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National Board Pressure Relief Device Certifications

NB-18

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FOREWARD

This publication presents the National Board pressure relief device certification program and lists those device designs certified and those organizations authorized to apply the National Board “NB” symbol to devices of certified types. This publication also includes a listing of organizations which have received a National Board certificate of authorization for the use of the “VR” repair symbol stamp in accordance with the National Board Inspection Code publication, NB-23 and NB-514, Accreditation of VR Repair Organizations.

This publication is divided into a series of listings as found in the table of contents. If using a portable document file (pdf) viewer, the user of this document may also use the bookmarks and search features of the viewer to navigate this document. Companies which no longer hold certifications or device design certifications which are no longer in production are not listed. Information on these devices may be obtained by contacting the National Board Pressure Relief Department.

This publication is updated weekly and is available free of charge from the National Board Web site, www.nationalboard.org.

The capacity rating values listed were determined from tests of samples of the relevant pressure relief device type at a National Board accepted testing laboratory under ideal conditions. Such capacities are certified only for the conditions under which obtained. Since the listed rating values were determined under atmospheric pressure discharge conditions, the calculated capacities may not be valid when discharge back-pressure conditions exist. The National Board has not tested each production device and makes no certification regarding its capacity, manufacturer, or application. Installation, operating conditions and manufacturer’s recommendations must be considered in selecting a pressure relief device for service.

Every effort has been made to make the information contained within NB-18 as accurate and complete as possible. However, this data is subject to change without notice and is neither guaranteed nor warranted. The National Board, its members, and employees assume no liability for the use or misuse of any information contained herein.

Organizations with listings are urged to review their listed information for accuracy, and to bring any errors or omissions to the National Board’s attention so that corrections can be made.

For further information regarding the National Board “NB” symbol and this program contact:

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Columbus, Ohio 43229-1183

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NATIONAL BOARD PRESSURE RELIEF DEVICE CERTIFICATION

ADMINISTRATIVE REQUIREMENTS

1.0 INTRODUCTION

The National Board Pressure Relief device certification program was developed in the mid-1930s in an effort to enhance safety to the industry and to the general public. At that time, when jurisdictional authorities expressed concern about relieving capacities, the National Board sponsored tests at The Ohio State University to compare the stamped and actual relieving capacities. They found large differences which prompted the National Board's membership to resolve that safety valves should be constructed to recognized standards and performance must be demonstrated by tests. At the request of the National Board, the American Society of Mechanical Engineers (ASME) appointed a special committee on safety valve requirements to cooperate with the National Board and developed construction requirements, quality standards and testing procedures.

2.0 SCOPE

2.1 This National Board program provides for the certification of pressure relief device designs and the accreditation of organizations who manufacture or assemble these devices. Accredited organizations are issued a certificate of authorization to apply the National Board "NB" symbol to devices of certified designs.

2.2 Technical requirements applied by this program to pressure relief devices are contained in standards called "construction codes." Abbreviations for these codes are listed below:

<u>Code Section</u>	<u>Construction Code</u>
I	ASME Boiler & Pressure Vessel Code (B&PVC) Section I
III	ASME (B&PVC) Section III
IV	ASME (B&PVC) Section IV
VIII	ASME (B&PVC) Section VIII

2.3 Organizations which have met the program requirements and have paid the proper administrative fees will be granted permission to use the National Board's "NB" mark on devices to denote certification by the National Board of the pressure relieving device design.

3.0 PROGRAM RULES AND PROCEDURES

3.1 ADMINISTRATION

Organizations desiring National Board certification and permission to use the "NB" mark shall apply to the National Board on forms available from the Pressure Relief Department. Manufacturers (as defined by the construction code) must supply all information as requested. Assemblers (as defined by the construction code) must indicate the valve manufacturer's name and valve type to be considered for certification.

3.2 QUALITY SYSTEM REQUIREMENTS

Each applicant shall have and maintain a quality system which shall establish that all of these rules and administrative procedures and applicable construction code requirements, including material control, fabrication, machining, welding, examination, setting, testing and inspection, will be met.

A written description of the system the applicant will use shall be available for review and shall contain, as a minimum, the features set forth by the construction code. The system shall include a description of the controls to ensure that the "NB" mark is applied to devices which have been certified in accordance with 3.3. This description may be brief or voluminous, depending upon the circumstances, and shall be treated confidentially.

A review for acceptance of the applicant's quality control system will be performed by a representative of the National Board. The review will include a demonstration of the implementation of the provisions of the applicant's quality system. Sample production devices will be selected for testing of performance and capacity.

Each applicant shall issue a controlled copy of the accepted quality system written description to the National Board. Except for changes which do not affect the quality system, revisions to the written description shall not be implemented until such revisions are accepted at any time by the National Board.

3.3 CAPACITY CERTIFICATION OF DEVICE DESIGNS

3.3.1 DESIGN REVIEW (MANUFACTURERS ONLY)

Before a design is tested by a manufacturer, it will be reviewed by the National Board to determine that all applicable mechanical and material requirements of the construction code have been considered and incorporated into the design as necessary. No testing for device certification will be performed on devices which do not meet these requirements.

3.3.2 INITIAL TESTING (MANUFACTURERS ONLY)

After completion of the design review per 3.3.1, tests of devices specified by the construction code shall be conducted to determine the certified rating which will be applied to the production device. Agreement shall be reached between the manufacturer and the National Board as to the number, sizes and set pressures of the devices to be tested. These tests will be performed for new designs or when an existing design is modified. Modifications of designs which affect the flow path, lift or performance characteristics must be reviewed by the National Board. Provisions for notifying the National Board of design changes shall be included in the applicant's quality system.

3.3.3 PRODUCTION TESTING

An applicant who has met the requirements of 3.1 and 3.2 may be granted permission to apply the National Board "NB" mark to production pressure relief devices (of designs for which initial testing has been completed) provided the following tests are successfully completed. This permission shall expire on the fifth anniversary of the date it is initially granted. This permission may be extended for 6 year periods if the following tests are successfully repeated within the 6 month period before expiration.

- (1) Two sample production pressure relief devices of a size and capacity within the capacity of a National Board accepted laboratory shall be selected by a National Board representative.
- (2) Operational and capacity tests shall be conducted in the presence of a National Board representative at a National Board accepted laboratory. The manufacturer or

assembler shall be notified of the time of the test and may have representatives present to witness the test.

- (3) Should any device fail to relieve at or above its certified capacity or should it fail to meet performance requirements of the construction code, the test shall be repeated at the rate of two replacement devices, selected in accordance with 3.3.3(1) for each valve that failed.
- (4) Failure of any of the replacement devices to meet the capacity or the performance requirements of this section shall be cause for revocation within 60 days of the permission to use the "NB" mark on that particular type of pressure relief device. During this period, the manufacturer or assembler shall demonstrate the cause of such deficiency and the action taken to guard against future occurrence, and the requirements of 3.3.3(1) above shall apply.

3.3.4 MARKING

When permission to apply the "NB" mark is received, the "NB" mark shall be applied to the nameplate using the National Board supplied stamp or a National Board approved facsimile along with the certified mark required by the construction code. The relieving capacity or flow resistance marked on the device shall be the value certified by the National Board as computed in accordance with the construction code. The arrangement of the marking is subject to National Board acceptance.

3.3.5 TRANSFER OF DESIGN CERTIFICATIONS

A manufacturer may request the results of the initial capacity testing (3.3.2) determined for one location be applied to a device type of identical design manufactured by the same organization at a different location. The following conditions must be met:

- (1) The manufacturer certifies to the National Board that the design is identical to the originally certified design and that the same production drawings are used at each location.
- (2) This system shall include provision to provide for the control of drawings and specifications between each location.
- (3) Device nameplate uniquely identifies the location of manufacture.
- (4) Each location must meet the production testing requirements of 3.3.3.

3.3.6 TRANSFER OF PERMISSION (RELOCATION)

Permission granted to a manufacturer or an assembler in accordance with 3.3.3 may be transferred to a new location when the organization relocated its facility within the same metropolitan area provided that:

- (1) Ownership, personnel and equipment are essentially unchanged,
- (2) Two pressure relief devices per test medium are selected for testing and satisfy the performance requirements of the construction code, and,
- (3) The requirements of 3.1 and 3.2 have been met.

3.4 LOCATION OF TESTING

All testing required by this procedure must be conducted at a facility and supervised by individuals who have been accepted by the National Board in accordance with established procedures. Tests shall be conducted in accordance with ASME PTC-25.

DETERMINATION OF CERTIFIED RELIEVING CAPACITIES

1.0 GENERAL

To determine the relieving capacity which should appear on a valve set between the minimum and maximum listed set pressures:

- 1.1 For the coefficient method – use the formula as applicable for the Code section and the coefficient and area given for the particular design of the valve.
- 1.2 For the slope or flow factor method – calculate using the slope or flow factor given.
- 1.3 Valves certified by the single valve method or three valve average have the certified capacity listed.

2.0 SAFETY VALVES FOR POWER BOILERS (Section I):

2.1 Coefficient Method Formula:

For nozzle..... $W = (51.5 \text{ APK})$

For flat seat (low lift)..... $W = (51.5\pi \text{ DLPK})$

For 45° seat..... $W = (51.5\pi \text{ DLPK}) (.707)$

For steam at pressures over 1500 psi and up to 3200 psi the value W of the certified relieving capacity shall be multiplied by:

$$\frac{0.1906P - 1000}{0.2292P - 1061}$$

Where W = rated capacity, pounds dry saturated steam per hour

A = actual discharge area through the valve at developed life, square inches

D = seat diameter, inches

K = certified coefficient

L = lift, inches

P = (stamped set pressure + 2 psi or 3%, whichever is greater) + 14.7, psia

2.2 Slope Method Formula:

The values of slope given have units of lbs. per hour per psia.

$W = \text{slope} \times (\text{stamped set pressure} + 2 \text{ psi or } 3\%, \text{ whichever is greater}) + 14.7, \text{ psia})$

- 2.3 For superheated conditions the capacity shall be calculated by multiplying the capacity as determined in 2.1 or 2.2 by the appropriate K_{sh} factor found in Section I table PG-68.7.
- 2.4 For pressures over 1500 psig and up to 3200 psig the capacity shall be calculated by multiplying the capacity as determined in 2.1 or 2.2 by the following only if the correction factor is greater than 1.0:

$$\frac{0.1906P - 1000}{0.2292P - 1061}$$

- 2.5 For pressures over 3200 psig the capacity shall be calculated by multiplying the capacity as determined in 2.1 or 2.2 by the appropriate K_{sc} factor found in Section I table PG-69.2.3.

3.0 SAFETY VALVES FOR NUCLEAR VESSELS (Section III):

- 3.1 Coefficient Method Formula:

Steam:

For nozzle..... $W = (51.5 \text{ APK})$

For flat seat (low lift)..... $W = (51.5\pi \text{ DLPK})$

For 45° seat..... $W = (51.5\pi \text{ DLPK}) (.707)$

For steam at pressures over 1500 psi and up to 3200 psi the valve W of the certified relieving capacity shall be multiplied by:

$$\frac{0.1906P - 1000}{0.2292P - 1061}$$

Where W = rated capacity, pounds dry saturated steam per hour

For Air..... $W = 18.331\text{APK} @ 60^\circ\text{F and } 14.7, \text{ psia}$

For Gas..... $W = \text{CAPK} \sqrt{M/T}$

For liquid (water)..... $W = 4.814\text{AK} \sqrt{w(P-P_d)}$

Where W = rated capacity, lbs/hr (dry saturated steam), SCFM (air), lbs/hr (gas or vapor), GPM (water)

A = actual discharge area through the valve at developed lift, square inches

C = constant for gas or vapor based on the ratio of specific heats C_p/C_v

D = seat diameter, inches

K = certified coefficient

L = lift, inches

M = molecular weight

P = (stamped set pressure + 3%) + 14.7, psia (for Class 1, 2, and 3 main)

- OR -

P = (stamped set pressure + 2.5 psi or 10%, whichever is greater) + 14.7, psia
(For air, gas, or steam valves other than main stream)

P_d = pressure at discharge from valve, psia

T = absolute temperature at inlet, °R (degrees Fahrenheit + 460)

w = 62.3058 lbs/ft³, specific weight of water @ 70°F

3.2 Slope Method Formula:

The values of slope given have the units of SCFM or lbs. per hour per psia.

$W = \text{slope} \times (\text{set pressure} + 3\% + 14.7, \text{ psia}), (\text{for Class 1, 2, 3 main stream valves})$

$W = \text{slope} \times [(\text{set pressure} + 3 \text{ psi or } 10\%, \text{ whichever is greater}) + 14.7, \text{ psia}],$
(For air, gas, or steam over than main stream)

For Liquid (water):

$W = F \times \sqrt{P - P_d}$ where F = flow factor

The flow factor is a rating number for liquid service determined by a test. It is equal to the capacity in gallons per minute divided by the square root of the differential flowing pressure. It is equivalent to the "slope" for an air or steam valve.

3.3 Values less than 15 psig and Vacuum Relief Valves:

Consult ASME Code Section III subsections NC, ND, or NE for applicable capacity equations.

4.0 SAFETY AND SAFETY RELIEF VALVES FOR HEATING BOILERS (Section IV):

4.1 Coefficient Method Formula:

For nozzle..... $W = (51.5 \text{ APK})$

For flat seat..... $W = (51.5\pi \text{ DLPK})$

For 45° seat..... $W = (51.5\pi \text{ DLPK}) (.707)$

Where W = rated capacity, pounds dry saturated steam per hour

A = actual discharge area through the valve at developed lift, square inches

D = seat diameter, inches

K = certified coefficient

L = lift, inches

$P = (15 + 33.3\%) + 14.7, \text{ psia} = 34.7, \text{ psia}$ for 15 psi steam safety valves

- OR -

$P = (\text{stamped set pressure} + 10\%) + 14.7, \text{ psia}$ for safety relief valves for hot water boilers

4.2 Slope Method Formula:

The values of slope given have the units of BTUs per hour per psia or lbs. per hour per psia.

$W = \text{slope} \times (\text{set pressure} + 10\% + 14.7, \text{ psia})$

5.0 SAFETY VALVES FRO PRESSURE VESSELS (Section VIII, Divisions 1 & 2):

5.1 Coefficient Method Formula:

For Steam:

For nozzle..... $W = (51.5 \text{ APK})$

For flat seat..... $W = (51.5\pi \text{ DLPK})$

For 45° seat..... $W = (51.5\pi \text{ DLPK}) (.707)$

For steam at pressures over 1500 psi and up to 3000 psi the value W of the certified relieving capacity shall be multiplied by:

$$\frac{0.1906P - 1000}{0.2292P - 1061}$$

For air: $W = 18.331\text{APK} @ 60^\circ\text{F and } 14.7, \text{ psia}$

For Gas or Vapor: $W = CKAP \sqrt{M/T}$

For Liquid (water): $W = 4.814AK \sqrt{w(P - P_d)}$

Where W = rated capacity, lbs/hr (dry saturated steam), SCFM (air), lbs/hr (gas or vapor), GPM (water)

A = nozzle throat area, square inches

C = constant for gas or vapor based on ratio of specific heats C_p/C_v

D = seat diameter, inches

K = certified coefficient

L = lift, inches

M = molecular weight

P = (stamped set pressure + 3 psia or 10%, whichever is greater) + 14.7, psia

- OR -

P = (stamped set pressure + 20%) + 14.7, psia for test per UG-131(c)(2)

P_d = pressure at discharge from valve, psia

T = absolute temperature at inlet, °R (degrees Fahrenheit + 460)

w = 62.3058 lbs/ft³, specific weight @ 70°F

5.2 Slope Method Formula:

The values of slope given have units of SCFM or lbs. per hour per psia.

$W = \text{slope} \times [(\text{set pressure} + 10\%) + 14.7, \text{ psia}]$

- OR -

$W = \text{slope} \times [(\text{stamped set pressure} + 20\%) + 14.7, \text{ psia for test per UG-131(c)(2)}]$

For Liquid (water):

$$W = F \times \sqrt{(P - P_d)} \text{ where } F = \text{flow factor}$$

The flow factor is a rating number for liquid service determined by a test. It is equal to the capacity in gallons per minute divided by the square root of the differential flowing pressure. It is equivalent to the “slope” for an air or steam valve.

5.3 Flow Resistance (Non-reclosing devices)

Device designs certified by the Flow Resistance method are not marked with a relieving capacity value. The certified flow resistance (K_{rg} , K_{rl} , K_{rgl}) appears on the nameplate and is to be used when determining total flow resistance of the pressure relief system and the flowing capacity it will relieve through the use of accepted engineering practices. The flow resistance subscripts “g,” “l,” or “gl” indicate that the device has been certified for gas (K_{rg}), liquid (K_{rl}), or both gases and liquids (K_{rgl}). Unless otherwise noted, the pressure drop across a certified non-reclosing device shall be calculated using dimensions for standard pipe (STD).

For pressure relief systems discharging directly to atmosphere which includes a non-reclosing device installed within 8 pipe diameters of the vessel nozzle and having a discharge pipe no longer than 5 pipe diameters, system capacity can be determined from the equations found in 5.1 above using the minimum net flow area (MNFA) marked on the nameplate and an assumed coefficient of discharge equal to 0.62.

LISTING OF ASSEMBLER AND MANUFACTURER CERTIFICATIONS

This section lists National Board pressure relief device certifications issued to device manufacturers and assemblers who hold National Board Certificates of Authorizations to use the "NB" symbol. Each organization is presented by company name, National Board three letter designation and location. Listed is the device type, certification category, name, type classification, Code Section, National Board capacity certification number, certification expiration date and page number where detailed technical information for the subject design type may be found.

The following is an example and explanation of the information found in the Index:

IDEAL VALVE COMPANY¹ (IVC)², Location - Ridgway OH³

Certifications ⁴ Category	Device Type ⁵	Type Classification ⁷	Code Section ⁸	NB Capacity ⁶ Certification Number	Expiration ⁹ Date	Page ¹⁰
M	102K	Safety Relief Valve	VIII	50005	7/12/06	32

- 1 Full Name of the Manufacturer or Assembler.
- 2 National Board Three Letter Designation. This is part of the National Board certification number and is derived from the manufacturer or assemblers company name.
- 3 Location of the organization. The country or province for companies located outside the United States is also listed.
- 4 The certification category of either "M" for Manufacturer or "A" for Assembler.
- 5 The design type name is the commercial designation specified by the manufacturer.
- 6 The National Board certification number has been instituted to provide a better means of identifying manufacturers and their design type designations. See description below on its use.
- 7 Type Classification indicates the type of pressure relief device (I.e. Relief valve, rupture disk).
- 8 The Code Section indicates the Construction Code requirements which were met to obtain National Board certification.
- 9 The expiration date is the date when the certification expires for the listed type. National Board certification is valid for a period of five years. Please note that when the index indicates an expiration date which is close to the present date, it will be necessary to consult with the National Board Pressure Relief Department for more information.
- 10 The page listed where detailed information on the design type can be found.

The National Board certification number is used in all National Board correspondence with manufacturers and assemblers. The following is an example of how the number is presented in correspondence:

(NB Cap Cert No IVC¹-M²50005³)

- 1 This is a three letter designation which is derived from the manufacturer or assemblers name. In this example, the designation is the company's initials.
- 2 This portion of the number will always be either an "M" or an "A", indicating whether the company is a manufacturer or an assembler.
- 3 Each individual valve type has been given its own number (it is this number that is indicated on the index). We have devised a "check-sum" concept for this number. For example, we have issued the number for the valve type listed above as 50005. If you add the first four digits of this number, the sum is 5. The last number of the designation is then 5. Should the sum of the first four numbers be greater than 10, we always use the second number.

Admiral Valve Repair and Supply, Inc. (ASR)**location: North Chicago, IL, UNITED STATES****Acceptable Abbrev.: Admiral Valve**Devices designed by: **A&R Energy Services, Corporation (ARE)***(cont'd)*

<i>Cert Cat</i>	<i>Device Type</i>	<i>NB Cert #</i>	<i>Type Classification</i>	<i>Code Section</i>	<i>Expiration Date</i>	<i>Page...</i>
A	Kunkle 6000, 6252 Series	36324	Safety Valve	I & VIII Div. 1	Feb 24, 2021	391

Devices designed by: **Emerson Automation Solutions Final Control, US LP (KBM)**

<i>Cert Cat</i>	<i>Device Type</i>	<i>NB Cert #</i>	<i>Type Classification</i>	<i>Code Section</i>	<i>Expiration Date</i>	<i>Page...</i>
A	300,600	36076	Safety Valve	I & VIII Div. 1	May 6, 2021	386
A	920, 921, 927, Agco A (High Temp. water)	36098	Safety Valve	I & VIII Div. 1	Feb 24, 2021	387
A	910 to 919	36100	Safety Relief Valve	VIII Div. 1	Jun 10, 2021	387
A	910 to 919 (Liquid)	36111	Relief Valve	VIII Div. 1	Mar 22, 2021	388
A	Kunkle 264, 265, 266 & 267	36267	Safety Relief Valve	VIII Div. 1	Mar 16, 2021	389
A	Kunkle 337	36278	Safety Relief Valve	VIII Div. 1	Mar 22, 2021	389

Advance Valve, Incorporated (ADV)**location: Fenton, MO, UNITED STATES**Devices designed by: **Aquatrol, Incorporated (AQT)**

<i>Cert Cat</i>	<i>Device Type</i>	<i>NB Cert #</i>	<i>Type Classification</i>	<i>Code Section</i>	<i>Expiration Date</i>	<i>Page...</i>
A	560, 570	02080	Safety Valve	I & VIII Div. 1	Jan 24, 2020	17
A	Series 740	02091	Safety Relief Valve	VIII Div. 1	Jan 24, 2020	18
A	Series 740 (Liquid)	02103	Safety Relief Valve	VIII Div. 1	Jan 24, 2020	18

Devices designed by: **ARI-Armaturen Albert Richter GmbH & Co. KG (ARI)**

<i>Cert Cat</i>	<i>Device Type</i>	<i>NB Cert #</i>	<i>Type Classification</i>	<i>Code Section</i>	<i>Expiration Date</i>	<i>Page...</i>
A	901/902/911/912	08008	Safety Relief Valve	VIII Div. 1	May 10, 2018	25
A	901/902/911/912 (Liquids)	08019	Relief Valve	VIII Div. 1	Apr 2, 2018	25
A	901/902/911/912 (1" liquid)	08020	Relief Valve	VIII Div. 1	May 8, 2018	26
A	901/902/911/912 {15-30}	08031	Safety Relief Valve	VIII Div. 1	May 10, 2018	26

Devices designed by: **LESER GmbH & Company KG (LES)**

<i>Cert Cat</i>	<i>Device Type</i>	<i>NB Cert #</i>	<i>Type Classification</i>	<i>Code Section</i>	<i>Expiration Date</i>	<i>Page...</i>
A	488	37022	Safety Relief Valve	VIII Div. 1	Feb 20, 2021	315
A	488 (Liquids)	37033	Relief Valve	VIII Div. 1	Feb 20, 2021	315
A	441/442/444	37044	Safety Relief Valve	VIII Div. 1	May 26, 2020	316
A	441/442/444 liquids	37055	Relief Valve	VIII Div. 1	Feb 2, 2021	317
A	459/462 liquids	37101	Relief Valve	VIII Div. 1	Dec 8, 2020	319
A	459/462	37112	Safety Relief Valve	VIII Div. 1	Dec 8, 2020	319
A	483, 484, 485 (1")	37145	Safety Relief Valve	VIII Div. 1	Jul 6, 2018	320
A	483, 484, 485 (1") Liquids	37156	Relief Valve	VIII Div. 1	Jun 6, 2018	320
A	483, 484, 485 (1.5")	37167	Safety Relief Valve	VIII Div. 1	Jun 6, 2018	321
A	483, 484, 485 (1.5") Liquids	37178	Relief Valve	VIII Div. 1	Jun 15, 2018	321
A	437 (Liquids)	37189	Relief Valve	VIII Div. 1	Jul 15, 2018	321
A	438 Sub Types 481, 439	37190	Safety Relief Valve	VIII Div. 1	Sep 17, 2018	322
A	438 Sub Types 481, 439, Liquids	37202	Safety Relief Valve	VIII Div. 1	Oct 11, 2018	322
A	437	37213	Safety Relief Valve	VIII Div. 1	Jun 6, 2018	322
A	526	37224	Safety Relief Valve	VIII Div. 1	Jun 6, 2018	323
A	526 (Liquids)	37235	Relief Valve	VIII Div. 1	Jun 6, 2018	324

Devices designed by: **Spence Engineering Company, Incorporated (SEC)**

<i>Cert Cat</i>	<i>Device Type</i>	<i>NB Cert #</i>	<i>Type Classification</i>	<i>Code Section</i>	<i>Expiration Date</i>	<i>Page...</i>
A	Fig 31, 41, 41A	65045	Safety Valve	I & VIII Div. 1	May 8, 2018	452

Aeon PEC, Inc. (HGO)location: **Shreveport, LA, UNITED STATES**Acceptable Abbrev.: **Aeon PEC**Devices designed by: **Emerson Automation Solutions Final Control US LP (AGC)**

<i>Cert Cat</i>	<i>Device Type</i>	<i>NB Cert #</i>	<i>Type Classification</i>	<i>Code Section</i>	<i>Expiration Date</i>	<i>Page...</i>
A	81, 81P, 83, 86	01089	Safety Relief Valve	VIII Div. 1	Mar 12, 2020	397
A	81P (Liquids)	01102	Relief Valve	VIII Div. 1	Mar 11, 2020	397
A	243/249/443/449/546/843/849/943/5046/5049/8043/8049	01292	Pilot Operated Pressure Relief Valve	VIII Div. 1	Mar 12, 2020	402
A	253/259/453/459/853/859/953/959/5059/8053/8059	01304	Pilot Operated Pressure Relief Valve	VIII Div. 1	Mar 12, 2020	402
A	263/269/463/469/566/863/869/963/969/5066/5069	01315	Pilot Operated Pressure Relief Valve	VIII Div. 1	Mar 11, 2020	403
A	453/459/853/859/953/959/5059 (Liquids)	01326	Pilot Operated Pressure Relief Valve	VIII Div. 1	Mar 12, 2020	403
A	443/449/546/843/849/943/949/5046/5049(Liquids)	01337	Pilot Operated Pressure Relief Valve	VIII Div. 1	Mar 11, 2020	404
A	463/469/566/863/869/963/969/5066/5069 (Liquids)	01348	Pilot Operated Pressure Relief Valve	VIII Div. 1	Mar 11, 2020	404
A	JLT (Liquids)	15095	Safety Relief Valve	VIII Div. 1	Jun 6, 2020	408
A	JOS-E/JBS-E/JOS-H-E 8400 AC/AB	15208	Safety Relief Valve	VIII Div. 1	Mar 12, 2020	409
A	900 Series, 7700, SNC	15411	Safety Relief Valve	VIII Div. 1	Mar 12, 2020	411
A	900 Series (Liquid), 7700, SNC	15499	Relief Valve	VIII Div. 1	Mar 11, 2020	412
A	JLT/JOS, JLT/JBS, 8500, ACL/ABL	15512	Safety Relief Valve	VIII Div. 1	Jun 6, 2020	413

Devices designed by: **Emerson Automation Solutions Final Control, US LP (KBM)**

<i>Cert Cat</i>	<i>Device Type</i>	<i>NB Cert #</i>	<i>Type Classification</i>	<i>Code Section</i>	<i>Expiration Date</i>	<i>Page...</i>
A	82 Series D Orifice	36470	Safety Valve	VIII Div. 1	Jun 6, 2020	393
A	82 Series E Orifice	36481	Safety Valve	VIII Div. 1	Jun 6, 2020	393

Albert Handtmann Armaturenfabrik GmbH & Co. KG (AHA)location: **Biberach/Riss, GERMANY**Acceptable Abbrev.: **AHA**Devices designed by: **Albert Handtmann Armaturenfabrik GmbH & Co. KG (AHA)**

<i>Cert Cat</i>	<i>Device Type</i>	<i>NB Cert #</i>	<i>Type Classification</i>	<i>Code Section</i>	<i>Expiration Date</i>	<i>Page...</i>
M	33551 and 33651	00639	Safety Relief Valve	VIII Div. 1	Jan 6, 2022	
M	33551 and 33651 (Liquid)	00640	Safety Relief Valve	VIII Div. 1	Jan 6, 2022	

Allied Valve, Inc. - Riverdale, IA (VRS)location: **Riverdale, IA, UNITED STATES**Acceptable Abbrev.: **Allied Valve, Inc.**Devices designed by: **Dresser, LLC (DRJ)**

<i>Cert Cat</i>	<i>Device Type</i>	<i>NB Cert #</i>	<i>Type Classification</i>	<i>Code Section</i>	<i>Expiration Date</i>	<i>Page...</i>
A	1811, 1511	18122	Safety Valve	I & VIII Div. 1	Jun 23, 2021	182
A	1900, 1900-30, 1900-35	18201	Safety Relief Valve	VIII Div. 1	Jun 23, 2021	184
A	19000 Series	18706	Safety Relief Valve	VIII Div. 1	Jun 23, 2021	196
A	1900, 1900-30 1900-35 LA & DALA (Liquids)	18784	Relief Valve	VIII Div. 1	Jun 23, 2021	198

Allied Valve, Inc. (ALC)location: **Chicago, IL, UNITED STATES**Acceptable Abbrev.: **Allied Valve, Inc.**Devices designed by: **A&R Energy Services, Corporation (ARE)**

<i>Cert Cat</i>	<i>Device Type</i>	<i>NB Cert #</i>	<i>Type Classification</i>	<i>Code Section</i>	<i>Expiration Date</i>	<i>Page...</i>
A	Kunkle 6000, 6252 Series	36324	Safety Valve	I & VIII Div. 1	Jun 26, 2021	391

Allied Valve, Inc. (ALC)(continued) location: **Chicago, IL, UNITED STATES**Acceptable Abbrev.: **Allied Valve, Inc.**Devices designed by: **Dresser, LLC (DRJ)**

<i>Cert Cat</i>	<i>Device Type</i>	<i>NB Cert #</i>	<i>Type Classification</i>	<i>Code Section</i>	<i>Expiration Date</i>	<i>Page...</i>
A	1541, 1543, 1541-3, 1543-3	18032	Safety Valve	I & VIII Div. 1	Feb 17, 2021	180
A	1811, 1511	18122	Safety Valve	I & VIII Div. 1	Feb 17, 2021	182
A	1900D-2, 1900-30D-2	18144	Safety Relief Valve	VIII Div. 1	Feb 17, 2021	183
A	1900E-2, 1900-30E-2	18166	Safety Relief Valve	VIII Div. 1	Feb 17, 2021	183
A	1900, 1900-30, 1900-35	18201	Safety Relief Valve	VIII Div. 1	Feb 17, 2021	184
A	19000 Series	18706	Safety Relief Valve	VIII Div. 1	Feb 18, 2024	196
A	19000 Series, Liquid	18717	Relief Valve	VIII Div. 1	Feb 15, 2024	197
A	1900D-2, 1900-30D-2 LA & DALA (Liquids)	18751	Relief Valve	VIII Div. 1	Feb 17, 2021	197
A	1900E-2, 1900-30E-2 LA & DALA (Liquids)	18762	Relief Valve	VIII Div. 1	Feb 17, 2021	197
A	1900, 1900-30 1900-35 LA & DALA (Liquids)	18784	Relief Valve	VIII Div. 1	Apr 17, 2021	198
A	19110M & 19110H (Liquids)	19077	Relief Valve	VIII Div. 1	Apr 17, 2021	207

Devices designed by: **Emerson Automation Solutions Final Control, US LP (KBM)**

<i>Cert Cat</i>	<i>Device Type</i>	<i>NB Cert #</i>	<i>Type Classification</i>	<i>Code Section</i>	<i>Expiration Date</i>	<i>Page...</i>
A	300,600	36076	Safety Valve	I & VIII Div. 1	Feb 15, 2024	386
A	910 to 919	36100	Safety Relief Valve	VIII Div. 1	Feb 15, 2024	387
A	910 to 919 (Liquid)	36111	Relief Valve	VIII Div. 1	Feb 15, 2024	388
A	Kunkle 264, 265, 266 & 267	36267	Safety Relief Valve	VIII Div. 1	May 18, 2018	389
A	Kunkle 337	36278	Safety Relief Valve	VIII Div. 1	Feb 18, 2024	389
A	Kunkle 548-A (.295 Orifice)	36290	Safety Relief Valve	VIII Div. 1	Aug 16, 2020	390
A	Kunkle 541-C/542-C/548-C (.422 Orifice)	36302	Safety Relief Valve	VIII Div. 1	Feb 15, 2024	390
A	Kunkle 30	36335	Safety Relief Valve	VIII Div. 1	Feb 15, 2024	392

Devices designed by: **A&R Energy Services, Corporation (ARE)**

<i>Cert Cat</i>	<i>Device Type</i>	<i>NB Cert #</i>	<i>Type Classification</i>	<i>Code Section</i>	<i>Expiration Date</i>	<i>Page...</i>
A	Kunkle 6000, 6252 Series	36324	Safety Valve	I & VIII Div. 1	Jun 26, 2021	391

Devices designed by: **Dresser, LLC (DRJ)**

<i>Cert Cat</i>	<i>Device Type</i>	<i>NB Cert #</i>	<i>Type Classification</i>	<i>Code Section</i>	<i>Expiration Date</i>	<i>Page...</i>
A	1541, 1543, 1541-3, 1543-3	18032	Safety Valve	I & VIII Div. 1	Feb 17, 2021	180
A	1811, 1511	18122	Safety Valve	I & VIII Div. 1	Feb 17, 2021	182
A	1900D-2, 1900-30D-2	18144	Safety Relief Valve	VIII Div. 1	Feb 17, 2021	183
A	1900E-2, 1900-30E-2	18166	Safety Relief Valve	VIII Div. 1	Feb 17, 2021	183
A	1900, 1900-30, 1900-35	18201	Safety Relief Valve	VIII Div. 1	Feb 17, 2021	184
A	19000 Series	18706	Safety Relief Valve	VIII Div. 1	Feb 18, 2024	196
A	19000 Series, Liquid	18717	Relief Valve	VIII Div. 1	Feb 15, 2024	197
A	1900D-2, 1900-30D-2 LA & DALA (Liquids)	18751	Relief Valve	VIII Div. 1	Feb 17, 2021	197
A	1900E-2, 1900-30E-2 LA & DALA (Liquids)	18762	Relief Valve	VIII Div. 1	Feb 17, 2021	197
A	1900, 1900-30 1900-35 LA & DALA (Liquids)	18784	Relief Valve	VIII Div. 1	Apr 17, 2021	198
A	19110M & 19110H (Liquids)	19077	Relief Valve	VIII Div. 1	Apr 17, 2021	207

Devices designed by: **Emerson Automation Solutions Final Control, US LP (KBM)**

<i>Cert Cat</i>	<i>Device Type</i>	<i>NB Cert #</i>	<i>Type Classification</i>	<i>Code Section</i>	<i>Expiration Date</i>	<i>Page...</i>
A	300,600	36076	Safety Valve	I & VIII Div. 1	Feb 15, 2024	386
A	910 to 919	36100	Safety Relief Valve	VIII Div. 1	Feb 15, 2024	387
A	910 to 919 (Liquid)	36111	Relief Valve	VIII Div. 1	Feb 15, 2024	388
A	Kunkle 264, 265, 266 & 267	36267	Safety Relief Valve	VIII Div. 1	May 18, 2018	389
A	Kunkle 337	36278	Safety Relief Valve	VIII Div. 1	Feb 18, 2024	389
A	Kunkle 548-A (.295 Orifice)	36290	Safety Relief Valve	VIII Div. 1	Aug 16, 2020	390
A	Kunkle 541-C/542-C/548-C (.422 Orifice)	36302	Safety Relief Valve	VIII Div. 1	Feb 15, 2024	390
A	Kunkle 30	36335	Safety Relief Valve	VIII Div. 1	Feb 15, 2024	392

Allied Valve, Inc. (AVB)**location: Bismarck, ND, UNITED STATES**

Devices designed by: Dresser, LLC (DRJ)

<i>Cert Cat</i>	<i>Device Type</i>	<i>NB Cert #</i>	<i>Type Classification</i>	<i>Code Section</i>	<i>Expiration Date</i>	<i>Page...</i>
A	1811, 1511	18122	Safety Valve	I & VIII Div. 1	Jun 24, 2020	182
A	1900, 1900-30, 1900-35	18201	Safety Relief Valve	VIII Div. 1	Jun 23, 2020	184
A	19000 Series	18706	Safety Relief Valve	VIII Div. 1	Jun 23, 2020	196
A	19000 Series, Liquid	18717	Relief Valve	VIII Div. 1	Jun 23, 2020	197
A	1900, 1900-30 1900-35 LA & DALA (Liquids)	18784	Relief Valve	VIII Div. 1	Jun 23, 2020	198

Allied Valve, Inc. (TPW)**location: Appleton, WI, UNITED STATES**

Devices designed by: A&R Energy Services, Corporation (ARE)

<i>Cert Cat</i>	<i>Device Type</i>	<i>NB Cert #</i>	<i>Type Classification</i>	<i>Code Section</i>	<i>Expiration Date</i>	<i>Page...</i>
A	Kunkle 6000, 6252 Series	36324	Safety Valve	I & VIII Div. 1	Dec 15, 2021	391

Devices designed by: Dresser, LLC (DRJ)

<i>Cert Cat</i>	<i>Device Type</i>	<i>NB Cert #</i>	<i>Type Classification</i>	<i>Code Section</i>	<i>Expiration Date</i>	<i>Page...</i>
A	1700 & 2700	18100	Safety Valve	I & VIII Div. 1	Sep 1, 2021	181
A	1700 & 2700 (Restricted Lift version of Cert. # 18100)	18111	Safety Valve	I & VIII Div. 1	Sep 1, 2021	182
A	1811, 1511	18122	Safety Valve	I & VIII Div. 1	Sep 1, 2021	182
A	1900, 1900-30, 1900-35	18201	Safety Relief Valve	VIII Div. 1	Nov 1, 2018	184
A	1982	18379	Safety Relief Valve	VIII Div. 1	Dec 15, 2022	188
A	1982 LS, 820000LS	18380	Relief Valve	VIII Div. 1	Jan 17, 2020	188
A	3900 (39PV, 39MV pilots)	18447	Pilot Operated Pressure Relief Valve	VIII Div. 1	Sep 1, 2021	192
A	3900 (39PV, 39MV pilots, liquid)	18458	Pilot Operated Pressure Relief Valve	VIII Div. 1	Nov 1, 2018	194
A	19000 Series	18706	Safety Relief Valve	VIII Div. 1	Jan 29, 2020	196
A	19000 Series, Liquid	18717	Relief Valve	VIII Div. 1	Jan 29, 2020	197
A	1900, 1900-30 1900-35 LA & DALA (Liquids)	18784	Relief Valve	VIII Div. 1	Nov 11, 2018	198

Devices designed by: Emerson Automation Solutions Final Control, US LP (KBM)

<i>Cert Cat</i>	<i>Device Type</i>	<i>NB Cert #</i>	<i>Type Classification</i>	<i>Code Section</i>	<i>Expiration Date</i>	<i>Page...</i>
A	910 to 919	36100	Safety Relief Valve	VIII Div. 1	Sep 1, 2021	387
A	910 to 919 (Liquid)	36111	Relief Valve	VIII Div. 1	Sep 1, 2021	388

Allied Valve, Inc. (VSS)**location: Cannon Falls, MN, UNITED STATES****Seal Identification: Allied Valve, Inc.**

Devices designed by: Dresser, LLC (DRJ)

<i>Cert Cat</i>	<i>Device Type</i>	<i>NB Cert #</i>	<i>Type Classification</i>	<i>Code Section</i>	<i>Expiration Date</i>	<i>Page...</i>
A	1541, 1543, 1541-3, 1543-3	18032	Safety Valve	I & VIII Div. 1	Mar 26, 2020	180
A	1700 & 2700	18100	Safety Valve	I & VIII Div. 1	Jun 29, 2020	181
A	1700 & 2700 (Restricted Lift version of Cert. # 18100)	18111	Safety Valve	I & VIII Div. 1	Jun 24, 2020	182
A	1811, 1511	18122	Safety Valve	I & VIII Div. 1	Aug 3, 2020	182
A	1900D-2, 1900-30D-2	18144	Safety Relief Valve	VIII Div. 1	Sep 25, 2020	183
A	1900E-2, 1900-30E-2	18166	Safety Relief Valve	VIII Div. 1	Jul 25, 2020	183
A	1900, 1900-30, 1900-35	18201	Safety Relief Valve	VIII Div. 1	Jul 25, 2020	184
A	3900 (39PV, 39MV pilots)	18447	Pilot Operated Pressure Relief Valve	VIII Div. 1	Sep 21, 2020	192
A	19000 Series	18706	Safety Relief Valve	VIII Div. 1	Jun 24, 2020	196
A	19000 Series, Liquid	18717	Relief Valve	VIII Div. 1	Jun 22, 2020	197
A	1900D-2, 1900-30D-2 LA & DALA (Liquids)	18751	Relief Valve	VIII Div. 1	Jun 22, 2020	197
A	1900E-2, 1900-30E-2 LA & DALA (Liquids)	18762	Relief Valve	VIII Div. 1	Jul 19, 2020	197
A	1900, 1900-30 1900-35 LA & DALA (Liquids)	18784	Relief Valve	VIII Div. 1	Jun 24, 2020	198
A	2900 (39PV & 39MV pilots)	18863	Pilot Operated Pressure Relief Valve	VIII Div. 1	Jun 24, 2020	200

Apparecchi Di Sicurezza e Tenuta S.p.A. (ADS)location: **Cornaredo (Milano), ITALY**Acceptable Abbrev.: **A.S.T. S.p.A.**Devices designed by: **Apparecchi Di Sicurezza e Tenuta S.p.A. (ADS)**

<i>Cert Cat</i>	<i>Device Type</i>	<i>NB Cert #</i>	<i>Type Classification</i>	<i>Code Section</i>	<i>Expiration Date</i>	<i>Page...</i>
M	SVP-7200 Restrict Lift (Liquid)	07108	Pilot Operated Pressure Relief Valve	VIII Div. 1	Dec 17, 2019	11
M	SVP-7200 Restrict Lift	07119	Pilot Operated Pressure Relief Valve	VIII Div. 1	Mar 19, 2020	11
M	SVP-7200 (Full Lift) (Liquid)	07120	Pilot Operated Pressure Relief Valve	VIII Div. 1	Dec 17, 2019	12
M	SVP-7200 (Full Lift)	07131	Pilot Operated Pressure Relief Valve	VIII Div. 1	Mar 19, 2020	12
M	SMG-7000	07175	Safety Relief Valve	VIII Div. 1	Sep 25, 2021	13
M	SML-7000 (Liquid)	07186	Relief Valve	VIII Div. 1	Sep 25, 2021	14
M	SMG-7000 (Restricted Lift)	07197	Safety Relief Valve	VIII Div. 1	Jan 28, 2022	
M	SML-7000 (Liquid) (Restricted Lift)	07209	Relief Valve	VIII Div. 1	Sep 25, 2021	14
M	SML-7000 (Steam & Air/Gas)	07210	Relief Valve	VIII Div. 1	Nov 30, 2022	
M	SML-7000 (Steam & Air/Gas) (Restricted Lift)	07221	Relief Valve	VIII Div. 1	Jul 19, 2023	
M	SHL-7000 / SUL-7000	07232	Safety Relief Valve	VIII Div. 1	Jul 19, 2023	
M	SHL-7000 / SUL-7000 (Liquid)	07243	Relief Valve	VIII Div. 1	Jul 19, 2023	

Applied Valve Technology, Inc. (AVT)location: **Chattanooga, TN, UNITED STATES**Acceptable Abbrev.: **A.V.T.**Devices designed by: **A&R Energy Services, Corporation (ARE)**

<i>Cert Cat</i>	<i>Device Type</i>	<i>NB Cert #</i>	<i>Type Classification</i>	<i>Code Section</i>	<i>Expiration Date</i>	<i>Page...</i>
A	Kunkle 6000, 6252 Series	36324	Safety Valve	I & VIII Div. 1	Jun 20, 2018	391

Devices designed by: **Conbraco Industries, Incorporated (CNB)**

<i>Cert Cat</i>	<i>Device Type</i>	<i>NB Cert #</i>	<i>Type Classification</i>	<i>Code Section</i>	<i>Expiration Date</i>	<i>Page...</i>
A	119 Series	11361	Safety Valve	I & VIII Div. 1	Jun 20, 2018	126

Devices designed by: **Emerson Automation Solutions Final Control, US LP (KBM)**

<i>Cert Cat</i>	<i>Device Type</i>	<i>NB Cert #</i>	<i>Type Classification</i>	<i>Code Section</i>	<i>Expiration Date</i>	<i>Page...</i>
A	910 to 919 (Liquid)	36111	Relief Valve	VIII Div. 1	Jun 20, 2018	388

Aquatrol, Incorporated (AQT)location: **Elburn, IL, UNITED STATES**Acceptable Abbrev.: **AQ**Devices designed by: **Aquatrol, Incorporated (AQT)**

<i>Cert Cat</i>	<i>Device Type</i>	<i>NB Cert #</i>	<i>Type Classification</i>	<i>Code Section</i>	<i>Expiration Date</i>	<i>Page...</i>
M	88A, 89A	02002	Safety Relief Valve	VIII Div. 1	Mar 17, 2020	15
M	88B, 89B	02013	Safety Relief Valve	VIII Div. 1	Mar 26, 2020	15
M	88C, 89C	02024	Safety Relief Valve	VIII Div. 1	Apr 12, 2020	15
M	88D, 89D	02035	Safety Relief Valve	VIII Div. 1	Apr 12, 2020	16
M	88E, 89E	02046	Safety Relief Valve	VIII Div. 1	Mar 16, 2020	16
M	88F, 89F	02057	Safety Relief Valve	VIII Div. 1	Mar 14, 2020	16
M	120, 121, 125, 126	02068	Safety Relief Valve	VIII Div. 1	Mar 25, 2020	17
M	130, 132, 133, 135	02079	Safety Relief Valve	VIII Div. 1	Jul 6, 2020	17
M	560, 570	02080	Safety Valve	I & VIII Div. 1	Jan 19, 2022	17
M	Series 740	02091	Safety Relief Valve	VIII Div. 1	Feb 11, 2019	18
M	Series 740 (Liquid)	02103	Safety Relief Valve	VIII Div. 1	Feb 11, 2019	18

ARI - Armaturen USA, LP (TAR)**location: Webster, TX, UNITED STATES**

Devices designed by: ARI - Armaturen USA, LP (TAR)

<i>Cert Cat</i>	<i>Device Type</i>	<i>NB Cert #</i>	<i>Type Classification</i>	<i>Code Section</i>	<i>Expiration Date</i>	<i>Page...</i>
M	Reyco R, RB & RO (Fig. 971, 973, 974)	73000	Safety Relief Valve	VIII Div. 1	Jan 19, 2021	19
M	Reyco R, RB, RO, RBO (Fig. 971, 973, 974) (liquid)	73011	Safety Relief Valve	VIII Div. 1	Nov 25, 2020	20
M	RL-14 & RLO-14	73044	Safety Relief Valve	VIII Div. 1	Nov 2, 2022	20
M	RL-14 & RLO-14 (Liquids)	73055	Safety Relief Valve	VIII Div. 1	May 18, 2023	20
M	RL40, RLO40, RL41, RLO41	73145	Safety Relief Valve	VIII Div. 1	Jul 26, 2022	21
M	RL40, RLO40, RL41, RLO41 (Liquids)	73156	Safety Relief Valve	VIII Div. 1	Jul 26, 2022	21
M	RL40, RL040 (0.847 in. orif.)	73167	Safety Relief Valve	VIII Div. 1	Feb 24, 2023	21
M	RL40, RL040 (0.847 in. orif.)(liquid)	73178	Safety Relief Valve	VIII Div. 1	Feb 18, 2023	22
M	RL14 & RLO14 (0.394 in.)	73202	Safety Relief Valve	VIII Div. 1	Nov 21, 2020	23
M	RL14 & RLO14 (0.394 in.) (Liquid)	73213	Relief Valve	VIII Div. 1	Nov 21, 2020	23
M	RL40, RLO40, RL41, RLO41 (0.547 in orifice), Design Rev. A	73224	Safety Relief Valve	VIII Div. 1	Sep 29, 2020	23
M	RL40, RLO40, RL41, RLO41 (0.547 in. orifice) (Liquid), Design	73235	Relief Valve	VIII Div. 1	Apr 10, 2023	24

Devices designed by: ARI-Armaturen Albert Richter GmbH & Co. KG (ARI)

<i>Cert Cat</i>	<i>Device Type</i>	<i>NB Cert #</i>	<i>Type Classification</i>	<i>Code Section</i>	<i>Expiration Date</i>	<i>Page...</i>
M	901/902/911/912	08008	Safety Relief Valve	VIII Div. 1	Nov 21, 2023	25
M	901/902/911/912 (1" liquid)	08020	Relief Valve	VIII Div. 1	Nov 21, 2023	26
M	901/902/911/912 {15-30}	08031	Safety Relief Valve	VIII Div. 1	Nov 21, 2023	26

ARI-Armaturen Albert Richter GmbH & Co. KG (ARI)**location: D-33758 Schloss Holte-Stukenbrock, GERMANY****Acceptable Abbrev.: ARI**

Devices designed by: ARI - Armaturen USA, LP (TAR)

<i>Cert Cat</i>	<i>Device Type</i>	<i>NB Cert #</i>	<i>Type Classification</i>	<i>Code Section</i>	<i>Expiration Date</i>	<i>Page...</i>
M	Reyco R, RB & RO (Fig. 971, 973, 974)	73000	Safety Relief Valve	VIII Div. 1	Jun 17, 2018	19
M	Reyco R, RB, RO, RBO (Fig. 971, 973, 974) (liquid)	73011	Safety Relief Valve	VIII Div. 1	May 15, 2018	20
M	RL-14 & RLO-14	73044	Safety Relief Valve	VIII Div. 1	Jul 26, 2023	20
M	RL-14 & RLO-14 (Liquids)	73055	Safety Relief Valve	VIII Div. 1	Jul 26, 2023	20
M	RL40, RLO40, RL41, RLO41	73145	Safety Relief Valve	VIII Div. 1	Jul 26, 2023	21
M	RL40, RLO40, RL41, RLO41 (Liquids)	73156	Safety Relief Valve	VIII Div. 1	Jul 26, 2023	21
M	RL40, RL040 (0.847 in. orif.)(liquid)	73178	Safety Relief Valve	VIII Div. 1	Jul 26, 2023	22
M	RL14 & RLO14 (0.394 in.)	73202	Safety Relief Valve	VIII Div. 1	Jul 26, 2023	23
M	RL14 & RLO14 (0.394 in.) (Liquid)	73213	Relief Valve	VIII Div. 1	Jul 26, 2023	23
M	RL40, RLO40, RL41, RLO41 (0.547 in. orifice) (Liquid), Design	73235	Relief Valve	VIII Div. 1	Jul 26, 2023	24

Devices designed by: ARI-Armaturen Albert Richter GmbH & Co. KG (ARI)

<i>Cert Cat</i>	<i>Device Type</i>	<i>NB Cert #</i>	<i>Type Classification</i>	<i>Code Section</i>	<i>Expiration Date</i>	<i>Page...</i>
M	901/902/911/912	08008	Safety Relief Valve	VIII Div. 1	Jun 12, 2018	25
M	901/902/911/912 (Liquids)	08019	Relief Valve	VIII Div. 1	Jun 12, 2018	25
M	901/902/911/912 (1" liquid)	08020	Relief Valve	VIII Div. 1	May 12, 2018	26
M	901/902/911/912 {15-30}	08031	Safety Relief Valve	VIII Div. 1	May 29, 2018	26

Atlantic Valve Services LLC (AGN)**location: Swedesboro, NJ, UNITED STATES****Acceptable Abbrev.: AVS**

Devices designed by: A&R Energy Services, Corporation (ARE)

<i>Cert Cat</i>	<i>Device Type</i>	<i>NB Cert #</i>	<i>Type Classification</i>	<i>Code Section</i>	<i>Expiration Date</i>	<i>Page...</i>
A	Kunkle 6000, 6252 Series	36324	Safety Valve	I & VIII Div. 1	Jun 5, 2019	391

Atlantic Valve Services LLC (AGN)(continued) location: **Swedesboro, NJ, UNITED STATES**Acceptable Abbrev.: **AVS**Devices designed by: **Emerson Automation Solutions Final Control US LP (AGC)**

<i>Cert Cat</i>	<i>Device Type</i>	<i>NB Cert #</i>	<i>Type Classification</i>	<i>Code Section</i>	<i>Expiration Date</i>	<i>Page...</i>
A	63B (.312", #5 orifice)	01056	Safety Relief Valve	VIII Div. 1	May 8, 2019	396
A	63B (.437", #7 orifice)	01067	Safety Relief Valve	VIII Div. 1	Oct 28, 2019	396
A	81, 81P, 83, 86	01089	Safety Relief Valve	VIII Div. 1	May 8, 2019	397
A	81P (Liquids)	01102	Relief Valve	VIII Div. 1	Mar 21, 2022	397
A	JLT (Liquids)	15095	Safety Relief Valve	VIII Div. 1	Mar 29, 2021	408
A	JOS-E/JBS-E/JOS-H-E 8400 AC/AB	15208	Safety Relief Valve	VIII Div. 1	Mar 29, 2021	409
A	900 Series, 7700, SNC	15411	Safety Relief Valve	VIII Div. 1	Jun 23, 2021	411
A	900 Series (Liquid), 7700, SNC	15499	Relief Valve	VIII Div. 1	May 5, 2021	412

Devices designed by: **Emerson Automation Solutions Final Control, US LP (KBM)**

<i>Cert Cat</i>	<i>Device Type</i>	<i>NB Cert #</i>	<i>Type Classification</i>	<i>Code Section</i>	<i>Expiration Date</i>	<i>Page...</i>
A	300,600	36076	Safety Valve	I & VIII Div. 1	Oct 16, 2019	386
A	910 to 919	36100	Safety Relief Valve	VIII Div. 1	Feb 22, 2020	387
A	910 to 919 (Liquid)	36111	Relief Valve	VIII Div. 1	May 8, 2019	388
A	Kunkle 337	36278	Safety Relief Valve	VIII Div. 1	Oct 28, 2019	389

AVP Valve, Inc. (AVP)location: **Lakeland, FL, UNITED STATES**Devices designed by: **Dresser, LLC (DRJ)**

<i>Cert Cat</i>	<i>Device Type</i>	<i>NB Cert #</i>	<i>Type Classification</i>	<i>Code Section</i>	<i>Expiration Date</i>	<i>Page...</i>
A	1541, 1543, 1541-3, 1543-3	18032	Safety Valve	I & VIII Div. 1	Jun 27, 2018	180
A	1700 & 2700	18100	Safety Valve	I	Jul 30, 2018	181
A	1700 & 2700 (Restricted Lift version of Cert. # 18100)	18111	Safety Valve	I & VIII Div. 1	Jul 30, 2018	182
A	1811, 1511	18122	Safety Valve	I & VIII Div. 1	Jul 30, 2018	182
A	1900, 1900-30, 1900-35	18201	Safety Relief Valve	VIII Div. 1	Jul 30, 2018	184
A	3900 (39PV, 39MV pilots)	18447	Pilot Operated Pressure Relief Valve	VIII Div. 1	Jun 15, 2021	192
A	3900 (39PV, 39MV pilots, liquid)	18458	Pilot Operated Pressure Relief Valve	VIII Div. 1	Jun 16, 2021	194
A	19000 Series	18706	Safety Relief Valve	VIII Div. 1	Jul 30, 2018	196
A	19000 Series, Liquid	18717	Relief Valve	VIII Div. 1	Jun 14, 2021	197
A	1900, 1900-30 1900-35 LA & DALA (Liquids)	18784	Relief Valve	VIII Div. 1	Jul 31, 2018	198

Baird Manufacturing (BRD)location: **Tulsa, OK, UNITED STATES**Devices designed by: **Baird Manufacturing (BRD)**

<i>Cert Cat</i>	<i>Device Type</i>	<i>NB Cert #</i>	<i>Type Classification</i>	<i>Code Section</i>	<i>Expiration Date</i>	<i>Page...</i>
M	731-1-GS	04004	Safety Relief Valve	VIII Div. 1	Aug 29, 2023	27
M	831	04037	Safety Relief Valve	VIII Div. 1	Jul 31, 2023	27
M	7100-2 G	04048	Safety Relief Valve	VIII Div. 1	May 31, 2023	27
M	7100-2 GHP	04059	Safety Relief Valve	VIII Div. 1	Aug 27, 2023	28

Basin Valve Company (BVS)location: **Signal Hill, CA, UNITED STATES**Devices designed by: **Emerson Automation Solutions Final Control US LP (AGC)**

<i>Cert Cat</i>	<i>Device Type</i>	<i>NB Cert #</i>	<i>Type Classification</i>	<i>Code Section</i>	<i>Expiration Date</i>	<i>Page...</i>
A	JLT (Liquids)	15095	Safety Relief Valve	VIII Div. 1	Jul 31, 2020	408
A	JOS-E/JBS-E/JOS-H-E 8400 AC/AB	15208	Safety Relief Valve	VIII Div. 1	Jul 31, 2020	409
A	900 Series, 7700, SNC	15411	Safety Relief Valve	VIII Div. 1	Jul 31, 2020	411
A	900 Series (Liquid), 7700, SNC	15499	Relief Valve	VIII Div. 1	Jul 31, 2020	412
A	H Series (Restricted Lift version of Cert # 15006)	15567	Safety Valve	I	Jul 31, 2020	415

Basin Valve Company (BVS)*(continued)* **location: Signal Hill, CA, UNITED STATES**

Devices designed by: Farris Engineering (TFO)

<i>Cert Cat</i>	<i>Device Type</i>	<i>NB Cert #</i>	<i>Type Classification</i>	<i>Code Section</i>	<i>Expiration Date</i>	<i>Page...</i>
A	6400/6600 (previously 2500 & 4600)	57046	Safety Valve	I & VIII Div. 1	Jan 5, 2024	235
A	2600 & 2600S	57057	Safety Relief Valve	VIII Div. 1	Jan 5, 2024	236
A	2600L (Liquids)	57068	Relief Valve	VIII Div. 1	Jan 5, 2023	237
A	2700, 2700S, 3700, 3700S	57237	Safety Relief Valve	VIII Div. 1	Jan 5, 2024	238
A	2700L, 3700L (Liquids)	57248	Relief Valve	VIII Div. 1	Jan 8, 2023	239
A	2600L (Air & Steam)	57260	Safety Relief Valve	VIII Div. 1	Jan 5, 2023	240
A	4200 / 4400	57282	Safety Valve	I & VIII Div. 1	Jan 5, 2024	241

Bay Valve Service & Engineering, LLC (MLV)**location: Odessa, TX, UNITED STATES****Acceptable Abbrev.: Bay Valve Service - Odessa, TX**

Devices designed by: Dresser, LLC (DRJ)

<i>Cert Cat</i>	<i>Device Type</i>	<i>NB Cert #</i>	<i>Type Classification</i>	<i>Code Section</i>	<i>Expiration Date</i>	<i>Page...</i>
A	1541, 1543, 1541-3, 1543-3	18032	Safety Valve	I & VIII Div. 1	Sep 7, 2019	180
A	1811, 1511	18122	Safety Valve	I & VIII Div. 1	Sep 7, 2019	182
A	1900D-2, 1900-30D-2	18144	Safety Relief Valve	VIII Div. 1	Sep 7, 2019	183
A	1900E-2, 1900-30E-2	18166	Safety Relief Valve	VIII Div. 1	Sep 7, 2019	183
A	1900, 1900-30, 1900-35	18201	Safety Relief Valve	VIII Div. 1	Sep 7, 2019	184
A	3900 (39PV, 39MV pilots)	18447	Pilot Operated Pressure Relief Valve	VIII Div. 1	Feb 9, 2022	192
A	19000 Series	18706	Safety Relief Valve	VIII Div. 1	Sep 19, 2019	196
A	19000 Series, Liquid	18717	Relief Valve	VIII Div. 1	Sep 18, 2019	197
A	1900D-2, 1900-30D-2 LA & DALA (Liquids)	18751	Relief Valve	VIII Div. 1	Sep 25, 2019	197
A	1900E-2, 1900-30E-2 LA & DALA (Liquids)	18762	Relief Valve	VIII Div. 1	Aug 13, 2019	197
A	1900, 1900-30 1900-35 LA & DALA (Liquids)	18784	Relief Valve	VIII Div. 1	Sep 9, 2019	198

Bay Valve Service & Engineering, LLC. (CRS)**location: Benicia, CA, UNITED STATES****Seal Identification: BVS/ BEN**

Devices designed by: Dresser, LLC (DRJ)

<i>Cert Cat</i>	<i>Device Type</i>	<i>NB Cert #</i>	<i>Type Classification</i>	<i>Code Section</i>	<i>Expiration Date</i>	<i>Page...</i>
A	1811, 1511	18122	Safety Valve	I & VIII Div. 1	Nov 30, 2023	182
A	1900D-2, 1900-30D-2	18144	Safety Relief Valve	VIII Div. 1	Nov 29, 2023	183
A	1900E-2, 1900-30E-2	18166	Safety Relief Valve	VIII Div. 1	Nov 29, 2023	183
A	1900, 1900-30, 1900-35	18201	Safety Relief Valve	VIII Div. 1	Nov 29, 2023	184
A	19000 Series	18706	Safety Relief Valve	VIII Div. 1	Nov 29, 2023	196
A	19000 Series, Liquid	18717	Relief Valve	VIII Div. 1	Nov 29, 2023	197
A	1900D-2, 1900-30D-2 LA & DALA (Liquids)	18751	Relief Valve	VIII Div. 1	Nov 29, 2023	197
A	1900E-2, 1900-30E-2 LA & DALA (Liquids)	18762	Relief Valve	VIII Div. 1	Nov 30, 2023	197
A	1900, 1900-30 1900-35 LA & DALA (Liquids)	18784	Relief Valve	VIII Div. 1	Nov 30, 2023	198

Bay Valve Service & Engineering, LLC. (WAR)**location: Aurora, CO, UNITED STATES**

Devices designed by: Dresser, LLC (DRJ)

<i>Cert Cat</i>	<i>Device Type</i>	<i>NB Cert #</i>	<i>Type Classification</i>	<i>Code Section</i>	<i>Expiration Date</i>	<i>Page...</i>
A	1900D-2, 1900-30D-2	18144	Safety Relief Valve	VIII Div. 1	Mar 9, 2023	183
A	1900E-2, 1900-30E-2	18166	Safety Relief Valve	VIII Div. 1	Mar 9, 2023	183
A	1900, 1900-30, 1900-35	18201	Safety Relief Valve	VIII Div. 1	Jun 26, 2023	184
A	19000 Series	18706	Safety Relief Valve	VIII Div. 1	Jun 26, 2023	196
A	19000 Series, Liquid	18717	Relief Valve	VIII Div. 1	Mar 9, 2023	197
A	1900D-2, 1900-30D-2 LA & DALA (Liquids)	18751	Relief Valve	VIII Div. 1	Mar 9, 2023	197
A	1900E-2, 1900-30E-2 LA & DALA (Liquids)	18762	Relief Valve	VIII Div. 1	Mar 9, 2023	197
A	1900, 1900-30 1900-35 LA & DALA (Liquids)	18784	Relief Valve	VIII Div. 1	Mar 10, 2023	198

Bay Valve Service & Engineering, LLC. (WSL)**location: Salt Lake City, UT, UNITED STATES****Acceptable Abbrev.: Bay Valve Service - Salt Lake City, UT**

Devices designed by: Dresser, LLC (DRJ)

<i>Cert Cat</i>	<i>Device Type</i>	<i>NB Cert #</i>	<i>Type Classification</i>	<i>Code Section</i>	<i>Expiration Date</i>	<i>Page...</i>
A	1811, 1511	18122	Safety Valve	I & VIII Div. 1	Mar 13, 2019	182
A	1900, 1900-30, 1900-35	18201	Safety Relief Valve	VIII Div. 1	Mar 13, 2019	184
A	19000 Series	18706	Safety Relief Valve	VIII Div. 1	Dec 20, 2018	196
A	19000 Series, Liquid	18717	Relief Valve	VIII Div. 1	Dec 20, 2018	197
A	1900, 1900-30 1900-35 LA & DALA (Liquids)	18784	Relief Valve	VIII Div. 1	Mar 13, 2019	198

Bay Valve Service, LLC. (BAY)**location: Seattle, WA, UNITED STATES****Acceptable Abbrev.: Bay Valve Service - Seattle, WA**

Devices designed by: Dresser, LLC (DRJ)

<i>Cert Cat</i>	<i>Device Type</i>	<i>NB Cert #</i>	<i>Type Classification</i>	<i>Code Section</i>	<i>Expiration Date</i>	<i>Page...</i>
A	1541, 1543, 1541-3, 1543-3	18032	Safety Valve	I & VIII Div. 1	Nov 22, 2022	180
A	1811, 1511	18122	Safety Valve	I & VIII Div. 1	Feb 7, 2023	182
A	1900D-2, 1900-30D-2	18144	Safety Relief Valve	VIII Div. 1	Nov 21, 2022	183
A	1900E-2, 1900-30E-2	18166	Safety Relief Valve	VIII Div. 1	Feb 7, 2023	183
A	1900, 1900-30, 1900-35	18201	Safety Relief Valve	VIII Div. 1	Feb 6, 2023	184
A	3900 (39PV, 39MV pilots)	18447	Pilot Operated Pressure Relief Valve	VIII Div. 1	Nov 21, 2022	192
A	19000 Series	18706	Safety Relief Valve	VIII Div. 1	Feb 6, 2023	196
A	19000 Series, Liquid	18717	Relief Valve	VIII Div. 1	Feb 6, 2023	197
A	1900D-2, 1900-30D-2 LA & DALA (Liquids)	18751	Relief Valve	VIII Div. 1	Nov 28, 2022	197
A	1900E-2, 1900-30E-2 LA & DALA (Liquids)	18762	Relief Valve	VIII Div. 1	Nov 28, 2022	197
A	1900, 1900-30 1900-35 LA & DALA (Liquids)	18784	Relief Valve	VIII Div. 1	Feb 6, 2023	198
A	19110M & 19110H (Liquids)	19077	Relief Valve	VIII Div. 1	Aug 22, 2022	207

Bay Valve Service, LLC. (BYS)**location: Ferndale, WA, UNITED STATES****Acceptable Abbrev.: Bay Valve Service - Ferndale, WA**

Devices designed by: Dresser, LLC (DRJ)

<i>Cert Cat</i>	<i>Device Type</i>	<i>NB Cert #</i>	<i>Type Classification</i>	<i>Code Section</i>	<i>Expiration Date</i>	<i>Page...</i>
A	1900D-2, 1900-30D-2	18144	Safety Relief Valve	VIII Div. 1	Oct 19, 2020	183
A	1900E-2, 1900-30E-2	18166	Safety Relief Valve	VIII Div. 1	Oct 20, 2020	183
A	1900, 1900-30, 1900-35	18201	Safety Relief Valve	VIII Div. 1	Oct 20, 2020	184
A	19000 Series	18706	Safety Relief Valve	VIII Div. 1	Oct 19, 2020	196
A	19000 Series, Liquid	18717	Relief Valve	VIII Div. 1	Oct 19, 2020	197
A	1900D-2, 1900-30D-2 LA & DALA (Liquids)	18751	Relief Valve	VIII Div. 1	Jul 30, 2020	197
A	1900E-2, 1900-30E-2 LA & DALA (Liquids)	18762	Relief Valve	VIII Div. 1	Jul 30, 2020	197
A	1900, 1900-30 1900-35 LA & DALA (Liquids)	18784	Relief Valve	VIII Div. 1	Oct 20, 2020	198

Beaumont Manufacturing and Distribution Company, LLC (MPV)**location: Beaumont, TX,****Acceptable Abbrev.: BMD**

Devices designed by: Beaumont Manufacturing and Distribution Company, LLC (MPV)

<i>Cert Cat</i>	<i>Device Type</i>	<i>NB Cert #</i>	<i>Type Classification</i>	<i>Code Section</i>	<i>Expiration Date</i>	<i>Page...</i>
M	RV10	00910	Safety Relief Valve	VIII Div. 1	Nov 3, 2022	

Beijing Aerospace Petrochemical Technology & Equipment Engineering Corporation Limited (BAP)**location: Beijing, PEOPLES REP/CHINA****Acceptable Abbrev.: BAPC**

Devices designed by: Beijing Aerospace Petrochemical Technology & Equipment Engineering Corporation Limited (BAP)

<i>Cert Cat</i>	<i>Device Type</i>	<i>NB Cert #</i>	<i>Type Classification</i>	<i>Code Section</i>	<i>Expiration Date</i>	<i>Page...</i>
M	HT Series	12407	Safety Relief Valve	VIII Div. 1	Jul 6, 2018	29
M	HTXO Series (Liquid)	12418	Safety Relief Valve	VIII Div. 1	Nov 13, 2020	29
M	HT Series (Liquid)	12429	Safety Relief Valve	VIII Div. 1	Nov 13, 2020	30
M	HTXD Series (Liquid)	12430	Pilot Operated Pressure Relief Valve	VIII Div. 1	Nov 13, 2020	31
M	HTXD Series	12441	Pilot Operated Pressure Relief Valve	VIII Div. 1	Dec 14, 2021	
M	HTXO Series	12452	Safety Relief Valve	VIII Div. 1	Dec 14, 2021	
M	HTBPO	12463	Buckling Pin Non-reclosing Device	VIII Div. 1	May 17, 2023	
M	HTBPX	12474	Buckling Pin Non-reclosing Device	VIII Div. 1	May 17, 2023	

Bermingham Controls, Incorporated (LSL)**location: Cerritos, CA, UNITED STATES**

Devices designed by: Dresser, LLC (DRJ)

<i>Cert Cat</i>	<i>Device Type</i>	<i>NB Cert #</i>	<i>Type Classification</i>	<i>Code Section</i>	<i>Expiration Date</i>	<i>Page...</i>
A	1541, 1543, 1541-3, 1543-3	18032	Safety Valve	I & VIII Div. 1	Nov 9, 2022	180
A	1700 & 2700 (Restricted Lift version of Cert. # 18100)	18111	Safety Valve	I & VIII Div. 1	Jul 29, 2022	182
A	1811, 1511	18122	Safety Valve	I & VIII Div. 1	Dec 9, 2022	182
A	1900D-2, 1900-30D-2	18144	Safety Relief Valve	VIII Div. 1	Apr 4, 2022	183
A	1900E-2, 1900-30E-2	18166	Safety Relief Valve	VIII Div. 1	Apr 4, 2022	183
A	1900, 1900-30, 1900-35	18201	Safety Relief Valve	VIII Div. 1	Apr 4, 2022	184
A	19000 Series	18706	Safety Relief Valve	VIII Div. 1	Sep 14, 2022	196
A	19000 Series, Liquid	18717	Relief Valve	VIII Div. 1	Sep 14, 2022	197
A	1900D-2, 1900-30D-2 LA & DALA (Liquids)	18751	Relief Valve	VIII Div. 1	Apr 4, 2022	197
A	1900E-2, 1900-30E-2 LA & DALA (Liquids)	18762	Relief Valve	VIII Div. 1	Jul 28, 2022	197
A	1900, 1900-30 1900-35 LA & DALA (Liquids)	18784	Relief Valve	VIII Div. 1	Apr 4, 2022	198
A	19110M & 19110H (Liquids)	19077	Relief Valve	VIII Div. 1	Apr 4, 2022	207

Birmingham Controls, Incorporated (LSL)*(continued)* location: **Cerritos, CA, UNITED STATES**Devices designed by: **Spence Engineering Company, Incorporated (SEC)**

<i>Cert Cat</i>	<i>Device Type</i>	<i>NB Cert #</i>	<i>Type Classification</i>	<i>Code Section</i>	<i>Expiration Date</i>	<i>Page...</i>
A	Fig 31, 41, 41A	65045	Safety Valve	I & VIII Div. 1	Sep 24, 2022	452

Binzagr Factory for Insulation Materials Co. Ltd. (BFI)location: **Jubail, Eastern Province, SAUDI ARABIA**Acceptable Abbrev.: **LESER BINZAGR**Devices designed by: **LESER GmbH & Company KG (LES)**

<i>Cert Cat</i>	<i>Device Type</i>	<i>NB Cert #</i>	<i>Type Classification</i>	<i>Code Section</i>	<i>Expiration Date</i>	<i>Page...</i>
A	441/442/444	37044	Safety Relief Valve	VIII Div. 1	Apr 16, 2019	316
A	441/442/444 liquids	37055	Relief Valve	VIII Div. 1	Apr 16, 2019	317
A	459/462 liquids	37101	Relief Valve	VIII Div. 1	Apr 16, 2019	319
A	459/462	37112	Safety Relief Valve	VIII Div. 1	Apr 16, 2019	319
A	437 (Liquids)	37189	Relief Valve	VIII Div. 1	Apr 16, 2019	321
A	438 Sub Types 481, 439	37190	Safety Relief Valve	VIII Div. 1	Apr 15, 2019	322
A	438 Sub Types 481, 439, Liquids	37202	Safety Relief Valve	VIII Div. 1	Apr 16, 2019	322
A	437	37213	Safety Relief Valve	VIII Div. 1	Apr 15, 2019	322
A	526	37224	Safety Relief Valve	VIII Div. 1	Apr 16, 2019	323
A	526 (Liquids)	37235	Relief Valve	VIII Div. 1	Apr 16, 2019	324
A	526D	37246	Safety Relief Valve	VIII Div. 1	Apr 15, 2019	324
A	526D Liquids	37257	Relief Valve	VIII Div. 1	Apr 15, 2019	324

Bliss Anand Private Limited (BLS)location: **HSIIDC, Bawal, Haryana, INDIA**Devices designed by: **Farris Engineering (TFO)**

<i>Cert Cat</i>	<i>Device Type</i>	<i>NB Cert #</i>	<i>Type Classification</i>	<i>Code Section</i>	<i>Expiration Date</i>	<i>Page...</i>
M	3800	57024	Pilot Operated Pressure Relief Valve	VIII Div. 1	Apr 24, 2020	233
M	2600 & 2600S	57057	Safety Relief Valve	VIII Div. 1	May 29, 2020	236
M	2600L (Liquids)	57068	Relief Valve	VIII Div. 1	Apr 3, 2020	237
M	3800L, PCL, PCM pilots	57215	Pilot Operated Pressure Relief Valve	VIII Div. 1	Apr 3, 2020	238
M	2700, 2700S, 3700, 3700S	57237	Safety Relief Valve	VIII Div. 1	Apr 2, 2020	238
M	2700L, 3700L (Liquids)	57248	Relief Valve	VIII Div. 1	Apr 2, 2020	239

The Blythe Company (BLY)location: **Mineral Springs, NC, UNITED STATES**Devices designed by: **Emerson Automation Solutions Final Control US LP (AGC)**

<i>Cert Cat</i>	<i>Device Type</i>	<i>NB Cert #</i>	<i>Type Classification</i>	<i>Code Section</i>	<i>Expiration Date</i>	<i>Page...</i>
A	81, 81P, 83, 86	01089	Safety Relief Valve	VIII Div. 1	Nov 3, 2019	397

Devices designed by: **Mercer Valve Company, Incorporated (MVC)**

<i>Cert Cat</i>	<i>Device Type</i>	<i>NB Cert #</i>	<i>Type Classification</i>	<i>Code Section</i>	<i>Expiration Date</i>	<i>Page...</i>
A	9100	38056	Safety Relief Valve	VIII Div. 1	Nov 3, 2019	332
A	9100L (Liquids)	38067	Relief Valve	VIII Div. 1	Jul 30, 2019	333
A	9500, S, M, E Pilots	38078	Pilot Operated Pressure Relief Valve	VIII Div. 1	Nov 3, 2019	333
A	9500 (Full Port), S, M, E Pilots	38089	Pilot Operated Pressure Relief Valve	VIII Div. 1	Nov 3, 2019	334

Bopp & Reuther Sicherheits (BOP)

location: Mannheim, GERMANY

Acceptable Abbrev.: IMI BuR; IMI B&R IMI B&R SR; IMI Bopp & Reuther SR

und Regelarmaturen GmbH

Devices designed by: Bopp & Reuther Sicherheits (BOP)

<i>Cert Cat</i>	<i>Device Type</i>	<i>NB Cert #</i>	<i>Type Classification</i>	<i>Code Section</i>	<i>Expiration Date</i>	<i>Page...</i>
M	Si 81/83/84	72009	Safety Relief Valve	VIII Div. 1	Mar 23, 2021	33
M	Si/83/84/81 (RL)	72010	Safety Relief Valve	III & VIII Div.1	Mar 23, 2021	34
M	Si 81/83/84 (Liquids) (RL)	72021	Relief Valve	III & VIII Div.1	Sep 20, 2021	34
M	SiZ 2507	72032	Safety Valve	III	Nov 30, 2022	34
M	SiC 11/13/14	72043	Safety Relief Valve	III & VIII Div.1	Oct 15, 2020	35
M	SiC 11/13/14 (Liquids)	72054	Relief Valve	III & VIII Div.1	Apr 15, 2022	35
M	Si 83/84/81 (Liquids)	72065	Relief Valve	III & VIII Div.1	Sep 20, 2021	36
M	Si 91/95, SiZ 2507 RL	72076	Safety Valve	I, III, & VIII Div. 1	Aug 9, 2021	37
M	Si 91/95 01-07 Type L + H (restricted lift)	72087	Safety Valve	I, III, & VIII Div. 1	Dec 22, 2023	39
M	Si 41/43/44 02-05	72098	Safety Valve	VIII Div. 1	May 14, 2021	40
M	Si 41/43/44 02-05 (Liquids)	72100	Safety Valve	VIII Div. 1	May 17, 2021	41
M	Si 11, Si 13, Si 14 (B, C, D, E orif.)	72122	Safety Relief Valve	VIII Div. 1	Jan 17, 2020	41
M	Si 11, Si 13, Si 14 (F orif.)	72133	Safety Relief Valve	VIII Div. 1	May 13, 2020	42
M	Si 11, Si 13, Si 14 (B, C, D, E orif., Liquid)	72144	Safety Relief Valve	VIII Div. 1	Dec 10, 2019	42
M	Si 11, Si 13, Si 14 (F orif. , Liquid)	72155	Safety Relief Valve	VIII Div. 1	Dec 9, 2019	42
M	Si 63 (High Press.)	72166	Safety Relief Valve	III NB, NC	Dec 6, 2024	43
M	Si 63 (Low Press.)	72177	Safety Relief Valve	III NB, NC	Dec 4, 2024	43
M	Si 25/ Si 63RL (Low Press., Restricted lift)	72188	Safety Relief Valve	III NB, NC	Dec 6, 2024	44
M	Si 25/ Si 63RL (High Press., Restricted lift)	72199	Safety Relief Valve	III NB, NC	Dec 6, 2024	44
M	Si 91 / 95, SiZ 2507	72201	Safety Valve	III NC, ND	Jan 27, 2021	45
M	Si 91 / 95, SiZ 2507 (Restricted Lift)	72212	Safety Valve	III NC, ND	Jan 27, 2021	45

Broady Flow Control Limited (BVL)

location: East Yorkshire, UNITED KINGDOM

Acceptable Abbrev.: Broady - Valvitalia

Devices designed by: Broady Flow Control Limited (BVL)

<i>Cert Cat</i>	<i>Device Type</i>	<i>NB Cert #</i>	<i>Type Classification</i>	<i>Code Section</i>	<i>Expiration Date</i>	<i>Page...</i>
M	3500	93002	Safety Relief Valve	VIII Div. 1	Jun 12, 2018	46
M	3500 (Liquid)	93013	Safety Relief Valve	VIII Div. 1	Nov 17, 2019	47
M	3600	93024	Safety Relief Valve	VIII Div. 1	Feb 6, 2019	47
M	3600 (Liquid)	93035	Safety Relief Valve	VIII Div. 1	Aug 6, 2018	48
M	4000 (Full Bore, Modulating & Snap Acting Pilot, Air/gas))	93046	Pilot Operated Pressure Relief Valve	VIII Div. 1	May 23, 2022	
M	4000 (API Nozzle -Modulating & Snap Acting Pilot, Air/gas)	93068	Pilot Operated Pressure Relief Valve	VIII Div. 1	Dec 20, 2022	

BS & B PREMCO LATINOAMERICA S.A. de C.V. (BSP)

location: Santa Catarina, Nuevo Leon,

Devices designed by: BS & B Premco LLC (PRL)

<i>Cert Cat</i>	<i>Device Type</i>	<i>NB Cert #</i>	<i>Type Classification</i>	<i>Code Section</i>	<i>Expiration Date</i>	<i>Page...</i>
M	BPRV, BPV	77813	Buckling Pin Non-reclosing Device	VIII Div. 1	Dec 14, 2023	53
M	BPAV (Liquid)	77970	Buckling Pin Non-reclosing Device	VIII Div. 1	Apr 10, 2023	54
M	BPAV (air/gas)	77981	Buckling Pin Non-reclosing Device	VIII Div. 1	Apr 10, 2023	54

BS & B Premco Latinoamerica S.A. De C.V. (PLS)**location: Guadalupe, Nuevo Leon, MEXICO**Devices designed by: **BS & B Premco Latinoamerica S.A. De C.V. (PLS)**

<i>Cert Cat</i>	<i>Device Type</i>	<i>NB Cert #</i>	<i>Type Classification</i>	<i>Code Section</i>	<i>Expiration Date</i>	<i>Page...</i>
M	REL	13004	Rupture Disk Device	VIII Div. 1	Jan 24, 2024	49
M	REV	13015	Rupture Disk Device	VIII Div. 1	Feb 5, 2024	50
M	AMBV & MBV W/Bar Type Vacuum Support	13037	Rupture Disk Device	VIII Div. 1	Feb 5, 2024	51
M	IMB, AIMB, IMBL & AIMBL	13048	Rupture Disk Device	VIII Div. 1	Apr 27, 2024	51
M	MB & AMB	13059	Rupture Disk Device	VIII Div. 1	Apr 27, 2024	52
M	MBV, AMBV w. Dial Vac. Support	13060	Rupture Disk Device	VIII Div. 1	Jan 12, 2023	52

BS & B Premco LLC (PRL)**location: Tulsa, OK, UNITED STATES****Acceptable Abbrev.: BSB**Devices designed by: **BS & B Premco LLC (PRL)**

<i>Cert Cat</i>	<i>Device Type</i>	<i>NB Cert #</i>	<i>Type Classification</i>	<i>Code Section</i>	<i>Expiration Date</i>	<i>Page...</i>
M	BPRV, BPV	77813	Buckling Pin Non-reclosing Device	VIII Div. 1	Apr 24, 2024	53
M	BPAV (Liquid)	77970	Buckling Pin Non-reclosing Device	VIII Div. 1	Sep 19, 2023	54
M	BPAV (air/gas)	77981	Buckling Pin Non-reclosing Device	VIII Div. 1	Feb 8, 2023	54
M	BPV	77992	Buckling Pin Non-reclosing Device	VIII Div. 1	Jun 19, 2018	55
M	RDV-HP	79017	Safety Relief Valve	VIII Div. 1	Jun 9, 2020	55

BS & B Safety Systems (India) Limited (BIN)**location: Chennai, Tamil Nadu 600097, INDIA**Devices designed by: **BS & B Safety Systems, LLC (BSB)**

<i>Cert Cat</i>	<i>Device Type</i>	<i>NB Cert #</i>	<i>Type Classification</i>	<i>Code Section</i>	<i>Expiration Date</i>	<i>Page...</i>
M	BV, BRV, BSV, BRSV	77026	Rupture Disk Device	VIII Div. 1	Jan 14, 2022	57
M	B, BR, BRR	77037	Rupture Disk Device	VIII Div. 1	Jan 14, 2022	58
M	RLS, RLS Welded Assembly	77059	Rupture Disk Device	VIII Div. 1	May 19, 2020	60
M	GFN, GFA	77060	Rupture Disk Device	VIII Div. 1	May 15, 2023	60
M	S90, S90 Welded Assembly	77082	Rupture Disk Device	VIII Div. 1	May 23, 2023	61
M	RLS, RLS Welded Assembly (liquid)	77307	Rupture Disk Device	VIII Div. 1	Jan 13, 2022	67

BS & B Safety Systems Ltda. (BDD)**location: Sao Paulo, BRAZIL****Acceptable Abbrev.: BS & B**Devices designed by: **BS & B Safety Systems, LLC (BSB)**

<i>Cert Cat</i>	<i>Device Type</i>	<i>NB Cert #</i>	<i>Type Classification</i>	<i>Code Section</i>	<i>Expiration Date</i>	<i>Page...</i>
M	RLS, RLS Welded Assembly	77059	Rupture Disk Device	VIII Div. 1	Aug 15, 2022	60
M	S90, S90 Welded Assembly	77082	Rupture Disk Device	VIII Div. 1	Aug 16, 2022	61
M	RLS, RLS Welded Assembly (liquid)	77307	Rupture Disk Device	VIII Div. 1	Aug 16, 2022	67
M	GCR-S,SE,SM,SS,SES,SMS, SW, N, NS (2")	77420	Rupture Disk Device	VIII Div. 1	Aug 17, 2022	70
M	GCR-S, SE, SM, SS, SES, SMS, SW, N, NS	77611	Rupture Disk Device	VIII Div. 1	Aug 15, 2022	73
M	GCR-S, SE, SM, SS, SES, SMS, SW, N, NS (liquids)	78195	Rupture Disk Device	VIII Div. 1	Aug 16, 2022	
M	GCR-S,SE,SM,SS,SES,SMS, SW, N, NS (2" liquids)	78207	Rupture Disk Device	VIII Div. 1	Aug 16, 2022	

Devices designed by: **BS & B Safety Systems, Ltd. (BSI)**

<i>Cert Cat</i>	<i>Device Type</i>	<i>NB Cert #</i>	<i>Type Classification</i>	<i>Code Section</i>	<i>Expiration Date</i>	<i>Page...</i>
M	SKR, SKR Welded Assembly (Liquids)	77329	Rupture Disk Device	VIII Div. 1	Aug 16, 2022	88
M	LPS, LPS Welded Assembly	77745	Rupture Disk Device	VIII Div. 1	Aug 15, 2022	91

BS & B Safety Systems, LLC (BSB)**location: Tulsa, OK, UNITED STATES****Acceptable Abbrev.: BSB**

Devices designed by: BS & B Safety Systems, LLC (BSB)

<i>Cert Cat</i>	<i>Device Type</i>	<i>NB Cert #</i>	<i>Type Classification</i>	<i>Code Section</i>	<i>Expiration Date</i>	<i>Page...</i>
M	CSR	77004	Rupture Disk Device	VIII Div. 1	Oct 10, 2019	56
M	JRS	77015	Rupture Disk Device	VIII Div. 1	Mar 27, 2020	56
M	BV, BRV, BSV, BRSV	77026	Rupture Disk Device	VIII Div. 1	Aug 4, 2020	57
M	B, BR, BRR	77037	Rupture Disk Device	VIII Div. 1	Aug 4, 2020	58
M	DV, D, DR, DRR, DRV	77048	Rupture Disk Device	VIII Div. 1	Oct 3, 2019	59
M	RLS, RLS Welded Assembly	77059	Rupture Disk Device	VIII Div. 1	Oct 16, 2019	60
M	GFN, GFA	77060	Rupture Disk Device	VIII Div. 1	Dec 18, 2019	60
M	ECR	77071	Rupture Disk Device	VIII Div. 1	Nov 25, 2019	61
M	S90, S90 Welded Assembly	77082	Rupture Disk Device	VIII Div. 1	Dec 18, 2020	61
M	CSR (liquid)	77093	Rupture Disk Device	VIII Div. 1	Oct 3, 2019	62
M	GFR-S, -SM, -SE, -SS, -SMS, -SES (1")	77105	Rupture Disk Device	VIII Div. 1	Apr 9, 2020	62
M	GFR-S, -SM, -SE (1.5")	77116	Rupture Disk Device	VIII Div. 1	Apr 9, 2020	62
M	GFR-S, -SM, -SE (2")	77127	Rupture Disk Device	VIII Div. 1	Dec 19, 2019	63
M	RB-90	77138	Rupture Disk Device	VIII Div. 1	May 2, 2022	63
M	GFR-S, -SM, -SE (Combined)	77194	Rupture Disk Device	VIII Div. 1	Apr 9, 2020	64
M	S-90 (Inconel)	77206	Rupture Disk Device	VIII Div. 1	May 12, 2020	64
M	1/2" FRB A-6 M x F & M x M Stakul	77217	Rupture Disk Device	VIII Div. 1	Aug 20, 2020	65
M	3/4" B assembly	77228	Rupture Disk Device	VIII Div. 1	Mar 5, 2021	65
M	GFR-S 1 1/2" Liquid	77239	Rupture Disk Device	VIII Div. 1	May 12, 2020	65
M	BV,BRV,BSV,BRSV (liquid)	77273	Rupture Disk Device	VIII Div. 1	Aug 6, 2020	66
M	FRS	77284	Rupture Disk Device	VIII Div. 1	Jan 22, 2021	66
M	RLS, RLS Welded Assembly (liquid)	77307	Rupture Disk Device	VIII Div. 1	Aug 6, 2020	67
M	B, BR, BRR (liquid)	77318	Rupture Disk Device	VIII Div. 1	Aug 6, 2020	68
M	AV	77341	Rupture Disk Device	VIII Div. 1	Feb 28, 2021	69
M	D Series (liquid) DR, DRR	77352	Rupture Disk Device	VIII Div. 1	Mar 1, 2021	70
M	GCR-S,SE,SM,SS,SES,SMS, SW, N, NS (2")	77420	Rupture Disk Device	VIII Div. 1	Mar 24, 2021	70
M	1/2" Welded FRB with 3/4" Sanitary Clamp Connection (A/G/L)	77442	Rupture Disk Device	VIII Div. 1	Apr 12, 2021	71
M	2" BV	77486	Rupture Disk Device	VIII Div. 1	Dec 20, 2019	71
M	2" B	77497	Rupture Disk Device	VIII Div. 1	Oct 3, 2019	71
M	CSI	77565	Rupture Disk Device	VIII Div. 1	Sep 19, 2022	72
M	A-10 SK 1" SCD B	77587	Rupture Disk Device	VIII Div. 1	Sep 13, 2022	72
M	A-2 SK 0.5 FRB	77598	Rupture Disk Device	VIII Div. 1	Sep 15, 2022	72
M	0.5" FRB WFT	77600	Rupture Disk Device	VIII Div. 1	Sep 15, 2022	73
M	GCR-S, SE, SM, SS, SES, SMS, SW, N, NS	77611	Rupture Disk Device	VIII Div. 1	Jan 4, 2023	73
M	A-6 with B Disk	77633	Rupture Disk Device	VIII Div. 1	May 24, 2023	74
M	A19 with Scored B Disk	77644	Rupture Disk Device	VIII Div. 1	Jul 15, 2023	74
M	RLS DD (liquid)	77688	Rupture Disk Device	VIII Div. 1	Jun 21, 2018	75
M	RLS DD	77699	Rupture Disk Device	VIII Div. 1	Jun 20, 2018	75
M	JRS DD	77701	Rupture Disk Device	VIII Div. 1	Jun 28, 2018	76
M	S90 DD	77712	Rupture Disk Device	VIII Div. 1	Jun 21, 2018	76
M	SVI Assembly	77723	Rupture Disk Device	VIII Div. 1	Jun 20, 2018	77
M	DV, DRV, DSV, DRSV (liquids)	77734	Rupture Disk Device	VIII Div. 1	Jun 21, 2018	77
M	Welded 1" FRB, w. 1/2" VCR connections	77778	Rupture Disk Device	VIII Div. 1	Oct 2, 2018	78
M	1/2" Welded FRB w. 3/4" Sanitary Connection (air/gas)	77789	Rupture Disk Device	VIII Div. 1	Feb 10, 2019	78
M	MRB	77824	Rupture Disk Device	VIII Div. 1	May 20, 2020	78
M	FRB (welded cassette)	77835	Rupture Disk Device	VIII Div. 1	Apr 9, 2020	79
M	SKA	77846	Rupture Disk Device	VIII Div. 1	Nov 17, 2020	79
M	X 90 Welded	77868	Rupture Disk Device	VIII Div. 1	Jun 30, 2021	79
M	B, BR, BRR-LTF	77879	Rupture Disk Device	VIII Div. 1	Nov 2, 2022	80
M	BV, BRV, BSV, BRSV-LTF	77880	Rupture Disk Device	VIII Div. 1	Dec 15, 2022	81
M	D, DR, DRR-LTF	77891	Rupture Disk Device	VIII Div. 1	Nov 2, 2022	82

BS & B Safety Systems, LLC (BSB)*(continued)* location: **Tulsa, OK, UNITED STATES**Acceptable Abbrev.: **BSB**Devices designed by: **BS & B Safety Systems, LLC (BSB)**

<i>Cert Cat</i>	<i>Device Type</i>	<i>NB Cert #</i>	<i>Type Classification</i>	<i>Code Section</i>	<i>Expiration Date</i>	<i>Page...</i>
M	FVA	77925	Rupture Disk Device	VIII Div. 1	Oct 2, 2019	82
M	Welded FRB w/ 3/4" VCR Connections	77936	Rupture Disk Device	VIII Div. 1	Jun 28, 2023	83
M	Scored B -LTF, Scd B-LTF, XB-LTF	78151	Rupture Disk Device	VIII Div. 1	Dec 11, 2020	83
M	CSI (liquid)	78162	Rupture Disk Device	VIII Div. 1	Oct 14, 2021	84
M	PLD	78173	Rupture Disk Device	VIII Div. 1	Oct 14, 2021	84
M	PLDV	78184	Rupture Disk Device	VIII Div. 1	Oct 14, 2021	85
M	GCR-S, SE, SM, SS, SES, SMS, SW, N, NS (liquids)	78195	Rupture Disk Device	VIII Div. 1	Jan 13, 2022	
M	GCR-S,SE,SM,SS,SES,SMS, SW, N, NS (2" liquids)	78207	Rupture Disk Device	VIII Div. 1	Jan 14, 2022	
M	AV-E, AV-EL	78285	Rupture Disk Device	VIII Div. 1	Apr 20, 2023	
M	AVV	78364	Rupture Disk Device	VIII Div. 1	Oct 5, 2023	
M	Welded QRB	78375	Rupture Disk Device	VIII Div. 1	Oct 5, 2023	
M	Scored B, SCD B, XB	84046	Rupture Disk Device	VIII Div. 1	Mar 22, 2019	86

BS & B Safety Systems, Ltd. (BSI)location: **Limerick, IRELAND**Devices designed by: **BS & B Safety Systems, LLC (BSB)**

<i>Cert Cat</i>	<i>Device Type</i>	<i>NB Cert #</i>	<i>Type Classification</i>	<i>Code Section</i>	<i>Expiration Date</i>	<i>Page...</i>
M	JRS	77015	Rupture Disk Device	VIII Div. 1	May 26, 2021	56
M	B, BR, BRR	77037	Rupture Disk Device	VIII Div. 1	Jan 11, 2023	58
M	RLS, RLS Welded Assembly	77059	Rupture Disk Device	VIII Div. 1	May 26, 2021	60
M	GFN, GFA	77060	Rupture Disk Device	VIII Div. 1	Apr 30, 2020	60
M	S90, S90 Welded Assembly	77082	Rupture Disk Device	VIII Div. 1	Oct 27, 2023	61
M	RB-90	77138	Rupture Disk Device	VIII Div. 1	Jan 11, 2023	63
M	S-90 (Inconel)	77206	Rupture Disk Device	VIII Div. 1	Oct 27, 2023	64
M	RLS, RLS Welded Assembly (liquid)	77307	Rupture Disk Device	VIII Div. 1	Oct 27, 2023	67
M	B, BR, BRR (liquid)	77318	Rupture Disk Device	VIII Div. 1	Sep 21, 2022	68
M	GCR-S,SE,SM,SS,SES,SMS, SW, N, NS (2")	77420	Rupture Disk Device	VIII Div. 1	Mar 12, 2020	70
M	2" BV	77486	Rupture Disk Device	VIII Div. 1	Aug 9, 2022	71
M	GCR-S, SE, SM, SS, SES, SMS, SW, N, NS (liquids)	77622	Rupture Disk Device	VIII Div. 1	Mar 16, 2020	73
M	DV, DRV, DSV, DRSV (liquids)	77734	Rupture Disk Device	VIII Div. 1	Jan 11, 2023	77
M	GCR-S, SE, SM, SS, SES, SMS, SW, N, NS (liquids)	78195	Rupture Disk Device	VIII Div. 1	Jan 12, 2023	
M	GCR-S,SE,SM,SS,SES,SMS, SW, N, NS (2" liquids)	78207	Rupture Disk Device	VIII Div. 1	Jan 11, 2023	

BS & B Safety Systems, Ltd. (BSI)

(continued) location: Limerick, IRELAND

Devices designed by: BS & B Safety Systems, Ltd. (BSI)

<i>Cert Cat</i>	<i>Device Type</i>	<i>NB Cert #</i>	<i>Type Classification</i>	<i>Code Section</i>	<i>Expiration Date</i>	<i>Page...</i>
M	XT	77149	Rupture Disk Device	VIII Div. 1	Oct 27, 2023	87
M	SKR, SKR Welded Assembly	77161	Rupture Disk Device	VIII Div. 1	Apr 30, 2020	87
M	CL	77183	Rupture Disk Device	VIII Div. 1	Aug 27, 2018	88
M	SKR, SKR Welded Assembly (Liquids)	77329	Rupture Disk Device	VIII Div. 1	Jan 22, 2020	88
M	SIGMA, SIGMA EXL, UBR	77464	Rupture Disk Device	VIII Div. 1	Sep 19, 2022	89
M	SIGMA, SIGMA EXL, UBR (liquid)	77475	Rupture Disk Device	VIII Div. 1	Sep 19, 2022	89
M	SKr-U 1/2"	77509	Rupture Disk Device	VIII Div. 1	Sep 18, 2022	89
M	SKr-U 3/4"	77510	Rupture Disk Device	VIII Div. 1	Sep 11, 2022	90
M	SKr-U 1"	77521	Rupture Disk Device	VIII Div. 1	Sep 18, 2022	90
M	SKr-U 3/4" Liquid	77543	Rupture Disk Device	VIII Div. 1	Sep 11, 2022	90
M	SKr-U 1" Liquid	77554	Rupture Disk Device	VIII Div. 1	Sep 14, 2022	90
M	MVB Cassette	77655	Rupture Disk Device	VIII Div. 1	Oct 27, 2023	91
M	LPS, LPS Welded Assembly	77745	Rupture Disk Device	VIII Div. 1	Oct 2, 2018	91
M	LPS, LPS Welded Assembly (liquid)	77756	Rupture Disk Device	VIII Div. 1	Oct 1, 2018	92
M	SRC	77767	Rupture Disk Device	VIII Div. 1	Mar 6, 2019	92
M	GLP-S	77790	Rupture Disk Device	VIII Div. 1	Mar 6, 2019	93
M	SSR (liquid)	77958	Rupture Disk Device	VIII Div. 1	Oct 27, 2023	93
M	SSR	77969	Rupture Disk Device	VIII Div. 1	Oct 27, 2023	94
M	XT (Liquid)	78094	Rupture Disk Device	VIII Div. 1	Sep 11, 2020	94
M	SKr DD	78106	Rupture Disk Device	VIII Div. 1	Dec 20, 2019	95
M	SKr DD (Liquid)	78117	Rupture Disk Device	VIII Div. 1	Dec 20, 2019	95
M	1.5" SLP-S, SLP-SE, SLP-SM, SLP-N, SLP-SS, SLP-SES, SLP-	78128	Rupture Disk Device	VIII Div. 1	Jan 21, 2021	96
M	2" SLP-S, SLP-SE, SLP-SM, SLP-N, SLP-SS, SLP-SES, SLP-	78139	Rupture Disk Device	VIII Div. 1	Jan 22, 2021	96
M	3" SLP-S, SLP-SE, SLP-SM, SLP-N, SLP-SS, SLP-SES, SLP-	78140	Rupture Disk Device	VIII Div. 1	Jan 22, 2021	96
M	SRD & CCS	78229	Rupture Disk Device	VIII Div. 1	Aug 15, 2022	
M	SRD & CCS (Liquid)	78230	Rupture Disk Device	VIII Div. 1	Aug 16, 2022	
M	SRD-L & CCS-L	78241	Rupture Disk Device	VIII Div. 1	Aug 16, 2022	
M	SRD-L & CCS-L (Liquid)	78252	Rupture Disk Device	VIII Div. 1	Jan 11, 2023	
M	LPS-U 0.5"	78308	Rupture Disk Device	VIII Div. 1	Jan 24, 2024	
M	LPS-U 0.5" (Liquid)	78319	Rupture Disk Device	VIII Div. 1	Jan 24, 2024	
M	LPS-U 0.75"	78320	Rupture Disk Device	VIII Div. 1	Jan 24, 2024	
M	LPS-U 0.75"	78331	Rupture Disk Device	VIII Div. 1	Jan 24, 2024	
M	LPS-U 1.0"	78342	Rupture Disk Device	VIII Div. 1	Dec 14, 2023	

Buckeye Valve and Equipment, LLC (BKV)

location: Canonsburg, PA,

Acceptable Abbrev.: Buckeye Valve

Devices designed by: A&R Energy Services, Corporation (ARE)

<i>Cert Cat</i>	<i>Device Type</i>	<i>NB Cert #</i>	<i>Type Classification</i>	<i>Code Section</i>	<i>Expiration Date</i>	<i>Page...</i>
A	Kunkle 6000, 6252 Series	36324	Safety Valve	I & VIII Div. 1	Oct 22, 2021	391

Devices designed by: Emerson Automation Solutions Final Control, US LP (KBM)

<i>Cert Cat</i>	<i>Device Type</i>	<i>NB Cert #</i>	<i>Type Classification</i>	<i>Code Section</i>	<i>Expiration Date</i>	<i>Page...</i>
A	910 to 919	36100	Safety Relief Valve	VIII Div. 1	Oct 22, 2021	387
A	910 to 919 (Liquid)	36111	Relief Valve	VIII Div. 1	Oct 22, 2021	388
A	Kunkle 337	36278	Safety Relief Valve	VIII Div. 1	Oct 22, 2021	389

Burns Pressure Systems Enterprises, Incorporated (BPS)location: **Broken Arrow, OK, UNITED STATES**Acceptable Abbrev.: **BPS, INC.**Devices designed by: **Burns Pressure Systems Enterprises, Incorporated (BPS)**

<i>Cert Cat</i>	<i>Device Type</i>	<i>NB Cert #</i>	<i>Type Classification</i>	<i>Code Section</i>	<i>Expiration Date</i>	<i>Page...</i>
M	2MBF	05005	Safety Relief Valve	VIII Div. 1	May 9, 2019	97
M	3MBF/ MBP-2	05016	Safety Relief Valve	VIII Div. 1	Jun 19, 2023	97
M	4 MBF/4 MRB/ 4 MBF-A	05027	Safety Relief Valve	VIII Div. 1	Oct 3, 2018	97
M	1 1/4" MBP	05050	Safety Relief Valve	VIII Div. 1	May 9, 2019	98
M	MBP-1 (revised)	05061	NLG (20% OP) PRV	VIII Div. 1	Jun 29, 2023	

Carraro s.r.l. (CAO)location: **Segrate (MI), ITALY**Devices designed by: **Carraro s.r.l. (CAO)**

<i>Cert Cat</i>	<i>Device Type</i>	<i>NB Cert #</i>	<i>Type Classification</i>	<i>Code Section</i>	<i>Expiration Date</i>	<i>Page...</i>
M	CS 35 / G	95408	Safety Relief Valve	VIII Div. 1	Aug 12, 2021	99
M	CS 35 / J	95419	Safety Relief Valve	VIII Div. 1	Feb 2, 2021	99

Cash Acme (Part of Reliance Worldwide Corporation) (CSH)location: **Cullman, AL, UNITED STATES**Devices designed by: **Cash Acme (Part of Reliance Worldwide Corporation) (CSH)**

<i>Cert Cat</i>	<i>Device Type</i>	<i>NB Cert #</i>	<i>Type Classification</i>	<i>Code Section</i>	<i>Expiration Date</i>	<i>Page...</i>
M	F-30 (3/4")	09009	Safety Relief Valve	IV	Jul 10, 2024	100
M	F-82, P3000BR (3/4")	09010	Safety Relief Valve	IV	Feb 20, 2019	100
M	F-82, P3000BR (1")	09021	Safety Relief Valve	IV	May 12, 2024	100
M	F-82, P3000BR (1-1/4")	09032	Safety Relief Valve	IV	Jun 17, 2024	101
M	F-82, P3000BR (1-1/2")	09043	Safety Relief Valve	IV	Sep 16, 2018	101
M	F-82, P3000BR (2")	09054	Safety Relief Valve	IV	Jul 10, 2024	101
M	(1-1/2")FVX-4 (2") FVMX-3 (T&P)	09098	Temperature Actuated Pressure Relief Valve	IV	Oct 4, 2018	101
M	1 FVX-5L/Series 15, 1-1/4 FVMX4L, FVX-8L	09100	Temperature Actuated Pressure Relief Valve	IV	May 21, 2024	102
M	FVX, FVMX-1-3-5-8, FVMX-5LS-SST Ser. 4 (3/4")	09111	Temperature Actuated Pressure Relief Valve	IV	Nov 5, 2018	102
M	1 FVX, FVMX3-5C, 3LS-6LS Ser. 4 (T&P)	09122	Temperature Actuated Pressure Relief Valve	IV	Jun 15, 2024	102
M	NCLX-1, -5, -8; NCLX-5L, -5LX, -5S, -LS, -A;S-14 and FWL-2 ,-	09155	Temperature Actuated Pressure Relief Valve	IV	Jun 21, 2024	102
M	F-95, P3000CI	09199	Safety Relief Valve	IV	Sep 16, 2018	103

Cavagna Group S.p.A. - OMECA Division (CAV)location: **Ponte San Marco, Brescia, ITALY**Acceptable Abbrev.: **OMECA**Devices designed by: **Cavagna Group S.p.A. - OMECA Division (CAV)**

<i>Cert Cat</i>	<i>Device Type</i>	<i>NB Cert #</i>	<i>Type Classification</i>	<i>Code Section</i>	<i>Expiration Date</i>	<i>Page...</i>
M	700073	69083	Safety Relief Valve	VIII Div. 1	Jun 26, 2018	104
M	1128	69128	Safety Relief Valve	VIII Div. 1	Jul 2, 2018	104
M	1129	69139	Safety Relief Valve	VIII Div. 1	Jan 31, 2024	105
M	1130	69140	Safety Relief Valve	VIII Div. 1	Feb 24, 2020	105
M	1135	69151	Safety Relief Valve	VIII Div. 1	Dec 5, 2018	105
M	1335	69173	Safety Relief Valve	VIII Div. 1	Jul 2, 2021	106
M	1361	69184	Safety Relief Valve	VIII Div. 1	Jul 18, 2022	
M	PV60	69195	Safety Relief Valve	VIII Div. 1	Apr 7, 2023	
M	1242	69207	Safety Relief Valve	VIII Div. 1	Jul 3, 2018	106
M	1162A	69218	Safety Relief Valve	VIII Div. 1	Sep 7, 2018	106
M	PV29 (700217)	69229	Safety Relief Valve	VIII Div. 1	Jul 16, 2018	107
M	PV19 (700214)	69230	Safety Relief Valve	VIII Div. 1	Jul 2, 2018	107
M	PV24 (700216)	69241	Safety Relief Valve	VIII Div. 1	Jul 3, 2018	107

Centrium Industries Ltd. (CIL)

location: Kaohsiung City,
Acceptable Abbrev.: CIL

Devices designed by: Dresser, LLC (DRJ)

<i>Cert Cat</i>	<i>Device Type</i>	<i>NB Cert #</i>	<i>Type Classification</i>	<i>Code Section</i>	<i>Expiration Date</i>	<i>Page...</i>
A	1900D-2, 1900-30D-2	18144	Safety Relief Valve	VIII Div. 1	Sep 7, 2022	183
A	1900E-2, 1900-30E-2	18166	Safety Relief Valve	VIII Div. 1	Sep 7, 2022	183
A	1900, 1900-30, 1900-35	18201	Safety Relief Valve	VIII Div. 1	Sep 7, 2022	184

Chalmers & Kubeck - AL (CKD)

location: Decatur, AL,
Acceptable Abbrev.: CKD

Devices designed by: Dresser, LLC (DRJ)

<i>Cert Cat</i>	<i>Device Type</i>	<i>NB Cert #</i>	<i>Type Classification</i>	<i>Code Section</i>	<i>Expiration Date</i>	<i>Page...</i>
A	1541, 1543, 1541-3, 1543-3	18032	Safety Valve	I & VIII Div. 1	Sep 22, 2021	180
A	1811, 1511	18122	Safety Valve	I & VIII Div. 1	Sep 22, 2021	182
A	1900D-2, 1900-30D-2	18144	Safety Relief Valve	VIII Div. 1	Sep 22, 2021	183
A	1900E-2, 1900-30E-2	18166	Safety Relief Valve	VIII Div. 1	Sep 22, 2021	183
A	1900, 1900-30, 1900-35	18201	Safety Relief Valve	VIII Div. 1	Sep 22, 2021	184
A	1982	18379	Safety Relief Valve	VIII Div. 1	Sep 22, 2021	188
A	1982 LS, 820000LS	18380	Relief Valve	VIII Div. 1	Sep 22, 2021	188
A	3900 (39PV, 39MV pilots)	18447	Pilot Operated Pressure Relief Valve	VIII Div. 1	Sep 22, 2021	192
A	3900 (39PV, 39MV pilots, liquid)	18458	Pilot Operated Pressure Relief Valve	VIII Div. 1	Sep 22, 2021	194
A	19000 Series	18706	Safety Relief Valve	VIII Div. 1	Sep 22, 2021	196
A	19000 Series, Liquid	18717	Relief Valve	VIII Div. 1	Sep 22, 2021	197
A	1900D-2, 1900-30D-2 LA & DALA (Liquids)	18751	Relief Valve	VIII Div. 1	Sep 22, 2021	197
A	1900E-2, 1900-30E-2 LA & DALA (Liquids)	18762	Relief Valve	VIII Div. 1	Sep 22, 2021	197
A	1900, 1900-30 1900-35 LA & DALA (Liquids)	18784	Relief Valve	VIII Div. 1	Sep 22, 2021	198

Chalmers & Kubeck - NC (IVG)

location: Charlotte, NC, UNITED STATES
Acceptable Abbrev.: NC

Devices designed by: Dresser, LLC (DRJ)

<i>Cert Cat</i>	<i>Device Type</i>	<i>NB Cert #</i>	<i>Type Classification</i>	<i>Code Section</i>	<i>Expiration Date</i>	<i>Page...</i>
A	1541, 1543, 1541-3, 1543-3	18032	Safety Valve	I & VIII Div. 1	Jul 19, 2019	180
A	1811, 1511	18122	Safety Valve	I & VIII Div. 1	May 16, 2023	182
A	1900D-2, 1900-30D-2	18144	Safety Relief Valve	VIII Div. 1	Mar 19, 2023	183
A	1900E-2, 1900-30E-2	18166	Safety Relief Valve	VIII Div. 1	Mar 19, 2023	183
A	1900, 1900-30, 1900-35	18201	Safety Relief Valve	VIII Div. 1	May 13, 2019	184
A	1982	18379	Safety Relief Valve	VIII Div. 1	Apr 2, 2018	188
A	1982 LS, 820000LS	18380	Relief Valve	VIII Div. 1	Mar 9, 2020	188
A	3900 (39PV, 39MV pilots)	18447	Pilot Operated Pressure Relief Valve	VIII Div. 1	Mar 15, 2023	192
A	19000 Series	18706	Safety Relief Valve	VIII Div. 1	Apr 2, 2018	196
A	1900D-2, 1900-30D-2 LA & DALA (Liquids)	18751	Relief Valve	VIII Div. 1	May 16, 2023	197
A	1900E-2, 1900-30E-2 LA & DALA (Liquids)	18762	Relief Valve	VIII Div. 1	May 16, 2023	197
A	1900, 1900-30 1900-35 LA & DALA (Liquids)	18784	Relief Valve	VIII Div. 1	May 16, 2023	198
A	19110M & 19110H (Liquids)	19077	Relief Valve	VIII Div. 1	Feb 14, 2019	207

Chalmers & Kubeck - North (MON)

location: Westfield, MA, UNITED STATES

Acceptable Abbrev.: CKN

Devices designed by: Dresser, LLC (DRJ)

<i>Cert Cat</i>	<i>Device Type</i>	<i>NB Cert #</i>	<i>Type Classification</i>	<i>Code Section</i>	<i>Expiration Date</i>	<i>Page...</i>
A	1541, 1543, 1541-3, 1543-3	18032	Safety Valve	I & VIII Div. 1	Apr 27, 2018	180
A	1811, 1511	18122	Safety Valve	I & VIII Div. 1	May 28, 2018	182
A	1900D-2, 1900-30D-2	18144	Safety Relief Valve	VIII Div. 1	Apr 27, 2024	183
A	1900E-2, 1900-30E-2	18166	Safety Relief Valve	VIII Div. 1	Apr 27, 2024	183
A	1900, 1900-30, 1900-35	18201	Safety Relief Valve	VIII Div. 1	May 29, 2024	184
A	1982	18379	Safety Relief Valve	VIII Div. 1	Mar 22, 2024	188
A	1982 LS, 820000LS	18380	Relief Valve	VIII Div. 1	May 28, 2024	188
A	19000 Series	18706	Safety Relief Valve	VIII Div. 1	May 28, 2024	196
A	19000 Series, Liquid	18717	Relief Valve	VIII Div. 1	May 28, 2024	197
A	1900D-2, 1900-30D-2 LA & DALA (Liquids)	18751	Relief Valve	VIII Div. 1	Aug 22, 2018	197
A	1900E-2, 1900-30E-2 LA & DALA (Liquids)	18762	Relief Valve	VIII Div. 1	Aug 23, 2018	197
A	1900, 1900-30 1900-35 LA & DALA (Liquids)	18784	Relief Valve	VIII Div. 1	Mar 22, 2024	198

Chalmers & Kubeck - SC (KSC)

location: Cayce, SC, UNITED STATES

Acceptable Abbrev.: C&K - SC

Devices designed by: Dresser, LLC (DRJ)

<i>Cert Cat</i>	<i>Device Type</i>	<i>NB Cert #</i>	<i>Type Classification</i>	<i>Code Section</i>	<i>Expiration Date</i>	<i>Page...</i>
A	1541, 1543, 1541-3, 1543-3	18032	Safety Valve	I & VIII Div. 1	Dec 14, 2022	180
A	1811, 1511	18122	Safety Valve	I & VIII Div. 1	Dec 15, 2022	182
A	1900D-2, 1900-30D-2	18144	Safety Relief Valve	VIII Div. 1	Oct 27, 2019	183
A	1900E-2, 1900-30E-2	18166	Safety Relief Valve	VIII Div. 1	Oct 27, 2019	183
A	1900, 1900-30, 1900-35	18201	Safety Relief Valve	VIII Div. 1	Dec 15, 2022	184
A	3900 (39PV, 39MV pilots)	18447	Pilot Operated Pressure Relief Valve	VIII Div. 1	Oct 27, 2019	192
A	19000 Series	18706	Safety Relief Valve	VIII Div. 1	Dec 15, 2022	196
A	19000 Series, Liquid	18717	Relief Valve	VIII Div. 1	Dec 15, 2022	197
A	1900D-2, 1900-30D-2 LA & DALA (Liquids)	18751	Relief Valve	VIII Div. 1	Oct 25, 2022	197
A	1900E-2, 1900-30E-2 LA & DALA (Liquids)	18762	Relief Valve	VIII Div. 1	Oct 25, 2022	197
A	1900, 1900-30 1900-35 LA & DALA (Liquids)	18784	Relief Valve	VIII Div. 1	Dec 15, 2022	198
A	19110M & 19110H (Liquids)	19077	Relief Valve	VIII	Jul 22, 2022	207
A	1541, 1543, 1541-3, 1543-3	18032	Safety Valve	I & VIII Div. 1	Dec 14, 2022	180
A	1811, 1511	18122	Safety Valve	I & VIII Div. 1	Dec 15, 2022	182
A	1900D-2, 1900-30D-2	18144	Safety Relief Valve	VIII Div. 1	Oct 27, 2019	183
A	1900E-2, 1900-30E-2	18166	Safety Relief Valve	VIII Div. 1	Oct 27, 2019	183
A	1900, 1900-30, 1900-35	18201	Safety Relief Valve	VIII Div. 1	Dec 15, 2022	184
A	3900 (39PV, 39MV pilots)	18447	Pilot Operated Pressure Relief Valve	VIII Div. 1	Oct 27, 2019	192
A	19000 Series	18706	Safety Relief Valve	VIII Div. 1	Dec 15, 2022	196
A	19000 Series, Liquid	18717	Relief Valve	VIII Div. 1	Dec 15, 2022	197
A	1900D-2, 1900-30D-2 LA & DALA (Liquids)	18751	Relief Valve	VIII Div. 1	Oct 25, 2022	197
A	1900E-2, 1900-30E-2 LA & DALA (Liquids)	18762	Relief Valve	VIII Div. 1	Oct 25, 2022	197
A	1900, 1900-30 1900-35 LA & DALA (Liquids)	18784	Relief Valve	VIII Div. 1	Dec 15, 2022	198
A	19110M & 19110H (Liquids)	19077	Relief Valve	VIII	Jul 22, 2022	207

Chalmers & Kubeck - South (CKS)**location: Watkinsville, GA, UNITED STATES**

Devices designed by: Dresser, LLC (DRJ)

<i>Cert Cat</i>	<i>Device Type</i>	<i>NB Cert #</i>	<i>Type Classification</i>	<i>Code Section</i>	<i>Expiration Date</i>	<i>Page...</i>
A	1541, 1543, 1541-3, 1543-3	18032	Safety Valve	I & VIII Div. 1	Jun 14, 2021	180
A	1811, 1511	18122	Safety Valve	I & VIII Div. 1	Jun 15, 2021	182
A	1900, 1900-30, 1900-35	18201	Safety Relief Valve	VIII Div. 1	Aug 12, 2021	184
A	19000 Series	18706	Safety Relief Valve	VIII Div. 1	Jun 16, 2021	196
A	19000 Series, Liquid	18717	Relief Valve	VIII Div. 1	Jun 14, 2021	197
A	1900, 1900-30 1900-35 LA & DALA (Liquids)	18784	Relief Valve	VIII Div. 1	Jun 16, 2021	198

Chalmers & Kubeck - TN (VSI)**location: Chattanooga, TN, UNITED STATES**

Devices designed by: Dresser, LLC (DRJ)

<i>Cert Cat</i>	<i>Device Type</i>	<i>NB Cert #</i>	<i>Type Classification</i>	<i>Code Section</i>	<i>Expiration Date</i>	<i>Page...</i>
A	1541, 1543, 1541-3, 1543-3	18032	Safety Valve	I & VIII Div. 1	Sep 18, 2018	180
A	1811, 1511	18122	Safety Valve	I & VIII Div. 1	Dec 17, 2018	182
A	1900D-2, 1900-30D-2	18144	Safety Relief Valve	VIII Div. 1	Sep 19, 2018	183
A	1900E-2, 1900-30E-2	18166	Safety Relief Valve	VIII Div. 1	Sep 19, 2018	183
A	1900, 1900-30, 1900-35	18201	Safety Relief Valve	VIII Div. 1	Sep 18, 2018	184
A	1982	18379	Safety Relief Valve	VIII Div. 1	Sep 18, 2018	188
A	3900 (39PV, 39MV pilots, liquid)	18458	Pilot Operated Pressure Relief Valve	VIII Div. 1	Aug 6, 2021	194
A	19000 Series	18706	Safety Relief Valve	VIII Div. 1	Sep 18, 2018	196
A	19000 Series, Liquid	18717	Relief Valve	VIII Div. 1	Jan 23, 2019	197
A	1900D-2, 1900-30D-2 LA & DALA (Liquids)	18751	Relief Valve	VIII Div. 1	Dec 17, 2018	197
A	1900E-2, 1900-30E-2 LA & DALA (Liquids)	18762	Relief Valve	VIII Div. 1	Jan 23, 2019	197
A	1900, 1900-30 1900-35 LA & DALA (Liquids)	18784	Relief Valve	VIII Div. 1	Sep 19, 2018	198
A	19110M & 19110H (Liquids)	19077	Relief Valve	VIII Div. 1	Aug 6, 2021	207

Chalmers & Kubeck, Inc. (BRU)**location: New Brunswick, NJ, UNITED STATES****Acceptable Abbrev.: Chalmers & Kubeck NB/NJ**

Devices designed by: Dresser, LLC (DRJ)

<i>Cert Cat</i>	<i>Device Type</i>	<i>NB Cert #</i>	<i>Type Classification</i>	<i>Code Section</i>	<i>Expiration Date</i>	<i>Page...</i>
A	1900D-2, 1900-30D-2	18144	Safety Relief Valve	VIII Div. 1	Jul 9, 2019	183
A	1900E-2, 1900-30E-2	18166	Safety Relief Valve	VIII Div. 1	Jul 9, 2019	183
A	1900, 1900-30, 1900-35	18201	Safety Relief Valve	VIII Div. 1	Jul 9, 2019	184
A	19000 Series	18706	Safety Relief Valve	VIII Div. 1	Jul 9, 2019	196
A	19000 Series, Liquid	18717	Relief Valve	VIII Div. 1	May 15, 2019	197
A	1900D-2, 1900-30D-2 LA & DALA (Liquids)	18751	Relief Valve	VIII Div. 1	May 15, 2019	197
A	1900E-2, 1900-30E-2 LA & DALA (Liquids)	18762	Relief Valve	VIII Div. 1	May 15, 2019	197
A	1900, 1900-30 1900-35 LA & DALA (Liquids)	18784	Relief Valve	VIII Div. 1	May 15, 2019	198

Chalmers & Kubeck, Inc. (CKB)**location: Beaver Falls, PA, UNITED STATES**

Devices designed by: Dresser, LLC (DRJ)

<i>Cert Cat</i>	<i>Device Type</i>	<i>NB Cert #</i>	<i>Type Classification</i>	<i>Code Section</i>	<i>Expiration Date</i>	<i>Page...</i>
A	1541, 1543, 1541-3, 1543-3	18032	Safety Valve	I & VIII Div. 1	Apr 11, 2020	180
A	1811, 1511	18122	Safety Valve	I & VIII Div. 1	Feb 13, 2020	182
A	1900D-2, 1900-30D-2	18144	Safety Relief Valve	VIII Div. 1	Feb 18, 2020	183
A	1900E-2, 1900-30E-2	18166	Safety Relief Valve	VIII Div. 1	Feb 18, 2020	183
A	1900, 1900-30, 1900-35	18201	Safety Relief Valve	VIII Div. 1	Apr 10, 2020	184
A	19000 Series	18706	Safety Relief Valve	VIII Div. 1	Feb 18, 2020	196
A	19000 Series, Liquid	18717	Relief Valve	VIII Div. 1	Feb 19, 2020	197
A	1900D-2, 1900-30D-2 LA & DALA (Liquids)	18751	Relief Valve	VIII Div. 1	Feb 18, 2020	197
A	1900E-2, 1900-30E-2 LA & DALA (Liquids)	18762	Relief Valve	VIII Div. 1	Feb 18, 2020	197
A	1900, 1900-30 1900-35 LA & DALA (Liquids)	18784	Relief Valve	VIII Div. 1	Feb 19, 2020	198
A	19110M & 19110H (Liquids)	19077	Relief Valve	VIII Div. 1	Feb 19, 2020	207

Chalmers & Kubeck, Incorporated (CKI)**location: Aston, PA, UNITED STATES**

Devices designed by: Dresser, LLC (DRJ)

<i>Cert Cat</i>	<i>Device Type</i>	<i>NB Cert #</i>	<i>Type Classification</i>	<i>Code Section</i>	<i>Expiration Date</i>	<i>Page...</i>
A	1541, 1543, 1541-3, 1543-3	18032	Safety Valve	I & VIII Div. 1	Feb 2, 2019	180
A	1700 & 2700	18100	Safety Valve	I	Nov 14, 2022	181
A	1700 & 2700 (Restricted Lift version of Cert. # 18100)	18111	Safety Valve	I	Sep 27, 2022	182
A	1811, 1511	18122	Safety Valve	I & VIII Div. 1	Feb 2, 2019	182
A	1900D-2, 1900-30D-2	18144	Safety Relief Valve	VIII Div. 1	Feb 2, 2019	183
A	1900E-2, 1900-30E-2	18166	Safety Relief Valve	VIII Div. 1	Feb 2, 2019	183
A	1900, 1900-30, 1900-35	18201	Safety Relief Valve	VIII Div. 1	Feb 2, 2019	184
A	1982	18379	Safety Relief Valve	VIII Div. 1	Feb 2, 2019	188
A	1982 LS, 820000LS	18380	Relief Valve	VIII Div. 1	Nov 15, 2022	188
A	1990 - 3999	18391	Safety Relief Valve	VIII Div. 1	Feb 2, 2019	189
A	3900 (39PV, 39MV pilots)	18447	Pilot Operated Pressure Relief Valve	VIII Div. 1	Aug 23, 2023	192
A	3900 (39PV, 39MV pilots, liquid)	18458	Pilot Operated Pressure Relief Valve	VIII Div. 1	Aug 23, 2023	194
A	19000 Series	18706	Safety Relief Valve	VIII Div. 1	Aug 23, 2023	196
A	19000 Series, Liquid	18717	Relief Valve	VIII Div. 1	Sep 14, 2023	197
A	1900D-2, 1900-30D-2 LA & DALA (Liquids)	18751	Relief Valve	VIII Div. 1	Sep 18, 2023	197
A	1900E-2, 1900-30E-2 LA & DALA (Liquids)	18762	Relief Valve	VIII Div. 1	Sep 18, 2023	197
A	1900, 1900-30 1900-35 LA & DALA (Liquids)	18784	Relief Valve	VIII Div. 1	Aug 18, 2023	198
A	19110M & 19110H (Liquids)	19077	Relief Valve	VIII Div. 1	Apr 10, 2024	207

Circor Aerospace, Inc. (CSC)**location: Corona, CA, UNITED STATES****Acceptable Abbrev.: Circle Seal**

Devices designed by: Circor Aerospace, Inc. (CSC)

<i>Cert Cat</i>	<i>Device Type</i>	<i>NB Cert #</i>	<i>Type Classification</i>	<i>Code Section</i>	<i>Expiration Date</i>	<i>Page...</i>
M	D-500-2M	10001	Safety Relief Valve	VIII Div. 1	Apr 29, 2020	108
M	M5100-1M	10012	Safety Relief Valve	VIII Div. 1	Apr 29, 2020	108
M	M5100-2M & 3M	10023	Safety Relief Valve	VIII Div. 1	Apr 29, 2020	108
M	M5100-4M	10034	Safety Relief Valve	VIII Div. 1	Apr 29, 2020	109
M	M5100-6M & 8M 100 - 1200	10056	Safety Relief Valve	VIII Div. 1	Apr 29, 2020	109

Circor Energy Products (HDS)location: **Oklahoma City, OK, UNITED STATES**Acceptable Abbrev.: **Hydroseal**Devices designed by: **Circor Energy Products (HDS)**

<i>Cert Cat</i>	<i>Device Type</i>	<i>NB Cert #</i>	<i>Type Classification</i>	<i>Code Section</i>	<i>Expiration Date</i>	<i>Page...</i>
M	1-BV thru 3-BV, 1EV thru 4EV, FL	30003	Safety Relief Valve	VIII Div. 1	Mar 22, 2021	110
M	5-BV thru 7-BV, FL-5-FV thru FL	30014	Safety Relief Valve	VIII Div. 1	Sep 23, 2021	110
M	1-CRV thru 3-CRV, 1-FRV thru 4-F	30025	Safety Relief Valve	VIII Div. 1	Sep 22, 2021	110
M	5-CRV, thru 8-CRV, FL-5-CRV	30036	Safety Relief Valve	VIII Div. 1	Sep 23, 2021	111
M	5, 6, 7, 8 CV, FL	30047	Safety Relief Valve	VIII Div. 1	Sep 23, 2021	111
M	CXV, FXV, AXV, FL-XV	30058	Safety Relief Valve	VIII Div. 1	Sep 22, 2021	111
M	3FT, 4FT, 5FT, FT flanged series	30069	Safety Relief Valve	VIII Div. 1	Sep 23, 2021	111
M	5HC, 6HC & 7HC	30081	Safety Relief Valve	VIII Div. 1	Sep 22, 2022	112
M	2500 (Liquids)	30115	Relief Valve	VIII Div. 1	Sep 20, 2021	113
M	Series 1500, 1400	30126	Safety Relief Valve	VIII Div. 1	Sep 23, 2021	113
M	Series 1500 , 1400 (Liquids)	30137	Relief Valve	VIII Div. 1	Sep 28, 2021	114
M	2500 Series ER (25MR, 25SER, B25ER)	30182	Safety Relief Valve	VIII Div. 1	Sep 22, 2021	115
M	5HD thru 7HD, HD Flanged Series	30205	Relief Valve	VIII Div. 1	Sep 26, 2021	115
M	1200B	30250	Relief Valve	VIII Div. 1	Aug 5, 2019	116
M	1200B (liquid)	30261	Relief Valve	VIII Div. 1	Aug 5, 2019	116
M	1400B	30272	Safety Relief Valve	VIII Div. 1	Apr 21, 2020	116
M	1400B (Liquid)	30283	Safety Relief Valve	VIII Div. 1	Jul 8, 2020	117
M	3500 w/ Modulating & Snap Pilots	30294	Pilot Operated Pressure Relief Valve	VIII Div. 1	Oct 27, 2020	117

Cleveland Valve and Gauge, Co. (CVG)location: **Cleveland, OH, UNITED STATES**Acceptable Abbrev.: **Cleveland Valve & Gauge**Devices designed by: **Dresser, LLC (DRJ)**

<i>Cert Cat</i>	<i>Device Type</i>	<i>NB Cert #</i>	<i>Type Classification</i>	<i>Code Section</i>	<i>Expiration Date</i>	<i>Page...</i>
A	1541, 1543, 1541-3, 1543-3	18032	Safety Valve	I & VIII Div. 1	Jul 13, 2020	180
A	1811, 1511	18122	Safety Valve	I & VIII Div. 1	Jul 24, 2020	182
A	1900D-2, 1900-30D-2	18144	Safety Relief Valve	VIII Div. 1	Apr 22, 2020	183
A	1900E-2, 1900-30E-2	18166	Safety Relief Valve	VIII Div. 1	Apr 22, 2020	183
A	1900, 1900-30, 1900-35	18201	Safety Relief Valve	VIII Div. 1	Jul 24, 2020	184
A	3900 (39PV, 39MV pilots)	18447	Pilot Operated Pressure Relief Valve	VIII Div. 1	Jun 1, 2020	192
A	19000 Series	18706	Safety Relief Valve	VIII Div. 1	Jul 1, 2020	196
A	19000 Series, Liquid	18717	Relief Valve	VIII Div. 1	Jul 30, 2020	197
A	1900D-2, 1900-30D-2 LA & DALA (Liquids)	18751	Relief Valve	VIII Div. 1	Apr 22, 2020	197
A	1900E-2, 1900-30E-2 LA & DALA (Liquids)	18762	Relief Valve	VIII Div. 1	Apr 22, 2020	197
A	1900, 1900-30 1900-35 LA & DALA (Liquids)	18784	Relief Valve	VIII Div. 1	Jul 1, 2020	198
A	19110M & 19110H (Liquids)	19077	Relief Valve	VIII Div. 1	Apr 22, 2020	207

Conbraco Industries, Incorporated (CNB)**location: Pageland, SC, UNITED STATES****Acceptable Abbrev.: Conbraco**

Devices designed by: Conbraco Industries, Incorporated (CNB)

<i>Cert Cat</i>	<i>Device Type</i>	<i>NB Cert #</i>	<i>Type Classification</i>	<i>Code Section</i>	<i>Expiration Date</i>	<i>Page...</i>
M	10-102/104 (RVW10)	11002	Safety Relief Valve	IV	Jul 24, 2023	118
M	10-301/303 (RVW30)	11024	Safety Relief Valve	IV	May 7, 2018	118
M	10-321 (RVW32)	11035	Safety Relief Valve	IV	Mar 24, 2021	118
M	10-322 (RVS32)	11046	Safety Relief Valve	VIII Div. 1	Mar 30, 2022	119
M	10-407 & 10-408 (30 psig)	11057	Safety Relief Valve	IV	Nov 17, 2018	119
M	10-512 (RVS52)	11080	Safety Relief Valve	VIII Div. 1	Nov 4, 2023	119
M	10-600 (RVW60)	11091	Safety Relief Valve	IV	Nov 3, 2018	120
M	10-610 (RVW61)	11103	Safety Relief Valve	IV	Aug 13, 2018	120
M	12-205 (RVS12)	11114	Safety Valve	IV	Nov 16, 2020	120
M	12-208 (RVS12)	11136	Safety Valve	IV	Nov 16, 2020	121
M	13-101 (RVS13T)	11147	Safety Valve	IV	Nov 17, 2020	121
M	13-202 (RVS13)	11169	Safety Valve	IV	Mar 24, 2021	121
M	13-211 (RVS13)	11170	Safety Valve	IV	Jun 21, 2020	122
M	13-213 (RVS13)	11181	Safety Valve	IV	Nov 17, 2018	122
M	13-214 (RVS13)	11192	Safety Valve	IV	Nov 17, 2018	122
M	14-205 (RVS14)	11215	Safety Valve	IV	Nov 16, 2020	122
M	14-206 (RVS14)	11226	Safety Valve	IV	Apr 16, 2023	123
M	14-207 (RVS14)	11237	Safety Valve	IV	Feb 9, 2020	123
M	15-112 (RVA15)	11248	Safety Relief Valve	VIII Div. 1	Jul 31, 2018	123
M	15-115/117 (RVA15)	11259	Safety Relief Valve	VIII Div. 1	Oct 2, 2022	123
M	19 Series	11282	Safety Valve	I & VIII Div. 1	Nov 13, 2023	124
M	29-102, 29-202, 29-302	11293	Safety Valve	I & VIII Div. 1	Nov 17, 2018	124
M	29-303, 29-402, 29-501	11305	Safety Valve	I & VIII Div. 1	Jul 31, 2018	125
M	13-511/512 (RVS13L)	11350	Safety Relief Valve	IV	Apr 16, 2023	125
M	119 Series	11361	Safety Valve	I & VIII Div. 1	Sep 29, 2018	126
M	15-118 (RVA15)	11372	Safety Relief Valve	VIII Div. 1	Aug 28, 2019	126
M	15-119 (RVA15)	11383	Safety Relief Valve	VIII Div. 1	Oct 23, 2019	127
M	17-402 (RVW17)	11440	Safety Relief Valve	IV	Mar 6, 2021	127
M	10-417/418 (RVW40)	11451	Safety Relief Valve	IV	Sep 27, 2020	127
M	500 Series	11462	Safety Valve	VIII Div. 1	Dec 5, 2021	128
M	500 Series (Liquids)	11473	Safety Relief Valve	VIII Div. 1	Jul 31, 2021	128
M	10-624/634 (RVW62)	11518	Safety Relief Valve	IV	Nov 17, 2018	129

Continental Disc Corporation (CDC)**location: Liberty, MO, UNITED STATES**

Devices designed by: Continental Disc Corporation (CDC)

<i>Cert Cat</i>	<i>Device Type</i>	<i>NB Cert #</i>	<i>Type Classification</i>	<i>Code Section</i>	<i>Expiration Date</i>	<i>Page...</i>
M	CDC (FS)	75002	Rupture Disk Device	VIII Div. 1	Mar 24, 2019	130
M	ENVIRO-SEAL, Isolation Seal	75013	Rupture Disk Device	VIII Div. 1	Mar 24, 2019	131
M	ZAP	75024	Rupture Disk Device	VIII Div. 1	Mar 24, 2019	131
M	KBA	75035	Rupture Disk Device	VIII Div. 1	Feb 13, 2024	132
M	CDCV (FS)	75046	Rupture Disk Device	VIII Div. 1	Mar 24, 2019	133
M	CDC/LD/ (LL)	75057	Rupture Disk Device	VIII Div. 1	Feb 13, 2019	134
M	MICRO X, MX-9T & SCORED FLAT SEAT	75079	Rupture Disk Device	VIII Div. 1	Mar 24, 2019	135
M	MICRO X-V, MX-9T-V & SCORED FLAT SEAT	75080	Rupture Disk Device	VIII Div. 1	Mar 24, 2019	136
M	STANDARD	75091	Rupture Disk Device	VIII Div. 1	Mar 24, 2019	137
M	ULTRX, ULTRX HP	75125	Rupture Disk Device	VIII Div. 1	Mar 24, 2019	137
M	RCS	75147	Rupture Disk Device	VIII Div. 1	Feb 13, 2019	138
M	PL, PLV, LPL, LPLV (Flat Seat)	75169	Rupture Disk Device	VIII Div. 1	May 13, 2019	138
M	PL, PLV, LPL, LPLV (Angular seat)	75170	Rupture Disk Device	VIII Div. 1	May 14, 2019	139
M	MICRO-X-V, MX-9T-V Flat Seat (liquid)	75181	Rupture Disk Device	VIII Div. 1	May 13, 2019	140
M	CDCV (FS) (No Options)	75215	Rupture Disk Device	VIII Div. 1	Oct 27, 2019	141
M	RCS (No Options)	75226	Rupture Disk Device	VIII Div. 1	May 14, 2019	142
M	MINTRX (No Options)	75237	Rupture Disk Device	VIII Div. 1	May 13, 2019	142
M	ULTRX, ULTRX HP (No Options)	75248	Rupture Disk Device	VIII Div. 1	May 14, 2019	143
M	CD30935	75259	Rupture Disk Device	VIII Div. 1	May 9, 2019	143
M	CD30936	75260	Rupture Disk Device	VIII Div. 1	May 9, 2019	143
M	ULTRX (DD)	75271	Rupture Disk Device	VIII Div. 1	Oct 27, 2019	144
M	SRA (FS)	75282	Rupture Disk Device	VIII Div. 1	Apr 30, 2020	144
M	Standard-V (flat seat threaded)	75293	Rupture Disk Device	VIII Div. 1	Apr 30, 2020	145
M	Standard (angle seat threaded)	75305	Rupture Disk Device	VIII Div. 1	Apr 30, 2020	145
M	Standard-V (Angle seat threaded)	75316	Rupture Disk Device	VIII Div. 1	Apr 30, 2020	146
M	Standard (flat seat threaded)	75327	Rupture Disk Device	VIII Div. 1	Apr 30, 2020	146
M	CDCV (FS threaded)	75338	Rupture Disk Device	VIII Div. 1	Apr 30, 2020	147
M	PL (CF)	75349	Rupture Disk Device	VIII Div. 1	Aug 2, 2022	147
M	PLV (CF)	75350	Rupture Disk Device	VIII Div. 1	Aug 2, 2022	148
M	CDC (CF)	75361	Rupture Disk Device	VIII Div. 1	Aug 2, 2022	149
M	CDCV (CF)	75372	Rupture Disk Device	VIII Div. 1	Aug 2, 2022	150
M	MICRO X, MX-9T (CF)	75383	Rupture Disk Device	VIII Div. 1	Aug 2, 2022	151
M	Micro-X-V, MX-9T-V (CF)	75394	Rupture Disk Device	VIII Div. 1	Mar 17, 2021	152
M	SRA RVI (FS)	75406	Rupture Disk Device	VIII Div. 1	Mar 17, 2021	152
M	VRD	75428	Rupture Disk Device	VIII Div. 1	Feb 22, 2024	153
M	Sanitrx, Sanitrx LP-NA (liquid)	75439	Rupture Disk Device	VIII Div. 1	Jan 17, 2019	153
M	Sanitrx LP, Sanitrx LP-NA	75440	Rupture Disk Device	VIII Div. 1	Jan 17, 2019	154
M	Sanitrx , Sanitrx NA (liquid)	75451	Rupture Disk Device	VIII Div. 1	Jan 17, 2019	154
M	Sanitrx , Sanitrx-NA(Air/Gas)	75462	Rupture Disk Device	VIII Div. 1	Jan 17, 2019	154
M	MICRO X-V(DD), MICRO X, MX-9T-V, MX-9T	75473	Rupture Disk Device	VIII Div. 1	Jan 17, 2019	155
M	CD 31074	75484	Rupture Disk Device	VIII Div. 1	Jan 17, 2019	155
M	Standard V (LL)	75495	Rupture Disk Device	VIII Div. 1	Oct 3, 2019	156
M	CDCV , LDV (LL)	75507	Rupture Disk Device	VIII Div. 1	Oct 3, 2019	156
M	RCS (DD)	75518	Rupture Disk Device	VIII Div. 1	Oct 3, 2019	157
M	STAR X, STAR X HP (gas)	75529	Rupture Disk Device	VIII Div. 1	Sep 18, 2019	157
M	STAR X, STAR X HP (liquid)	75530	Rupture Disk Device	VIII Div. 1	Feb 20, 2019	158
M	MINTRX (liquid)	75541	Rupture Disk Device	VIII Div. 1	Sep 18, 2019	158
M	MINTRX (gas)	75552	Rupture Disk Device	VIII Div. 1	Sep 18, 2019	159
M	SANITRX MP (SF, NA, IS) (liquid)	75563	Rupture Disk Device	VIII Div. 1	Mar 11, 2020	159
M	SANITRX MP (SF, NA, IS) (gas)	75574	Rupture Disk Device	VIII Div. 1	Mar 11, 2020	159
M	HPX (FS)(GAS)	75585	Rupture Disk Device	VIII Div. 1	Dec 3, 2020	160
M	HPX (FS)(Liquid)	75596	Rupture Disk Device	VIII Div. 1	Dec 3, 2020	160

Continental Disc Corporation (CDC)*(continued)* **location: Liberty, MO, UNITED STATES**

Devices designed by: Continental Disc Corporation (CDC)

<i>Cert Cat</i>	<i>Device Type</i>	<i>NB Cert #</i>	<i>Type Classification</i>	<i>Code Section</i>	<i>Expiration Date</i>	<i>Page...</i>
M	HPX Sanitary, Sanitrx HPX, Sanitrx LPX (SF,NA,IS)(Gas)	75608	Rupture Disk Device	VIII Div. 1	Dec 2, 2020	161
M	HPX Sanitary, Sanitrx HPX, Sanitrx LPX (SF,NA,IS)(Liquid)	75619	Rupture Disk Device	VIII Div. 1	Dec 3, 2020	161
M	LOTRX (Gas)	75620	Rupture Disk Device	VIII Div. 1	Apr 21, 2021	161
M	LOTRX (Liquid)	75631	Rupture Disk Device	VIII Div. 1	Apr 22, 2021	162
M	CDC, CDCV (DD)	75642	Rupture Disk Device	VIII Div. 1	Sep 2, 2022	162
M	CD 31327	75653	Rupture Disk Device	VIII Div. 1	Sep 1, 2022	163
M	HPX (DD)	75664	Rupture Disk Device	VIII Div. 1	Oct 27, 2023	163
M	SANITRX HPX II (SF, NA, IS)(GAS)	75675	Rupture Disk Device	VIII Div. 1	Oct 27, 2023	163
M	SANITRX HPX II (SF, NA, IS)(Liquid)	75686	Rupture Disk Device	VIII Div. 1	Oct 26, 2023	164
M	SRA (Gas)	75697	Rupture Disk Device	VIII Div. 1	Dec 5, 2018	164
M	SRA (Liquid)	75709	Rupture Disk Device	VIII Div. 1	Dec 5, 2018	164
M	WMP (Gas)	75710	Rupture Disk Device	VIII Div. 1	Dec 5, 2018	165
M	WMP (Liquid)	75721	Rupture Disk Device	VIII Div. 1	Dec 5, 2018	165
M	CD31159	75732	Rupture Disk Device	VIII Div. 1	Jun 15, 2023	

Continental NH3 Products Co., Inc. (CNT)**location: Dallas, TX, UNITED STATES**

Devices designed by: Continental NH3 Products Co., Inc. (CNT)

<i>Cert Cat</i>	<i>Device Type</i>	<i>NB Cert #</i>	<i>Type Classification</i>	<i>Code Section</i>	<i>Expiration Date</i>	<i>Page...</i>
M	AA-402VA	12003	Safety Relief Valve	VIII Div. 1	Jul 12, 2023	166
M	AA-402VA (265 psig)	12025	Safety Relief Valve	VIII Div. 1	Jul 12, 2023	166
M	AA-417-AB	12036	Safety Relief Valve	VIII Div. 1	Jan 11, 2020	166

Contro Valve Equipment Inc. (CBU)**location: Burlington, CANADA****Acceptable Abbrev.: Contro Valve Inc. Burlington**

Devices designed by: Conbraco Industries, Incorporated (CNB)

<i>Cert Cat</i>	<i>Device Type</i>	<i>NB Cert #</i>	<i>Type Classification</i>	<i>Code Section</i>	<i>Expiration Date</i>	<i>Page...</i>
A	19 Series	11282	Safety Valve	I & VIII Div. 1	Mar 19, 2024	124
A	119 Series	11361	Safety Valve	I & VIII Div. 1	Mar 19, 2024	126
A	500 Series	11462	Safety Valve	VIII Div. 1	Mar 19, 2024	128
A	500 Series (Liquids)	11473	Safety Relief Valve	VIII Div. 1	Mar 19, 2024	128

Devices designed by: Dresser, LLC (DRJ)

<i>Cert Cat</i>	<i>Device Type</i>	<i>NB Cert #</i>	<i>Type Classification</i>	<i>Code Section</i>	<i>Expiration Date</i>	<i>Page...</i>
A	1541, 1543, 1541-3, 1543-3	18032	Safety Valve	I & VIII Div. 1	Mar 5, 2019	180
A	1811, 1511	18122	Safety Valve	I & VIII Div. 1	Mar 5, 2019	182
A	1900D-2, 1900-30D-2	18144	Safety Relief Valve	VIII Div. 1	Mar 6, 2019	183
A	1900E-2, 1900-30E-2	18166	Safety Relief Valve	VIII Div. 1	Mar 6, 2019	183
A	1900, 1900-30, 1900-35	18201	Safety Relief Valve	VIII Div. 1	Mar 6, 2019	184
A	1982 LS, 820000LS	18380	Relief Valve	VIII Div. 1	Jan 29, 2020	188
A	19000 Series	18706	Safety Relief Valve	VIII Div. 1	Mar 5, 2019	196
A	19000 Series, Liquid	18717	Relief Valve	VIII Div. 1	Mar 4, 2019	197
A	1900D-2, 1900-30D-2 LA & DALA (Liquids)	18751	Relief Valve	VIII Div. 1	Mar 4, 2019	197
A	1900E-2, 1900-30E-2 LA & DALA (Liquids)	18762	Relief Valve	VIII Div. 1	Mar 4, 2019	197
A	1900, 1900-30 1900-35 LA & DALA (Liquids)	18784	Relief Valve	VIII Div. 1	Mar 4, 2019	198
A	19110M & 19110H (Liquids)	19077	Relief Valve	VIII Div. 1	Feb 13, 2019	207

Contro Valve Equipment Inc. (VAL)location: **Brossard, CANADA**Acceptable Abbrev.: **Contro Valve Inc. Brossard**Devices designed by: **Conbraco Industries, Incorporated (CNB)**

<i>Cert Cat</i>	<i>Device Type</i>	<i>NB Cert #</i>	<i>Type Classification</i>	<i>Code Section</i>	<i>Expiration Date</i>	<i>Page...</i>
A	19 Series	11282	Safety Valve	I & VIII Div. 1	Apr 25, 2023	124
A	119 Series	11361	Safety Valve	I & VIII Div. 1	Apr 25, 2023	126
A	500 Series	11462	Safety Valve	VIII Div. 1	Sep 13, 2023	128
A	500 Series (Liquids)	11473	Safety Relief Valve	VIII Div. 1	Apr 25, 2023	128

Devices designed by: **Dresser, LLC (DRJ)**

<i>Cert Cat</i>	<i>Device Type</i>	<i>NB Cert #</i>	<i>Type Classification</i>	<i>Code Section</i>	<i>Expiration Date</i>	<i>Page...</i>
A	1541, 1543, 1541-3, 1543-3	18032	Safety Valve	I & VIII Div. 1	Feb 4, 2020	180
A	1811, 1511	18122	Safety Valve	I & VIII Div. 1	Apr 16, 2023	182
A	1900D-2, 1900-30D-2	18144	Safety Relief Valve	VIII Div. 1	Feb 5, 2020	183
A	1900E-2, 1900-30E-2	18166	Safety Relief Valve	VIII Div. 1	Feb 5, 2020	183
A	1900, 1900-30, 1900-35	18201	Safety Relief Valve	VIII Div. 1	Feb 13, 2020	184
A	3900 (39PV, 39MV pilots)	18447	Pilot Operated Pressure Relief Valve	VIII Div. 1	Mar 5, 2020	192
A	3900 (39PV, 39MV pilots, liquid)	18458	Pilot Operated Pressure Relief Valve	VIII Div. 1	Feb 8, 2020	194
A	19000 Series	18706	Safety Relief Valve	VIII Div. 1	Jan 22, 2023	196
A	19000 Series, Liquid	18717	Relief Valve	VIII Div. 1	Jan 23, 2024	197
A	1900D-2, 1900-30D-2 LA & DALA (Liquids)	18751	Relief Valve	VIII Div. 1	Jan 23, 2024	197
A	1900E-2, 1900-30E-2 LA & DALA (Liquids)	18762	Relief Valve	VIII Div. 1	Jan 23, 2024	197
A	1900, 1900-30 1900-35 LA & DALA (Liquids)	18784	Relief Valve	VIII Div. 1	Mar 5, 2020	198
A	19110M & 19110H (Liquids)	19077	Relief Valve	VIII Div. 1	Dec 21, 2023	207

Contro Valve Equipment, Inc. (CTR)location: **Sarnia, CANADA**Acceptable Abbrev.: **Contro Valve Inc.**Devices designed by: **Dresser, LLC (DRJ)**

<i>Cert Cat</i>	<i>Device Type</i>	<i>NB Cert #</i>	<i>Type Classification</i>	<i>Code Section</i>	<i>Expiration Date</i>	<i>Page...</i>
A	1541, 1543, 1541-3, 1543-3	18032	Safety Valve	VIII Div. 1	Feb 5, 2020	180
A	1900D-2, 1900-30D-2	18144	Safety Relief Valve	VIII Div. 1	Feb 18, 2024	183
A	1900E-2, 1900-30E-2	18166	Safety Relief Valve	VIII Div. 1	Apr 8, 2019	183
A	1900, 1900-30, 1900-35	18201	Safety Relief Valve	VIII Div. 1	Feb 18, 2024	184
A	19000 Series	18706	Safety Relief Valve	VIII Div. 1	Mar 7, 2021	196
A	19000 Series, Liquid	18717	Relief Valve	VIII Div. 1	Mar 2, 2021	197
A	1900D-2, 1900-30D-2 LA & DALA (Liquids)	18751	Relief Valve	VIII Div. 1	Feb 18, 2024	197
A	1900E-2, 1900-30E-2 LA & DALA (Liquids)	18762	Relief Valve	VIII Div. 1	Feb 18, 2024	197
A	1900, 1900-30 1900-35 LA & DALA (Liquids)	18784	Relief Valve	VIII Div. 1	Feb 18, 2024	198
A	19110M & 19110H (Liquids)	19077	Relief Valve	VIII Div. 1	Jan 13, 2020	207

Control Devices, LLC (CDV)**location: Fenton, MO, UNITED STATES****Acceptable Abbrev.: CD STL, MO**Devices designed by: **Control Devices, LLC (CDV)**

<i>Cert Cat</i>	<i>Device Type</i>	<i>NB Cert #</i>	<i>Type Classification</i>	<i>Code Section</i>	<i>Expiration Date</i>	<i>Page...</i>
M	ST	14016	Safety Relief Valve	VIII Div. 1	Aug 5, 2019	167
M	SA	14038	Safety Relief Valve	VIII Div. 1	Jun 3, 2023	167
M	SP	14049	Safety Relief Valve	VIII Div. 1	Mar 22, 2024	167
M	SF	14050	Safety Relief Valve	VIII Div. 1	May 29, 2019	168
M	SB	14061	Safety Relief Valve	VIII Div. 1	Mar 20, 2023	168
M	SW	14072	Safety Relief Valve	VIII Div. 1	Mar 20, 2023	168
M	SCB	14083	Safety Relief Valve	VIII Div. 1	Sep 22, 2023	168
M	SN	14094	Safety Relief Valve	VIII Div. 1	Apr 7, 2019	169

Control Southern Inc. (SJF)**location: Jacksonville, FL, UNITED STATES**Devices designed by: **Emerson Automation Solutions Final Control US LP (AGC)**

<i>Cert Cat</i>	<i>Device Type</i>	<i>NB Cert #</i>	<i>Type Classification</i>	<i>Code Section</i>	<i>Expiration Date</i>	<i>Page...</i>
A	81, 81P, 83, 86	01089	Safety Relief Valve	VIII Div. 1	Oct 17, 2023	397
A	243/249/443/449/546/843/849/943/5046/5049/8043/8049	01292	Pilot Operated Pressure Relief Valve	VIII Div. 1	Oct 18, 2023	402
A	253/259/453/459/853/859/953/959/5059/8053/8059	01304	Pilot Operated Pressure Relief Valve	VIII Div. 1	Oct 18, 2023	402
A	263/269/463/469/566/863/869/963/969/5066/5069	01315	Pilot Operated Pressure Relief Valve	VIII Div. 1	Oct 18, 2023	403
A	453/459/853/859/953/959/5059 (Liquids)	01326	Pilot Operated Pressure Relief Valve	VIII Div. 1	Oct 18, 2023	403
A	443/449/546/843/849/943/949/5046/5049(Liquids)	01337	Pilot Operated Pressure Relief Valve	VIII Div. 1	Oct 17, 2023	404
A	463/469/566/863/869/963/969/5066/5069 (Liquids)	01348	Pilot Operated Pressure Relief Valve	VIII Div. 1	Oct 18, 2023	404
A	JLT (Liquids)	15095	Safety Relief Valve	VIII Div. 1	Oct 17, 2023	408
A	JOS-E/JBS-E/JOS-H-E 8400 AC/AB	15208	Safety Relief Valve	VIII Div. 1	Oct 18, 2023	409
A	900 Series, 7700, SNC	15411	Safety Relief Valve	VIII Div. 1	Oct 17, 2023	411
A	900 Series (Liquid), 7700, SNC	15499	Relief Valve	VIII Div. 1	Oct 17, 2023	412

Devices designed by: **Farris Engineering (TFO)**

<i>Cert Cat</i>	<i>Device Type</i>	<i>NB Cert #</i>	<i>Type Classification</i>	<i>Code Section</i>	<i>Expiration Date</i>	<i>Page...</i>
A	2600 & 2600S	57057	Safety Relief Valve	VIII Div. 1	Jul 17, 2021	236
A	2600L (Liquids)	57068	Relief Valve	VIII Div. 1	Jul 17, 2021	237
A	2700, 2700S, 3700, 3700S	57237	Safety Relief Valve	VIII Div. 1	Jul 17, 2021	238
A	2700L, 3700L (Liquids)	57248	Relief Valve	VIII Div. 1	Jul 17, 2021	239

Control Southern, Inc (CSM)**location: Macon, GA,**Devices designed by: **A&R Energy Services, Corporation (ARE)**

<i>Cert Cat</i>	<i>Device Type</i>	<i>NB Cert #</i>	<i>Type Classification</i>	<i>Code Section</i>	<i>Expiration Date</i>	<i>Page...</i>
A	Kunkle 6000, 6252 Series	36324	Safety Valve	I & VIII Div. 1	Oct 19, 2023	391

Control Southern, Inc (CSM)*(continued)* **location: Macon, GA,**Devices designed by: **Emerson Automation Solutions Final Control US LP (AGC)**

<i>Cert Cat</i>	<i>Device Type</i>	<i>NB Cert #</i>	<i>Type Classification</i>	<i>Code Section</i>	<i>Expiration Date</i>	<i>Page...</i>
A	63B (.437", #7 orifice)	01067	Safety Relief Valve	VIII Div. 1	Aug 29, 2023	396
A	81, 81P, 83, 86	01089	Safety Relief Valve	VIII Div. 1	Aug 29, 2023	397
A	81P (Liquids)	01102	Relief Valve	VIII Div. 1	Aug 29, 2023	397
A	243/249/443/449/546/843/849/943/5046/5049/8043/8049	01292	Pilot Operated Pressure Relief Valve	VIII Div. 1	Aug 29, 2023	402
A	253/259/453/459/853/859/953/959/5059/8053/8059	01304	Pilot Operated Pressure Relief Valve	VIII Div. 1	Aug 29, 2023	402
A	263/269/463/469/566/863/869/963/969/5066/5069	01315	Pilot Operated Pressure Relief Valve	VIII Div. 1	Aug 29, 2023	403
A	453/459/853/859/953/959/5059 (Liquids)	01326	Pilot Operated Pressure Relief Valve	VIII Div. 1	Oct 19, 2023	403
A	443/449/546/843/849/943/949/5046/5049(Liquids)	01337	Pilot Operated Pressure Relief Valve	VIII Div. 1	Aug 29, 2023	404
A	463/469/566/863/869/963/969/5066/5069 (Liquids)	01348	Pilot Operated Pressure Relief Valve	VIII Div. 1	Oct 19, 2023	404
A	JLT (Liquids)	15095	Safety Relief Valve	VIII Div. 1	Aug 29, 2023	408
A	JOS-E/JBS-E/JOS-H-E 8400 AC/AB	15208	Safety Relief Valve	VIII Div. 1	Aug 29, 2023	409
A	900 Series, 7700, SNC	15411	Safety Relief Valve	VIII Div. 1	Aug 29, 2023	411
A	900 Series (Liquid), 7700, SNC	15499	Relief Valve	VIII Div. 1	Aug 29, 2023	412

Devices designed by: **Emerson Automation Solutions Final Control, US LP (KBM)**

<i>Cert Cat</i>	<i>Device Type</i>	<i>NB Cert #</i>	<i>Type Classification</i>	<i>Code Section</i>	<i>Expiration Date</i>	<i>Page...</i>
A	910 to 919	36100	Safety Relief Valve	VIII Div. 1	Oct 19, 2023	387
A	910 to 919 (Liquid)	36111	Relief Valve	VIII Div. 1	Aug 29, 2023	388

COOPER Valves, LLC (CPV)**location: Stafford, TX,**Devices designed by: **COOPER Valves, LLC (CPV)**

<i>Cert Cat</i>	<i>Device Type</i>	<i>NB Cert #</i>	<i>Type Classification</i>	<i>Code Section</i>	<i>Expiration Date</i>	<i>Page...</i>
M	ARV Series 1	00909	Power Actuated Relief Valve	I	Mar 18, 2021	
M	ARV Series 2	00921	Power Actuated Relief Valve	I	Mar 18, 2021	

Corix Control Solutions, LP (BRB)**location: Edmonton, CANADA****Acceptable Abbrev.: Corix Control Solutions**Devices designed by: **Dresser, LLC (DRJ)**

<i>Cert Cat</i>	<i>Device Type</i>	<i>NB Cert #</i>	<i>Type Classification</i>	<i>Code Section</i>	<i>Expiration Date</i>	<i>Page...</i>
A	1541, 1543, 1541-3, 1543-3	18032	Safety Valve	I & VIII Div. 1	Jul 25, 2022	180
A	1811, 1511	18122	Safety Valve	I & VIII Div. 1	Dec 19, 2023	182
A	1900D-2, 1900-30D-2	18144	Safety Relief Valve	VIII Div. 1	Jul 26, 2022	183
A	1900E-2, 1900-30E-2	18166	Safety Relief Valve	VIII Div. 1	Jul 26, 2022	183
A	1900, 1900-30, 1900-35	18201	Safety Relief Valve	VIII Div. 1	Jul 26, 2022	184
A	3900 (39PV, 39MV pilots)	18447	Pilot Operated Pressure Relief Valve	VIII Div. 1	Jan 17, 2023	192
A	3900 (39PV, 39MV pilots, liquid)	18458	Pilot Operated Pressure Relief Valve	VIII Div. 1	Jul 25, 2022	194
A	19000 Series	18706	Safety Relief Valve	VIII Div. 1	Jul 25, 2022	196
A	19000 Series, Liquid	18717	Relief Valve	VIII Div. 1	Jul 25, 2022	197
A	1900D-2, 1900-30D-2 LA & DALA (Liquids)	18751	Relief Valve	VIII Div. 1	Jul 25, 2022	197
A	1900E-2, 1900-30E-2 LA & DALA (Liquids)	18762	Relief Valve	VIII Div. 1	Jul 25, 2022	197
A	1900, 1900-30 1900-35 LA & DALA (Liquids)	18784	Relief Valve	VIII Div. 1	Jul 25, 2022	198
A	1900-UM	18997	Safety Relief Valve	VIII Div. 1	May 2, 2018	205
A	1900-UM (Liquids)	19000	Safety Relief Valve	VIII Div. 1	May 2, 2018	206
A	1900-UM-D	19011	Safety Relief Valve	VIII Div. 1	May 3, 2018	206
A	1900 UM-D (Liquids)	19022	Safety Relief Valve	VIII Div. 1	May 3, 2018	206
A	1900-UM-E	19033	Safety Relief Valve	VIII Div. 1	May 3, 2018	207
A	1900-UM-E (Liquids)	19044	Safety Relief Valve	VIII Div. 1	May 3, 2018	207

Crosby Valve, LLC (CVM)location: **Mansfield, MA, UNITED STATES**Acceptable Abbrev.: **CVM**Devices designed by: **Crosby Valve, LLC (CVM)**

<i>Cert Cat</i>	<i>Device Type</i>	<i>NB Cert #</i>	<i>Type Classification</i>	<i>Code Section</i>	<i>Expiration Date</i>	<i>Page...</i>
M	HA-HAA (Class 1)	15017	Safety Valve	III	Mar 1, 2023	2
M	HB (Class 1)	15028	Safety Valve	III	Mar 1, 2023	2
M	JB	15073	Safety Relief Valve	III & VIII Div.1	Oct 23, 2021	3
M	JMBL (Liquids)	15129	Relief Valve	III & VIII Div.1	Feb 15, 2022	4
M	JMB-WR	15174	Safety Relief Valve	III & VIII Div.1	Jul 11, 2020	5
M	JO/HSU (Class 2 and 3)	15196	Safety Relief Valve	III & VIII Div.1	Jul 11, 2020	6
M	JPV-A	15231	Safety Relief Valve	VIII Div. 1	Sep 23, 2021	
M	JRAK-BS (Class 1, 2, 3 Liquids)	15309	Relief Valve	III & VIII Div.1	Aug 30, 2022	7
M	JRL (Liquids)	15310	Relief Valve	III & VIII Div.1	Aug 30, 2022	7
M	JRU	15332	Safety Relief Valve	III & VIII Div.1	Mar 28, 2023	8
M	JO/JB-WR (Class 1, 2, 3 Liquids)	15343	Relief Valve	III	Mar 1, 2023	8
M	JB-TD	15387	Relief Valve	III	Feb 20, 2019	8
M	CV1B	15398	Vacuum Relief Valve	III	Dec 11, 2019	9
M	JMAK (Liquid Service)	15422	Relief Valve	III & VIII Div.1	Apr 23, 2019	9
M	VR (1")	15488	Vacuum Relief Valve	III NB, NC, ND	Mar 1, 2023	9
M	VR (3")	15556	Vacuum Relief Valve	III NB, NC, ND	Aug 15, 2023	10
M	VR (2")	15578	Vacuum Relief Valve	III	Mar 1, 2023	10

Devices designed by: **Emerson Automation Solutions Final Control US LP (AGC)**

<i>Cert Cat</i>	<i>Device Type</i>	<i>NB Cert #</i>	<i>Type Classification</i>	<i>Code Section</i>	<i>Expiration Date</i>	<i>Page...</i>
M	81, 81P, 83, 86	01089	Safety Relief Valve	III & VIII Div.1	Oct 21, 2021	397
M	81P (Liquids)	01102	Relief Valve	III	Aug 24, 2022	397
M	H Series (HCI, HSJ, HCA, HA, HB, HC, HCB, HCP, HJO, HN,	15006	Safety Valve	I & VIII Div. 1	Jun 14, 2019	406
M	HE	15039	Safety Valve	I & III NC	Oct 24, 2018	407
M	JLT (Liquids)	15095	Safety Relief Valve	III & VIII Div.1	Jan 9, 2023	408
M	JOS-E/JBS-E/JOS-H-E 8400 AC/AB	15208	Safety Relief Valve	III & VIII Div.1	Jun 29, 2019	409
M	900 Series, 7700, SNC	15411	Safety Relief Valve	III & VIII Div.1	Jun 7, 2023	411
M	800	15466	Safety Relief Valve	III & VIII Div.1	Dec 6, 2022	412
M	900 Series (Liquid), 7700, SNC	15499	Relief Valve	III & VIII	Mar 17, 2023	412
M	BP	15501	Relief Valve	III & VIII Div.1	Nov 28, 2023	413
M	BP (Liquids)	15534	Relief Valve	VIII Div. 1	Nov 28, 2023	414
M	H Series (Restricted Lift version of Cert # 15006)	15567	Safety Valve	I	Apr 3, 2020	415

Curtiss Wright (Tianjin) Flow Control Co., Ltd. (FTC)location: **Tianjin City, PEOPLES REP/CHINA**Acceptable Abbrev.: **Tianjin, China**Devices designed by: **Farris Engineering (TFO)**

<i>Cert Cat</i>	<i>Device Type</i>	<i>NB Cert #</i>	<i>Type Classification</i>	<i>Code Section</i>	<i>Expiration Date</i>	<i>Page...</i>
M	3800	57024	Pilot Operated Pressure Relief Valve	VIII Div. 1	Sep 22, 2021	233
M	3800FP	57035	Pilot Operated Pressure Relief Valve	VIII Div. 1	Sep 22, 2022	234
M	2600 & 2600S	57057	Safety Relief Valve	VIII Div. 1	Jun 21, 2018	236
M	2600L (Liquids)	57068	Relief Valve	VIII Div. 1	Sep 21, 2021	237
M	3800L, PCL, PCM pilots	57215	Pilot Operated Pressure Relief Valve	VIII Div. 1	Sep 22, 2021	238
M	2700, 2700S, 3700, 3700S	57237	Safety Relief Valve	VIII Div. 1	Sep 22, 2021	238
M	2700L, 3700L (Liquids)	57248	Relief Valve	VIII Div. 1	Sep 23, 2021	239
M	2600L (Air & Steam)	57260	Safety Relief Valve	VIII Div. 1	Sep 21, 2021	240

Cv Techserv, Inc. (CVT)**location: Hastings, MN, UNITED STATES****Acceptable Abbrev.: Cv Techserv**

Devices designed by: A&R Energy Services, Corporation (ARE)

<i>Cert Cat</i>	<i>Device Type</i>	<i>NB Cert #</i>	<i>Type Classification</i>	<i>Code Section</i>	<i>Expiration Date</i>	<i>Page...</i>
A	Kunkle 6000, 6252 Series	36324	Safety Valve	I & VIII Div. 1	Aug 11, 2019	391

Devices designed by: Emerson Automation Solutions Final Control, US LP (KBM)

<i>Cert Cat</i>	<i>Device Type</i>	<i>NB Cert #</i>	<i>Type Classification</i>	<i>Code Section</i>	<i>Expiration Date</i>	<i>Page...</i>
A	300,600	36076	Safety Valve	I & VIII Div. 1	May 3, 2019	386
A	920, 921, 927, Agco A (High Temp. water)	36098	Safety Valve	I	May 3, 2019	387
A	910 to 919	36100	Safety Relief Valve	VIII Div. 1	May 1, 2019	387
A	910 to 919 (Liquid)	36111	Relief Valve	VIII Div. 1	Aug 28, 2019	388
A	Kunkle 264, 265, 266 & 267	36267	Safety Relief Valve	VIII Div. 1	Jun 26, 2019	389
A	Kunkle 337	36278	Safety Relief Valve	VIII Div. 1	Aug 9, 2019	389

Cyrus Shank Company (SHK)**location: Cicero, IL, UNITED STATES**

Devices designed by: Cyrus Shank Company (SHK)

<i>Cert Cat</i>	<i>Device Type</i>	<i>NB Cert #</i>	<i>Type Classification</i>	<i>Code Section</i>	<i>Expiration Date</i>	<i>Page...</i>
M	804, 804QR Series	51017	Safety Relief Valve	VIII Div. 1	Sep 15, 2020	170
M	805-T, 805QR, 815, 815QR Series	51028	Safety Relief Valve	VIII Div. 1	Sep 26, 2021	170
M	803 LQ 75 psig (liquids)	51039	Relief Valve	VIII Div. 1	Mar 23, 2021	170
M	900, 901, 902, 903	51040	Safety Relief Valve	VIII Div. 1	Dec 14, 2018	171
M	850, 851	51051	Safety Relief Valve	VIII Div. 1	Aug 24, 2019	171
M	805 LQ 100 psig	51062	Relief Valve	VIII Div. 1	Aug 24, 2019	171
M	803 LQ 100 psig liquid, 803 LQ QC 100 psig liquid	51073	Relief Valve	VIII Div. 1	Nov 2, 2019	172
M	803, 803QC	51129	Safety Relief Valve	VIII Div. 1	Nov 14, 2020	172
M	814	51130	Safety Relief Valve	VIII Div. 1	May 17, 2023	172
M	813	51141	Safety Relief Valve	VIII Div. 1	Sep 25, 2023	173
M	801, 801D, 801QR, 801QRW	51152	Safety Relief Valve	VIII Div. 1	Sep 21, 2023	173
M	800, 800D, 800QR, 800QRW	51163	Safety Relief Valve	VIII Div. 1	Dec 14, 2018	173
M	812	51174	Safety Relief Valve	VIII Div. 1	Jan 27, 2021	173
M	CS 5602A, CS5602AQR	51185	Safety Relief Valve	VIII Div. 1	Sep 27, 2022	174
M	CS 5602B, CS 5602BQR, CS 5602C, CS 5602CQR	51196	Safety Relief Valve	VIII Div. 1	Sep 23, 2022	174
M	801DHC/801DHC QR	51208	Safety Relief Valve	VIII Div. 1	Jun 17, 2023	174
M	804R, 804R-QR	51219	Safety Relief Valve	VIII Div. 1	Oct 12, 2018	174
M	805R, 805R-QR	51220	Safety Relief Valve	VIII Div. 1	Oct 12, 2018	175
M	850DR, 851DR, 850AR, 851AR	51231	Safety Relief Valve	VIII Div. 1	Aug 13, 2019	175
M	800OP, 800OPQR	51253	Safety Relief Valve	VIII Div. 1	Sep 21, 2023	
M	CS 5602R	51264	Safety Relief Valve	VIII Div. 1	Sep 21, 2023	

D.I. UK, Ltd. (DDE)location: **Skelmersdale, Lancashire, UNITED KINGDOM**Acceptable Abbrev.: **DDE**Devices designed by: **Dresser, LLC (DRJ)**

<i>Cert Cat</i>	<i>Device Type</i>	<i>NB Cert #</i>	<i>Type Classification</i>	<i>Code Section</i>	<i>Expiration Date</i>	<i>Page...</i>
M	1700 & 2700	18100	Safety Valve	I & VIII Div. 1	Dec 7, 2020	181
M	1700 & 2700 (Restricted Lift version of Cert. # 18100)	18111	Safety Valve	I & VIII Div. 1	Aug 10, 2020	182
M	1811, 1511	18122	Safety Valve	I & VIII Div. 1	Sep 13, 2020	182
M	1900D-2, 1900-30D-2	18144	Safety Relief Valve	VIII Div. 1	Jun 26, 2018	183
M	1900E-2, 1900-30E-2	18166	Safety Relief Valve	VIII Div. 1	Apr 7, 2019	183
M	1900, 1900-30, 1900-35	18201	Safety Relief Valve	VIII Div. 1	Jun 27, 2018	184
M	1900, 1900-30, 1900-35 (R.L.)	18223	Safety Relief Valve	VIII Div. 1	Apr 7, 2019	185
M	1900D/P, 1900-30D/P (Rest. Lift)	18256	Safety Relief Valve	I & VIII Div. 1	Jul 10, 2020	186
M	1900E/P, 1900-30E/P (Rest. Lift)	18278	Safety Relief Valve	I	Jul 10, 2020	186
M	1900/P, 1900-30/P	18290	Safety Relief Valve	I & VIII Div. 1	Jul 10, 2020	187
M	3900 (39PV, 39MV pilots)	18447	Pilot Operated Pressure Relief Valve	VIII Div. 1	Jul 7, 2020	192
M	3900 (39PV, 39MV pilots, liquid)	18458	Pilot Operated Pressure Relief Valve	VIII Div. 1	Aug 10, 2020	194
M	19000 Series	18706	Safety Relief Valve	VIII Div. 1	Feb 9, 2021	196
M	19000 Series, Liquid	18717	Relief Valve	VIII Div. 1	Jul 8, 2020	197
M	1900D-2, 1900-30D-2 LA & DALA (Liquids)	18751	Relief Valve	VIII Div. 1	Jun 8, 2019	197
M	1900E-2, 1900-30E-2 LA & DALA (Liquids)	18762	Relief Valve	VIII Div. 1	Jun 27, 2018	197
M	1900, 1900-30 1900-35 LA & DALA (Liquids)	18784	Relief Valve	VIII Div. 1	Jun 27, 2018	198
M	2900 (39PV & 39MV pilots)	18863	Pilot Operated Pressure Relief Valve	VIII Div. 1	Dec 8, 2022	200
M	2900 (39PV & 39MV pilots - Liquid)	18874	Pilot Operated Pressure Relief Valve	VIII Div. 1	Dec 4, 2022	201
M	2900 POSRV (39 PV, 39 MV Pilots)	18964	Pilot Operated Pressure Relief Valve	I	May 28, 2021	204
M	19110M & 19110H (Liquids)	19077	Relief Valve	VIII Div. 1	May 22, 2020	207

Dante Valve Company, Incorporated (DAN)location: **Bellflower, CA, UNITED STATES**Acceptable Abbrev.: **DVCI**Devices designed by: **A&R Energy Services, Corporation (ARE)**

<i>Cert Cat</i>	<i>Device Type</i>	<i>NB Cert #</i>	<i>Type Classification</i>	<i>Code Section</i>	<i>Expiration Date</i>	<i>Page...</i>
A	Kunkle 6000, 6252 Series	36324	Safety Valve	I & VIII Div. 1	May 17, 2024	391

Devices designed by: **Emerson Automation Solutions Final Control, US LP (KBM)**

<i>Cert Cat</i>	<i>Device Type</i>	<i>NB Cert #</i>	<i>Type Classification</i>	<i>Code Section</i>	<i>Expiration Date</i>	<i>Page...</i>
A	300,600	36076	Safety Valve	I & VIII Div. 1	Oct 25, 2023	386
A	910 to 919	36100	Safety Relief Valve	VIII Div. 1	Feb 10, 2024	387
A	910 to 919 (Liquid)	36111	Relief Valve	VIII Div. 1	Oct 18, 2023	388
A	Kunkle 264, 265, 266 & 267	36267	Safety Relief Valve	VIII Div. 1	Feb 10, 2024	389
A	Kunkle 337	36278	Safety Relief Valve	VIII Div. 1	Oct 18, 2023	389

DonadonSDD Srl (DON)location: **Corbetta Milano, ITALY**Acceptable Abbrev.: **DonadonSDD**Devices designed by: **DonadonSDD Srl (DON)**

<i>Cert Cat</i>	<i>Device Type</i>	<i>NB Cert #</i>	<i>Type Classification</i>	<i>Code Section</i>	<i>Expiration Date</i>	<i>Page...</i>
M	KRD	00516	Rupture Disk Device	VIII Div. 1	Mar 25, 2021	176
M	SCD	00527	Rupture Disk Device	VIII Div. 1	Mar 25, 2021	177
M	SCR	00538	Rupture Disk Device	VIII Div. 1	Mar 25, 2021	178

Dowco Valve Company, Inc. (DWC)**location: Hastings, MN, UNITED STATES****Acceptable Abbrev.: Dowco Valve**

Devices designed by: Conbraco Industries, Incorporated (CNB)

<i>Cert Cat</i>	<i>Device Type</i>	<i>NB Cert #</i>	<i>Type Classification</i>	<i>Code Section</i>	<i>Expiration Date</i>	<i>Page...</i>
A	19 Series	11282	Safety Valve	I & VIII Div. 1	Nov 8, 2022	124
A	119 Series	11361	Safety Valve	I & VIII Div. 1	Nov 21, 2022	126
A	500 Series	11462	Safety Valve	VIII Div. 1	Mar 20, 2020	128
A	500 Series (Liquids)	11473	Safety Relief Valve	VIII Div. 1	Nov 8, 2022	128

Devices designed by: Farris Engineering (TFO)

<i>Cert Cat</i>	<i>Device Type</i>	<i>NB Cert #</i>	<i>Type Classification</i>	<i>Code Section</i>	<i>Expiration Date</i>	<i>Page...</i>
A	3800	57024	Pilot Operated Pressure Relief Valve	VIII Div. 1	Nov 8, 2022	233
A	3800FP	57035	Pilot Operated Pressure Relief Valve	VIII Div. 1	Feb 9, 2023	234
A	2600 & 2600S	57057	Safety Relief Valve	VIII Div. 1	Nov 21, 2022	236
A	2600L (Liquids)	57068	Relief Valve	VIII Div. 1	Feb 9, 2023	237
A	3800L, PCL, PCM pilots	57215	Pilot Operated Pressure Relief Valve	VIII Div. 1	Nov 8, 2022	238
A	2700, 2700S, 3700, 3700S	57237	Safety Relief Valve	VIII Div. 1	Nov 8, 2022	238
A	2700L, 3700L (Liquids)	57248	Relief Valve	VIII Div. 1	Nov 8, 2022	239
A	2600L (Air & Steam)	57260	Safety Relief Valve	VIII Div. 1	Nov 8, 2022	240
A	4200 / 4400	57282	Safety Valve	I & VIII Div. 1	Nov 21, 2022	241

Dowco Valve Company, Inc. Iowa Division (DIA)**location: DeWitt, IA, UNITED STATES****Acceptable Abbrev.: DOWCO**

Devices designed by: Farris Engineering (TFO)

<i>Cert Cat</i>	<i>Device Type</i>	<i>NB Cert #</i>	<i>Type Classification</i>	<i>Code Section</i>	<i>Expiration Date</i>	<i>Page...</i>
A	2600 & 2600S	57057	Safety Relief Valve	VIII Div. 1	Jul 17, 2024	236
A	2600L (Liquids)	57068	Relief Valve	VIII Div. 1	Jul 17, 2024	237
A	2700, 2700S, 3700, 3700S	57237	Safety Relief Valve	VIII Div. 1	Jul 17, 2024	238
A	2700L, 3700L (Liquids)	57248	Relief Valve	VIII Div. 1	Jul 17, 2024	239
A	2600L (Air & Steam)	57260	Safety Relief Valve	VIII Div. 1	May 18, 2018	240

Dresser AI Rushaid Valve & Instrument Company, Ltd. (DAR)**location: Jubail Industrial City, SAUDI ARABIA****Acceptable Abbrev.: DARVICO**

Devices designed by: Dresser, LLC (DRJ)

<i>Cert Cat</i>	<i>Device Type</i>	<i>NB Cert #</i>	<i>Type Classification</i>	<i>Code Section</i>	<i>Expiration Date</i>	<i>Page...</i>
M	1900D-2, 1900-30D-2	18144	Safety Relief Valve	VIII Div. 1	Jun 12, 2018	183
M	1900E-2, 1900-30E-2	18166	Safety Relief Valve	VIII Div. 1	Jun 12, 2018	183
M	1900, 1900-30, 1900-35	18201	Safety Relief Valve	VIII Div. 1	Jun 12, 2018	184
M	1990 - 3999	18391	Safety Relief Valve	VIII Div. 1	Sep 9, 2019	189
M	3900 (39PV, 39MV pilots)	18447	Pilot Operated Pressure Relief Valve	VIII Div. 1	Jun 12, 2018	192
M	3900 (39PV, 39MV pilots, liquid)	18458	Pilot Operated Pressure Relief Valve	VIII Div. 1	Jun 13, 2018	194
M	19000 Series	18706	Safety Relief Valve	VIII Div. 1	Jun 12, 2018	196
M	19000 Series, Liquid	18717	Relief Valve	VIII Div. 1	Jun 12, 2018	197
M	1900D-2, 1900-30D-2 LA & DALA (Liquids)	18751	Relief Valve	VIII Div. 1	Mar 8, 2019	197
M	1900E-2, 1900-30E-2 LA & DALA (Liquids)	18762	Relief Valve	VIII Div. 1	Jun 12, 2018	197
M	1900, 1900-30 1900-35 LA & DALA (Liquids)	18784	Relief Valve	VIII Div. 1	Jun 13, 2018	198
M	2900 (39PV & 39MV pilots)	18863	Pilot Operated Pressure Relief Valve	VIII Div. 1	Feb 25, 2020	200
M	2900 (39PV & 39MV pilots - Liquid)	18874	Pilot Operated Pressure Relief Valve	VIII Div. 1	Feb 25, 2020	201
M	19110M & 19110H (Liquids)	19077	Relief Valve	VIII Div. 1	Feb 25, 2020	207

Dresser de Mexico, S.A. de C.V. (DMX)

location: Tlalnepantla, Estado de Mexico, MEXICO

Acceptable Abbrev.: Dresser Mexico

Devices designed by: Dresser, LLC (DRJ)

<i>Cert Cat</i>	<i>Device Type</i>	<i>NB Cert #</i>	<i>Type Classification</i>	<i>Code Section</i>	<i>Expiration Date</i>	<i>Page...</i>
A	1900D-2, 1900-30D-2	18144	Safety Relief Valve	VIII Div. 1	Dec 1, 2020	183
A	1900E-2, 1900-30E-2	18166	Safety Relief Valve	VIII Div. 1	Dec 1, 2020	183
A	1900, 1900-30, 1900-35	18201	Safety Relief Valve	VIII Div. 1	Dec 1, 2020	184
A	19000 Series	18706	Safety Relief Valve	VIII Div. 1	Dec 1, 2020	196
A	19000 Series, Liquid	18717	Relief Valve	VIII Div. 1	Dec 1, 2020	197
A	1900D-2, 1900-30D-2 LA & DALA (Liquids)	18751	Relief Valve	VIII Div. 1	Dec 7, 2018	197
A	1900E-2, 1900-30E-2 LA & DALA (Liquids)	18762	Relief Valve	VIII Div. 1	Nov 18, 2021	197
A	1900, 1900-30 1900-35 LA & DALA (Liquids)	18784	Relief Valve	VIII Div. 1	Nov 18, 2021	198
A	19110M & 19110H (Liquids)	19077	Relief Valve	VIII Div. 1	Mar 10, 2021	207

Dresser International LLC. (DRA)

location: Johannesburg,

Acceptable Abbrev.: DRA

Devices designed by: Dresser, LLC (DRJ)

<i>Cert Cat</i>	<i>Device Type</i>	<i>NB Cert #</i>	<i>Type Classification</i>	<i>Code Section</i>	<i>Expiration Date</i>	<i>Page...</i>
A	1900D-2, 1900-30D-2	18144	Safety Relief Valve	VIII Div. 1	Jun 30, 2022	183
A	1900E-2, 1900-30E-2	18166	Safety Relief Valve	VIII Div. 1	Jun 30, 2022	183
A	1900, 1900-30, 1900-35	18201	Safety Relief Valve	VIII Div. 1	Jun 30, 2022	184
A	19000 Series	18706	Safety Relief Valve	VIII Div. 1	Jun 30, 2022	196
A	19000 Series, Liquid	18717	Relief Valve	VIII Div. 1	Jun 30, 2022	197
A	1900D-2, 1900-30D-2 LA & DALA (Liquids)	18751	Relief Valve	VIII Div. 1	Apr 3, 2023	197
A	1900E-2, 1900-30E-2 LA & DALA (Liquids)	18762	Relief Valve	VIII Div. 1	Apr 3, 2023	197
A	1900, 1900-30 1900-35 LA & DALA (Liquids)	18784	Relief Valve	VIII Div. 1	Apr 3, 2023	198
A	19110M & 19110H (Liquids)	19077	Relief Valve	VIII Div. 1	Jun 30, 2022	207

Dresser International, Inc. (DIU)

location: Dubai, UNITED ARAB EMIRATES

Acceptable Abbrev.: Dresser JA

Devices designed by: Dresser, LLC (DRJ)

<i>Cert Cat</i>	<i>Device Type</i>	<i>NB Cert #</i>	<i>Type Classification</i>	<i>Code Section</i>	<i>Expiration Date</i>	<i>Page...</i>
M	1900D-2, 1900-30D-2	18144	Safety Relief Valve	VIII Div. 1	Oct 3, 2019	183
M	1900E-2, 1900-30E-2	18166	Safety Relief Valve	VIII Div. 1	Oct 2, 2019	183
M	1900, 1900-30, 1900-35	18201	Safety Relief Valve	VIII Div. 1	Oct 2, 2019	184
M	3900 (39PV, 39MV pilots)	18447	Pilot Operated Pressure Relief Valve	VIII Div. 1	Dec 16, 2021	192
M	3900 (39PV, 39MV pilots, liquid)	18458	Pilot Operated Pressure Relief Valve	VIII Div. 1	Dec 16, 2021	194
M	19000 Series	18706	Safety Relief Valve	VIII Div. 1	Apr 24, 2020	196
M	19000 Series, Liquid	18717	Relief Valve	VIII Div. 1	Oct 2, 2019	197
M	1900D-2, 1900-30D-2 LA & DALA (Liquids)	18751	Relief Valve	VIII Div. 1	Oct 1, 2019	197
M	1900E-2, 1900-30E-2 LA & DALA (Liquids)	18762	Relief Valve	VIII Div. 1	Oct 2, 2019	197
M	1900, 1900-30 1900-35 LA & DALA (Liquids)	18784	Relief Valve	VIII Div. 1	Oct 3, 2019	198
M	2900 (39PV & 39MV pilots)	18863	Pilot Operated Pressure Relief Valve	VIII Div. 1	Dec 16, 2021	200
M	2900 (39PV & 39MV pilots - Liquid)	18874	Pilot Operated Pressure Relief Valve	VIII Div. 1	Dec 16, 2021	201
M	19110M & 19110H (Liquids)	19077	Relief Valve	VIII Div. 1	Dec 16, 2021	207

Dresser Italia SRL (GOI)location: **Casavatore, Napoli, ITALY**Seal Identification: **NAP**Devices designed by: **Dresser, LLC (DRJ)**

<i>Cert Cat</i>	<i>Device Type</i>	<i>NB Cert #</i>	<i>Type Classification</i>	<i>Code Section</i>	<i>Expiration Date</i>	<i>Page...</i>
M	1900D-2, 1900-30D-2	18144	Safety Relief Valve	VIII Div. 1	Nov 20, 2023	183
M	1900E-2, 1900-30E-2	18166	Safety Relief Valve	VIII Div. 1	Nov 20, 2023	183
M	1900, 1900-30, 1900-35	18201	Safety Relief Valve	VIII Div. 1	Sep 26, 2020	184
M	3900 (39PV, 39MV pilots)	18447	Pilot Operated Pressure Relief Valve	VIII Div. 1	Dec 9, 2021	192
M	3900 (39PV, 39MV pilots, liquid)	18458	Pilot Operated Pressure Relief Valve	VIII Div. 1	Dec 9, 2021	194
M	19000 Series	18706	Safety Relief Valve	VIII Div. 1	Nov 20, 2023	196
M	19000 Series, Liquid	18717	Relief Valve	VIII Div. 1	Sep 26, 2023	197
M	1900D-2, 1900-30D-2 LA & DALA (Liquids)	18751	Relief Valve	VIII Div. 1	Jan 16, 2021	197
M	1900E-2, 1900-30E-2 LA & DALA (Liquids)	18762	Relief Valve	VIII Div. 1	Jan 16, 2021	197
M	1900, 1900-30 1900-35 LA & DALA (Liquids)	18784	Relief Valve	VIII Div. 1	Jan 16, 2021	198
M	2900 (39PV & 39MV pilots)	18863	Pilot Operated Pressure Relief Valve	VIII Div. 1	Dec 9, 2021	200
M	2900 (39PV & 39MV pilots - Liquid)	18874	Pilot Operated Pressure Relief Valve	VIII Div. 1	Dec 9, 2021	201
M	19110M & 19110H (Liquids)	19077	Relief Valve	VIII Div. 1	Nov 20, 2023	207

Dresser LLC (DDT)location: **Deer Park, TX, UNITED STATES**Acceptable Abbrev.: **DDT**Devices designed by: **Dresser, LLC (DRJ)**

<i>Cert Cat</i>	<i>Device Type</i>	<i>NB Cert #</i>	<i>Type Classification</i>	<i>Code Section</i>	<i>Expiration Date</i>	<i>Page...</i>
M	1541, 1543, 1541-3, 1543-3	18032	Safety Valve	I & VIII Div. 1	Jan 14, 2020	180
M	1700 & 2700	18100	Safety Valve	I & VIII Div. 1	Mar 17, 2020	181
M	1700 & 2700 (Restricted Lift version of Cert. # 18100)	18111	Safety Valve	I & VIII Div. 1	Apr 20, 2023	182
M	1811, 1511	18122	Safety Valve	I & VIII Div. 1	Mar 2, 2020	182
M	1900D-2, 1900-30D-2	18144	Safety Relief Valve	VIII Div. 1	Jan 14, 2020	183
M	1900E-2, 1900-30E-2	18166	Safety Relief Valve	VIII Div. 1	Jan 14, 2020	183
M	1900, 1900-30, 1900-35	18201	Safety Relief Valve	VIII Div. 1	Jan 14, 2020	184
M	1900D/P, 1900-30D/P (Rest. Lift)	18256	Safety Relief Valve	I & VIII Div. 1	Oct 27, 2022	186
M	1900E/P, 1900-30E/P (Rest. Lift)	18278	Safety Relief Valve	I & VIII Div. 1	Oct 27, 2022	186
M	1900/P, 1900-30/P	18290	Safety Relief Valve	I & VIII Div. 1	Feb 14, 2023	187
M	1982	18379	Safety Relief Valve	VIII Div. 1	Feb 9, 2020	188
M	1982 LS, 820000LS	18380	Relief Valve	VIII Div. 1	Mar 17, 2020	188
M	3900 (39PV, 39MV pilots)	18447	Pilot Operated Pressure Relief Valve	VIII Div. 1	Jan 14, 2020	192
M	3900 (39PV, 39MV pilots, liquid)	18458	Pilot Operated Pressure Relief Valve	VIII Div. 1	Jan 13, 2020	194
M	19000 Series	18706	Safety Relief Valve	VIII Div. 1	Jan 14, 2020	196
M	19000 Series, Liquid	18717	Relief Valve	VIII Div. 1	Mar 15, 2020	197
M	1900D-2, 1900-30D-2 LA & DALA (Liquids)	18751	Relief Valve	VIII Div. 1	Mar 3, 2020	197
M	1900E-2, 1900-30E-2 LA & DALA (Liquids)	18762	Relief Valve	VIII Div. 1	Mar 17, 2020	197
M	1900, 1900-30 1900-35 LA & DALA (Liquids)	18784	Relief Valve	VIII Div. 1	Jan 13, 2020	198
M	2900 (39PV & 39MV pilots)	18863	Pilot Operated Pressure Relief Valve	VIII Div. 1	Jan 14, 2020	200
M	2900 (39PV & 39MV pilots - Liquid)	18874	Pilot Operated Pressure Relief Valve	VIII Div. 1	Feb 11, 2020	201
M	1900-UM	18997	Safety Relief Valve	VIII Div. 1	Dec 4, 2022	205
M	1900-UM (Liquids)	19000	Safety Relief Valve	VIII Div. 1	Oct 7, 2022	206
M	1900-UM-D	19011	Safety Relief Valve	VIII Div. 1	Dec 4, 2022	206
M	1900 UM-D (Liquids)	19022	Safety Relief Valve	VIII Div. 1	Apr 19, 2023	206
M	1900-UM-E	19033	Safety Relief Valve	VIII Div. 1	Dec 4, 2022	207
M	1900-UM-E (Liquids)	19044	Safety Relief Valve	VIII Div. 1	Apr 19, 2023	207
M	19110M & 19110H (Liquids)	19077	Relief Valve	VIII Div. 1	Aug 12, 2020	207

Dresser Machinery (Suzhou) Co., Ltd. (DMS)**location: Suzhou Industrial Park, Suzhou, Jiangsu, PEOPLES REP/CHINA****Acceptable Abbrev.: DMS**

Devices designed by: Dresser Machinery (Suzhou) Co., Ltd. (DMS)

<i>Cert Cat</i>	<i>Device Type</i>	<i>NB Cert #</i>	<i>Type Classification</i>	<i>Code Section</i>	<i>Expiration Date</i>	<i>Page...</i>
M	11000 E Liquid	00864	Safety Relief Valve	VIII Div. 1	Aug 25, 2022	
M	11000 E gas	00875	Safety Relief Valve	VIII Div. 1	Aug 25, 2022	
M	11000 D gas	00886	Safety Relief Valve	VIII Div. 1	Aug 25, 2022	

Devices designed by: Dresser, LLC (DRJ)

<i>Cert Cat</i>	<i>Device Type</i>	<i>NB Cert #</i>	<i>Type Classification</i>	<i>Code Section</i>	<i>Expiration Date</i>	<i>Page...</i>
M	1541, 1543, 1541-3, 1543-3	18032	Safety Valve	I & VIII Div. 1	Sep 9, 2019	180
M	1700 & 2700 (4" #7 & Ovrzsd Q)	18087	Safety Valve	I & VIII Div. 1	Jul 23, 2021	180
M	1700 & 2700 (4" #7 & Ovrzsd Q) (Restricted Lift version of Cert.	18098	Safety Valve	I & VIII Div. 1	Jul 23, 2021	181
M	1700 & 2700	18100	Safety Valve	I & VIII Div. 1	Jun 14, 2023	181
M	1700 & 2700 (Restricted Lift version of Cert. # 18100)	18111	Safety Valve	I & VIII Div. 1	Dec 9, 2021	182
M	1811, 1511	18122	Safety Valve	I & VIII Div. 1	Jun 15, 2023	182
M	1900D-2, 1900-30D-2	18144	Safety Relief Valve	VIII Div. 1	Jun 15, 2023	183
M	1900E-2, 1900-30E-2	18166	Safety Relief Valve	VIII Div. 1	Jun 15, 2023	183
M	1900, 1900-30, 1900-35 (R.L.)	18223	Safety Relief Valve	VIII Div. 1	Nov 18, 2020	185
M	1900D/P, 1900-30D/P (Rest. Lift)	18256	Safety Relief Valve	I & VIII Div. 1	Aug 25, 2022	186
M	1900E/P, 1900-30E/P (Rest. Lift)	18278	Safety Relief Valve	I & VIII Div. 1	Aug 25, 2022	186
M	1900/P, 1900-30/P	18290	Safety Relief Valve	I & VIII Div. 1	Aug 25, 2022	187
M	1982	18379	Safety Relief Valve	VIII Div. 1	Sep 9, 2019	188
M	1982 LS, 820000LS	18380	Relief Valve	VIII Div. 1	Sep 9, 2019	188
M	3900 (39PV, 39MV pilots)	18447	Pilot Operated Pressure Relief Valve	VIII Div. 1	May 13, 2021	192
M	3900 (39PV, 39MV pilots, liquid)	18458	Pilot Operated Pressure Relief Valve	VIII Div. 1	May 11, 2021	194
M	19000 Series	18706	Safety Relief Valve	VIII Div. 1	Jun 15, 2023	196
M	19000 Series, Liquid	18717	Relief Valve	VIII Div. 1	Jun 15, 2023	197
M	1900D-2, 1900-30D-2 LA & DALA (Liquids)	18751	Relief Valve	VIII Div. 1	Jun 15, 2023	197
M	1900E-2, 1900-30E-2 LA & DALA (Liquids)	18762	Relief Valve	VIII Div. 1	Jun 15, 2023	197
M	1900, 1900-30 1900-35 LA & DALA (Liquids)	18784	Relief Valve	VIII Div. 1	Jul 11, 2023	198
M	2900 (39PV & 39MV pilots)	18863	Pilot Operated Pressure Relief Valve	VIII Div. 1	Nov 18, 2020	200
M	2900 (39PV & 39MV pilots - Liquid)	18874	Pilot Operated Pressure Relief Valve	VIII Div. 1	Nov 18, 2020	201
M	2900 POSRV (39 PV, 39 MV Pilots)	18964	Pilot Operated Pressure Relief Valve	I	Nov 18, 2020	204
M	1900-UM	18997	Safety Relief Valve	VIII Div. 1	Aug 25, 2022	205
M	1900-UM (Liquids)	19000	Safety Relief Valve	VIII Div. 1	May 12, 2023	206
M	1900-UM-D	19011	Safety Relief Valve	VIII Div. 1	May 12, 2023	206
M	1900 UM-D (Liquids)	19022	Safety Relief Valve	VIII Div. 1	May 10, 2023	206
M	1900-UM-E	19033	Safety Relief Valve	VIII Div. 1	May 12, 2023	207
M	1900-UM-E (Liquids)	19044	Safety Relief Valve	VIII Div. 1	May 10, 2023	207
M	19110M & 19110H (Liquids)	19077	Relief Valve	VIII Div. 1	Aug 25, 2022	207

Dresser Valve India Pvt. Ltd (DVP)**location: Coimbatore, Tamilnadu, INDIA****Acceptable Abbrev.: DVI**

Devices designed by: Dresser, LLC (DRJ)

<i>Cert Cat</i>	<i>Device Type</i>	<i>NB Cert #</i>	<i>Type Classification</i>	<i>Code Section</i>	<i>Expiration Date</i>	<i>Page...</i>
M	1900D-2, 1900-30D-2	18144	Safety Relief Valve	VIII Div. 1	Jan 20, 2021	183
M	1900E-2, 1900-30E-2	18166	Safety Relief Valve	VIII Div. 1	Jan 20, 2021	183
M	1900, 1900-30, 1900-35	18201	Safety Relief Valve	VIII Div. 1	Jan 20, 2021	184
M	3900 (39PV, 39MV pilots)	18447	Pilot Operated Pressure Relief Valve	VIII Div. 1	Nov 19, 2021	192
M	3900 (39PV, 39MV pilots, liquid)	18458	Pilot Operated Pressure Relief Valve	VIII Div. 1	Nov 19, 2021	194
M	19000 Series	18706	Safety Relief Valve	VIII Div. 1	Jan 20, 2021	196
M	19000 Series, Liquid	18717	Relief Valve	VIII Div. 1	Jan 20, 2021	197

Dresser, LLC (DRJ)**location: Jacksonville, FL, UNITED STATES****Acceptable Abbrev.: JAX**

Devices designed by: Dresser, LLC (DRJ)

<i>Cert Cat</i>	<i>Device Type</i>	<i>NB Cert #</i>	<i>Type Classification</i>	<i>Code Section</i>	<i>Expiration Date</i>	<i>Page...</i>
M	1541, 1543, 1541-3, 1543-3	18032	Safety Valve	I & VIII Div. 1	May 25, 2022	180
M	1700 & 2700 (4" #7 & Ovrzsd Q)	18087	Safety Valve	I & VIII Div. 1	Nov 11, 2022	180
M	1700 & 2700 (4" #7 & Ovrzsd Q) (Restricted Lift version of Cert.	18098	Safety Valve	I & VIII Div. 1	Nov 30, 2022	181
M	1700 & 2700	18100	Safety Valve	I & VIII Div. 1	Apr 26, 2022	181
M	1700 & 2700 (Restricted Lift version of Cert. # 18100)	18111	Safety Valve	I & VIII Div. 1	Apr 26, 2022	182
M	1811, 1511	18122	Safety Valve	I & VIII Div. 1	Mar 24, 2022	182
M	1900D-2, 1900-30D-2	18144	Safety Relief Valve	III & VIII Div.1	Dec 22, 2021	183
M	1900E-2, 1900-30E-2	18166	Safety Relief Valve	III & VIII Div.1	Nov 4, 2021	183
M	1900, 1900-30, 1900-35	18201	Safety Relief Valve	III & VIII Div.1	Dec 22, 2021	184
M	1900, 1900-30, 1900-35 (R.L.)	18223	Safety Relief Valve	VIII Div. 1	Sep 25, 2023	185
M	1900D/P, 1900-30D/P (Rest. Lift)	18256	Safety Relief Valve	I, III, & VIII Div. 1	Sep 29, 2022	186
M	1900E/P, 1900-30E/P (Rest. Lift)	18278	Safety Relief Valve	I & VIII Div. 1	Apr 25, 2022	186
M	1900/P, 1900-30/P	18290	Safety Relief Valve	I & VIII Div. 1	Apr 25, 2022	187
M	1982	18379	Safety Relief Valve	VIII Div. 1	Mar 23, 2022	188
M	1982 LS, 820000LS	18380	Relief Valve	VIII Div. 1	May 25, 2022	188
M	1990 - 3999 LS & DL (Liquids)	18403	Relief Valve	III	Feb 14, 2021	189
M	3700-RT	18414	Safety Valve	III NB, NC, ND	Dec 15, 2022	190
M	3900 (39PV, 39MV pilots)	18447	Pilot Operated Pressure Relief Valve	VIII Div. 1	Mar 23, 2022	192
M	3900 (39PV, 39MV pilots, liquid)	18458	Pilot Operated Pressure Relief Valve	III & VIII Div.1	Jan 27, 2022	194
M	19000 Series	18706	Safety Relief Valve	VIII Div. 1	Nov 4, 2021	196
M	19000 Series, Liquid	18717	Relief Valve	VIII Div. 1	Mar 21, 2022	197
M	1900D-2, 1900-30D-2 LA & DALA (Liquids)	18751	Relief Valve	III & VIII Div.1	Nov 4, 2021	197
M	1900E-2, 1900-30E-2 LA & DALA (Liquids)	18762	Relief Valve	III & VIII Div.1	Nov 4, 2021	197
M	1900, 1900-30 1900-35 LA & DALA (Liquids)	18784	Relief Valve	III & VIII Div.1	Nov 4, 2021	198
M	2900 (39PV & 39MV pilots)	18863	Pilot Operated Pressure Relief Valve	VIII Div. 1	Apr 25, 2022	200
M	2900 (39PV & 39MV pilots - Liquid)	18874	Pilot Operated Pressure Relief Valve	VIII Div. 1	Apr 25, 2022	201
M	4900 (49PV & 49MV pilots)	18885	Pilot Operated Pressure Relief Valve	VIII Div. 1	Mar 23, 2022	202
M	2900 POSRV (39 PV, 39 MV Pilots)	18964	Pilot Operated Pressure Relief Valve	I	May 25, 2022	204
M	1900-UM	18997	Safety Relief Valve	VIII Div. 1	Jan 27, 2022	205
M	1900-UM (Liquids)	19000	Safety Relief Valve	VIII Div. 1	May 25, 2022	206
M	1900-UM-D	19011	Safety Relief Valve	VIII Div. 1	Jan 27, 2022	206
M	1900 UM-D (Liquids)	19022	Safety Relief Valve	VIII Div. 1	Dec 22, 2021	206
M	1900-UM-E	19033	Safety Relief Valve	VIII Div. 1	Jan 27, 2022	207
M	1900-UM-E (Liquids)	19044	Safety Relief Valve	VIII Div. 1	May 29, 2022	207
M	19110M & 19110H (Liquids)	19077	Relief Valve	III & VIII Div.1	Nov 4, 2021	207

DS Controls (DSC)location: **Velikiy Novgorod, RUSSIAN FEDERATION**Acceptable Abbrev.: **DSC**Devices designed by: **Dresser, LLC (DRJ)**

<i>Cert Cat</i>	<i>Device Type</i>	<i>NB Cert #</i>	<i>Type Classification</i>	<i>Code Section</i>	<i>Expiration Date</i>	<i>Page...</i>
A	1900D-2, 1900-30D-2	18144	Safety Relief Valve	VIII Div. 1	Aug 24, 2021	183
A	1900E-2, 1900-30E-2	18166	Safety Relief Valve	VIII Div. 1	Aug 24, 2021	183
A	1900, 1900-30, 1900-35	18201	Safety Relief Valve	VIII Div. 1	Aug 24, 2021	184
A	3900 (39PV, 39MV pilots)	18447	Pilot Operated Pressure Relief Valve	VIII Div. 1	Dec 12, 2022	192
A	3900 (39PV, 39MV pilots, liquid)	18458	Pilot Operated Pressure Relief Valve	VIII Div. 1	Dec 12, 2022	194
A	19000 Series	18706	Safety Relief Valve	VIII Div. 1	Aug 24, 2021	196
A	19000 Series, Liquid	18717	Relief Valve	VIII Div. 1	Dec 12, 2022	197
A	1900D-2, 1900-30D-2 LA & DALA (Liquids)	18751	Relief Valve	VIII Div. 1	Aug 24, 2021	197
A	1900E-2, 1900-30E-2 LA & DALA (Liquids)	18762	Relief Valve	VIII Div. 1	Dec 12, 2022	197
A	1900, 1900-30 1900-35 LA & DALA (Liquids)	18784	Relief Valve	VIII Div. 1	Dec 12, 2022	198
A	19110M & 19110H (Liquids)	19077	Relief Valve	VIII Div. 1	Dec 12, 2022	207

Elfab Limited (ELF)location: **North Shields, Tyne & Wear, UNITED KINGDOM**Acceptable Abbrev.: **ELFAB**Devices designed by: **Elfab Limited (ELF)**

<i>Cert Cat</i>	<i>Device Type</i>	<i>NB Cert #</i>	<i>Type Classification</i>	<i>Code Section</i>	<i>Expiration Date</i>	<i>Page...</i>
M	DSC-FCD	88062	Rupture Disk Device	VIII Div. 1	Apr 25, 2018	208
M	OPR	88118	Rupture Disk Device	VIII Div. 1	Nov 12, 2019	209
M	AGS	88129	Rupture Disk Device	VIII Div. 1	Aug 6, 2019	210
M	CD	88152	Rupture Disk Device	VIII Div. 1	Oct 31, 2023	210
M	DSC-OPR	88185	Rupture Disk Device	VIII Div. 1	Jan 28, 2020	211
M	DSC-SGD	88196	Rupture Disk Device	VIII Div. 1	Apr 25, 2018	212
M	FCD (Flat or Domed Composite Discs)	88208	Rupture Disk Device	VIII Div. 1	Jan 28, 2020	213

Emerson Automation Solution Final Control (Shanghai) Co., Ltd. (SAG)

location: Shanghai, PEOPLES REP/CHINA

Devices designed by: Emerson Automation Solutions Final Control US LP (AGC)

<i>Cert Cat</i>	<i>Device Type</i>	<i>NB Cert #</i>	<i>Type Classification</i>	<i>Code Section</i>	<i>Expiration Date</i>	<i>Page...</i>
M	JOS-E-RL/JBS-E-RL (Restricted Lift version of cert 15208)	01045	Safety Relief Valve	VIII Div. 1	Jul 24, 2023	395
M	81, 81P, 83, 86	01089	Safety Relief Valve	VIII Div. 1	Sep 18, 2018	397
M	243/249/443/449/546/843/849/943/5046/5049/8043/8049	01292	Pilot Operated Pressure Relief Valve	VIII Div. 1	Sep 18, 2018	402
M	253/259/453/459/853/859/953/959/5059/8053/8059	01304	Pilot Operated Pressure Relief Valve	VIII Div. 1	Sep 18, 2018	402
M	263/269/463/469/566/863/869/963/969/5066/5069	01315	Pilot Operated Pressure Relief Valve	VIII Div. 1	Sep 18, 2018	403
M	453/459/853/859/953/959/5059 (Liquids)	01326	Pilot Operated Pressure Relief Valve	VIII Div. 1	Sep 18, 2018	403
M	443/449/546/843/849/943/949/5046/5049(Liquids)	01337	Pilot Operated Pressure Relief Valve	VIII Div. 1	Sep 18, 2018	404
M	463/469/566/863/869/963/969/5066/5069 (Liquids)	01348	Pilot Operated Pressure Relief Valve	VIII Div. 1	Sep 18, 2018	404
M	JLT-JOS-RL/JLT-JBS-RL (Restricted Lift version of	01382	Safety Relief Valve	VIII Div. 1	Jan 17, 2023	
M	JLT-JOS-RL/JLT-JBS-RL (Liquids) (Restricted lift version of	01393	Safety Relief Valve	VIII Div. 1	Jan 17, 2023	
M	H Series (HCI, HSJ, HCA, HA, HB, HC, HCB, HCP, HJO, HN,	15006	Safety Valve	I & VIII Div. 1	Oct 10, 2020	406
M	HE	15039	Safety Valve	I	Aug 31, 2020	407
M	JLT (Liquids)	15095	Safety Relief Valve	VIII Div. 1	Feb 14, 2023	408
M	JOS-E/JBS-E/JOS-H-E 8400 AC/AB	15208	Safety Relief Valve	VIII Div. 1	Aug 14, 2023	409
M	900 Series, 7700, SNC	15411	Safety Relief Valve	VIII Div. 1	Feb 14, 2023	411
M	800	15466	Safety Relief Valve	VIII Div. 1	Feb 14, 2023	412
M	900 Series (Liquid), 7700, SNC	15499	Relief Valve	VIII Div. 1	Feb 14, 2023	412
M	BP	15501	Relief Valve	VIII Div. 1	Feb 14, 2023	413
M	JLT/JOS, JLT/JBS, 8500, ACL/ABL	15512	Safety Relief Valve	VIII Div. 1	Feb 14, 2023	413
M	BP (Liquids)	15534	Relief Valve	VIII Div. 1	Feb 14, 2023	414
M	H Series (Restricted Lift version of Cert # 15006)	15567	Safety Valve	I	Mar 4, 2021	415
M	HL, HSL	15589	Safety Valve	I & VIII Div. 1	Oct 9, 2020	416
M	5200 Series (Water K = 0.674)	36458	Pilot Operated Pressure Relief Valve	I & VIII Div. 1	Mar 4, 2021	417

Emerson Automation Solutions Final Control UK, Ltd. (BRK)

location: Worsley, Manchester, Lancashire, UNITED KINGDOM

Devices designed by: Emerson Automation Solutions Final Control UK, Ltd. (BRK)

<i>Cert Cat</i>	<i>Device Type</i>	<i>NB Cert #</i>	<i>Type Classification</i>	<i>Code Section</i>	<i>Expiration Date</i>	<i>Page...</i>
M	B Series	06006	Safety Valve	VIII Div. 1	Dec 15, 2019	376
M	C Series	06017	Relief Valve	VIII Div. 1	Nov 18, 2019	376
M	WB 100/200 (Liquids)	06028	Relief Valve	VIII Div. 1	Dec 15, 2019	377
M	WB 300/400	06039	Safety Relief Valve	VIII Div. 1	Sep 19, 2018	378
M	746-1, JCE/1	06062	Safety Relief Valve	VIII Div. 1	Dec 13, 2022	379
M	746-3, JCE/3 (Liquids)	06073	Relief Valve	VIII Div. 1	Dec 12, 2022	379
M	WB 300B	06084	Safety Relief Valve	VIII Div. 1	Dec 19, 2023	380
M	20R (Liquid) (4, 5, 8, 9 pilots) 4FR3, 4FR9, 8FR3, 8FR9	06095	Pilot Operated Pressure Relief Valve	VIII Div. 1	Dec 19, 2023	380
M	20F(2,4,5,8,9 pilots) 2FF3, 2FF9, 4FF3, 4FF9, 8FF3, 8FF9	06118	Pilot Operated Pressure Relief Valve	VIII Div. 1	Dec 19, 2023	381
M	20R (2,4,5,8,9 pilots) 2FR3, 2FR9, 4FR3, 4FR9, 8FR3, 8FR9	06129	Pilot Operated Pressure Relief Valve	VIII Div. 1	Dec 15, 2023	382
M	D Series, 716H7	06130	Safety Relief Valve	VIII Div. 1	Dec 7, 2020	382
M	D Series (Liquids), 716H7	06141	Safety Relief Valve	VIII Div. 1	Dec 7, 2020	382
M	776	06185	Safety Relief Valve	VIII Div. 1	Feb 5, 2020	383
M	RBH	81010	Rupture Disk Device	VIII Div. 1	Jul 7, 2021	383
M	SANIVENT	81122	Rupture Disk Device	VIII Div. 1	Oct 27, 2021	384
M	LRF	81133	Rupture Disk Device	VIII Div. 1	Jul 9, 2021	384

Emerson Automation Solutions Final Control UK, Ltd. (BRK)

(continued) location: Worsley, Manchester, Lancashire, UNITED KINGDOM

Devices designed by: Emerson Automation Solutions Final Control US LP (AGC)

<i>Cert Cat</i>	<i>Device Type</i>	<i>NB Cert #</i>	<i>Type Classification</i>	<i>Code Section</i>	<i>Expiration Date</i>	<i>Page...</i>
M	81, 81P, 83, 86	01089	Safety Relief Valve	VIII Div. 1	Aug 19, 2020	397
M	81P (Liquids)	01102	Relief Valve	VIII Div. 1	Oct 31, 2020	397
M	243/249/443/449/546/843/849/943/5046/5049/8043/8049	01292	Pilot Operated Pressure Relief Valve	VIII Div. 1	Aug 19, 2020	402
M	253/259/453/459/853/859/953/959/5059/8053/8059	01304	Pilot Operated Pressure Relief Valve	VIII Div. 1	Aug 19, 2020	402
M	263/269/463/469/566/863/869/963/969/5066/5069	01315	Pilot Operated Pressure Relief Valve	VIII Div. 1	Aug 19, 2020	403
M	453/459/853/859/953/959/5059 (Liquids)	01326	Pilot Operated Pressure Relief Valve	VIII Div. 1	Jul 22, 2020	403
M	443/449/546/843/849/943/949/5046/5049(Liquids)	01337	Pilot Operated Pressure Relief Valve	VIII Div. 1	Jul 22, 2020	404
M	463/469/566/863/869/963/969/5066/5069 (Liquids)	01348	Pilot Operated Pressure Relief Valve	VIII Div. 1	Jul 22, 2020	404
M	JLT (Liquids)	15095	Safety Relief Valve	VIII Div. 1	Aug 19, 2020	408
M	JOS-E/JBS-E/JOS-H-E 8400 AC/AB	15208	Safety Relief Valve	VIII Div. 1	Aug 22, 2020	409
M	900 Series, 7700, SNC	15411	Safety Relief Valve	VIII Div. 3	Aug 19, 2020	411
M	900 Series (Liquid), 7700, SNC	15499	Relief Valve	VIII Div. 1	Aug 19, 2020	412
M	JLT/JOS, JLT/JBS, 8500, ACL/ABL	15512	Safety Relief Valve	VIII Div. 1	Aug 19, 2020	413

Emerson Automation Solutions Final Control US LP (AGC)

location: **Stafford, TX, UNITED STATES**

Acceptable Abbrev.: **EMRT**

Devices designed by: **Emerson Automation Solutions Final Control US LP (AGC)**

<i>Cert Cat</i>	<i>Device Type</i>	<i>NB Cert #</i>	<i>Type Classification</i>	<i>Code Section</i>	<i>Expiration Date</i>	<i>Page...</i>
M	JOS-E-RL/JBS-E-RL (Restricted Lift version of cert 15208)	01045	Safety Relief Valve	VIII Div. 1	Sep 23, 2021	395
M	63B (.312", #5 orifice)	01056	Safety Relief Valve	VIII Div. 1	Sep 13, 2022	396
M	63B (.437", #7 orifice)	01067	Safety Relief Valve	VIII Div. 1	Sep 13, 2022	396
M	81, 81P, 83, 86	01089	Safety Relief Valve	VIII Div. 1	Nov 9, 2022	397
M	81P (Liquids)	01102	Relief Valve	I & VIII Div. 1	Sep 20, 2022	397
M	83F	01113	Safety Relief Valve	VIII Div. 1	Sep 13, 2022	398
M	91/94	01124	Pilot Operated Pressure Relief Valve	VIII Div. 1	Nov 9, 2022	398
M	93	01135	Pilot Operated Pressure Relief Valve	VIII Div. 1	Sep 13, 2022	398
M	95	01146	Pilot Operated Pressure Relief Valve	VIII Div. 1	Sep 13, 2022	399
M	727	01247	Pilot Operated Pressure Relief Valve	VIII Div. 1	Dec 18, 2022	400
M	9340/9390	01258	Pilot Operated Pressure Relief Valve	VIII Div. 1	Sep 14, 2022	401
M	61	01269	Safety Relief Valve	VIII Div. 1	Mar 25, 2019	401
M	243/249/443/449/546/843/849/943/5046/5049/8043/8049	01292	Pilot Operated Pressure Relief Valve	VIII Div. 1	Nov 20, 2018	402
M	253/259/453/459/853/859/953/959/5059/8053/8059	01304	Pilot Operated Pressure Relief Valve	VIII Div. 1	Nov 6, 2018	402
M	263/269/463/469/566/863/869/963/969/5066/5069	01315	Pilot Operated Pressure Relief Valve	VIII Div. 1	Nov 20, 2018	403
M	453/459/853/859/953/959/5059 (Liquids)	01326	Pilot Operated Pressure Relief Valve	VIII Div. 1	Nov 6, 2018	403
M	443/449/546/843/849/943/949/5046/5049(Liquids)	01337	Pilot Operated Pressure Relief Valve	VIII Div. 1	Nov 6, 2018	404
M	463/469/566/863/869/963/969/5066/5069 (Liquids)	01348	Pilot Operated Pressure Relief Valve	VIII Div. 1	Dec 4, 2018	404
M	JLT-JOS-RL/JLT-JBS-RL (Restricted Lift version of	01382	Safety Relief Valve	VIII Div. 1	Feb 3, 2022	
M	JLT-JOS-RL/JLT-JBS-RL (Liquids) (Restricted lift version of	01393	Safety Relief Valve	I & VIII Div. 1	Nov 24, 2021	
M	243/249/443/449/843/849-RL (Restricted Lift version of Cert No.	01562	Pilot Operated Pressure Relief Valve	VIII Div. 1	Jun 13, 2023	
M	443/449/843/849-RL (Restricted Lift version of Cert No. 01337) -	01573	Pilot Operated Pressure Relief Valve	VIII Div. 1	Jun 13, 2023	
M	H Series (HCI, HSJ, HCA, HA, HB, HC, HCB, HCP, HJO, HN,	15006	Safety Valve	I & VIII Div. 1	Jun 7, 2021	406
M	HE	15039	Safety Valve	I	Jun 14, 2018	407
M	JLT (Liquids)	15095	Safety Relief Valve	I & VIII Div. 1	Oct 22, 2019	408
M	JOS-E/JBS-E/JOS-H-E 8400 AC/AB	15208	Safety Relief Valve	VIII Div. 1	Oct 22, 2019	409
M	PVR-3	15354	Safety Relief Valve	VIII Div. 1	Aug 29, 2023	411
M	PVR-4	15365	Safety Relief Valve	VIII Div. 1	Aug 29, 2023	411
M	900 Series, 7700, SNC	15411	Safety Relief Valve	VIII Div. 1	Oct 22, 2019	411
M	800	15466	Safety Relief Valve	VIII Div. 1	Oct 23, 2019	412
M	900 Series (Liquid), 7700, SNC	15499	Relief Valve	I & VIII Div. 1	Oct 22, 2019	412
M	BP	15501	Relief Valve	VIII Div. 1	Oct 22, 2019	413
M	JLT/JOS, JLT/JBS, 8500, ACL/ABL	15512	Safety Relief Valve	VIII Div. 1	Oct 22, 2019	413
M	BP (Liquids)	15534	Relief Valve	I & VIII Div. 1	Oct 22, 2019	414
M	H Series (Restricted Lift version of Cert # 15006)	15567	Safety Valve	I	Sep 2, 2023	415
M	HL, HSL	15589	Safety Valve	I & VIII Div. 1	Aug 22, 2023	416
M	LCP	36368	Pilot Operated Pressure Relief Valve	VIII Div. 1	Jul 28, 2020	416
M	5200 Series (Water K = 0.674)	36458	Pilot Operated Pressure Relief Valve	I & VIII Div. 1	Jan 5, 2024	417

Emerson Automation Solutions Final Control, US LP (KBM)

location: **Black Mountain, NC, UNITED STATES**

Acceptable Abbrev.: **EMRN**

Devices designed by: **A&R Energy Services, Corporation (ARE)**

<i>Cert Cat</i>	<i>Device Type</i>	<i>NB Cert #</i>	<i>Type Classification</i>	<i>Code Section</i>	<i>Expiration Date</i>	<i>Page...</i>
M	Kunkle 6000, 6252 Series	36324	Safety Valve	I & VIII Div. 1	Oct 5, 2020	391

Emerson Automation Solutions Final Control, US LP (KBM)

(continued) location: **Black Mountain, NC, UNITED STATES**

Acceptable Abbrev.: **EMRN**

Devices designed by: **Emerson Automation Solutions Final Control, US LP (KBM)**

<i>Cert Cat</i>	<i>Device Type</i>	<i>NB Cert #</i>	<i>Type Classification</i>	<i>Code Section</i>	<i>Expiration Date</i>	<i>Page...</i>
M	Kunkle 189, 363, 389	36043	Safety Relief Valve	VIII Div. 1	Dec 12, 2020	385
M	300,600	36076	Safety Valve	I & VIII Div. 1	Jul 1, 2020	386
M	330. 330S, 333S	36087	Safety Relief Valve	VIII Div. 1	Nov 4, 2018	386
M	920, 921, 927, Agco A (High Temp. water)	36098	Safety Valve	I	Dec 12, 2020	387
M	910 to 919	36100	Safety Relief Valve	VIII Div. 1	Dec 12, 2020	387
M	910 to 919 (Liquid)	36111	Relief Valve	I & VIII Div. 1	Feb 24, 2024	388
M	Kunkle Fig. 930	36122	Safety Valve	IV	Jul 28, 2023	388
M	1, 2	36223	Safety Valve	VIII Div. 1	Oct 20, 2019	388
M	Kunkle 264, 265, 266 & 267	36267	Safety Relief Valve	VIII Div. 1	Feb 24, 2024	389
M	Kunkle 337	36278	Safety Relief Valve	VIII Div. 1	Sep 18, 2023	389
M	Kunkle 537	36289	Safety Relief Valve	IV	Jun 28, 2021	389
M	Kunkle 548-A (.295 Orifice)	36290	Safety Relief Valve	VIII Div. 1	Oct 20, 2019	390
M	Kunkle 541-C/542-C/548-C (.422 Orifice)	36302	Safety Relief Valve	VIII Div. 1	Oct 20, 2019	390
M	Kunkle 6933, 6934, 6935, 6254	36313	Safety Valve	IV	Sep 1, 2020	390
M	Kunkle 30	36335	Safety Relief Valve	VIII Div. 1	Jun 28, 2021	392
M	C776	36425	Safety Relief Valve	VIII Div. 1	Sep 9, 2018	392
M	Kunkle 541-A/542-A (.295 orifice)	36469	Safety Relief Valve	VIII Div. 1	Jun 7, 2023	392
M	82 Series D Orifice	36470	Safety Valve	VIII Div. 1	Mar 7, 2024	393
M	Cash C600	36492	Safety Valve	VIII Div. 1	Mar 16, 2022	

Emerson Process Management Regulator Technologies, Inc. (FCF)

location: **Nuevo Laredo, Tamaulipas, MEXICO**

Acceptable Abbrev.: **Fromex S.A. de C.V.**

Devices designed by: **Emerson Process Management Regulator Technologies, Inc. (FCF)**

<i>Cert Cat</i>	<i>Device Type</i>	<i>NB Cert #</i>	<i>Type Classification</i>	<i>Code Section</i>	<i>Expiration Date</i>	<i>Page...</i>
M	H722/ H822	22262	Safety Relief Valve	VIII Div. 1	Apr 11, 2019	214
M	H732/H832/H732F3/H832F3/H732A/H832A	22273	Safety Relief Valve	VIII Div. 1	Mar 26, 2019	214
M	H282/ H284/ H882/ H884/ H5112/ H5114/ H8112/	22284	Safety Relief Valve	VIII Div. 1	Mar 26, 2019	214
M	H733/H833/H733F3/H833F3	22295	Safety Relief Valve	VIII Div. 1	Jul 1, 2019	215

Energy Power, Incorporated (ENG)

location: **Port Arthur, TX, UNITED STATES**

Acceptable Abbrev.: **EPI**

Devices designed by: **Emerson Automation Solutions Final Control US LP (AGC)**

<i>Cert Cat</i>	<i>Device Type</i>	<i>NB Cert #</i>	<i>Type Classification</i>	<i>Code Section</i>	<i>Expiration Date</i>	<i>Page...</i>
A	JLT (Liquids)	15095	Safety Relief Valve	VIII Div. 1	Jul 12, 2023	408
A	JOS-E/JBS-E/JOS-H-E 8400 AC/AB	15208	Safety Relief Valve	VIII Div. 1	Jul 12, 2023	409
A	900 Series, 7700, SNC	15411	Safety Relief Valve	VIII Div. 1	Jul 12, 2023	411
A	900 Series (Liquid), 7700, SNC	15499	Relief Valve	VIII Div. 1	Jul 12, 2023	412

Engineered Controls International, LLC (REG)location: **Elon, NC, UNITED STATES**Acceptable Abbrev.: **ECII, RegO**Devices designed by: **Engineered Controls International, LLC (REG)**

<i>Cert Cat</i>	<i>Device Type</i>	<i>NB Cert #</i>	<i>Type Classification</i>	<i>Code Section</i>	<i>Expiration Date</i>	<i>Page...</i>
M	AA3130A250	46000	Safety Relief Valve	VIII Div. 1	Oct 4, 2023	216
M	AA3130UA250	46011	Safety Relief Valve	VIII Div. 1	Feb 22, 2023	216
M	AA3130UA265	46022	Safety Relief Valve	VIII Div. 1	May 22, 2023	216
M	3131 (20% OP)	46033	Safety Relief Valve	VIII Div. 1	Apr 28, 2020	217
M	AA3135A150	46055	Safety Relief Valve	VIII Div. 1	May 23, 2023	217
M	AA3135A300	46066	Safety Relief Valve	VIII Div. 1	Apr 23, 2023	217
M	A3149 (20% OP)	46077	Safety Relief Valve	VIII Div. 1	Feb 3, 2024	218
M	7534 (20% OP)	46099	Safety Relief Valve	VIII Div. 1	Feb 3, 2024	218
M	7583 (20% OP)	46101	Safety Relief Valve	VIII Div. 1	May 22, 2023	218
M	A8434G	46112	Safety Relief Valve	VIII Div. 1	Apr 29, 2019	219
M	A8434N	46123	Safety Relief Valve	VIII Div. 1	Apr 23, 2023	219
M	A8436G, VA8436G	46134	Safety Relief Valve	VIII Div. 1	Mar 6, 2019	219
M	A8436N, VA8436N (20% OP)	46145	Safety Relief Valve	VIII Div. 1	May 8, 2024	220
M	8543 (20% OP)	46156	Safety Relief Valve	VIII Div. 1	Feb 3, 2021	220
M	8544 (20% OP)	46167	Safety Relief Valve	VIII Div. 1	Nov 17, 2020	220
M	8684 (20% OP)	46178	Safety Relief Valve	VIII Div. 1	Feb 25, 2023	221
M	8685 (20% OP)	46189	Safety Relief Valve	VIII Div. 1	Apr 23, 2023	221
M	B-19434B & C-19434B	46190	Safety Relief Valve	VIII Div. 1	Feb 22, 2024	422
M	UA3149A	46213	Safety Relief Valve	VIII Div. 1	Feb 3, 2021	221
M	AA3135 (20% OP)	46268	Safety Relief Valve	VIII Div. 1	Apr 23, 2023	222
M	PRV19430 , PRV29430	46279	Safety Relief Valve	VIII Div. 1	Aug 27, 2020	422
M	A3149 (20% OP)	46291	Safety Relief Valve	VIII Div. 1	Mar 6, 2019	222
M	AA3135A (20% OP)	46303	Safety Relief Valve	VIII Div. 1	Nov 17, 2020	222
M	6555 Series	46314	Safety Relief Valve	VIII Div. 1	Feb 28, 2023	223
M	8546T (20% OP)	46336	Relief Valve	VIII Div. 1	Nov 20, 2019	223
M	8546G (20% OP)	46347	Safety Relief Valve	VIII Div. 1	Nov 20, 2019	223
M	3135 (20% OP)	46358	Safety Relief Valve	VIII Div. 1	Jan 6, 2023	224
M	AR4112A, AR5112A	46381	Safety Relief Valve	VIII Div. 1	Mar 13, 2024	423
M	AR4104A, AR5104A	46392	Safety Relief Valve	VIII Div. 1	Nov 13, 2019	423
M	NG9008M	46404	Safety Relief Valve	VIII Div. 1	May 12, 2020	424
M	PRV19430, PRV29430 (Low Pressure)	46415	Safety Relief Valve	VIII Div. 1	Nov 14, 2023	

Devices designed by: **Rego Cryo - Flow Products (CFP)**

<i>Cert Cat</i>	<i>Device Type</i>	<i>NB Cert #</i>	<i>Type Classification</i>	<i>Code Section</i>	<i>Expiration Date</i>	<i>Page...</i>
M	B-19434B350-375 & C-19434B350-375	46325	Safety Relief Valve	VIII Div. 1	Nov 9, 2023	422

Enviro Valve Inc (ENV)location: **Broken Arrow, OK, UNITED STATES**Acceptable Abbrev.: **EnviroValve**Devices designed by: **Enviro Valve Inc (ENV)**

<i>Cert Cat</i>	<i>Device Type</i>	<i>NB Cert #</i>	<i>Type Classification</i>	<i>Code Section</i>	<i>Expiration Date</i>	<i>Page...</i>
M	EVSP	58025	Breaking Bar Non-reclosing Device	VIII Div. 1	Oct 17, 2018	225

Equipment and Controls, Inc. (ICE)

location: Monessen, PA, UNITED STATES

Acceptable Abbrev.: ICE

Devices designed by: Emerson Automation Solutions Final Control US LP (AGC)

<i>Cert Cat</i>	<i>Device Type</i>	<i>NB Cert #</i>	<i>Type Classification</i>	<i>Code Section</i>	<i>Expiration Date</i>	<i>Page...</i>
A	81, 81P, 83, 86	01089	Safety Relief Valve	VIII Div. 1	Jul 24, 2023	397
A	81P (Liquids)	01102	Relief Valve	VIII Div. 1	Sep 22, 2023	397
A	243/249/443/449/546/843/849/943/5046/5049/8043/8049	01292	Pilot Operated Pressure Relief Valve	VIII Div. 1	Jul 24, 2023	402
A	253/259/453/459/853/859/953/959/5059/8053/8059	01304	Pilot Operated Pressure Relief Valve	VIII Div. 1	Jul 24, 2023	402
A	263/269/463/469/566/863/869/963/969/5066/5069	01315	Pilot Operated Pressure Relief Valve	VIII Div. 1	Jul 24, 2023	403
A	453/459/853/859/953/959/5059 (Liquids)	01326	Pilot Operated Pressure Relief Valve	VIII Div. 1	Jul 24, 2023	403
A	443/449/546/843/849/943/949/5046/5049(Liquids)	01337	Pilot Operated Pressure Relief Valve	VIII Div. 1	Jul 24, 2023	404
A	463/469/566/863/869/963/969/5066/5069 (Liquids)	01348	Pilot Operated Pressure Relief Valve	VIII Div. 1	Jul 24, 2023	404
A	JLT (Liquids)	15095	Safety Relief Valve	VIII Div. 1	Jul 24, 2023	408
A	JOS-E/JBS-E/JOS-H-E 8400 AC/AB	15208	Safety Relief Valve	VIII Div. 1	Jul 24, 2023	409
A	900 Series, 7700, SNC	15411	Safety Relief Valve	VIII Div. 1	Jul 24, 2023	411
A	900 Series (Liquid), 7700, SNC	15499	Relief Valve	VIII Div. 1	Jul 25, 2023	412

Devices designed by: LESER GmbH & Company KG (LES)

<i>Cert Cat</i>	<i>Device Type</i>	<i>NB Cert #</i>	<i>Type Classification</i>	<i>Code Section</i>	<i>Expiration Date</i>	<i>Page...</i>
A	459/462	37112	Safety Relief Valve	VIII Div. 1	Jul 9, 2020	319
A	526	37224	Safety Relief Valve	VIII Div. 1	Jul 9, 2020	323
A	526 (Liquids)	37235	Relief Valve	VIII Div. 1	Jul 9, 2020	324

Exion Asia Pte Ltd (OSA)

location: Singapore, SINGAPORE

Devices designed by: Dresser, LLC (DRJ)

<i>Cert Cat</i>	<i>Device Type</i>	<i>NB Cert #</i>	<i>Type Classification</i>	<i>Code Section</i>	<i>Expiration Date</i>	<i>Page...</i>
A	1900D-2, 1900-30D-2	18144	Safety Relief Valve	VIII Div. 1	Jun 26, 2018	183
A	1900E-2, 1900-30E-2	18166	Safety Relief Valve	VIII Div. 1	Jun 26, 2018	183
A	1900, 1900-30, 1900-35	18201	Safety Relief Valve	VIII Div. 1	Jun 26, 2018	184
A	3900 (39PV, 39MV pilots)	18447	Pilot Operated Pressure Relief Valve	VIII Div. 1	May 26, 2021	192
A	3900 (39PV, 39MV pilots, liquid)	18458	Pilot Operated Pressure Relief Valve	VIII Div. 1	May 26, 2021	194
A	19000 Series	18706	Safety Relief Valve	VIII Div. 1	Jun 6, 2018	196
A	19000 Series, Liquid	18717	Relief Valve	VIII Div. 1	Nov 10, 2021	197
A	1900D-2, 1900-30D-2 LA & DALA (Liquids)	18751	Relief Valve	VIII Div. 1	Jun 26, 2018	197
A	1900E-2, 1900-30E-2 LA & DALA (Liquids)	18762	Relief Valve	VIII Div. 1	Jun 26, 2018	197
A	1900, 1900-30 1900-35 LA & DALA (Liquids)	18784	Relief Valve	VIII Div. 1	Jun 26, 2018	198
A	19110M & 19110H (Liquids)	19077	Relief Valve	VIII Div. 1	May 26, 2021	207

F. C. Kingston Company (KNG)location: **Torrance, CA, UNITED STATES**Acceptable Abbrev.: **Kingston**

Div. of Storm Manufacturing Group

Devices designed by: **F. C. Kingston Company (KNG)**

<i>Cert Cat</i>	<i>Device Type</i>	<i>NB Cert #</i>	<i>Type Classification</i>	<i>Code Section</i>	<i>Expiration Date</i>	<i>Page...</i>
M	110C	35008	Safety Relief Valve	VIII Div. 1	Oct 18, 2022	226
M	112C (.250" Orif.)	35019	Safety Relief Valve	VIII Div. 1	Feb 22, 2021	226
M	112C (.375" Orif.)	35020	Safety Relief Valve	VIII Div. 1	Feb 22, 2021	226
M	Fig. 114 (.437" Orif.)	35031	Safety Relief Valve	VIII Div. 1	Oct 24, 2020	227
M	Fig. 114 (.625" Orif.)	35042	Safety Relief Valve	VIII Div. 1	Dec 22, 2020	227
M	Fig. 114 & 115 (.219" Orif.)	35053	Safety Relief Valve	VIII Div. 1	Dec 20, 2022	227
M	Fig. 114 & 115 (.265 Orif.)	35064	Safety Relief Valve	VIII Div. 1	Oct 24, 2020	228
M	Fig. 114 & 115 (.312" Orif.)	35075	Safety Relief Valve	VIII Div. 1	Oct 24, 2020	228
M	Fig. 118C & 119 (.302" Orif.)	35086	Safety Relief Valve	VIII Div. 1	Dec 18, 2022	228
M	Fig. 118C & 119 (.359" Orif.)	35097	Safety Relief Valve	VIII Div. 1	Mar 12, 2021	228
M	Fig. 118C & 119 (.578" Orif.)	35109	Safety Relief Valve	VIII Div. 1	Apr 13, 2019	229
M	KSV12P-1 & KSV25P-2	35121	Safety Relief Valve	VIII Div. 1	Aug 17, 2018	229
M	KSV10-1 & KSV10-2	35132	Safety Relief Valve	VIII Div. 1	Dec 12, 2018	229
M	112C Steam Service	35143	Safety Relief Valve	VIII Div. 1	Apr 16, 2020	229
M	710D	35154	Safety Relief Valve	VIII Div. 1	Feb 28, 2019	230

F. H. Gaskins Company, Incorporated (FHG)location: **Norfolk, VA, UNITED STATES**Seal Identification: **FHG**Devices designed by: **Dresser, LLC (DRJ)**

<i>Cert Cat</i>	<i>Device Type</i>	<i>NB Cert #</i>	<i>Type Classification</i>	<i>Code Section</i>	<i>Expiration Date</i>	<i>Page...</i>
A	1541, 1543, 1541-3, 1543-3	18032	Safety Valve	I & VIII Div. 1	Dec 6, 2022	180
A	1811, 1511	18122	Safety Valve	I & VIII Div. 1	Dec 6, 2022	182
A	1900, 1900-30, 1900-35	18201	Safety Relief Valve	VIII Div. 1	Jul 22, 2023	184
A	3900 (39PV, 39MV pilots)	18447	Pilot Operated Pressure Relief Valve	VIII Div. 1	Aug 26, 2020	192
A	19000 Series	18706	Safety Relief Valve	VIII Div. 1	May 14, 2019	196
A	19000 Series, Liquid	18717	Relief Valve	VIII Div. 1	Nov 1, 2022	197
A	1900, 1900-30 1900-35 LA & DALA (Liquids)	18784	Relief Valve	VIII Div. 1	Nov 15, 2023	198

F.W. Webb Process Controls Division (SEV)location: **Winslow, ME, UNITED STATES**Acceptable Abbrev.: **Sevco**Devices designed by: **Conbraco Industries, Incorporated (CNB)**

<i>Cert Cat</i>	<i>Device Type</i>	<i>NB Cert #</i>	<i>Type Classification</i>	<i>Code Section</i>	<i>Expiration Date</i>	<i>Page...</i>
A	19 Series	11282	Safety Valve	I & VIII Div. 1	Jan 14, 2020	124
A	119 Series	11361	Safety Valve	I & VIII Div. 1	Dec 13, 2019	126
A	500 Series	11462	Safety Valve	VIII Div. 1	Sep 20, 2018	128
A	500 Series (Liquids)	11473	Safety Relief Valve	VIII Div. 1	Jun 20, 2018	128

Fainger LESER Valves Pvt. Ltd. (FLV)**location: Maharashtra,**Devices designed by: **LESER GmbH & Company KG (LES)**

<i>Cert Cat</i>	<i>Device Type</i>	<i>NB Cert #</i>	<i>Type Classification</i>	<i>Code Section</i>	<i>Expiration Date</i>	<i>Page...</i>
M	459/462 liquids	37101	Relief Valve	VIII Div. 1	Jun 15, 2021	319
M	459/462	37112	Safety Relief Valve	VIII Div. 1	Jun 15, 2021	319
M	526	37224	Safety Relief Valve	VIII Div. 1	Jun 15, 2021	323
M	526 (Liquids)	37235	Relief Valve	VIII Div. 1	Jun 15, 2021	324
M	526D	37246	Safety Relief Valve	VIII Div. 1	Jun 15, 2021	324
M	526D Liquids	37257	Relief Valve	VIII Div. 1	Jun 15, 2021	324

Farris Brasil Indústria de Válvulas Ltda, a Division of Curtiss-Wright Flow Control (FBV)**location: Sao Carlos - S.P.,****Acceptable Abbrev.: Farris Brasil**Devices designed by: **Farris Engineering (TFO)**

<i>Cert Cat</i>	<i>Device Type</i>	<i>NB Cert #</i>	<i>Type Classification</i>	<i>Code Section</i>	<i>Expiration Date</i>	<i>Page...</i>
A	3800	57024	Pilot Operated Pressure Relief Valve	VIII Div. 1	Nov 5, 2020	233
A	3800FP	57035	Pilot Operated Pressure Relief Valve	VIII Div. 1	Nov 5, 2020	234
A	2600 & 2600S	57057	Safety Relief Valve	VIII Div. 1	Nov 5, 2020	236
A	2600L (Liquids)	57068	Relief Valve	VIII Div. 1	Nov 5, 2020	237
A	3800L, PCL, PCM pilots	57215	Pilot Operated Pressure Relief Valve	VIII Div. 1	Nov 5, 2020	238
A	2700, 2700S, 3700, 3700S	57237	Safety Relief Valve	VIII Div. 1	Nov 5, 2020	238
A	2700L, 3700L (Liquids)	57248	Relief Valve	VIII Div. 1	Nov 5, 2020	239
A	2600L (Air & Steam)	57260	Safety Relief Valve	VIII Div. 1	Nov 5, 2020	240

FARRIS ENGINEERING - A Division of CWFC (UK) LTD. (FEE)**location: Corby, UNITED KINGDOM****Acceptable Abbrev.: FARRIS ENGINEERING, Div. of Curtiss-Wright F.C. UK LTD, Corby, UK**Devices designed by: **Farris Engineering (TFO)**

<i>Cert Cat</i>	<i>Device Type</i>	<i>NB Cert #</i>	<i>Type Classification</i>	<i>Code Section</i>	<i>Expiration Date</i>	<i>Page...</i>
M	3800	57024	Pilot Operated Pressure Relief Valve	VIII Div. 1	Jan 27, 2020	233
M	3800FP	57035	Pilot Operated Pressure Relief Valve	VIII Div. 1	Aug 13, 2019	234
M	2600 & 2600S	57057	Safety Relief Valve	VIII Div. 1	Aug 13, 2019	236
M	2600L (Liquids)	57068	Relief Valve	VIII Div. 1	Aug 13, 2019	237
M	3800L, PCL, PCM pilots	57215	Pilot Operated Pressure Relief Valve	VIII Div. 1	Jan 27, 2020	238
M	2700, 2700S, 3700, 3700S	57237	Safety Relief Valve	VIII Div. 1	Aug 13, 2019	238
M	2700L, 3700L (Liquids)	57248	Relief Valve	VIII Div. 1	Aug 13, 2019	239
M	2600L (Air & Steam)	57260	Safety Relief Valve	VIII Div. 1	Aug 13, 2019	240

Farris Engineering (FIC)**location: Brantford, CANADA****Acceptable Abbrev.: Farris Engineering, Div. of Curtiss-Wright F.C.C.**

Division of Curtiss - Wright Flow Control Corporation

Devices designed by: **Farris Engineering (FIC)**

<i>Cert Cat</i>	<i>Device Type</i>	<i>NB Cert #</i>	<i>Type Classification</i>	<i>Code Section</i>	<i>Expiration Date</i>	<i>Page...</i>
M	4700L (liquids)	57259	Relief Valve	III & VIII Div.1	Sep 10, 2020	231
M	954C55-120/S4	57383	Vacuum Relief Valve	III ND	Mar 24, 2021	
M	SS-114-657	59116	Power Actuated Relief Valve	III NB	Jul 23, 2021	

Farris Engineering (FIC)

(continued) location: **Brantford, CANADA**

Acceptable Abbrev.: **Farris Engineering, Div. of Curtiss-Wright F.C.C.**

Division of Curtiss - Wright Flow Control Corporation

Devices designed by: **Farris Engineering (TFO)**

<i>Cert Cat</i>	<i>Device Type</i>	<i>NB Cert #</i>	<i>Type Classification</i>	<i>Code Section</i>	<i>Expiration Date</i>	<i>Page...</i>
M	1890, 1892, 1895, 1896	57013	Safety Relief Valve	III & VIII Div.1	Oct 15, 2021	232
M	3800	57024	Pilot Operated Pressure Relief Valve	VIII Div. 1	Aug 18, 2020	233
M	3800FP	57035	Pilot Operated Pressure Relief Valve	VIII Div. 1	Aug 18, 2020	234
M	6400/6600 (previously 2500 & 4600)	57046	Safety Valve	I & VIII Div. 1	Aug 27, 2019	235
M	2600 & 2600S	57057	Safety Relief Valve	III & VIII Div.1	Sep 18, 2020	236
M	2600L (Liquids)	57068	Relief Valve	III & VIII Div.1	Oct 15, 2021	237
M	1890L, 1892L, 1895L, 1896L (Liquids)	57192	Relief Valve	VIII Div. 1	Jun 30, 2019	237
M	3800L, PCL, PCM pilots	57215	Pilot Operated Pressure Relief Valve	VIII Div. 1	Sep 10, 2020	238
M	2700, 2700S, 3700, 3700S	57237	Safety Relief Valve	VIII Div. 1	Nov 19, 2018	238
M	2700L, 3700L (Liquids)	57248	Relief Valve	VIII Div. 1	Nov 19, 2019	239
M	2600L (Air & Steam)	57260	Safety Relief Valve	VIII Div. 1	Aug 10, 2020	240
M	4200 / 4400	57282	Safety Valve	I & VIII Div. 1	Oct 15, 2021	241

Farris Engineering (TFO)

location: **Brecksville, OH, UNITED STATES**

Division of Curtiss-Wright Flow Control Corporation

Devices designed by: **Farris Engineering (TFO)**

<i>Cert Cat</i>	<i>Device Type</i>	<i>NB Cert #</i>	<i>Type Classification</i>	<i>Code Section</i>	<i>Expiration Date</i>	<i>Page...</i>
M	1850, 1850H, 1851, 1852, 1855, 1856M, 2850, 2852, 2856, 2850H	57002	Safety Relief Valve	VIII Div. 1	Nov 7, 2023	232
M	1890, 1892, 1895, 1896	57013	Safety Relief Valve	VIII Div. 1	Aug 2, 2021	232
M	3800	57024	Pilot Operated Pressure Relief Valve	VIII Div. 1	Aug 2, 2021	233
M	3800FP	57035	Pilot Operated Pressure Relief Valve	VIII Div. 1	Aug 1, 2021	234
M	6400/6600 (previously 2500 & 4600)	57046	Safety Valve	I & VIII Div. 1	Jul 16, 2021	235
M	2600 & 2600S	57057	Safety Relief Valve	VIII Div. 1	Aug 2, 2021	236
M	2600L (Liquids)	57068	Relief Valve	VIII Div. 1	Aug 7, 2021	237
M	1890L, 1892L, 1895L, 1896L (Liquids)	57192	Relief Valve	VIII Div. 1	Aug 2, 2021	237
M	3800L, PCL, PCM pilots	57215	Pilot Operated Pressure Relief Valve	VIII Div. 1	Apr 27, 2021	238
M	2700, 2700S, 3700, 3700S	57237	Safety Relief Valve	VIII Div. 1	Aug 2, 2021	238
M	2700L, 3700L (Liquids)	57248	Relief Valve	VIII Div. 1	Aug 7, 2021	239
M	2600L (Air & Steam)	57260	Safety Relief Valve	VIII Div. 1	Jul 6, 2020	240
M	4200 / 4400	57282	Safety Valve	I & VIII Div. 1	Oct 10, 2021	241
M	3800L PCM	57394	Pilot Operated Pressure Relief Valve	VIII Div. 1	Jan 31, 2023	
M	2600 Series Restricted lift	57406	Safety Valve	VIII Div. 1	Aug 31, 2023	
M	2600L (Liquids) Series Restricted lift	57417	Safety Relief Valve	VIII Div. 1	Jun 12, 2023	

FDC Co., Ltd. (FDC)

location: **Juchon-myeon, Gimhae-si, Gyeongsangnam-do,**

Devices designed by: **FDC Co., Ltd. (FDC)**

<i>Cert Cat</i>	<i>Device Type</i>	<i>NB Cert #</i>	<i>Type Classification</i>	<i>Code Section</i>	<i>Expiration Date</i>	<i>Page...</i>
M	KSRC	00695	Rupture Disk Device	VIII Div. 1	Aug 18, 2022	
M	KSRSR	00943	Rupture Disk Device	VIII Div. 1	Aug 18, 2022	

Fike Corporation (FIK)**location: Blue Springs, MO, UNITED STATES**

Devices designed by: Fike Corporation (FIK)

<i>Cert Cat</i>	<i>Device Type</i>	<i>NB Cert #</i>	<i>Type Classification</i>	<i>Code Section</i>	<i>Expiration Date</i>	<i>Page...</i>
M	Poly-SD Single Hinge	80008	Rupture Disk Device	VIII Div. 1	Nov 23, 2019	242
M	Poly-SD Double Hinge	80019	Rupture Disk Device	VIII Div. 1	Sep 11, 2019	242
M	Poly-SD Cross Score	80020	Rupture Disk Device	VIII Div. 1	Dec 6, 2018	243
M	SRL	80031	Rupture Disk Device	VIII Div. 1	Sep 11, 2019	243
M	SRX	80042	Rupture Disk Device	VIII Div. 1	Sep 16, 2019	244
M	PV, CP-C, CPV, CPV-C	80053	Rupture Disk Device	VIII Div. 1	May 17, 2018	244
M	HO/HOV	80064	Rupture Disk Device	VIII Div. 1	Jan 14, 2020	245
M	FSR Scored	80075	Rupture Disk Device	VIII Div. 1	Sep 11, 2019	246
M	SR-H	80097	Rupture Disk Device	VIII Div. 1	Nov 23, 2019	246
M	MRK, RKB, Reverse Knife Blade	80109	Rupture Disk Device	VIII Div. 1	May 17, 2018	247
M	P, CP,CPC	80132	Rupture Disk Device	VIII Div. 1	Aug 21, 2019	248
M	SCRD FSR-VT	80154	Rupture Disk Device	VIII Div. 1	Oct 28, 2023	248
M	SCRD-FSR-VT (Liquid)	80187	Rupture Disk Device	VIII Div. 1	Dec 19, 2023	249
M	SCRD-V Cross Score	80200	Rupture Disk Device	VIII Div. 1	Oct 20, 2023	250
M	SRL (gas/liq.)	80277	Rupture Disk Device	VIII Div. 1	Dec 10, 2021	250
M	3/4" Poly SD Double Hinge (DH)	80288	Rupture Disk Device	VIII Div. 1	May 16, 2018	251
M	1/2" Poly SD Double Hinge (DH)	80299	Rupture Disk Device	VIII Div. 1	Apr 15, 2023	251
M	1/2" Poly SD Double Hinge (DH) liquid	80301	Rupture Disk Device	VIII Div. 1	Apr 13, 2023	251
M	Poly SD Cross Score, Liquid	80334	Rupture Disk Device	VIII Div. 1	Apr 14, 2023	252
M	1/2" Poly SD Cross Score (liquid)	80345	Rupture Disk Device	VIII Div. 1	Sep 13, 2018	252
M	1/2" Poly SD Cross Score	80356	Rupture Disk Device	VIII Div. 1	Jun 12, 2018	252
M	1/2" Poly SD Cross Score w. Liner	80367	Rupture Disk Device	VIII Div. 1	Nov 9, 2023	253
M	A8701-X	80402	Rupture Disk Device	VIII Div. 1	Oct 18, 2018	253
M	3/4" Poly-SD Single Hinge	80424	Rupture Disk Device	VIII Div. 1	Oct 17, 2018	253
M	P, CP, CPC - Union Type Holder	80457	Rupture Disk Device	VIII Div. 1	Aug 19, 2020	254
M	PV, CP-C, CPV, CPV-C with Union Type Holder	80468	Rupture Disk Device	VIII Div. 1	Aug 21, 2019	254
M	HO, HOV with Union Type holder	80479	Rupture Disk Device	VIII Div. 1	Aug 22, 2019	254
M	FSR Scored (Liquid)	80514	Rupture Disk Device	VIII Div. 1	May 7, 2020	255
M	1/2 " P ST FS	80525	Rupture Disk Device	VIII Div. 1	Oct 10, 2020	255
M	1/2 " SCR ST FS Cross Scored	80536	Rupture Disk Device	VIII Div. 1	Oct 9, 2020	256
M	1/2 " SCR ST FS Double Hinge	80547	Rupture Disk Device	VIII Div. 1	Oct 9, 2020	256
M	Axius	80558	Rupture Disk Device	VIII Div. 1	Dec 10, 2021	256
M	HOV Flat Seat Single Hinge	80570	Rupture Disk Device	VIII Div. 1	Dec 10, 2021	257
M	HOV Flat Seat Multi-Petal	80581	Rupture Disk Device	VIII Div. 1	Oct 20, 2023	258
M	Poly-SD, SCR-D-V (Double Disc)	80592	Rupture Disk Device	VIII Div. 1	Dec 21, 2023	258
M	Axius (liquid)	80604	Rupture Disk Device	VIII Div. 1	Sep 9, 2022	259
M	Axius (gas)	80615	Rupture Disk Device	VIII Div. 1	May 24, 2022	259
M	Axius SC	80626	Rupture Disk Device	VIII Div. 1	Nov 19, 2023	260
M	A9182-X	80648	Rupture Disk Device	VIII Div. 1	Apr 28, 2023	
M	A9111-X	80659	Rupture Disk Device	VIII Div. 1	Oct 31, 2019	260
M	ATLAS	80716	Rupture Disk Device	VIII Div. 1	Jun 29, 2018	261
M	ATLAS (Liquid)	80727	Rupture Disk Device	VIII Div. 1	May 17, 2018	261
M	SRL DOUBLE DISC (DD)	80738	Rupture Disk Device	VIII	Oct 17, 2018	262
M	Axius Double Disc (Axius DD)	80749	Rupture Disk Device	VIII Div. 1	Oct 31, 2019	262
M	Axius Double Disc (Axius DD) (Liquid)	80750	Rupture Disk Device	VIII Div. 1	Oct 31, 2019	263
M	SCRD-FSR-SQ	80761	Rupture Disk Device	VIII Div. 1	Aug 19, 2021	263

Flotech, Inc. - Charleston Div. (SCI)**location: North Charleston, SC, UNITED STATES****Acceptable Abbrev.: Valve Services, Division of Flotech North Charleston, SC**

Devices designed by: Emerson Automation Solutions Final Control US LP (AGC)

<i>Cert Cat</i>	<i>Device Type</i>	<i>NB Cert #</i>	<i>Type Classification</i>	<i>Code Section</i>	<i>Expiration Date</i>	<i>Page...</i>
A	63B (.312", #5 orifice)	01056	Safety Relief Valve	VIII Div. 1	Sep 1, 2022	396
A	63B (.437", #7 orifice)	01067	Safety Relief Valve	VIII Div. 1	Aug 25, 2022	396
A	81, 81P, 83, 86	01089	Safety Relief Valve	VIII Div. 1	Aug 25, 2022	397
A	243/249/443/449/546/843/849/943/5046/5049/8043/8049	01292	Pilot Operated Pressure Relief Valve	VIII Div. 1	Sep 1, 2022	402
A	253/259/453/459/853/859/953/959/5059/8053/8059	01304	Pilot Operated Pressure Relief Valve	VIII Div. 1	Sep 1, 2022	402
A	263/269/463/469/566/863/869/963/969/5066/5069	01315	Pilot Operated Pressure Relief Valve	VIII Div. 1	Aug 25, 2022	403
A	463/469/566/863/869/963/969/5066/5069 (Liquids)	01348	Pilot Operated Pressure Relief Valve	VIII Div. 1	Sep 1, 2022	404
A	H Series (HCI, HSJ, HCA, HA, HB, HC, HCB, HCP, HJO, HN,	15006	Safety Valve	I & VIII Div. 1	Aug 31, 2022	406
A	JLT (Liquids)	15095	Safety Relief Valve	VIII Div. 1	Aug 23, 2022	408
A	JOS-E/JBS-E/JOS-H-E 8400 AC/AB	15208	Safety Relief Valve	VIII Div. 1	Aug 31, 2022	409
A	900 Series, 7700, SNC	15411	Safety Relief Valve	VIII Div. 1	Sep 1, 2022	411
A	900 Series (Liquid), 7700, SNC	15499	Relief Valve	VIII Div. 1	Aug 23, 2022	412

Flotech, Inc. (FLO)**location: Jacksonville, FL, UNITED STATES**

Devices designed by: A&R Energy Services, Corporation (ARE)

<i>Cert Cat</i>	<i>Device Type</i>	<i>NB Cert #</i>	<i>Type Classification</i>	<i>Code Section</i>	<i>Expiration Date</i>	<i>Page...</i>
A	Kunkle 6000, 6252 Series	36324	Safety Valve	I & VIII Div. 1	Jan 11, 2024	391

Devices designed by: Emerson Automation Solutions Final Control, US LP (KBM)

<i>Cert Cat</i>	<i>Device Type</i>	<i>NB Cert #</i>	<i>Type Classification</i>	<i>Code Section</i>	<i>Expiration Date</i>	<i>Page...</i>
A	910 to 919	36100	Safety Relief Valve	VIII Div. 1	Jan 11, 2024	387
A	910 to 919 (Liquid)	36111	Relief Valve	VIII Div. 1	Jan 11, 2024	388
A	Kunkle 337	36278	Safety Relief Valve	VIII Div. 1	Jan 11, 2024	389

Devices designed by: Farris Engineering (TFO)

<i>Cert Cat</i>	<i>Device Type</i>	<i>NB Cert #</i>	<i>Type Classification</i>	<i>Code Section</i>	<i>Expiration Date</i>	<i>Page...</i>
A	3800	57024	Pilot Operated Pressure Relief Valve	VIII Div. 1	Jan 11, 2024	233
A	3800FP	57035	Pilot Operated Pressure Relief Valve	VIII Div. 1	Jan 11, 2024	234
A	2600 & 2600S	57057	Safety Relief Valve	VIII Div. 1	Jan 11, 2024	236
A	2600L (Liquids)	57068	Relief Valve	VIII Div. 1	Jan 11, 2024	237
A	2700, 2700S, 3700, 3700S	57237	Safety Relief Valve	VIII Div. 1	Jan 11, 2024	238
A	2700L, 3700L (Liquids)	57248	Relief Valve	VIII Div. 1	Jan 11, 2024	239
A	2600L (Air & Steam)	57260	Safety Relief Valve	VIII Div. 1	Jan 11, 2024	240
A	4200 / 4400	57282	Safety Valve	I & VIII Div. 1	Jan 11, 2024	241

Flow Safe Supply, Inc. (FSS)**location: Houston, TX, UNITED STATES****Seal Identification: FSS**

Devices designed by: Flow Safe, Inc. (FLW)

<i>Cert Cat</i>	<i>Device Type</i>	<i>NB Cert #</i>	<i>Type Classification</i>	<i>Code Section</i>	<i>Expiration Date</i>	<i>Page...</i>
M	F7100, F7200, F7300, F7400, F7500	28000	Pilot Operated Pressure Relief Valve	VIII Div. 1	Jan 2, 2024	264
M	F7100, F7300, F7400, F7500 (Liquids)	28011	Pilot Operated Pressure Relief Valve	VIII Div. 1	Apr 25, 2020	265
M	F8100, F8200, F8300, F8400, F8500	28022	Pilot Operated Pressure Relief Valve	VIII Div. 1	Jun 14, 2024	266
M	F84L-4, F88-4 (Liquids)	28044	Relief Valve	VIII Div. 1	Apr 25, 2020	267
M	F84L, F88 (liquids)	28055	Safety Relief Valve	VIII Div. 1	Apr 25, 2020	267
M	F84, F85	28066	Safety Relief Valve	VIII Div. 1	Jan 2, 2024	267
M	F88-8	28077	Safety Valve	VIII Div. 1	Apr 25, 2020	268
M	F88-4	28088	Safety Valve	VIII Div. 1	Apr 25, 2020	268
M	F8100, F8300, F8500 (liquid)	28099	Pilot Operated Pressure Relief Valve	VIII Div. 1	Apr 25, 2020	269
M	F88-J	28101	Safety Valve	VIII Div. 1	Apr 25, 2020	269
M	F88-G	28112	Safety Valve	VIII Div. 1	Apr 25, 2020	270
M	F84L-2	28123	Safety Relief Valve	VIII Div. 1	Apr 25, 2020	270
M	F88-3	28134	Safety Valve	VIII Div. 1	Aug 10, 2021	270
M	F84L-3, F88-3 (Liquid)	28145	Safety Relief Valve	VIII Div. 1	Aug 10, 2021	271
M	F8100, F8300, F8500 (High Beta Ratio Sizes) (Liquid)	28156	Pilot Operated Pressure Relief Valve	VIII Div. 1	Jul 21, 2021	271
M	F84L-2 LP	28167	Safety Relief Valve	VIII Div. 1	Feb 22, 2023	

Flow Safe, Inc. (FLW)**location: Orchard Park, NY, UNITED STATES**

Devices designed by: Flow Safe, Inc. (FLW)

<i>Cert Cat</i>	<i>Device Type</i>	<i>NB Cert #</i>	<i>Type Classification</i>	<i>Code Section</i>	<i>Expiration Date</i>	<i>Page...</i>
M	F7100, F7200, F7300, F7400, F7500	28000	Pilot Operated Pressure Relief Valve	VIII Div. 1	Dec 18, 2023	264
M	F7100, F7300, F7400, F7500 (Liquids)	28011	Pilot Operated Pressure Relief Valve	VIII Div. 1	Oct 28, 2023	265
M	F8100, F8200, F8300, F8400, F8500	28022	Pilot Operated Pressure Relief Valve	VIII Div. 1	Oct 6, 2021	266
M	F84L-4, F88-4 (Liquids)	28044	Relief Valve	VIII Div. 1	Dec 18, 2023	267
M	F84L, F88 (liquids)	28055	Safety Relief Valve	VIII Div. 1	Dec 18, 2023	267
M	F84, F85	28066	Safety Relief Valve	VIII Div. 1	Jan 18, 2023	267
M	F88-8	28077	Safety Valve	VIII Div. 1	Jan 8, 2021	268
M	F88-4	28088	Safety Valve	VIII Div. 1	Sep 26, 2019	268
M	F8100, F8300, F8500 (liquid)	28099	Pilot Operated Pressure Relief Valve	VIII Div. 1	Sep 26, 2019	269
M	F88-J	28101	Safety Valve	VIII Div. 1	Dec 21, 2022	269
M	F88-G	28112	Safety Valve	VIII Div. 1	Dec 21, 2022	270
M	F84L-2	28123	Safety Relief Valve	VIII Div. 1	Dec 21, 2022	270
M	F88-3	28134	Safety Valve	VIII Div. 1	Jan 15, 2021	270
M	F84L-3, F88-3 (Liquid)	28145	Safety Relief Valve	VIII Div. 1	Jan 15, 2021	271
M	F8100, F8300, F8500 (High Beta Ratio Sizes) (Liquid)	28156	Pilot Operated Pressure Relief Valve	VIII Div. 1	May 27, 2021	271
M	F84L-2 LP	28167	Safety Relief Valve	VIII Div. 1	Sep 1, 2022	

Fluid Handling LLC (Bell & Gossett, McDonnell & Miller) (BGT)**location: Morton Grove, IL, UNITED STATES**

Devices designed by: Fluid Handling LLC (Bell & Gossett, McDonnell & Miller) (BGT)

<i>Cert Cat</i>	<i>Device Type</i>	<i>NB Cert #</i>	<i>Type Classification</i>	<i>Code Section</i>	<i>Expiration Date</i>	<i>Page...</i>
M	790 & McDonnell & Miller 250-3/4	31004	Safety Relief Valve	IV	Jul 20, 2021	272
M	1170 & McDonnell & Miller 250-1	31015	Safety Relief Valve	IV	Feb 23, 2019	272
M	3301 & McDonnell & Miller 260-1-1/2	31026	Safety Relief Valve	IV	Oct 11, 2018	272
M	4100 & McDonnell & Miller 250-2	31037	Safety Relief Valve	IV	Sep 19, 2019	273

Fluid Mechanics Valve Company (FMV)

location: Houston, TX, UNITED STATES

Acceptable Abbrev.: F/M

Devices designed by: Fluid Mechanics Valve Company (FMV)

<i>Cert Cat</i>	<i>Device Type</i>	<i>NB Cert #</i>	<i>Type Classification</i>	<i>Code Section</i>	<i>Expiration Date</i>	<i>Page...</i>
M	1511, 1521, 1611, 1621	25007	Safety Relief Valve	VIII Div. 1	Mar 31, 2021	274
M	1513, 1523, 1613, 1623	25018	Safety Relief Valve	VIII Div. 1	Jun 28, 2021	274
M	1524 - 1548, 1624 - 1648	25029	Safety Relief Valve	VIII Div. 1	Dec 15, 2020	274
M	4000 & 4200 (.312 soft seat)	25030	Safety Relief Valve	VIII Div. 1	Mar 31, 2021	275
M	4000 & 4200 Model (405 & 425)	25041	Safety Relief Valve	VIII Div. 1	Jun 28, 2021	275
M	3900 Model (392 Series), .250 Soft Seat	25063	Relief Valve	VIII Div. 1	Dec 15, 2020	275

Fukui Seisakusho Company, Limited (FKI)

location: Hirakata City, Osaka, JAPAN

Devices designed by: Fukui Seisakusho Company, Limited (FKI)

<i>Cert Cat</i>	<i>Device Type</i>	<i>NB Cert #</i>	<i>Type Classification</i>	<i>Code Section</i>	<i>Expiration Date</i>	<i>Page...</i>
M	RE Series	27032	Safety Relief Valve	VIII Div. 1	Sep 29, 2018	278
M	RECL & REBL (Liquids)	27043	Relief Valve	VIII Div. 1	May 29, 2018	279
M	RP Series	27054	Pilot Operated Pressure Relief Valve	VIII Div. 1	Sep 9, 2018	280
M	RPSL (Liquids)	27065	Relief Valve	VIII Div. 1	Sep 9, 2018	281
M	SL Series	27076	Safety Valve	I & VIII Div. 1	Jun 5, 2018	282
M	PSH 2-1/2 K 4	27098	Power Actuated Relief Valve	I	Oct 9, 2021	283
M	PSH 2-1/2 L 4	27100	Power Actuated Relief Valve	I	Oct 9, 2021	284
M	RTE Liquid	27133	Relief Valve	VIII Div. 1	Feb 22, 2021	284
M	RTE	27144	Safety Relief Valve	VIII Div. 1	Feb 22, 2021	284
M	RPE (Water K = 0.681)	27177	Pilot Operated Pressure Relief Valve	I & VIII Div. 1	Sep 27, 2023	285
M	PCV	27188	Power Actuated Relief Valve	I	Sep 27, 2024	285
M	SL-xxxx PA	27199	Power Actuated Relief Valve	I	Sep 30, 2021	286

GE Measurement and Control (Singapore) PTE LTD Flow and Process Technologies (DSP)

location: Singapore, SINGAPORE

Acceptable Abbrev.: DSP

Devices designed by: Dresser, LLC (DRJ)

<i>Cert Cat</i>	<i>Device Type</i>	<i>NB Cert #</i>	<i>Type Classification</i>	<i>Code Section</i>	<i>Expiration Date</i>	<i>Page...</i>
M	1900D-2, 1900-30D-2	18144	Safety Relief Valve	VIII Div. 1	Oct 3, 2019	183
M	1900E-2, 1900-30E-2	18166	Safety Relief Valve	VIII Div. 1	Apr 24, 2019	183
M	1900, 1900-30, 1900-35	18201	Safety Relief Valve	VIII Div. 1	Apr 24, 2019	184
M	3900 (39PV, 39MV pilots)	18447	Pilot Operated Pressure Relief Valve	VIII Div. 1	Nov 17, 2021	192
M	3900 (39PV, 39MV pilots, liquid)	18458	Pilot Operated Pressure Relief Valve	VIII Div. 1	Nov 17, 2021	194
M	19000 Series	18706	Safety Relief Valve	VIII Div. 1	Apr 24, 2019	196
M	19000 Series, Liquid	18717	Relief Valve	VIII Div. 1	Apr 24, 2019	197
M	1900D-2, 1900-30D-2 LA & DALA (Liquids)	18751	Relief Valve	VIII Div. 1	Nov 19, 2020	197
M	1900E-2, 1900-30E-2 LA & DALA (Liquids)	18762	Relief Valve	VIII Div. 1	Apr 24, 2019	197
M	1900, 1900-30 1900-35 LA & DALA (Liquids)	18784	Relief Valve	VIII Div. 1	Apr 24, 2019	198
M	19110M & 19110H (Liquids)	19077	Relief Valve	VIII Div. 1	May 26, 2021	207

GEA AWP GmbH (GEA)

location: Prenzlau, GERMANY

Acceptable Abbrev.: GEA AWP GMBH PRENZLAU, GERMANY

Devices designed by: GEA AWP GmbH (GEA)

<i>Cert Cat</i>	<i>Device Type</i>	<i>NB Cert #</i>	<i>Type Classification</i>	<i>Code Section</i>	<i>Expiration Date</i>	<i>Page...</i>
M	SVA type 455, 456 / SVU type 457, 458 (1.189 orifice)	07085	Safety Relief Valve	VIII Div. 1	Aug 28, 2019	287
M	SVA type 455, 456 / SVU 457, 458 (0.648 orifice)	07096	Safety Relief Valve	VIII Div. 1	Aug 29, 2019	287
M	SVA type 455, 456/ SVU type 457, 458 (0.953 orifice)	07142	Safety Relief Valve	VIII Div. 1	Aug 29, 2019	287
M	SVA type 455, 456/ SVU type 457, 458 (0.480 orifice)	07153	Safety Relief Valve	VIII Div. 1	Aug 29, 2019	288
M	SVA type 455, 456 / SVU type 457, 458 (0.795 orifice)	07164	Safety Relief Valve	VIII Div. 1	Aug 28, 2019	288

GLM Corporation (GCM)

location: Kenai, AK, UNITED STATES

Acceptable Abbrev.: GLM Corp

Devices designed by: Dresser, LLC (DRJ)

<i>Cert Cat</i>	<i>Device Type</i>	<i>NB Cert #</i>	<i>Type Classification</i>	<i>Code Section</i>	<i>Expiration Date</i>	<i>Page...</i>
A	1541, 1543, 1541-3, 1543-3	18032	Safety Valve	I & VIII Div. 1	Jun 19, 2019	180
A	1811, 1511	18122	Safety Valve	I & VIII Div. 1	Jun 19, 2019	182
A	1900D-2, 1900-30D-2	18144	Safety Relief Valve	VIII Div. 1	Jul 10, 2019	183
A	1900E-2, 1900-30E-2	18166	Safety Relief Valve	VIII Div. 1	Jul 10, 2019	183
A	1900, 1900-30, 1900-35	18201	Safety Relief Valve	VIII Div. 1	Jul 10, 2019	184
A	1982	18379	Safety Relief Valve	VIII Div. 1	Jul 10, 2019	188
A	1982 LS, 820000LS	18380	Relief Valve	VIII Div. 1	Jul 10, 2019	188
A	3900 (39PV, 39MV pilots)	18447	Pilot Operated Pressure Relief Valve	VIII Div. 1	Jul 10, 2019	192
A	3900 (39PV, 39MV pilots, liquid)	18458	Pilot Operated Pressure Relief Valve	VIII Div. 1	Jul 10, 2019	194
A	19000 Series	18706	Safety Relief Valve	VIII Div. 1	Jul 10, 2019	196
A	19000 Series, Liquid	18717	Relief Valve	VIII Div. 1	Jul 10, 2019	197
A	1900D-2, 1900-30D-2 LA & DALA (Liquids)	18751	Relief Valve	VIII Div. 1	Jul 10, 2019	197
A	1900E-2, 1900-30E-2 LA & DALA (Liquids)	18762	Relief Valve	VIII Div. 1	Jul 10, 2019	197
A	1900, 1900-30 1900-35 LA & DALA (Liquids)	18784	Relief Valve	VIII Div. 1	Jul 10, 2019	198
A	1900-UM	18997	Safety Relief Valve	VIII Div. 1	Jul 10, 2019	205
A	1900-UM (Liquids)	19000	Safety Relief Valve	VIII Div. 1	Jul 10, 2019	206
A	1900-UM-D	19011	Safety Relief Valve	VIII Div. 1	Jul 10, 2019	206
A	1900 UM-D (Liquids)	19022	Safety Relief Valve	VIII Div. 1	Jul 10, 2019	206
A	1900-UM-E	19033	Safety Relief Valve	VIII Div. 1	Jul 10, 2019	207
A	1900-UM-E (Liquids)	19044	Safety Relief Valve	VIII Div. 1	Jul 10, 2019	207

Global Engg. Solutions FzCo (A Bliss Anand-India Group Company) (GES)

location: Dubai, UNITED ARAB EMIRATES

Devices designed by: Farris Engineering (TFO)

<i>Cert Cat</i>	<i>Device Type</i>	<i>NB Cert #</i>	<i>Type Classification</i>	<i>Code Section</i>	<i>Expiration Date</i>	<i>Page...</i>
A	2600 & 2600S	57057	Safety Relief Valve	VIII Div. 1	Oct 31, 2023	236
A	2600L (Liquids)	57068	Relief Valve	VIII Div. 1	Oct 31, 2023	237
A	2700, 2700S, 3700, 3700S	57237	Safety Relief Valve	VIII Div. 1	Oct 31, 2023	238
A	2700L, 3700L (Liquids)	57248	Relief Valve	VIII Div. 1	Oct 31, 2023	239

Goetze KG Armaturen (GTZ)

location: Ludwigsburg, GERMANY

Acceptable Abbrev.: Goetze KG

Devices designed by: Goetze KG Armaturen (GTZ)

<i>Cert Cat</i>	<i>Device Type</i>	<i>NB Cert #</i>	<i>Type Classification</i>	<i>Code Section</i>	<i>Expiration Date</i>	<i>Page...</i>
M	812, 412, 1812	96005	Safety Relief Valve	VIII Div. 1	Nov 20, 2019	289
M	451, 851	96038	Safety Relief Valve	VIII Div. 1	May 5, 2022	
M	451, 851 Liquids	96049	Safety Relief Valve	VIII Div. 1	Jan 12, 2023	
M	451-1/2", 851-1/2"	96050	Safety Relief Valve	VIII Div. 1	Oct 3, 2022	
M	451-1/2", 851-1/2" (Liquids)	96061	Safety Relief Valve	VIII Div. 1	May 4, 2022	
M	2400 / 2480	96072	Safety Relief Valve	VIII Div. 1	Jan 13, 2023	
M	2400 / 2480 Liquids	96083	Safety Relief Valve	VIII Div. 1	Jan 12, 2023	
M	410, 810, 1809, 1810	96094	Safety Relief Valve	VIII Div. 1	Jan 13, 2023	
M	812-2", 412-2"	96106	Safety Relief Valve	VIII Div. 1	Jan 12, 2023	
M	492 (6 mm orifice)	96117	Safety Relief Valve	VIII Div. 1	Jan 13, 2023	
M	492 (9 mm orifice)	96128	Safety Relief Valve	VIII Div. 1	Jan 13, 2023	

GRISS (SPG)

location: BP159, Armentieres, FRANCE

Acceptable Abbrev.: GRISS

Devices designed by: Emerson Automation Solutions Final Control US LP (AGC)

<i>Cert Cat</i>	<i>Device Type</i>	<i>NB Cert #</i>	<i>Type Classification</i>	<i>Code Section</i>	<i>Expiration Date</i>	<i>Page...</i>
M	81, 81P, 83, 86	01089	Safety Relief Valve	VIII Div. 1	May 1, 2021	397
M	81P (Liquids)	01102	Relief Valve	VIII Div. 1	Apr 27, 2021	397
M	243/249/443/449/546/843/849/943/5046/5049/8043/8049	01292	Pilot Operated Pressure Relief Valve	VIII Div. 1	Mar 23, 2021	402
M	253/259/453/459/853/859/953/959/5059/8053/8059	01304	Pilot Operated Pressure Relief Valve	VIII Div. 1	Dec 5, 2021	402
M	263/269/463/469/566/863/869/963/969/5066/5069	01315	Pilot Operated Pressure Relief Valve	VIII Div. 1	Dec 5, 2021	403
M	453/459/853/859/953/959/5059 (Liquids)	01326	Pilot Operated Pressure Relief Valve	VIII Div. 1	Feb 25, 2023	403
M	443/449/546/843/849/943/949/5046/5049(Liquids)	01337	Pilot Operated Pressure Relief Valve	VIII Div. 1	Mar 23, 2021	404
M	463/469/566/863/869/963/969/5066/5069 (Liquids)	01348	Pilot Operated Pressure Relief Valve	VIII Div. 1	May 12, 2021	404
M	JLT (Liquids)	15095	Safety Relief Valve	VIII Div. 1	Apr 26, 2021	408
M	JOS-E/JBS-E/JOS-H-E 8400 AC/AB	15208	Safety Relief Valve	VIII Div. 1	Feb 25, 2023	409
M	900 Series, 7700, SNC	15411	Safety Relief Valve	VIII Div. 1	Apr 12, 2021	411
M	900 Series (Liquid), 7700, SNC	15499	Relief Valve	VIII Div. 1	Apr 11, 2021	412
M	BP	15501	Relief Valve	VIII Div. 1	Apr 27, 2021	413
M	JLT/JOS, JLT/JBS, 8500, ACL/ABL	15512	Safety Relief Valve	VIII Div. 1	Apr 27, 2021	413
M	BP (Liquids)	15534	Relief Valve	VIII Div. 1	Apr 26, 2021	414

Devices designed by: GRISS (SPG)

<i>Cert Cat</i>	<i>Device Type</i>	<i>NB Cert #</i>	<i>Type Classification</i>	<i>Code Section</i>	<i>Expiration Date</i>	<i>Page...</i>
M	5780-2 & 5781-2	49003	Safety Relief Valve	VIII Div. 1	Jun 17, 2019	290
M	8100	49047	Safety Valve	VIII Div. 1	Aug 29, 2020	292
M	8200	49058	Relief Valve	VIII Div. 1	Feb 22, 2019	293

Groth Equipment Corporation (GEG)

location: Geismar, LA, UNITED STATES

Acceptable Abbrev.: GROQUIP

Devices designed by: Emerson Automation Solutions Final Control US LP (AGC)

<i>Cert Cat</i>	<i>Device Type</i>	<i>NB Cert #</i>	<i>Type Classification</i>	<i>Code Section</i>	<i>Expiration Date</i>	<i>Page...</i>
A	JOS-E-RL/JBS-E-RL (Restricted Lift version of cert 15208)	01045	Safety Relief Valve	VIII Div. 1	Aug 17, 2023	395
A	63B (.312", #5 orifice)	01056	Safety Relief Valve	VIII Div. 1	Aug 17, 2023	396
A	63B (.437", #7 orifice)	01067	Safety Relief Valve	VIII Div. 1	Aug 17, 2023	396
A	81, 81P, 83, 86	01089	Safety Relief Valve	VIII Div. 1	Aug 17, 2023	397
A	81P (Liquids)	01102	Relief Valve	VIII Div. 1	Aug 17, 2023	397
A	243/249/443/449/546/843/849/943/5046/5049/8043/8049	01292	Pilot Operated Pressure Relief Valve	VIII Div. 1	Dec 7, 2023	402
A	253/259/453/459/853/859/953/959/5059/8053/8059	01304	Pilot Operated Pressure Relief Valve	VIII Div. 1	Aug 17, 2023	402
A	263/269/463/469/566/863/869/963/969/5066/5069	01315	Pilot Operated Pressure Relief Valve	VIII Div. 1	Dec 7, 2023	403
A	453/459/853/859/953/959/5059 (Liquids)	01326	Pilot Operated Pressure Relief Valve	VIII Div. 1	Aug 17, 2023	403
A	443/449/546/843/849/943/949/5046/5049(Liquids)	01337	Pilot Operated Pressure Relief Valve	VIII Div. 1	Aug 17, 2023	404
A	463/469/566/863/869/963/969/5066/5069 (Liquids)	01348	Pilot Operated Pressure Relief Valve	VIII Div. 1	Dec 7, 2023	404
A	JLT-JOS-RL/JLT-JBS-RL (Restricted Lift version of	01382	Safety Relief Valve	VIII Div. 1	Aug 17, 2023	
A	JLT-JOS-RL/JLT-JBS-RL (Liquids) (Restricted lift version of	01393	Safety Relief Valve	VIII Div. 1	Aug 17, 2023	
A	JLT (Liquids)	15095	Safety Relief Valve	VIII Div. 1	Aug 17, 2023	408
A	JOS-E/JBS-E/JOS-H-E 8400 AC/AB	15208	Safety Relief Valve	VIII Div. 1	Aug 17, 2023	409
A	900 Series, 7700, SNC	15411	Safety Relief Valve	VIII Div. 1	Aug 17, 2023	411
A	900 Series (Liquid), 7700, SNC	15499	Relief Valve	VIII Div. 1	Aug 17, 2023	412
A	JLT/JOS, JLT/JBS, 8500, ACL/ABL	15512	Safety Relief Valve	VIII Div. 1	Aug 17, 2023	413

Devices designed by: Farris Engineering (TFO)

<i>Cert Cat</i>	<i>Device Type</i>	<i>NB Cert #</i>	<i>Type Classification</i>	<i>Code Section</i>	<i>Expiration Date</i>	<i>Page...</i>
A	3800	57024	Pilot Operated Pressure Relief Valve	VIII Div. 1	Dec 19, 2020	233
A	3800L, PCL, PCM pilots	57215	Pilot Operated Pressure Relief Valve	VIII Div. 1	Nov 18, 2020	238
A	2700, 2700S, 3700, 3700S	57237	Safety Relief Valve	VIII Div. 1	Feb 23, 2020	238
A	2700L, 3700L (Liquids)	57248	Relief Valve	VIII Div. 1	Feb 23, 2020	239

Groth Equipment Corporation (GRG)

location: Sulphur, LA, UNITED STATES

Acceptable Abbrev.: GroQuip

Devices designed by: Farris Engineering (TFO)

<i>Cert Cat</i>	<i>Device Type</i>	<i>NB Cert #</i>	<i>Type Classification</i>	<i>Code Section</i>	<i>Expiration Date</i>	<i>Page...</i>
A	2600 & 2600S	57057	Safety Relief Valve	VIII Div. 1	Mar 12, 2020	236
A	2600L (Liquids)	57068	Relief Valve	VIII Div. 1	Feb 23, 2020	237
A	2700, 2700S, 3700, 3700S	57237	Safety Relief Valve	VIII Div. 1	Feb 23, 2020	238
A	2700L, 3700L (Liquids)	57248	Relief Valve	VIII Div. 1	Feb 23, 2020	239

Gulf Valve Service Co., LLC (GVS)**location: Baton Rouge, LA, UNITED STATES**Devices designed by: **Dresser, LLC (DRJ)**

<i>Cert Cat</i>	<i>Device Type</i>	<i>NB Cert #</i>	<i>Type Classification</i>	<i>Code Section</i>	<i>Expiration Date</i>	<i>Page...</i>
A	1541, 1543, 1541-3, 1543-3	18032	Safety Valve	I & VIII Div. 1	Aug 16, 2021	180
A	1811, 1511	18122	Safety Valve	I & VIII Div. 1	Nov 6, 2018	182
A	1900D-2, 1900-30D-2	18144	Safety Relief Valve	VIII Div. 1	Oct 12, 2018	183
A	1900E-2, 1900-30E-2	18166	Safety Relief Valve	VIII Div. 1	Jun 17, 2019	183
A	1900, 1900-30, 1900-35	18201	Safety Relief Valve	VIII Div. 1	Aug 16, 2021	184
A	1982	18379	Safety Relief Valve	VIII Div. 1	Nov 5, 2018	188
A	1990 - 3999	18391	Safety Relief Valve	VIII Div. 1	Jun 17, 2019	189
A	1990 - 3999 LS & DL (Liquids)	18403	Relief Valve	VIII Div. 1	Jun 17, 2019	189
A	19000 Series	18706	Safety Relief Valve	VIII Div. 1	Aug 16, 2021	196
A	19000 Series, Liquid	18717	Relief Valve	VIII Div. 1	Jun 17, 2019	197
A	1900D-2, 1900-30D-2 LA & DALA (Liquids)	18751	Relief Valve	VIII Div. 1	Nov 6, 2018	197
A	1900E-2, 1900-30E-2 LA & DALA (Liquids)	18762	Relief Valve	VIII Div. 1	Aug 16, 2021	197
A	1900, 1900-30 1900-35 LA & DALA (Liquids)	18784	Relief Valve	VIII Div. 1	Aug 16, 2021	198

Hansen Technologies Corporation (HTL)**location: Commerce, GA, UNITED STATES****Acceptable Abbrev.: Hansen**Devices designed by: **Hansen Technologies Corporation (HTL)**

<i>Cert Cat</i>	<i>Device Type</i>	<i>NB Cert #</i>	<i>Type Classification</i>	<i>Code Section</i>	<i>Expiration Date</i>	<i>Page...</i>
M	H5613	70007	Safety Relief Valve	VIII Div. 1	Sep 4, 2020	294
M	H5600, H5601 & H5602	70018	Safety Relief Valve	VIII Div. 1	Sep 2, 2020	294
M	H5604	70029	Safety Relief Valve	VIII Div. 1	Sep 4, 2020	294
M	H5600A	70030	Safety Relief Valve	VIII Div. 1	Sep 24, 2020	295
M	H5600R, H5602R	70041	Safety Relief Valve	VIII Div. 1	Sep 24, 2020	295
M	H5632R	70052	Safety Relief Valve	VIII Div. 1	Sep 24, 2020	295
M	H5633R	70063	Safety Relief Valve	VIII Div. 1	Sep 24, 2020	295
M	H5634R	70074	Safety Relief Valve	VIII Div. 1	Sep 4, 2020	296
M	EZLQ	70085	Safety Relief Valve	VIII Div. 1	Sep 16, 2023	296
M	EZC	70096	Safety Relief Valve	VIII Div. 1	Sep 16, 2023	296
M	EZB	70108	Safety Relief Valve	VIII Div. 1	Nov 23, 2023	297
M	EZE	70120	Safety Relief Valve	VIII Div. 1	Aug 7, 2023	297
M	EZF	70131	Safety Relief Valve	VIII Div. 1	Aug 7, 2023	297

Henry Technologies, Inc. (ACR)**location: Chatham, IL, UNITED STATES****Acceptable Abbrev.: HENRY**Devices designed by: **Henry Technologies, Inc. (ACR)**

<i>Cert Cat</i>	<i>Device Type</i>	<i>NB Cert #</i>	<i>Type Classification</i>	<i>Code Section</i>	<i>Expiration Date</i>	<i>Page...</i>
M	5244-1, 5244-3/4, 5344-1, 5344-3/4, B518, B518-JT, B518-JBT	29090	Safety Relief Valve	VIII Div. 1	Jul 24, 2020	298
M	5601 & 5602	29113	Safety Relief Valve	VIII Div. 1	Aug 14, 2020	298
M	5603	29124	Safety Relief Valve	VIII Div. 1	Aug 14, 2020	298
M	5604, 5604-YM, 5604-YP	29135	Relief Valve	VIII Div. 1	Aug 4, 2021	299
M	5600	29146	Safety Relief Valve	VIII Div. 1	Jun 6, 2018	299
M	5230AX, 5231AX, 5231BX, 5233AX, 5234AX, 5235AX	29180	Relief Valve	VIII Div. 1	Mar 23, 2021	299
M	5246A-1, 5246A 1 1/4, 5246A 1 5/8, 5345A, 5346A 1 1/4	29449	Safety Relief Valve	VIII Div. 1	Mar 27, 2019	299
M	5250-1/2, 5250-7/8, 5252-3/4, 5350-1/2, 5352-3/4, 5250A-1/2,	29461	Safety Relief Valve	VIII Div. 1	Dec 9, 2021	300

Herose Gmbh Armaturen Und Metalle (HEG)

location: Bad Oldesloe, GERMANY

Acceptable Abbrev.: Herose

Devices designed by: Herose Gmbh Armaturen Und Metalle (HEG)

<i>Cert Cat</i>	<i>Device Type</i>	<i>NB Cert #</i>	<i>Type Classification</i>	<i>Code Section</i>	<i>Expiration Date</i>	<i>Page...</i>
M	06388/06418/06383/06413.0704/0706	91011	Safety Relief Valve	VIII Div. 1	Dec 9, 2020	301
M	06388/06418/06383/06413.1510	91077	Safety Relief Valve	VIII Div. 1	Dec 9, 2020	301
M	06388/06418/06383/06413.1004/1006	91088	Safety Relief Valve	VIII Div. 1	Dec 9, 2020	301
M	06388/06418/06383/06413.2312/2314	91101	Safety Relief Valve	VIII Div. 1	Nov 8, 2018	302
M	06216/06217.0600	91112	Safety Relief Valve	VIII Div. 1	May 15, 2018	302
M	06216/06217.1000	91123	Safety Relief Valve	VIII Div. 1	Nov 8, 2018	302
M	06216/06217.1200	91134	Safety Relief Valve	VIII Div. 1	Dec 11, 2018	303
M	06216/06217.1400	91145	Safety Relief Valve	VIII Div. 1	Dec 11, 2018	303
M	06216/06217.2000	91156	Safety Relief Valve	VIII Div. 1	Dec 11, 2018	303
M	06216/06217.0400	91178	Safety Relief Valve	VIII Div. 1	Oct 23, 2018	304
M	06420/06421/06425/06426/06440/06441/06445/06446.0704/0706	91189	Safety Relief Valve	VIII Div. 1	May 1, 2021	304
M	06420/06421/06425/06426/06440/06441/06445/06446.1004/1006	91190	Safety Relief Valve	VIII Div. 1	Jan 7, 2022	
M	06420/06421/06425/06426/06440/06441/06445/06446.2312 (23	91202	Safety Relief Valve	VIII Div. 1	May 27, 2021	304
M	06002/06012/06006/06016	91213	Safety Relief Valve	VIII Div. 1	May 27, 2021	304
M	06381/06386/06416	91224	Safety Relief Valve	VIII Div. 1	May 27, 2021	
M	06002/06012 gas tight	91246	Safety Relief Valve	VIII Div. 1	May 27, 2021	305
M	06420/06421/06425/06426/06440/06441/06445/06446.1406/1410	91257	Safety Relief Valve	VIII Div. 1	May 27, 2021	305
M	06420/06421/06425/06426/06440/06441/06445/06446.1406/.1410	91279	Safety Relief Valve	VIII Div. 1	Jan 7, 2022	
M	06420/06421/06425/06426/06440/06441/06445/06446.1810/.1812	91280	Safety Relief Valve	VIII Div. 1	Jan 7, 2022	

Hiter Indústria e Comércio de Controles Termo-Hidraulicos Ltda. (VCC)

location: São Paulo - SP, BRAZIL

Acceptable Abbrev.: Crosby

Devices designed by: Emerson Automation Solutions Final Control US LP (AGC)

<i>Cert Cat</i>	<i>Device Type</i>	<i>NB Cert #</i>	<i>Type Classification</i>	<i>Code Section</i>	<i>Expiration Date</i>	<i>Page...</i>
M	JLT (Liquids)	15095	Safety Relief Valve	VIII Div. 1	Aug 26, 2019	408
M	JOS-E/JBS-E/JOS-H-E 8400 AC/AB	15208	Safety Relief Valve	VIII Div. 1	Aug 26, 2019	409
M	900 Series, 7700, SNC	15411	Safety Relief Valve	VIII Div. 1	Mar 27, 2020	411
M	900 Series (Liquid), 7700, SNC	15499	Relief Valve	VIII Div. 1	Aug 26, 2019	412
M	BP	15501	Relief Valve	VIII Div. 1	Aug 26, 2019	413
M	BP (Liquids)	15534	Relief Valve	VIII Div. 1	Aug 26, 2019	414

Honeywell Technologies S.A.R.L., Environmental & Energy Solutions (HAG)

location: Mosbach, GERMANY

Acceptable Abbrev.: Honeywell

Devices designed by: Honeywell Technologies S.A.R.L., Environmental & Energy Solutions (HAG)

<i>Cert Cat</i>	<i>Device Type</i>	<i>NB Cert #</i>	<i>Type Classification</i>	<i>Code Section</i>	<i>Expiration Date</i>	<i>Page...</i>
M	S245	90009	Safety Relief Valve	VIII Div. 1	Mar 21, 2023	306

Hui Bao Enterprise Co., Ltd (HBO)

location: Ho Mei, Chang Hua Hsien, TAIWAN, REPUBLIC OF CHINA

Acceptable Abbrev.: THB

Devices designed by: Hui Bao Enterprise Co., Ltd (HBO)

<i>Cert Cat</i>	<i>Device Type</i>	<i>NB Cert #</i>	<i>Type Classification</i>	<i>Code Section</i>	<i>Expiration Date</i>	<i>Page...</i>
M	T102N	95037	Safety Relief Valve	VIII Div. 1	Jan 23, 2020	307

Industrial Steel & Boiler Services, Inc. (ISB)**location: Chicopee, MA, UNITED STATES**Devices designed by: **A&R Energy Services, Corporation (ARE)**

<i>Cert Cat</i>	<i>Device Type</i>	<i>NB Cert #</i>	<i>Type Classification</i>	<i>Code Section</i>	<i>Expiration Date</i>	<i>Page...</i>
A	Kunkle 6000, 6252 Series	36324	Safety Valve	I & VIII Div. 1	Nov 26, 2020	391

Devices designed by: **Emerson Automation Solutions Final Control, US LP (KBM)**

<i>Cert Cat</i>	<i>Device Type</i>	<i>NB Cert #</i>	<i>Type Classification</i>	<i>Code Section</i>	<i>Expiration Date</i>	<i>Page...</i>
A	300,600	36076	Safety Valve	I & VIII Div. 1	Nov 6, 2020	386
A	910 to 919	36100	Safety Relief Valve	VIII Div. 1	May 7, 2021	387
A	910 to 919 (Liquid)	36111	Relief Valve	VIII Div. 1	May 12, 2020	388

Industrial Valve Sales & Service, Incorporated (IVE)**location: Mobile, AL, UNITED STATES**Devices designed by: **A&R Energy Services, Corporation (ARE)**

<i>Cert Cat</i>	<i>Device Type</i>	<i>NB Cert #</i>	<i>Type Classification</i>	<i>Code Section</i>	<i>Expiration Date</i>	<i>Page...</i>
A	Kunkle 6000, 6252 Series	36324	Safety Valve	I & VIII Div. 1	Jul 21, 2020	391

Devices designed by: **Emerson Automation Solutions Final Control US LP (AGC)**

<i>Cert Cat</i>	<i>Device Type</i>	<i>NB Cert #</i>	<i>Type Classification</i>	<i>Code Section</i>	<i>Expiration Date</i>	<i>Page...</i>
A	81, 81P, 83, 86	01089	Safety Relief Valve	VIII Div. 1	Jul 19, 2022	397
A	81P (Liquids)	01102	Relief Valve	VIII Div. 1	Jul 17, 2020	397
A	243/249/443/449/546/843/849/943/5046/5049/8043/8049	01292	Pilot Operated Pressure Relief Valve	VIII Div. 1	Jul 19, 2022	402
A	253/259/453/459/853/859/953/959/5059/8053/8059	01304	Pilot Operated Pressure Relief Valve	VIII Div. 1	Jul 19, 2022	402
A	453/459/853/859/953/959/5059 (Liquids)	01326	Pilot Operated Pressure Relief Valve	VIII Div. 1	Jul 19, 2022	403
A	443/449/546/843/849/943/949/5046/5049(Liquids)	01337	Pilot Operated Pressure Relief Valve	VIII Div. 1	Jul 26, 2020	404
A	H Series (HCI, HSJ, HCA, HA, HB, HC, HCB, HCP, HJO, HN,	15006	Safety Valve	I & VIII Div. 1	Sep 29, 2020	406
A	JLT (Liquids)	15095	Safety Relief Valve	VIII Div. 1	Jul 26, 2020	408
A	JOS-E/JBS-E/JOS-H-E 8400 AC/AB	15208	Safety Relief Valve	VIII Div. 1	Jul 21, 2020	409
A	900 Series, 7700, SNC	15411	Safety Relief Valve	VIII Div. 1	Jul 22, 2020	411
A	900 Series (Liquid), 7700, SNC	15499	Relief Valve	VIII Div. 1	Sep 22, 2020	412
A	JLT/JOS, JLT/JBS, 8500, ACL/ABL	15512	Safety Relief Valve	VIII Div. 1	Jul 17, 2023	413

Integrated Plant Services (IPS)**location: Columbus, OH, UNITED STATES****Acceptable Abbrev.: Integrated Plant Services**Devices designed by: **Emerson Automation Solutions Final Control US LP (AGC)**

<i>Cert Cat</i>	<i>Device Type</i>	<i>NB Cert #</i>	<i>Type Classification</i>	<i>Code Section</i>	<i>Expiration Date</i>	<i>Page...</i>
A	81, 81P, 83, 86	01089	Safety Relief Valve	VIII Div. 1	Aug 3, 2021	397
A	JLT (Liquids)	15095	Safety Relief Valve	VIII Div. 1	Mar 9, 2023	408
A	JOS-E/JBS-E/JOS-H-E 8400 AC/AB	15208	Safety Relief Valve	VIII Div. 1	Mar 9, 2023	409
A	900 Series, 7700, SNC	15411	Safety Relief Valve	VIII Div. 1	Mar 9, 2023	411
A	900 Series (Liquid), 7700, SNC	15499	Relief Valve	VIII Div. 1	Mar 9, 2023	412

Integrated Pressure Management (IPM)

location: Houston, TX,

Acceptable Abbrev.: AWC IPM

Devices designed by: Farris Engineering (TFO)

<i>Cert Cat</i>	<i>Device Type</i>	<i>NB Cert #</i>	<i>Type Classification</i>	<i>Code Section</i>	<i>Expiration Date</i>	<i>Page...</i>
A	3800	57024	Pilot Operated Pressure Relief Valve	VIII Div. 1	Sep 27, 2023	233
A	3800FP	57035	Pilot Operated Pressure Relief Valve	VIII Div. 1	Sep 27, 2023	234
A	2600 & 2600S	57057	Safety Relief Valve	VIII Div. 1	Sep 27, 2023	236
A	2600L (Liquids)	57068	Relief Valve	VIII Div. 1	Nov 9, 2023	237
A	3800L, PCL, PCM pilots	57215	Pilot Operated Pressure Relief Valve	VIII Div. 1	Sep 27, 2023	238
A	2700, 2700S, 3700, 3700S	57237	Safety Relief Valve	VIII Div. 1	Sep 27, 2023	238
A	2700L, 3700L (Liquids)	57248	Relief Valve	VIII Div. 1	Sep 27, 2023	239
A	2600L (Air & Steam)	57260	Safety Relief Valve	VIII Div. 1	Sep 27, 2023	240

Integrated Pressure Management LLC, an affiliate of AWC, Inc (ITP)

location: Corpus Christi, TX,

Seal Identification: IPM/ COR

Devices designed by: Farris Engineering (TFO)

<i>Cert Cat</i>	<i>Device Type</i>	<i>NB Cert #</i>	<i>Type Classification</i>	<i>Code Section</i>	<i>Expiration Date</i>	<i>Page...</i>
A	3800	57024	Pilot Operated Pressure Relief Valve	VIII Div. 1	Feb 27, 2024	233
A	3800FP	57035	Pilot Operated Pressure Relief Valve	VIII Div. 1	Feb 27, 2024	234
A	2600 & 2600S	57057	Safety Relief Valve	VIII Div. 1	Feb 27, 2024	236
A	2600L (Liquids)	57068	Relief Valve	VIII Div. 1	Feb 27, 2024	237
A	3800L, PCL, PCM pilots	57215	Pilot Operated Pressure Relief Valve	VIII Div. 1	Feb 27, 2024	238
A	2700, 2700S, 3700, 3700S	57237	Safety Relief Valve	VIII Div. 1	Feb 27, 2024	238
A	2700L, 3700L (Liquids)	57248	Relief Valve	VIII Div. 1	Feb 27, 2024	239
A	2600L (Air & Steam)	57260	Safety Relief Valve	VIII Div. 1	Feb 27, 2024	240

Jiangsu Reliable Mechanical Equipment Co., Ltd. (JRM)

location: Nanjing, Jiangsu Province, PEOPLES REP/CHINA

Acceptable Abbrev.: JRME

Devices designed by: Jiangsu Reliable Mechanical Equipment Co., Ltd. (JRM)

<i>Cert Cat</i>	<i>Device Type</i>	<i>NB Cert #</i>	<i>Type Classification</i>	<i>Code Section</i>	<i>Expiration Date</i>	<i>Page...</i>
M	AG-D Series	00583	Buckling Pin Non-reclosing Device	VIII Div. 1	Aug 11, 2021	308
M	IN-P Series	00897	Buckling Pin Non-reclosing Device	VIII Div. 1	Aug 31, 2022	

Jokwang I.L.I. Co., Ltd. (JOK)

location: Yangsan-si, Gyeongsangnam-do, SOUTH KOREA

Devices designed by: Jokwang I.L.I. Co., Ltd. (JOK)

<i>Cert Cat</i>	<i>Device Type</i>	<i>NB Cert #</i>	<i>Type Classification</i>	<i>Code Section</i>	<i>Expiration Date</i>	<i>Page...</i>
M	JSV-FF100	89030	Safety Relief Valve	VIII Div. 1	Mar 21, 2023	309
M	JSV-FF100 (Liquid)	89041	Safety Relief Valve	VIII Div. 1	Mar 21, 2023	310
M	JSV-PF100	89052	Pilot Operated Pressure Relief Valve	VIII Div. 1	Feb 27, 2019	311
M	JSV-PF100 (Liquid)	89063	Pilot Operated Pressure Relief Valve	VIII Div. 1	Feb 27, 2019	312
M	JSV-FF200	89074	Safety Valve	I & VIII Div. 1	Feb 10, 2021	313
M	JSV-FT100	89085	Safety Relief Valve	VIII Div. 1	Mar 22, 2022	
M	JSV-FT100 (Liquid)	89096	Relief Valve	VIII Div. 1	Mar 22, 2022	

Kunshan Xinxinpeng Mechanical Co. Ltd (KUN)

location: Jiangsu Province, PEOPLES REP/CHINA

Acceptable Abbrev.: XXP

Devices designed by: Kunshan Xinxinpeng Mechanical Co. Ltd (KUN)

<i>Cert Cat</i>	<i>Device Type</i>	<i>NB Cert #</i>	<i>Type Classification</i>	<i>Code Section</i>	<i>Expiration Date</i>	<i>Page...</i>
M	AX-15	14915	Safety Relief Valve	VIII Div. 1	Nov 29, 2023	314

LAM Valves, Incorporated (LMV)

location: Houston, TX, UNITED STATES

Devices designed by: A&R Energy Services, Corporation (ARE)

<i>Cert Cat</i>	<i>Device Type</i>	<i>NB Cert #</i>	<i>Type Classification</i>	<i>Code Section</i>	<i>Expiration Date</i>	<i>Page...</i>
A	Kunkle 6000, 6252 Series	36324	Safety Valve	I & VIII Div. 1	Jan 7, 2019	391

Devices designed by: Emerson Automation Solutions Final Control, US LP (KBM)

<i>Cert Cat</i>	<i>Device Type</i>	<i>NB Cert #</i>	<i>Type Classification</i>	<i>Code Section</i>	<i>Expiration Date</i>	<i>Page...</i>
A	920, 921, 927, Agco A (High Temp. water)	36098	Safety Valve	I	Aug 7, 2018	387
A	910 to 919	36100	Safety Relief Valve	VIII Div. 1	Aug 7, 2018	387
A	910 to 919 (Liquid)	36111	Relief Valve	VIII Div. 1	Aug 7, 2018	388
A	1, 2	36223	Safety Valve	VIII Div. 1	Aug 8, 2018	388
A	Kunkle 264, 265, 266 & 267	36267	Safety Relief Valve	VIII Div. 1	Aug 7, 2018	389
A	Kunkle 337	36278	Safety Relief Valve	VIII Div. 1	Aug 8, 2018	389

Laurentide Controls Limited (SIE)

location: Kirkland, CANADA

Acceptable Abbrev.: LCL

Devices designed by: A&R Energy Services, Corporation (ARE)

<i>Cert Cat</i>	<i>Device Type</i>	<i>NB Cert #</i>	<i>Type Classification</i>	<i>Code Section</i>	<i>Expiration Date</i>	<i>Page...</i>
A	Kunkle 6000, 6252 Series	36324	Safety Valve	I & VIII Div. 1	Jun 19, 2023	391

Devices designed by: Conbraco Industries, Incorporated (CNB)

<i>Cert Cat</i>	<i>Device Type</i>	<i>NB Cert #</i>	<i>Type Classification</i>	<i>Code Section</i>	<i>Expiration Date</i>	<i>Page...</i>
A	15-112 (RVA15)	11248	Safety Relief Valve	VIII Div. 1	Jun 3, 2020	123
A	15-115/117 (RVA15)	11259	Safety Relief Valve	VIII Div. 1	Jun 3, 2020	123
A	19 Series	11282	Safety Valve	I & VIII Div. 1	May 16, 2018	124
A	119 Series	11361	Safety Valve	I & VIII Div. 1	May 16, 2018	126
A	15-118 (RVA15)	11372	Safety Relief Valve	VIII Div. 1	Jun 3, 2020	126
A	500 Series	11462	Safety Valve	VIII Div. 1	May 16, 2018	128
A	500 Series (Liquids)	11473	Safety Relief Valve	VIII Div. 1	May 16, 2018	128

Devices designed by: Emerson Automation Solutions Final Control US LP (AGC)

<i>Cert Cat</i>	<i>Device Type</i>	<i>NB Cert #</i>	<i>Type Classification</i>	<i>Code Section</i>	<i>Expiration Date</i>	<i>Page...</i>
A	81, 81P, 83, 86	01089	Safety Relief Valve	VIII Div. 1	Jun 19, 2023	397
A	81P (Liquids)	01102	Relief Valve	VIII Div. 1	Jun 19, 2023	397
A	JLT (Liquids)	15095	Safety Relief Valve	VIII Div. 1	Sep 15, 2023	408
A	JOS-E/JBS-E/JOS-H-E 8400 AC/AB	15208	Safety Relief Valve	VIII Div. 1	Jun 19, 2023	409
A	900 Series, 7700, SNC	15411	Safety Relief Valve	VIII Div. 1	Jun 19, 2023	411
A	900 Series (Liquid), 7700, SNC	15499	Relief Valve	VIII Div. 1	Jun 19, 2023	412

Devices designed by: Emerson Automation Solutions Final Control, US LP (KBM)

<i>Cert Cat</i>	<i>Device Type</i>	<i>NB Cert #</i>	<i>Type Classification</i>	<i>Code Section</i>	<i>Expiration Date</i>	<i>Page...</i>
A	910 to 919	36100	Safety Relief Valve	VIII Div. 1	Jun 19, 2023	387
A	910 to 919 (Liquid)	36111	Relief Valve	VIII Div. 1	Jun 19, 2023	388
A	Kunkle 337	36278	Safety Relief Valve	VIII Div. 1	Jun 19, 2023	389
A	Kunkle 30	36335	Safety Relief Valve	VIII Div. 1	Jun 19, 2023	392
A	C776	36425	Safety Relief Valve	VIII Div. 1	Jun 19, 2023	392

Laurentide Controls Limited (SIE)*(continued)* location: **Kirkland, CANADA**Acceptable Abbrev.: **LCL**Devices designed by: **Farris Engineering (TFO)**

<i>Cert Cat</i>	<i>Device Type</i>	<i>NB Cert #</i>	<i>Type Classification</i>	<i>Code Section</i>	<i>Expiration Date</i>	<i>Page...</i>
A	2600 & 2600S	57057	Safety Relief Valve	VIII Div. 1	Jun 3, 2020	236
A	2600L (Liquids)	57068	Relief Valve	VIII Div. 1	Jun 25, 2019	237
A	2700, 2700S, 3700, 3700S	57237	Safety Relief Valve	VIII Div. 1	Mar 17, 2020	238
A	2700L, 3700L (Liquids)	57248	Relief Valve	VIII Div. 1	Apr 24, 2020	239
A	4200 / 4400	57282	Safety Valve	I & VIII Div. 1	May 16, 2018	241

LCM Industries, Inc. (LCM)location: **Odessa, TX, UNITED STATES**Devices designed by: **Farris Engineering (TFO)**

<i>Cert Cat</i>	<i>Device Type</i>	<i>NB Cert #</i>	<i>Type Classification</i>	<i>Code Section</i>	<i>Expiration Date</i>	<i>Page...</i>
A	3800	57024	Pilot Operated Pressure Relief Valve	VIII Div. 1	May 21, 2019	233
A	3800FP	57035	Pilot Operated Pressure Relief Valve	VIII Div. 1	Jan 14, 2019	234
A	2600 & 2600S	57057	Safety Relief Valve	VIII Div. 1	May 21, 2019	236
A	2600L (Liquids)	57068	Relief Valve	VIII Div. 1	May 22, 2019	237
A	3800L, PCL, PCM pilots	57215	Pilot Operated Pressure Relief Valve	VIII Div. 1	May 21, 2019	238
A	2700, 2700S, 3700, 3700S	57237	Safety Relief Valve	VIII Div. 1	May 21, 2019	238
A	2700L, 3700L (Liquids)	57248	Relief Valve	VIII Div. 1	May 21, 2019	239

LESER - The Safety Valve (Tianjin) Ltd. (LST)location: **Tianjin,**Devices designed by: **LESER GmbH & Company KG (LES)**

<i>Cert Cat</i>	<i>Device Type</i>	<i>NB Cert #</i>	<i>Type Classification</i>	<i>Code Section</i>	<i>Expiration Date</i>	<i>Page...</i>
M	441/442/444	37044	Safety Relief Valve	VIII Div. 1	Dec 13, 2023	316
M	441/442/444 liquids	37055	Relief Valve	VIII Div. 1	Dec 12, 2023	317
M	459/462 liquids	37101	Relief Valve	VIII Div. 1	Dec 13, 2023	319
M	459/462	37112	Safety Relief Valve	VIII Div. 1	Dec 12, 2023	319
M	526	37224	Safety Relief Valve	VIII Div. 1	Dec 13, 2023	323
M	526 (Liquids)	37235	Relief Valve	VIII Div. 1	Dec 12, 2023	324
M	526D Liquids	37257	Relief Valve	VIII Div. 1	Dec 12, 2023	324
M	237, 237IC, 237CC	37325	Safety Relief Valve	VIII Div. 1	Dec 12, 2023	
M	237, 237IC, 237CC (Liquid)	37336	Relief Valve	VIII Div. 1	Dec 13, 2023	

LESER GmbH & Company KG (LES)**location: Hohenwestedt, GERMANY**Devices designed by: **LESER GmbH & Company KG (LES)**

<i>Cert Cat</i>	<i>Device Type</i>	<i>NB Cert #</i>	<i>Type Classification</i>	<i>Code Section</i>	<i>Expiration Date</i>	<i>Page...</i>
M	488	37022	Safety Relief Valve	VIII Div. 1	Mar 7, 2023	315
M	488 (Liquids)	37033	Relief Valve	VIII Div. 1	Mar 7, 2023	315
M	441/442/444	37044	Safety Relief Valve	VIII Div. 1	Feb 5, 2024	316
M	441/442/444 liquids	37055	Relief Valve	VIII Div. 1	Feb 5, 2024	317
M	455/456/457/458 Group 1	37066	Safety Relief Valve	VIII Div. 1	Feb 5, 2024	317
M	455/456/457/458 Group 1 (Liq)	37077	Relief Valve	VIII Div. 1	Feb 5, 2024	318
M	455/456/457/458 Group 2	37088	Safety Relief Valve	VIII Div. 1	Feb 5, 2024	318
M	455/456/457/458 Group 2 (Liq)	37099	Relief Valve	VIII Div. 1	Feb 5, 2024	318
M	459/462 liquids	37101	Relief Valve	VIII Div. 1	Feb 5, 2024	319
M	459/462	37112	Safety Relief Valve	VIII Div. 1	Feb 5, 2024	319
M	447 Air/Gas	37123	Safety Relief Valve	VIII Div. 1	Feb 5, 2024	319
M	447 Liquid	37134	Relief Valve	VIII Div. 1	Feb 5, 2024	320
M	483, 484, 485 (1")	37145	Safety Relief Valve	VIII Div. 1	Feb 9, 2023	320
M	483, 484, 485 (1") Liquids	37156	Relief Valve	VIII Div. 1	Mar 1, 2023	320
M	483, 484, 485 (1.5")	37167	Safety Relief Valve	VIII Div. 1	May 14, 2023	321
M	483, 484, 485 (1.5") Liquids	37178	Relief Valve	VIII Div. 1	Mar 1, 2023	321
M	437 (Liquids)	37189	Relief Valve	VIII Div. 1	Feb 5, 2024	321
M	438 Sub Types 481, 439	37190	Safety Relief Valve	VIII Div. 1	Feb 5, 2024	322
M	438 Sub Types 481, 439, Liquids	37202	Safety Relief Valve	VIII Div. 1	Feb 5, 2024	322
M	437	37213	Safety Relief Valve	VIII Div. 1	Feb 5, 2024	322
M	526	37224	Safety Relief Valve	VIII Div. 1	Aug 5, 2018	323
M	526 (Liquids)	37235	Relief Valve	VIII Div. 1	Feb 5, 2024	324
M	526D	37246	Safety Relief Valve	VIII Div. 1	Aug 15, 2018	324
M	526D Liquids	37257	Relief Valve	VIII Div. 1	Feb 5, 2024	324
M	820 (liquid) (821)	37268	Pilot Operated Pressure Relief Valve	VIII Div. 1	Nov 11, 2020	325
M	810/820 (811/821)	37280	Pilot Operated Pressure Relief Valve	VIII Div. 1	Nov 11, 2020	326
M	526FB (Liquid)	37303	Safety Relief Valve	VIII Div. 1	Sep 18, 2020	327
M	526FB	37314	Safety Relief Valve	VIII Div. 1	Sep 18, 2020	328
M	237, 237IC, 237CC	37325	Safety Relief Valve	VIII Div. 1	Jan 23, 2024	
M	237, 237IC, 237CC (Liquid)	37336	Relief Valve	VIII Div. 1	Dec 7, 2023	

Leser LLC (LSR)location: **Charlotte, NC, UNITED STATES**Acceptable Abbrev.: **LESER**Devices designed by: **LESER GmbH & Company KG (LES)**

<i>Cert Cat</i>	<i>Device Type</i>	<i>NB Cert #</i>	<i>Type Classification</i>	<i>Code Section</i>	<i>Expiration Date</i>	<i>Page...</i>
A	488	37022	Safety Relief Valve	VIII Div. 1	Jul 12, 2018	315
A	488 (Liquids)	37033	Relief Valve	VIII Div. 1	Jul 12, 2018	315
A	441/442/444	37044	Safety Relief Valve	VIII Div. 1	Jul 12, 2018	316
A	441/442/444 liquids	37055	Relief Valve	VIII Div. 1	Jul 12, 2018	317
A	459/462 liquids	37101	Relief Valve	VIII Div. 1	Jul 12, 2018	319
A	459/462	37112	Safety Relief Valve	VIII Div. 1	Jul 12, 2018	319
A	447 Air/Gas	37123	Safety Relief Valve	VIII Div. 1	Jul 12, 2018	319
A	447 Liquid	37134	Relief Valve	VIII Div. 1	Jul 12, 2018	320
A	483, 484, 485 (1")	37145	Safety Relief Valve	VIII Div. 1	Feb 21, 2019	320
A	483, 484, 485 (1") Liquids	37156	Relief Valve	VIII Div. 1	Jul 12, 2018	320
A	483, 484, 485 (1.5")	37167	Safety Relief Valve	VIII Div. 1	Jul 12, 2018	321
A	483, 484, 485 (1.5") Liquids	37178	Relief Valve	VIII Div. 1	Jul 12, 2018	321
A	437 (Liquids)	37189	Relief Valve	VIII Div. 1	Jul 12, 2018	321
A	438 Sub Types 481, 439	37190	Safety Relief Valve	VIII Div. 1	Jun 5, 2018	322
A	438 Sub Types 481, 439, Liquids	37202	Safety Relief Valve	VIII Div. 1	Jul 12, 2018	322
A	437	37213	Safety Relief Valve	VIII Div. 1	Jul 12, 2018	322
A	526	37224	Safety Relief Valve	VIII Div. 1	Jul 12, 2018	323
A	526 (Liquids)	37235	Relief Valve	VIII Div. 1	Jul 12, 2018	324
A	526D	37246	Safety Relief Valve	VIII Div. 1	Aug 30, 2018	324
A	526D Liquids	37257	Relief Valve	VIII Div. 1	Jul 12, 2018	324
A	820 (liquid) (821)	37268	Pilot Operated Pressure Relief Valve	VIII Div. 1	Apr 29, 2021	325
A	810/820 (811/821)	37280	Pilot Operated Pressure Relief Valve	VIII Div. 1	Apr 6, 2021	326

LESER Valvulas de Seguranca Ltda. (PLB)location: **Rio de Janeiro CEP, BRAZIL**Acceptable Abbrev.: **LESER BR**Devices designed by: **LESER GmbH & Company KG (LES)**

<i>Cert Cat</i>	<i>Device Type</i>	<i>NB Cert #</i>	<i>Type Classification</i>	<i>Code Section</i>	<i>Expiration Date</i>	<i>Page...</i>
A	441/442/444	37044	Safety Relief Valve	VIII Div. 1	Nov 13, 2018	316
A	441/442/444 liquids	37055	Relief Valve	VIII Div. 1	Nov 13, 2018	317
A	459/462 liquids	37101	Relief Valve	VIII Div. 1	Nov 13, 2018	319
A	459/462	37112	Safety Relief Valve	VIII Div. 1	Nov 13, 2018	319
A	437 (Liquids)	37189	Relief Valve	VIII Div. 1	Nov 13, 2018	321
A	438 Sub Types 481, 439	37190	Safety Relief Valve	VIII Div. 1	Nov 12, 2018	322
A	438 Sub Types 481, 439, Liquids	37202	Safety Relief Valve	VIII Div. 1	Nov 13, 2018	322
A	437	37213	Safety Relief Valve	VIII Div. 1	Nov 12, 2018	322
A	526	37224	Safety Relief Valve	VIII Div. 1	Nov 12, 2018	323
A	526 (Liquids)	37235	Relief Valve	VIII Div. 1	Nov 12, 2018	324
A	526D	37246	Safety Relief Valve	VIII Div. 1	Nov 12, 2018	324
A	526D Liquids	37257	Relief Valve	VIII Div. 1	Nov 12, 2018	324

Leslie Controls, Inc. (LSH)location: **Tampa, FL, UNITED STATES**Acceptable Abbrev.: **Leslie**Devices designed by: **Spence Engineering Company, Incorporated (SEC)**

<i>Cert Cat</i>	<i>Device Type</i>	<i>NB Cert #</i>	<i>Type Classification</i>	<i>Code Section</i>	<i>Expiration Date</i>	<i>Page...</i>
M	RXSO and RXSO-S	47001	Safety Relief Valve	VIII Div. 1	Dec 18, 2019	451

Linatex Rubber Products SDN BHD (A Weir Minerals Company) (WRM)

location: Batu Caves, Selangor,

Acceptable Abbrev.: Weir Sarasin - RSBD Linatex Rubber Products SDN BHD.

Devices designed by: Weir Power & Industrial - France (SAR)

<i>Cert Cat</i>	<i>Device Type</i>	<i>NB Cert #</i>	<i>Type Classification</i>	<i>Code Section</i>	<i>Expiration Date</i>	<i>Page...</i>
A	9 Series (Liquids)	44020	Safety Relief Valve	VIII Div. 1	Jun 13, 2023	497
A	P3, P4, P5	92001	Safety Relief Valve	VIII Div. 1	Jun 13, 2023	501
A	P3, P4 (liquids)	92012	Relief Valve	VIII Div. 1	Jun 13, 2023	502

LORCH Sicherheitsventile GmbH & Co. KG, Member of Herose Group (LRH)

location: Filderstadt-Bernhausen, GERMANY

Devices designed by: LORCH Sicherheitsventile GmbH & Co. KG, Member of Herose Group (LRH)

<i>Cert Cat</i>	<i>Device Type</i>	<i>NB Cert #</i>	<i>Type Classification</i>	<i>Code Section</i>	<i>Expiration Date</i>	<i>Page...</i>
M	2115	00707	Safety Relief Valve	VIII Div. 1	May 31, 2023	
M	2125	00718	Safety Relief Valve	VIII Div. 1	Jan 9, 2024	
M	2120	00729	Safety Relief Valve	VIII Div. 1	Jan 9, 2024	
M	2108	00730	Safety Relief Valve	VIII Div. 1	May 31, 2023	
M	2110	00752	Safety Relief Valve	VIII Div. 1	May 31, 2023	
M	2207	00774	Safety Relief Valve	VIII Div. 1	May 31, 2023	
M	2212	00785	Safety Relief Valve	VIII Div. 1	May 31, 2023	
M	2215	00796	Safety Relief Valve	VIII Div. 1	Jan 9, 2024	

Luofu Valve Group Co., Ltd (LVG)

location: Zhejiang, PEOPLES REP/CHINA

Devices designed by: Luofu Valve Group Co., Ltd (LVG)

<i>Cert Cat</i>	<i>Device Type</i>	<i>NB Cert #</i>	<i>Type Classification</i>	<i>Code Section</i>	<i>Expiration Date</i>	<i>Page...</i>
M	LFO-0101CB 4M6	23038	Safety Valve	VIII Div. 1	Nov 4, 2019	329
M	LFO-03a01CB 2H3	23049	Safety Valve	VIII Div. 1	Nov 4, 2019	329

Mack Valves Pty Ltd. (MAK)

location: Bayswater, Victoria, AUSTRALIA

Devices designed by: Mack Valves Pty Ltd. (MAK)

<i>Cert Cat</i>	<i>Device Type</i>	<i>NB Cert #</i>	<i>Type Classification</i>	<i>Code Section</i>	<i>Expiration Date</i>	<i>Page...</i>
M	17 Series (9.5 mm orif.)	00303	Safety Valve	VIII Div. 1	Feb 11, 2021	330
M	17 Series (12.7 mm orif.)	00651	Safety Valve	VIII Div. 1	Feb 11, 2021	330

Mec - Tric Control Company (MCT)

location: Charlotte, NC, UNITED STATES

Acceptable Abbrev.: Mec-Tric

Devices designed by: Farris Engineering (TFO)

<i>Cert Cat</i>	<i>Device Type</i>	<i>NB Cert #</i>	<i>Type Classification</i>	<i>Code Section</i>	<i>Expiration Date</i>	<i>Page...</i>
A	1890, 1892, 1895, 1896	57013	Safety Relief Valve	VIII Div. 1	Aug 16, 2022	232
A	2600 & 2600S	57057	Safety Relief Valve	VIII Div. 1	Mar 30, 2023	236
A	2600L (Liquids)	57068	Relief Valve	VIII Div. 1	Aug 28, 2022	237
A	2700, 2700S, 3700, 3700S	57237	Safety Relief Valve	VIII Div. 1	Mar 30, 2023	238
A	2700L, 3700L (Liquids)	57248	Relief Valve	VIII Div. 1	Aug 14, 2023	239
A	4200 / 4400	57282	Safety Valve	I	Mar 30, 2023	241

Devices designed by: Spence Engineering Company, Incorporated (SEC)

<i>Cert Cat</i>	<i>Device Type</i>	<i>NB Cert #</i>	<i>Type Classification</i>	<i>Code Section</i>	<i>Expiration Date</i>	<i>Page...</i>
A	Fig 31, 41, 41A	65045	Safety Valve	I & VIII Div. 1	Oct 6, 2022	452

Mecklenburg Valve Source, LLC (MCK)location: **Charlotte, NC, UNITED STATES**Acceptable Abbrev.: **Mecklenburg Valve**Devices designed by: **A&R Energy Services, Corporation (ARE)**

<i>Cert Cat</i>	<i>Device Type</i>	<i>NB Cert #</i>	<i>Type Classification</i>	<i>Code Section</i>	<i>Expiration Date</i>	<i>Page...</i>
A	Kunkle 6000, 6252 Series	36324	Safety Valve	I & VIII Div. 1	Apr 19, 2023	391

Devices designed by: **Emerson Automation Solutions Final Control, US LP (KBM)**

<i>Cert Cat</i>	<i>Device Type</i>	<i>NB Cert #</i>	<i>Type Classification</i>	<i>Code Section</i>	<i>Expiration Date</i>	<i>Page...</i>
A	300,600	36076	Safety Valve	I & VIII Div. 1	Apr 19, 2023	386
A	920, 921, 927, Agco A (High Temp. water)	36098	Safety Valve	I	May 26, 2023	387
A	910 to 919	36100	Safety Relief Valve	VIII Div. 1	Apr 20, 2023	387
A	910 to 919 (Liquid)	36111	Relief Valve	VIII Div. 1	Apr 19, 2023	388
A	Kunkle 264, 265, 266 & 267	36267	Safety Relief Valve	VIII Div. 1	Apr 20, 2023	389
A	Kunkle 337	36278	Safety Relief Valve	VIII Div. 1	Apr 20, 2023	389

Mercer Valve Canada a division of the Unified Valve Group Ltd (MVL)location: **Calgary, CANADA**Acceptable Abbrev.: **Mercer Valve Canada**Devices designed by: **Mercer Valve Company, Incorporated (MVC)**

<i>Cert Cat</i>	<i>Device Type</i>	<i>NB Cert #</i>	<i>Type Classification</i>	<i>Code Section</i>	<i>Expiration Date</i>	<i>Page...</i>
A	81-100000 Series	38001	Safety Relief Valve	VIII Div. 1	Dec 19, 2023	331
A	81-100000L Liquids	38012	Relief Valve	VIII Div. 1	May 16, 2020	331
A	81-200000 Series	38023	Safety Relief Valve	VIII Div. 1	Dec 19, 2023	331
A	81-200000L Liquids	38034	Relief Valve	VIII Div. 1	May 16, 2020	332
A	9100	38056	Safety Relief Valve	VIII Div. 1	Dec 19, 2023	332
A	9100L (Liquids)	38067	Relief Valve	VIII Div. 1	May 16, 2020	333
A	8500 Series	38102	Safety Relief Valve	VIII Div. 1	May 16, 2020	334

Mercer Valve Co., Inc. (MCO)location: **Mercer, WI, UNITED STATES**Acceptable Abbrev.: **MVC Mercer Division**Devices designed by: **Mercer Valve Company, Incorporated (MVC)**

<i>Cert Cat</i>	<i>Device Type</i>	<i>NB Cert #</i>	<i>Type Classification</i>	<i>Code Section</i>	<i>Expiration Date</i>	<i>Page...</i>
A	81-100000 Series	38001	Safety Relief Valve	VIII Div. 1	Jun 14, 2018	331
A	81-200000 Series	38023	Safety Relief Valve	VIII Div. 1	Jun 14, 2018	331
A	9100	38056	Safety Relief Valve	VIII Div. 1	Jun 14, 2018	332

Mercer Valve Company, Inc. (MVV)location: **Houston, TX, UNITED STATES**Acceptable Abbrev.: **MVC Houston Division**Devices designed by: **Mercer Valve Company, Incorporated (MVC)**

<i>Cert Cat</i>	<i>Device Type</i>	<i>NB Cert #</i>	<i>Type Classification</i>	<i>Code Section</i>	<i>Expiration Date</i>	<i>Page...</i>
A	81-100000 Series	38001	Safety Relief Valve	VIII Div. 1	Nov 20, 2022	331
A	81-200000 Series	38023	Safety Relief Valve	VIII Div. 1	Nov 20, 2022	331
A	9100	38056	Safety Relief Valve	VIII Div. 1	Nov 20, 2022	332
A	9100L (Liquids)	38067	Relief Valve	VIII Div. 1	Nov 20, 2022	333
A	9500, S, M, E Pilots	38078	Pilot Operated Pressure Relief Valve	VIII Div. 1	Jun 3, 2023	333
A	9500 (Full Port), S, M, E Pilots	38089	Pilot Operated Pressure Relief Valve	VIII Div. 1	Jun 3, 2023	334

Mercer Valve Company, Inc. Bridgeport Division (MRB)

location: Bridgeport, TX, UNITED STATES

Acceptable Abbrev.: MVC Bridgeport Division

Devices designed by: Mercer Valve Company, Incorporated (MVC)

<i>Cert Cat</i>	<i>Device Type</i>	<i>NB Cert #</i>	<i>Type Classification</i>	<i>Code Section</i>	<i>Expiration Date</i>	<i>Page...</i>
A	81-100000 Series	38001	Safety Relief Valve	VIII Div. 1	Nov 7, 2020	331
A	81-200000 Series	38023	Safety Relief Valve	VIII Div. 1	Nov 7, 2020	331
A	9100	38056	Safety Relief Valve	VIII Div. 1	Nov 27, 2020	332

Mercer Valve Company, Incorporated (MVC)

location: Oklahoma City, OK, UNITED STATES

Devices designed by: Mercer Valve Company, Incorporated (MVC)

<i>Cert Cat</i>	<i>Device Type</i>	<i>NB Cert #</i>	<i>Type Classification</i>	<i>Code Section</i>	<i>Expiration Date</i>	<i>Page...</i>
M	81-100000 Series	38001	Safety Relief Valve	VIII Div. 1	Feb 21, 2024	331
M	81-100000L Liquids	38012	Relief Valve	VIII Div. 1	Jul 11, 2024	331
M	81-200000 Series	38023	Safety Relief Valve	VIII Div. 1	Jul 11, 2024	331
M	81-200000L Liquids	38034	Relief Valve	VIII Div. 1	Jul 13, 2020	332
M	87-110000 Series	38045	Safety Relief Valve	VIII Div. 1	Jul 13, 2020	332
M	9100	38056	Safety Relief Valve	VIII Div. 1	Jul 13, 2020	332
M	9100L (Liquids)	38067	Relief Valve	VIII Div. 1	Jul 13, 2020	333
M	9500, S, M, E Pilots	38078	Pilot Operated Pressure Relief Valve	VIII Div. 1	Feb 2, 2024	333
M	9500 (Full Port), S, M, E Pilots	38089	Pilot Operated Pressure Relief Valve	VIII Div. 1	Feb 21, 2024	334
M	9500 L Series	38090	Pilot Operated Pressure Relief Valve	VIII Div. 1	Mar 14, 2024	334
M	8500 Series	38102	Safety Relief Valve	VIII Div. 1	Apr 19, 2019	334
M	1400 Series	38113	Safety Relief Valve	VIII Div. 1	Jun 24, 2021	335

Mercury Manufacturing Company (MMC)

location: Wyandotte, MI, UNITED STATES

Acceptable Abbrev.: MMC

Devices designed by: Mercury Manufacturing Company (MMC)

<i>Cert Cat</i>	<i>Device Type</i>	<i>NB Cert #</i>	<i>Type Classification</i>	<i>Code Section</i>	<i>Expiration Date</i>	<i>Page...</i>
M	MMC-0453-2	78016	Safety Relief Valve	VIII Div. 1	Feb 7, 2019	336
M	MMC-0270	78027	Safety Relief Valve	VIII Div. 1	Mar 13, 2023	336
M	MMC-TV5	78038	Safety Relief Valve	VIII Div. 1	Feb 6, 2019	336
M	MMC00014, MMC00016	78049	Safety Relief Valve	VIII Div. 1	Sep 18, 2019	337
M	MMC00346	78061	Safety Valve	VIII Div. 1	Apr 5, 2019	337
M	MMC00410, 411, 412, 420	78072	Safety Relief Valve	VIII Div. 1	Jun 7, 2019	337
M	MMC01410, MMC01411, MMC01412, MMC01420, MMC01421,	78083	Safety Relief Valve	VIII Div. 1	Jun 7, 2019	337
M	MMC00521, MMC00522	78296	Safety Relief Valve	VIII Div. 1	Sep 12, 2023	

Mersen USA - Salem Branch (COA)

location: Salem, VA, UNITED STATES

Acceptable Abbrev.: Mersen USA

Devices designed by: Mersen USA - Salem Branch (COA)

<i>Cert Cat</i>	<i>Device Type</i>	<i>NB Cert #</i>	<i>Type Classification</i>	<i>Code Section</i>	<i>Expiration Date</i>	<i>Page...</i>
M	Series 3	90111	Rupture Disk Device	VIII Div. 1	Jan 23, 2021	338
M	Series 3 w/Bar Vac. Support	90122	Rupture Disk Device	VIII Div. 1	Aug 7, 2020	338
M	Series 6	90133	Rupture Disk Device	VIII Div. 1	Apr 11, 2019	339
M	Series 3 w. Dial Vac. Support	90144	Rupture Disk Device	VIII Div. 1	Jan 23, 2021	

MERSEN Xianda Shanghai Co., Ltd. (MXC)

location: Shanghai,

Acceptable Abbrev.: MERSEN Xianda

Devices designed by: Mersen USA - Salem Branch (COA)

<i>Cert Cat</i>	<i>Device Type</i>	<i>NB Cert #</i>	<i>Type Classification</i>	<i>Code Section</i>	<i>Expiration Date</i>	<i>Page...</i>
M	Series 3	90111	Rupture Disk Device	VIII Div. 1	Oct 2, 2021	338
M	Series 3 w/Bar Vac. Support	90122	Rupture Disk Device	VIII Div. 1	Oct 2, 2021	338
M	Series 6	90133	Rupture Disk Device	VIII Div. 1	Feb 6, 2021	339

Midwest Valve Services LLC (MWV)

location: Mandan, ND,

Acceptable Abbrev.: Novaspect/Midwest Valve Services ND

Devices designed by: Emerson Automation Solutions Final Control US LP (AGC)

<i>Cert Cat</i>	<i>Device Type</i>	<i>NB Cert #</i>	<i>Type Classification</i>	<i>Code Section</i>	<i>Expiration Date</i>	<i>Page...</i>
A	81, 81P, 83, 86	01089	Safety Relief Valve	VIII Div. 1	Feb 1, 2024	397
A	81P (Liquids)	01102	Relief Valve	VIII Div. 1	Feb 1, 2024	397
A	243/249/443/449/546/843/849/943/5046/5049/8043/8049	01292	Pilot Operated Pressure Relief Valve	VIII Div. 1	Feb 1, 2024	402
A	253/259/453/459/853/859/953/959/5059/8053/8059	01304	Pilot Operated Pressure Relief Valve	VIII Div. 1	Feb 1, 2024	402
A	263/269/463/469/566/863/869/963/969/5066/5069	01315	Pilot Operated Pressure Relief Valve	VIII Div. 1	Feb 1, 2024	403
A	JLT (Liquids)	15095	Safety Relief Valve	VIII Div. 1	Feb 1, 2024	408
A	JOS-E/JBS-E/JOS-H-E 8400 AC/AB	15208	Safety Relief Valve	VIII Div. 1	Feb 1, 2024	409
A	900 Series (Liquid), 7700, SNC	15499	Relief Valve	VIII Div. 1	Feb 1, 2024	412
A	JLT/JOS, JLT/JBS, 8500, ACL/ABL	15512	Safety Relief Valve	VIII Div. 1	Feb 1, 2024	413

Midwest Valve Services, LLC (MID)

location: Minooka, IL, UNITED STATES

Acceptable Abbrev.: Midwest Valve Services

Devices designed by: Emerson Automation Solutions Final Control US LP (AGC)

<i>Cert Cat</i>	<i>Device Type</i>	<i>NB Cert #</i>	<i>Type Classification</i>	<i>Code Section</i>	<i>Expiration Date</i>	<i>Page...</i>
A	81, 81P, 83, 86	01089	Safety Relief Valve	VIII Div. 1	Aug 23, 2023	397
A	81P (Liquids)	01102	Relief Valve	VIII Div. 1	Aug 23, 2023	397
A	243/249/443/449/546/843/849/943/5046/5049/8043/8049	01292	Pilot Operated Pressure Relief Valve	VIII Div. 1	Aug 23, 2023	402
A	253/259/453/459/853/859/953/959/5059/8053/8059	01304	Pilot Operated Pressure Relief Valve	VIII Div. 1	Aug 23, 2023	402
A	263/269/463/469/566/863/869/963/969/5066/5069	01315	Pilot Operated Pressure Relief Valve	VIII Div. 1	Aug 23, 2023	403
A	453/459/853/859/953/959/5059 (Liquids)	01326	Pilot Operated Pressure Relief Valve	VIII Div. 1	Aug 23, 2023	403
A	443/449/546/843/849/943/949/5046/5049(Liquids)	01337	Pilot Operated Pressure Relief Valve	VIII Div. 1	Aug 23, 2023	404
A	463/469/566/863/869/963/969/5066/5069 (Liquids)	01348	Pilot Operated Pressure Relief Valve	VIII Div. 1	Nov 14, 2023	404
A	JLT (Liquids)	15095	Safety Relief Valve	VIII Div. 1	Aug 23, 2023	408
A	JOS-E/JBS-E/JOS-H-E 8400 AC/AB	15208	Safety Relief Valve	VIII Div. 1	Aug 23, 2023	409
A	900 Series, 7700, SNC	15411	Safety Relief Valve	VIII Div. 1	Aug 23, 2023	411
A	900 Series (Liquid), 7700, SNC	15499	Relief Valve	VIII Div. 1	Aug 23, 2023	412
A	JLT/JOS, JLT/JBS, 8500, ACL/ABL	15512	Safety Relief Valve	VIII Div. 1	Aug 23, 2023	413

Midwest Valve Services, LLC (MID)*(continued)* location: **Minooka, IL, UNITED STATES**Acceptable Abbrev.: **Midwest Valve Services**Devices designed by: **Farris Engineering (TFO)**

<i>Cert Cat</i>	<i>Device Type</i>	<i>NB Cert #</i>	<i>Type Classification</i>	<i>Code Section</i>	<i>Expiration Date</i>	<i>Page...</i>
A	3800	57024	Pilot Operated Pressure Relief Valve	VIII Div. 1	Oct 16, 2018	233
A	3800FP	57035	Pilot Operated Pressure Relief Valve	VIII Div. 1	Jan 25, 2019	234
A	6400/6600 (previously 2500 & 4600)	57046	Safety Valve	I & VIII Div. 1	Oct 15, 2018	235
A	2600 & 2600S	57057	Safety Relief Valve	VIII Div. 1	Oct 16, 2018	236
A	2600L (Liquids)	57068	Relief Valve	VIII Div. 1	Oct 15, 2018	237
A	3800L, PCL, PCM pilots	57215	Pilot Operated Pressure Relief Valve	VIII Div. 1	Oct 15, 2018	238
A	2700, 2700S, 3700, 3700S	57237	Safety Relief Valve	VIII Div. 1	Oct 16, 2018	238
A	2700L, 3700L (Liquids)	57248	Relief Valve	VIII Div. 1	Oct 15, 2018	239
A	2600L (Air & Steam)	57260	Safety Relief Valve	VIII Div. 1	May 7, 2021	240
A	4200 / 4400	57282	Safety Valve	I & VIII Div. 1	Oct 15, 2018	241

Millennium Power Services, Inc. (MPS)location: **Fairfield, ME, UNITED STATES**Acceptable Abbrev.: **MPS**Devices designed by: **Farris Engineering (TFO)**

<i>Cert Cat</i>	<i>Device Type</i>	<i>NB Cert #</i>	<i>Type Classification</i>	<i>Code Section</i>	<i>Expiration Date</i>	<i>Page...</i>
A	2600 & 2600S	57057	Safety Relief Valve	VIII Div. 1	Nov 16, 2022	236
A	2600L (Liquids)	57068	Relief Valve	VIII Div. 1	Dec 15, 2022	237
A	2700, 2700S, 3700, 3700S	57237	Safety Relief Valve	VIII Div. 1	Nov 16, 2022	238
A	2700L, 3700L (Liquids)	57248	Relief Valve	VIII Div. 1	Nov 16, 2022	239

Mobile Valve - Tracy (MVT)location: **Tracy, CANADA**Acceptable Abbrev.: **MVT**Devices designed by: **Dresser, LLC (DRJ)**

<i>Cert Cat</i>	<i>Device Type</i>	<i>NB Cert #</i>	<i>Type Classification</i>	<i>Code Section</i>	<i>Expiration Date</i>	<i>Page...</i>
A	1900, 1900-30, 1900-35	18201	Safety Relief Valve	VIII Div. 1	Aug 12, 2022	184
A	19000 Series	18706	Safety Relief Valve	VIII Div. 1	Aug 12, 2022	196
A	19000 Series, Liquid	18717	Relief Valve	VIII Div. 1	Aug 12, 2022	197
A	1900, 1900-30 1900-35 LA & DALA (Liquids)	18784	Relief Valve	VIII Div. 1	Aug 12, 2022	198

Mobile Valve, a division of Source Atlantic (MVR)location: **Mt. Uniacke, CANADA**Acceptable Abbrev.: **MVR**Devices designed by: **Dresser, LLC (DRJ)**

<i>Cert Cat</i>	<i>Device Type</i>	<i>NB Cert #</i>	<i>Type Classification</i>	<i>Code Section</i>	<i>Expiration Date</i>	<i>Page...</i>
A	1541, 1543, 1541-3, 1543-3	18032	Safety Valve	I & VIII Div. 1	Aug 17, 2020	180
A	1811, 1511	18122	Safety Valve	I & VIII Div. 1	Jul 10, 2020	182

Mogas Industries, Incorporated (MII)location: **Houston, TX, UNITED STATES**Devices designed by: **Mogas Industries, Incorporated (MII)**

<i>Cert Cat</i>	<i>Device Type</i>	<i>NB Cert #</i>	<i>Type Classification</i>	<i>Code Section</i>	<i>Expiration Date</i>	<i>Page...</i>
M	PORV-UM, PORV-UMC	64101	Power Actuated Relief Valve	I	May 1, 2021	340
M	PORV-UD	64112	Power Actuated Relief Valve	I	Jul 5, 2020	340
M	PORV-UL	64123	Power Actuated Relief Valve	I	Mar 14, 2024	340
M	PORV-UN	64134	Power Actuated Relief Valve	I	Nov 26, 2018	340
M	PORV-UK, PORV-UKC	64145	Power Actuated Relief Valve	I	Aug 7, 2023	341

Motoyama Engineering Works Limited (MTY)

location: Kurokawa-gun, Miyagi-Ken, JAPAN

Devices designed by: Motoyama Engineering Works Limited (MTY)

<i>Cert Cat</i>	<i>Device Type</i>	<i>NB Cert #</i>	<i>Type Classification</i>	<i>Code Section</i>	<i>Expiration Date</i>	<i>Page...</i>
M	H (HS,HSA,HC,HCA, HJ)	40004	Safety Valve	I & VIII Div. 1	Apr 10, 2019	342
M	JLT-JNO, JLT-JNB (Liquids)	40015	Relief Valve	VIII Div. 1	Apr 10, 2019	343
M	JNO/JNB	40059	Safety Relief Valve	VIII Div. 1	Apr 10, 2019	344
M	900 (Air, Gas and Steam)	40093	Safety Relief Valve	VIII Div. 1	Apr 10, 2019	345
M	900 (Liquids)	40105	Safety Relief Valve	VIII Div. 1	Apr 10, 2019	345

Mt. H Control Valves Co., LTD (MHC)

location: Ganseo-gu, Busan,

Devices designed by: Mt. H Control Valves Co., LTD (MHC)

<i>Cert Cat</i>	<i>Device Type</i>	<i>NB Cert #</i>	<i>Type Classification</i>	<i>Code Section</i>	<i>Expiration Date</i>	<i>Page...</i>
M	SC 32	00549	Safety Relief Valve	VIII Div. 1	Apr 5, 2022	
M	SC 32 (Liquid)	00550	Safety Relief Valve	VIII Div. 1	Sep 29, 2021	346
M	SP 32	00561	Pilot Operated Pressure Relief Valve	VIII Div. 1	Apr 5, 2022	
M	SP 32 (Liquid)	00572	Pilot Operated Pressure Relief Valve	VIII Div. 1	Sep 29, 2021	347

Mueller Refrigeration, LLC (MBC)

location: Hartsville, TN, UNITED STATES

Acceptable Abbrev.: Block style "M"

Devices designed by: Mueller Refrigeration, LLC (MBC)

<i>Cert Cat</i>	<i>Device Type</i>	<i>NB Cert #</i>	<i>Type Classification</i>	<i>Code Section</i>	<i>Expiration Date</i>	<i>Page...</i>
M	A15501, A15508, A15509, A15511, A18932 & B-34067	41005	Safety Relief Valve	VIII Div. 1	May 13, 2018	348
M	A15502, A15503, A15512, A15513, A17430, A18774, A18933,	41016	Safety Relief Valve	VIII Div. 1	Feb 13, 2023	348
M	A15504, A15514, A15515, B35413, A18736, A18737	41027	Safety Relief Valve	VIII Div. 1	May 3, 2021	348
M	A-15506 & B-34444	41049	Safety Relief Valve	VIII Div. 1	May 22, 2020	349
M	A-17840, A-18735, & B-34519	41050	Safety Relief Valve	VIII Div. 1	Aug 20, 2020	349
M	A-17834, B-34580, A-18387, A-18473	41061	Safety Relief Valve	VIII Div. 1	Mar 31, 2020	349
M	A-17970, A-18443	41072	Safety Relief Valve	VIII Div. 1	May 3, 2021	349
M	A-18356, A-18357, A-18358, A-18540	41083	Safety Relief Valve	VIII Div. 1	Oct 15, 2018	350
M	A-18422	41106	Relief Valve	VIII Div. 1	Apr 9, 2020	350
M	A-18425, A-18444 (Teflon seat)	41117	Safety Relief Valve	VIII Div. 1	Jul 28, 2020	350
M	A-18424 (Teflon seat)	41128	Safety Relief Valve	VIII Div. 1	Jul 28, 2020	351
M	3080A (3075TR, 5730)	41162	Safety Relief Valve	VIII Div. 1	Mar 22, 2023	
M	3000A (3000, 3001, 3001X2, 3002, 3012, 3014, 3015, 3212, 3214,	41173	Safety Relief Valve	VIII Div. 1	Mar 22, 2023	
M	3020A (3016, 3020, 3020X2, 3216, 3220, 5731AX9, 5733, 5733X2,	41184	Safety Relief Valve	VIII Div. 1	Mar 22, 2023	
M	3030A (3030, 3031, 3031X1, 3045, 3045TR, 3045X1)	41195	Safety Relief Valve	VIII Div. 1	Mar 22, 2023	
M	3060A (3060, 3060FL, 3060X1, 3060X7, 3061X1, 3070, 3075)	41207	Safety Relief Valve	VIII Div. 1	Mar 22, 2023	
M	3090	41218	Safety Relief Valve	VIII Div. 1	Feb 26, 2024	

Myers - Aubrey Company (MAC)

location: Broken Arrow, OK, UNITED STATES

Acceptable Abbrev.: Myers-Aubrey Co.

Devices designed by: Emerson Automation Solutions Final Control US LP (AGC)

<i>Cert Cat</i>	<i>Device Type</i>	<i>NB Cert #</i>	<i>Type Classification</i>	<i>Code Section</i>	<i>Expiration Date</i>	<i>Page...</i>
A	81, 81P, 83, 86	01089	Safety Relief Valve	VIII Div. 1	Mar 29, 2020	397
A	81P (Liquids)	01102	Relief Valve	VIII Div. 1	Feb 17, 2020	397
A	243/249/443/449/546/843/849/943/5046/5049/8043/8049	01292	Pilot Operated Pressure Relief Valve	VIII Div. 1	Feb 17, 2020	402
A	253/259/453/459/853/859/953/959/5059/8053/8059	01304	Pilot Operated Pressure Relief Valve	VIII Div. 1	Feb 17, 2020	402
A	263/269/463/469/566/863/869/963/969/5066/5069	01315	Pilot Operated Pressure Relief Valve	VIII Div. 1	Jan 27, 2020	403
A	453/459/853/859/953/959/5059 (Liquids)	01326	Pilot Operated Pressure Relief Valve	VIII Div. 1	May 14, 2020	403
A	443/449/546/843/849/943/949/5046/5049(Liquids)	01337	Pilot Operated Pressure Relief Valve	VIII Div. 1	Jan 27, 2020	404
A	463/469/566/863/869/963/969/5066/5069 (Liquids)	01348	Pilot Operated Pressure Relief Valve	VIII Div. 1	Jan 27, 2020	404
A	JLT (Liquids)	15095	Safety Relief Valve	VIII Div. 1	Apr 14, 2020	408
A	JOS-E/JBS-E/JOS-H-E 8400 AC/AB	15208	Safety Relief Valve	VIII Div. 1	May 14, 2020	409
A	900 Series, 7700, SNC	15411	Safety Relief Valve	VIII Div. 1	Jan 27, 2020	411
A	900 Series (Liquid), 7700, SNC	15499	Relief Valve	VIII Div. 1	Jan 28, 2020	412

Devices designed by: Emerson Automation Solutions Final Control, US LP (KBM)

<i>Cert Cat</i>	<i>Device Type</i>	<i>NB Cert #</i>	<i>Type Classification</i>	<i>Code Section</i>	<i>Expiration Date</i>	<i>Page...</i>
A	82 Series D Orifice	36470	Safety Valve	VIII Div. 1	Mar 28, 2018	393
A	82 Series E Orifice	36481	Safety Valve	VIII Div. 1	Mar 28, 2018	393

Nakakita Seisakusho Company, Limited (NKK)

location: Daito City, Osaka, JAPAN

Acceptable Abbrev.: NAKAKITA SEISAKUSHO

Devices designed by: Nakakita Seisakusho Company, Limited (NKK)

<i>Cert Cat</i>	<i>Device Type</i>	<i>NB Cert #</i>	<i>Type Classification</i>	<i>Code Section</i>	<i>Expiration Date</i>	<i>Page...</i>
M	NS255	42039	Safety Relief Valve	VIII Div. 1	Jun 17, 2021	352
M	NS255E (Liquids)	42040	Relief Valve	VIII Div. 1	Jun 17, 2021	353
M	NS255F	42051	Safety Valve	I & VIII Div. 1	Apr 12, 2018	354
M	NS256	42062	Pilot Operated Pressure Relief Valve	VIII Div. 1	Apr 3, 2021	354
M	NS 200JMR	42073	Relief Valve	VIII Div. 1	Apr 18, 2018	355

Nirmal Industrial Controls Pvt. Ltd. (NIC)

location: District Thane, Maharashtra,

Acceptable Abbrev.: NIRMAL INDIA

Devices designed by: Nirmal Industrial Controls Pvt. Ltd. (NIC)

<i>Cert Cat</i>	<i>Device Type</i>	<i>NB Cert #</i>	<i>Type Classification</i>	<i>Code Section</i>	<i>Expiration Date</i>	<i>Page...</i>
M	Securamax SR-07 Series	00819	Safety Relief Valve	VIII Div. 1	Jan 26, 2023	

Norriseal Wellmark Inc. (NWK)

location: Houston, TX,

Acceptable Abbrev.: Norriseal Wellmark

Devices designed by: Norriseal Wellmark Inc. (NWK)

<i>Cert Cat</i>	<i>Device Type</i>	<i>NB Cert #</i>	<i>Type Classification</i>	<i>Code Section</i>	<i>Expiration Date</i>	<i>Page...</i>
M	W9503	66057	Safety Relief Valve	VIII Div. 1	Mar 4, 2022	356
M	2600 Series	66068	Safety Relief Valve	VIII Div. 1	Mar 4, 2022	356
M	2600 (Liquid)	66079	Safety Relief Valve	VIII Div. 1	Mar 4, 2022	357

Norriseal Wellmark Inc. (WLM)

location: Oklahoma City, OK, UNITED STATES

Acceptable Abbrev.: WellMark

Devices designed by: Norriseal Wellmark Inc. (NWK)

<i>Cert Cat</i>	<i>Device Type</i>	<i>NB Cert #</i>	<i>Type Classification</i>	<i>Code Section</i>	<i>Expiration Date</i>	<i>Page...</i>
M	2600 Series	66068	Safety Relief Valve	VIII Div. 1	Aug 2, 2018	356

North American Machine Works, Inc. (ANA)

location: Folcroft, PA, UNITED STATES

Acceptable Abbrev.: NAMW

Devices designed by: Farris Engineering (TFO)

<i>Cert Cat</i>	<i>Device Type</i>	<i>NB Cert #</i>	<i>Type Classification</i>	<i>Code Section</i>	<i>Expiration Date</i>	<i>Page...</i>
A	1850, 1850H, 1851, 1852, 1855, 1856M, 2850, 2852, 2856, 2850H	57002	Safety Relief Valve	VIII Div. 1	Jan 4, 2021	232
A	3800	57024	Pilot Operated Pressure Relief Valve	VIII Div. 1	Dec 20, 2020	233
A	3800FP	57035	Pilot Operated Pressure Relief Valve	VIII Div. 1	Aug 16, 2022	234
A	2600 & 2600S	57057	Safety Relief Valve	VIII Div. 1	Jan 4, 2021	236
A	2600L (Liquids)	57068	Relief Valve	VIII Div. 1	Dec 21, 2020	237
A	3800L, PCL, PCM pilots	57215	Pilot Operated Pressure Relief Valve	VIII Div. 1	Oct 3, 2020	238
A	2700, 2700S, 3700, 3700S	57237	Safety Relief Valve	VIII Div. 1	Jan 4, 2021	238
A	2700L, 3700L (Liquids)	57248	Relief Valve	VIII Div. 1	Dec 20, 2020	239
A	2600L (Air & Steam)	57260	Safety Relief Valve	VIII Div. 1	Jul 9, 2020	240
A	4200 / 4400	57282	Safety Valve	I & VIII Div. 1	Nov 10, 2020	241

North American Safety Valve Industries, Inc. (NAS)

location: North Kansas City, MO, UNITED STATES

Seal Identification: NASVI

Devices designed by: A&R Energy Services, Corporation (ARE)

<i>Cert Cat</i>	<i>Device Type</i>	<i>NB Cert #</i>	<i>Type Classification</i>	<i>Code Section</i>	<i>Expiration Date</i>	<i>Page...</i>
A	Kunkle 6000, 6252 Series	36324	Safety Valve	I & VIII Div. 1	Aug 22, 2023	391

Devices designed by: Conbraco Industries, Incorporated (CNB)

<i>Cert Cat</i>	<i>Device Type</i>	<i>NB Cert #</i>	<i>Type Classification</i>	<i>Code Section</i>	<i>Expiration Date</i>	<i>Page...</i>
A	19 Series	11282	Safety Valve	I & VIII Div. 1	Aug 22, 2023	124

Devices designed by: Emerson Automation Solutions Final Control, US LP (KBM)

<i>Cert Cat</i>	<i>Device Type</i>	<i>NB Cert #</i>	<i>Type Classification</i>	<i>Code Section</i>	<i>Expiration Date</i>	<i>Page...</i>
A	Kunkle 189, 363, 389	36043	Safety Relief Valve	VIII Div. 1	Jul 22, 2020	385
A	300,600	36076	Safety Valve	I & VIII Div. 1	Jul 22, 2020	386
A	330. 330S, 333S	36087	Safety Relief Valve	VIII Div. 1	Jul 22, 2020	386
A	920, 921, 927, Agco A (High Temp. water)	36098	Safety Valve	I	Jul 22, 2020	387
A	910 to 919	36100	Safety Relief Valve	VIII Div. 1	Jul 23, 2020	387
A	910 to 919 (Liquid)	36111	Relief Valve	VIII Div. 1	Jul 22, 2020	388
A	1, 2	36223	Safety Valve	VIII Div. 1	Jul 22, 2020	388
A	Kunkle 264, 265, 266 & 267	36267	Safety Relief Valve	VIII Div. 1	Aug 22, 2023	389
A	Kunkle 337	36278	Safety Relief Valve	VIII Div. 1	Jul 23, 2020	389
A	Kunkle 548-A (.295 Orifice)	36290	Safety Relief Valve	VIII Div. 1	Sep 19, 2020	390
A	Kunkle 541-C/542-C/548-C (.422 Orifice)	36302	Safety Relief Valve	VIII Div. 1	Jul 22, 2020	390
A	Kunkle 30	36335	Safety Relief Valve	VIII Div. 1	Jul 22, 2020	392
A	Kunkle 541-A/542-A (.295 orifice)	36469	Safety Relief Valve	VIII Div. 1	Jul 22, 2020	392

NUOVA GENERAL INSTRUMENTS S.r.l. (NGI)

location: Pianello Val Tidone (PC), ITALY

Acceptable Abbrev.: Logo: Letter "I" encircled by "G"

Devices designed by: NUOVA GENERAL INSTRUMENTS S.r.l. (NGI)

<i>Cert Cat</i>	<i>Device Type</i>	<i>NB Cert #</i>	<i>Type Classification</i>	<i>Code Section</i>	<i>Expiration Date</i>	<i>Page...</i>
M	A001	32500	Safety Valve	VIII Div. 1	Dec 2, 2022	358
M	A002	32511	Safety Valve	VIII Div. 1	Mar 9, 2023	359

Oklahoma Safety Equipment Company, Inc. (OSECO) (OSE)

location: Broken Arrow, OK, UNITED STATES

Acceptable Abbrev.: OSECO

Devices designed by: Oklahoma Safety Equipment Company, Inc. (OSECO) (OSE)

<i>Cert Cat</i>	<i>Device Type</i>	<i>NB Cert #</i>	<i>Type Classification</i>	<i>Code Section</i>	<i>Expiration Date</i>	<i>Page...</i>
M	FAS, WDA/FAS	00011	Rupture Disk Device	VIII Div. 1	Jan 9, 2020	360
M	STDV	00022	Rupture Disk Device	VIII Div. 1	Dec 18, 2019	360
M	(F) COV	00033	Rupture Disk Device	VIII Div. 1	Aug 27, 2020	361
M	PCR, PCRL	00055	Rupture Disk Device	VIII Div. 1	Jan 9, 2020	361
M	PSR, PSRL, SSR, SSRL	00077	Rupture Disk Device	VIII Div. 1	Jan 22, 2021	362
M	CO (F) Flat Seat	00190	Rupture Disk Device	VIII Div. 1	Apr 27, 2023	363
M	FAS (Liquid)	00202	Rupture Disk Device	VIII Div. 1	Jan 25, 2019	364
M	PROS	00235	Rupture Disk Device	VIII Div. 1	Feb 26, 2019	364
M	GR, GRO	00246	Rupture Disk Device	VIII Div. 1	Feb 16, 2023	365
M	FST, FSTL, SST, SSTL	00257	Rupture Disk Device	VIII Div. 1	Jan 25, 2019	365
M	STD	00268	Rupture Disk Device	VIII Div. 1	Apr 20, 2021	366
M	(F) STD-OTU	00279	Rupture Disk Device	VIII Div. 1	Jan 25, 2019	366
M	PRO +, PRO+L, RPRO+, RPRO+L (air/gas)	00381	Rupture Disk Device	VIII Div. 1	Sep 20, 2022	367
M	OPFTK+	00426	Rupture Disk Device	VIII Div. 1	Jun 20, 2021	367
M	OPFTR+	00437	Rupture Disk Device	VIII Div. 1	Jun 29, 2021	367
M	OPR+	00448	Rupture Disk Device	VIII Div. 1	Jun 29, 2021	368
M	OPK+	00459	Rupture Disk Device	VIII Div. 1	Sep 20, 2022	368
M	PRO+KRGL, PRO+KRGL-L	00460	Rupture Disk Device	VIII Div. 1	Oct 22, 2022	368
M	HPSR Welded Assembly	01472	Rupture Disk Device	VIII Div. 1	Feb 17, 2023	

Pacific Industrial Service, Inc. (PSI)

location: St. Helens, OR, UNITED STATES

Devices designed by: ARI - Armaturen USA, LP (TAR)

<i>Cert Cat</i>	<i>Device Type</i>	<i>NB Cert #</i>	<i>Type Classification</i>	<i>Code Section</i>	<i>Expiration Date</i>	<i>Page...</i>
A	Reyco R, RB & RO (Fig. 971, 973, 974)	73000	Safety Relief Valve	VIII Div. 1	Jun 6, 2018	19
A	Reyco R, RB, RO, RBO (Fig. 971, 973, 974) (liquid)	73011	Safety Relief Valve	VIII Div. 1	Jun 6, 2018	20

PARCOL S.p.A. (PCL)

location: Canegrate (MI), ITALY

Acceptable Abbrev.: PARCOL

Devices designed by: PARCOL S.p.A. (PCL)

<i>Cert Cat</i>	<i>Device Type</i>	<i>NB Cert #</i>	<i>Type Classification</i>	<i>Code Section</i>	<i>Expiration Date</i>	<i>Page...</i>
M	3-5403	00493	Safety Valve	VIII Div. 1	Dec 15, 2021	
M	3-5403 (Liquid)	00505	Safety Relief Valve	VIII Div. 1	Dec 15, 2021	

Parker Hannifin Corporation (RSP)

location: Mauston, WI, UNITED STATES

Acceptable Abbrev.: Parker

Refrigerating Specialties Division

Devices designed by: Parker Hannifin Corporation (RSP)

<i>Cert Cat</i>	<i>Device Type</i>	<i>NB Cert #</i>	<i>Type Classification</i>	<i>Code Section</i>	<i>Expiration Date</i>	<i>Page...</i>
M	H-2	45009	Safety Relief Valve	VIII Div. 1	Mar 23, 2021	369
M	H-3	45010	Safety Relief Valve	VIII Div. 1	Apr 13, 2019	369
M	H-4	45021	Safety Relief Valve	VIII Div. 1	May 6, 2019	369
M	H-5	45032	Safety Relief Valve	VIII Div. 1	Apr 13, 2019	370
M	SR1, CSR1	45043	Safety Relief Valve	VIII Div. 1	Oct 2, 2018	370
M	SR2, CSR2	45054	Safety Relief Valve	VIII Div. 1	Oct 2, 2018	370
M	SR3, CSR3	45065	Safety Relief Valve	VIII Div. 1	Jul 18, 2018	371
M	SR4, CSR4	45076	Safety Relief Valve	VIII Div. 1	Jul 18, 2018	371
M	SRH1, SRH2, SRH3, CSRH1, CSRH2, CSRH3	45087	Safety Relief Valve	VIII Div. 1	Jul 18, 2018	371
M	SRH5, CSRH5	45098	Safety Relief Valve	VIII Div. 1	May 6, 2019	372
M	SRH4, CSRH4	45100	Safety Relief Valve	VIII Div. 1	May 28, 2019	372
M	SR Series (1/2 in. Liquid)	45111	Safety Relief Valve	VIII Div. 1	Feb 1, 2024	372
M	SR Series (3/4 in. Liquid)	45122	Safety Relief Valve	VIII Div. 1	Feb 1, 2024	372
M	SR1R	45133	Safety Relief Valve	VIII Div. 1	Mar 17, 2022	

Parker Hannifin Corporation PGI Division (FVC)

location: Houston, TX, UNITED STATES

Acceptable Abbrev.: Parker PGI

Devices designed by: Parker Hannifin Corporation PGI Division (FVC)

<i>Cert Cat</i>	<i>Device Type</i>	<i>NB Cert #</i>	<i>Type Classification</i>	<i>Code Section</i>	<i>Expiration Date</i>	<i>Page...</i>
M	AA1301A	24006	Safety Relief Valve	VIII Div. 1	Mar 27, 2019	374
M	AA1301B	24017	Safety Relief Valve	VIII Div. 1	Aug 29, 2019	374
M	AA1310A	24028	Safety Relief Valve	VIII Div. 1	Mar 27, 2019	374
M	AA1310B	24039	Safety Relief Valve	VIII Div. 1	Jun 19, 2019	375

PCE Pacific, Inc. (TSR)

location: Everett, WA, UNITED STATES

Seal Identification: PCE

Devices designed by: A&R Energy Services, Corporation (ARE)

<i>Cert Cat</i>	<i>Device Type</i>	<i>NB Cert #</i>	<i>Type Classification</i>	<i>Code Section</i>	<i>Expiration Date</i>	<i>Page...</i>
A	Kunkle 6000, 6252 Series	36324	Safety Valve	I & VIII Div. 1	Feb 2, 2019	391

Devices designed by: Emerson Automation Solutions Final Control US LP (AGC)

<i>Cert Cat</i>	<i>Device Type</i>	<i>NB Cert #</i>	<i>Type Classification</i>	<i>Code Section</i>	<i>Expiration Date</i>	<i>Page...</i>
A	81, 81P, 83, 86	01089	Safety Relief Valve	VIII Div. 1	Jan 31, 2019	397
A	81P (Liquids)	01102	Relief Valve	VIII Div. 1	Jan 19, 2019	397
A	243/249/443/449/546/843/849/943/5046/5049/8043/8049	01292	Pilot Operated Pressure Relief Valve	VIII Div. 1	Jan 31, 2019	402
A	253/259/453/459/853/859/953/959/5059/8053/8059	01304	Pilot Operated Pressure Relief Valve	VIII Div. 1	Jan 31, 2019	402
A	263/269/463/469/566/863/869/963/969/5066/5069	01315	Pilot Operated Pressure Relief Valve	VIII Div. 1	Jan 31, 2019	403
A	453/459/853/859/953/959/5059 (Liquids)	01326	Pilot Operated Pressure Relief Valve	VIII Div. 1	Jan 14, 2019	403
A	443/449/546/843/849/943/949/5046/5049(Liquids)	01337	Pilot Operated Pressure Relief Valve	VIII Div. 1	Jan 14, 2019	404
A	463/469/566/863/869/963/969/5066/5069 (Liquids)	01348	Pilot Operated Pressure Relief Valve	VIII Div. 1	Jan 11, 2019	404
A	H Series (HCI, HSJ, HCA, HA, HB, HC, HCB, HCP, HJO, HN,	15006	Safety Valve	I & VIII Div. 1	Dec 8, 2021	406
A	JLT (Liquids)	15095	Safety Relief Valve	VIII Div. 1	Jan 11, 2019	408
A	JOS-E/JBS-E/JOS-H-E 8400 AC/AB	15208	Safety Relief Valve	VIII Div. 1	Feb 2, 2019	409
A	900 Series, 7700, SNC	15411	Safety Relief Valve	VIII Div. 1	Jan 31, 2019	411
A	900 Series (Liquid), 7700, SNC	15499	Relief Valve	VIII Div. 1	Jan 31, 2019	412

PCE Pacific, Inc. (TSR)

(continued) location: Everett, WA, UNITED STATES

Seal Identification: PCE

Devices designed by: Emerson Automation Solutions Final Control, US LP (KBM)

<i>Cert Cat</i>	<i>Device Type</i>	<i>NB Cert #</i>	<i>Type Classification</i>	<i>Code Section</i>	<i>Expiration Date</i>	<i>Page...</i>
A	300,600	36076	Safety Valve	I	Jan 31, 2019	386
A	920, 921, 927, Agco A (High Temp. water)	36098	Safety Valve	I	Feb 1, 2019	387
A	910 to 919	36100	Safety Relief Valve	VIII Div. 1	Jan 31, 2019	387
A	910 to 919 (Liquid)	36111	Relief Valve	VIII Div. 1	Jan 31, 2019	388
A	Kunkle 337	36278	Safety Relief Valve	VIII Div. 1	Jan 31, 2019	389

Pentair Flow Control Pacific Pty Ltd (PFP)

location: Wangara, Western Australia,

Acceptable Abbrev.: Pentair Valves & Controls

Devices designed by: Emerson Automation Solutions Final Control US LP (AGC)

<i>Cert Cat</i>	<i>Device Type</i>	<i>NB Cert #</i>	<i>Type Classification</i>	<i>Code Section</i>	<i>Expiration Date</i>	<i>Page...</i>
A	81, 81P, 83, 86	01089	Safety Relief Valve	VIII Div. 1	May 11, 2021	397
A	243/249/443/449/546/843/849/943/5046/5049/8043/8049	01292	Pilot Operated Pressure Relief Valve	VIII Div. 1	May 11, 2021	402
A	253/259/453/459/853/859/953/959/5059/8053/8059	01304	Pilot Operated Pressure Relief Valve	VIII Div. 1	May 11, 2021	402
A	263/269/463/469/566/863/869/963/969/5066/5069	01315	Pilot Operated Pressure Relief Valve	VIII Div. 1	May 11, 2021	403
A	443/449/546/843/849/943/949/5046/5049(Liquids)	01337	Pilot Operated Pressure Relief Valve	VIII Div. 1	May 12, 2021	404
A	463/469/566/863/869/963/969/5066/5069 (Liquids)	01348	Pilot Operated Pressure Relief Valve	VIII Div. 1	May 12, 2021	404
A	JLT (Liquids)	15095	Safety Relief Valve	VIII Div. 1	May 12, 2021	408
A	900 Series, 7700, SNC	15411	Safety Relief Valve	VIII Div. 1	May 11, 2021	411
A	900 Series (Liquid), 7700, SNC	15499	Relief Valve	VIII Div. 1	May 12, 2021	412
A	JLT/JOS, JLT/JBS, 8500, ACL/ABL	15512	Safety Relief Valve	VIII Div. 1	May 11, 2021	413

Pentair Sanmar Limited (TYC)

location: Pudukottai District, Tamilnadu, INDIA

Acceptable Abbrev.: Pentair Sanmar Limited Viralimalai-621316, India

Devices designed by: Emerson Automation Solutions Final Control US LP (AGC)

<i>Cert Cat</i>	<i>Device Type</i>	<i>NB Cert #</i>	<i>Type Classification</i>	<i>Code Section</i>	<i>Expiration Date</i>	<i>Page...</i>
M	243/249/443/449/546/843/849/943/5046/5049/8043/8049	01292	Pilot Operated Pressure Relief Valve	VIII Div. 1	Dec 12, 2023	402
M	253/259/453/459/853/859/953/959/5059/8053/8059	01304	Pilot Operated Pressure Relief Valve	VIII Div. 1	Dec 12, 2023	402
M	263/269/463/469/566/863/869/963/969/5066/5069	01315	Pilot Operated Pressure Relief Valve	VIII Div. 1	Feb 12, 2023	403
M	453/459/853/859/953/959/5059 (Liquids)	01326	Pilot Operated Pressure Relief Valve	VIII Div. 1	Dec 11, 2023	403
M	443/449/546/843/849/943/949/5046/5049(Liquids)	01337	Pilot Operated Pressure Relief Valve	VIII Div. 1	Dec 13, 2023	404
M	463/469/566/863/869/963/969/5066/5069 (Liquids)	01348	Pilot Operated Pressure Relief Valve	VIII Div. 1	Jun 26, 2019	404
M	H Series (HCl, HSJ, HCA, HA, HB, HC, HCB, HCP, HJO, HN,	15006	Safety Valve	I	May 31, 2019	406
M	HE	15039	Safety Valve	I	Apr 4, 2019	407
M	JLT (Liquids)	15095	Safety Relief Valve	VIII Div. 1	Nov 15, 2023	408
M	JOS-E/JBS-E/JOS-H-E 8400 AC/AB	15208	Safety Relief Valve	VIII Div. 1	Feb 13, 2023	409
M	900 Series, 7700, SNC	15411	Safety Relief Valve	VIII Div. 1	Feb 13, 2023	411
M	800	15466	Safety Relief Valve	VIII Div. 1	Jan 8, 2021	412
M	900 Series (Liquid), 7700, SNC	15499	Relief Valve	VIII Div. 1	Mar 9, 2023	412
M	H Series (Restricted Lift version of Cert # 15006)	15567	Safety Valve	I	May 31, 2019	415

Pentair Valves and Controls Singapore Pte. Ltd. (TSG)

location: Singapore, SINGAPORE

Acceptable Abbrev.: PVCS

Devices designed by: Emerson Automation Solutions Final Control US LP (AGC)

<i>Cert Cat</i>	<i>Device Type</i>	<i>NB Cert #</i>	<i>Type Classification</i>	<i>Code Section</i>	<i>Expiration Date</i>	<i>Page...</i>
A	81, 81P, 83, 86	01089	Safety Relief Valve	VIII Div. 1	Apr 12, 2018	397
A	81P (Liquids)	01102	Relief Valve	VIII Div. 1	Apr 12, 2018	397
A	JLT (Liquids)	15095	Safety Relief Valve	VIII Div. 1	Apr 17, 2018	408
A	JOS-E/JBS-E/JOS-H-E 8400 AC/AB	15208	Safety Relief Valve	VIII Div. 1	Apr 11, 2018	409
A	900 Series, 7700, SNC	15411	Safety Relief Valve	VIII Div. 1	Apr 11, 2018	411
A	900 Series (Liquid), 7700, SNC	15499	Relief Valve	VIII Div. 1	Apr 12, 2018	412

Pioneer Industrial Corporation (PIC)

location: Calvert City, KY,

Acceptable Abbrev.: Pioneer Industrial Corporation Calvert City, KY

Devices designed by: Dresser, LLC (DRJ)

<i>Cert Cat</i>	<i>Device Type</i>	<i>NB Cert #</i>	<i>Type Classification</i>	<i>Code Section</i>	<i>Expiration Date</i>	<i>Page...</i>
A	1541, 1543, 1541-3, 1543-3	18032	Safety Valve	I & VIII Div. 1	Sep 26, 2022	180
A	1811, 1511	18122	Safety Valve	I & VIII Div. 1	Sep 26, 2022	182
A	1900, 1900-30, 1900-35	18201	Safety Relief Valve	VIII Div. 1	Sep 26, 2022	184
A	1900, 1900-30, 1900-35 (R.L.)	18223	Safety Relief Valve	VIII Div. 1	Oct 24, 2023	185
A	19000 Series	18706	Safety Relief Valve	VIII Div. 1	Sep 26, 2022	196
A	19000 Series, Liquid	18717	Relief Valve	VIII Div. 1	Sep 26, 2022	197
A	1900, 1900-30 1900-35 LA & DALA (Liquids)	18784	Relief Valve	VIII Div. 1	Sep 26, 2022	198

Pioneer Industrial Corporation (PII)

location: Kansas City, MO, UNITED STATES

Acceptable Abbrev.: PII

Devices designed by: Dresser, LLC (DRJ)

<i>Cert Cat</i>	<i>Device Type</i>	<i>NB Cert #</i>	<i>Type Classification</i>	<i>Code Section</i>	<i>Expiration Date</i>	<i>Page...</i>
A	1900, 1900-30, 1900-35	18201	Safety Relief Valve	VIII Div. 1	Jun 8, 2024	184
A	19000 Series	18706	Safety Relief Valve	VIII Div. 1	Jun 8, 2024	196
A	19000 Series, Liquid	18717	Relief Valve	VIII Div. 1	Feb 7, 2024	197
A	1900, 1900-30 1900-35 LA & DALA (Liquids)	18784	Relief Valve	VIII Div. 1	Jun 8, 2024	198

Pioneer Industrial Corporation (ZLT)**location: St. Louis, MO, UNITED STATES****Seal Identification: PIC**

Devices designed by: Dresser, LLC (DRJ)

<i>Cert Cat</i>	<i>Device Type</i>	<i>NB Cert #</i>	<i>Type Classification</i>	<i>Code Section</i>	<i>Expiration Date</i>	<i>Page...</i>
A	1541, 1543, 1541-3, 1543-3	18032	Safety Valve	I & VIII Div. 1	Feb 7, 2024	180
A	1700 & 2700	18100	Safety Valve	I & VIII Div. 1	Feb 7, 2024	181
A	1811, 1511	18122	Safety Valve	I & VIII Div. 1	Feb 7, 2024	182
A	1900D-2, 1900-30D-2	18144	Safety Relief Valve	VIII Div. 1	Feb 7, 2024	183
A	1900E-2, 1900-30E-2	18166	Safety Relief Valve	VIII Div. 1	Feb 7, 2024	183
A	1900, 1900-30, 1900-35	18201	Safety Relief Valve	VIII Div. 1	Feb 7, 2024	184
A	1900, 1900-30, 1900-35 (R.L.)	18223	Safety Relief Valve	VIII Div. 1	Feb 7, 2024	185
A	1982	18379	Safety Relief Valve	VIII Div. 1	Feb 11, 2020	188
A	1982 LS, 820000LS	18380	Relief Valve	VIII Div. 1	Mar 7, 2019	188
A	19000 Series	18706	Safety Relief Valve	VIII Div. 1	Jun 12, 2024	196
A	19000 Series, Liquid	18717	Relief Valve	VIII Div. 1	Jun 12, 2024	197
A	1900D-2, 1900-30D-2 LA & DALA (Liquids)	18751	Relief Valve	VIII Div. 1	Feb 7, 2024	197
A	1900E-2, 1900-30E-2 LA & DALA (Liquids)	18762	Relief Valve	VIII Div. 1	Jun 12, 2024	197
A	1900, 1900-30 1900-35 LA & DALA (Liquids)	18784	Relief Valve	VIII Div. 1	Jun 12, 2024	198
A	19110M & 19110H (Liquids)	19077	Relief Valve	VIII Div. 1	Feb 7, 2024	207

Portersville PRD LLC (PRK)**location: South Point, OH, UNITED STATES****Acceptable Abbrev.: PRD**

Devices designed by: Farris Engineering (TFO)

<i>Cert Cat</i>	<i>Device Type</i>	<i>NB Cert #</i>	<i>Type Classification</i>	<i>Code Section</i>	<i>Expiration Date</i>	<i>Page...</i>
A	2600 & 2600S	57057	Safety Relief Valve	VIII Div. 1	Dec 13, 2022	236
A	2600L (Liquids)	57068	Relief Valve	VIII Div. 1	Dec 13, 2022	237
A	2700, 2700S, 3700, 3700S	57237	Safety Relief Valve	VIII Div. 1	Dec 14, 2022	238
A	2700L, 3700L (Liquids)	57248	Relief Valve	VIII Div. 1	Dec 14, 2022	239

Portersville PRD LLC (PRT)**location: Blountville, TN,****Acceptable Abbrev.: TN**

Devices designed by: Farris Engineering (TFO)

<i>Cert Cat</i>	<i>Device Type</i>	<i>NB Cert #</i>	<i>Type Classification</i>	<i>Code Section</i>	<i>Expiration Date</i>	<i>Page...</i>
A	2600 & 2600S	57057	Safety Relief Valve	VIII Div. 1	Apr 15, 2022	236
A	2600L (Liquids)	57068	Relief Valve	VIII Div. 1	Apr 15, 2022	237
A	2700, 2700S, 3700, 3700S	57237	Safety Relief Valve	VIII Div. 1	Apr 15, 2022	238
A	2700L, 3700L (Liquids)	57248	Relief Valve	VIII Div. 1	Apr 15, 2022	239
A	2600L (Air & Steam)	57260	Safety Relief Valve	VIII Div. 1	Apr 15, 2022	240

Portersville PRD LLC (PRV)**location: Richmond, VA,****Acceptable Abbrev.: VA**

Devices designed by: Farris Engineering (TFO)

<i>Cert Cat</i>	<i>Device Type</i>	<i>NB Cert #</i>	<i>Type Classification</i>	<i>Code Section</i>	<i>Expiration Date</i>	<i>Page...</i>
A	2600 & 2600S	57057	Safety Relief Valve	VIII Div. 1	Jan 19, 2024	236
A	2600L (Liquids)	57068	Relief Valve	VIII Div. 1	Jan 19, 2024	237
A	2700, 2700S, 3700, 3700S	57237	Safety Relief Valve	VIII Div. 1	Jan 19, 2024	238
A	2700L, 3700L (Liquids)	57248	Relief Valve	VIII Div. 1	Jan 19, 2024	239

Portersville PRD LLC. (PTI)**location: Tallmadge, OH, UNITED STATES****Seal Identification: PRD Technologies, Inc.**Devices designed by: **Farris Engineering (TFO)**

<i>Cert Cat</i>	<i>Device Type</i>	<i>NB Cert #</i>	<i>Type Classification</i>	<i>Code Section</i>	<i>Expiration Date</i>	<i>Page...</i>
A	2600 & 2600S	57057	Safety Relief Valve	VIII Div. 1	Oct 21, 2023	236
A	2600L (Liquids)	57068	Relief Valve	VIII Div. 1	Aug 28, 2023	237
A	2700, 2700S, 3700, 3700S	57237	Safety Relief Valve	VIII Div. 1	Aug 23, 2023	238
A	2700L, 3700L (Liquids)	57248	Relief Valve	VIII Div. 1	Oct 20, 2023	239

Portersville PRD LLC. (PVE)**location: New Castle, PA, UNITED STATES****Acceptable Abbrev.: PV**Devices designed by: **Dresser, LLC (DRJ)**

<i>Cert Cat</i>	<i>Device Type</i>	<i>NB Cert #</i>	<i>Type Classification</i>	<i>Code Section</i>	<i>Expiration Date</i>	<i>Page...</i>
A	1541, 1543, 1541-3, 1543-3	18032	Safety Valve	I & VIII Div. 1	Apr 22, 2018	180
A	1811, 1511	18122	Safety Valve	I & VIII Div. 1	Apr 22, 2018	182
A	1900D-2, 1900-30D-2	18144	Safety Relief Valve	VIII Div. 1	Apr 22, 2018	183
A	1900E-2, 1900-30E-2	18166	Safety Relief Valve	VIII Div. 1	Apr 22, 2018	183
A	1900, 1900-30, 1900-35	18201	Safety Relief Valve	VIII Div. 1	Apr 22, 2018	184
A	1982 LS, 820000LS	18380	Relief Valve	VIII Div. 1	Apr 22, 2018	188
A	19000 Series	18706	Safety Relief Valve	VIII Div. 1	Apr 8, 2018	196
A	1900D-2, 1900-30D-2 LA & DALA (Liquids)	18751	Relief Valve	VIII Div. 1	Apr 23, 2018	197
A	1900E-2, 1900-30E-2 LA & DALA (Liquids)	18762	Relief Valve	VIII Div. 1	Apr 18, 2018	197
A	1900, 1900-30 1900-35 LA & DALA (Liquids)	18784	Relief Valve	VIII Div. 1	Apr 9, 2018	198
A	19110M & 19110H (Liquids)	19077	Relief Valve	VIII Div. 1	Mar 28, 2018	207

Devices designed by: **Farris Engineering (TFO)**

<i>Cert Cat</i>	<i>Device Type</i>	<i>NB Cert #</i>	<i>Type Classification</i>	<i>Code Section</i>	<i>Expiration Date</i>	<i>Page...</i>
A	3800	57024	Pilot Operated Pressure Relief Valve	VIII Div. 1	Feb 7, 2020	233
A	3800FP	57035	Pilot Operated Pressure Relief Valve	VIII Div. 1	Feb 10, 2020	234
A	6400/6600 (previously 2500 & 4600)	57046	Safety Valve	I & VIII Div. 1	Jul 10, 2021	235
A	2600 & 2600S	57057	Safety Relief Valve	VIII Div. 1	Jul 10, 2021	236
A	2600L (Liquids)	57068	Relief Valve	VIII Div. 1	Oct 4, 2019	237
A	3800L, PCL, PCM pilots	57215	Pilot Operated Pressure Relief Valve	VIII Div. 1	Oct 4, 2019	238
A	2700, 2700S, 3700, 3700S	57237	Safety Relief Valve	VIII Div. 1	Jul 10, 2021	238
A	2700L, 3700L (Liquids)	57248	Relief Valve	VIII Div. 1	Oct 4, 2019	239
A	2600L (Air & Steam)	57260	Safety Relief Valve	VIII Div. 1	Feb 7, 2020	240
A	4200 / 4400	57282	Safety Valve	I & VIII Div. 1	Jul 10, 2021	241

Precision Fitting and Gauge Company (PFG)

location: Tulsa, OK, UNITED STATES

Acceptable Abbrev.: PFG OK

Devices designed by: Dresser, LLC (DRJ)

<i>Cert Cat</i>	<i>Device Type</i>	<i>NB Cert #</i>	<i>Type Classification</i>	<i>Code Section</i>	<i>Expiration Date</i>	<i>Page...</i>
A	1541, 1543, 1541-3, 1543-3	18032	Safety Valve	VIII Div. 1	Jun 5, 2018	180
A	1700 & 2700	18100	Safety Valve	I	Nov 15, 2018	181
A	1700 & 2700 (Restricted Lift version of Cert. # 18100)	18111	Safety Valve	I	Nov 15, 2018	182
A	1811, 1511	18122	Safety Valve	I & VIII Div. 1	Apr 22, 2021	182
A	1900D-2, 1900-30D-2	18144	Safety Relief Valve	VIII Div. 1	Apr 22, 2021	183
A	1900E-2, 1900-30E-2	18166	Safety Relief Valve	VIII Div. 1	Apr 22, 2021	183
A	1900, 1900-30, 1900-35	18201	Safety Relief Valve	VIII Div. 1	Apr 22, 2021	184
A	1900, 1900-30, 1900-35 (R.L.)	18223	Safety Relief Valve	VIII Div. 1	Apr 21, 2023	185
A	3900 (39PV, 39MV pilots)	18447	Pilot Operated Pressure Relief Valve	VIII Div. 1	Jul 26, 2023	192
A	3900 (39PV, 39MV pilots, liquid)	18458	Pilot Operated Pressure Relief Valve	VIII Div. 1	Jul 26, 2023	194
A	19000 Series	18706	Safety Relief Valve	VIII Div. 1	Apr 27, 2021	196
A	19000 Series, Liquid	18717	Relief Valve	VIII Div. 1	Apr 27, 2021	197
A	1900D-2, 1900-30D-2 LA & DALA (Liquids)	18751	Relief Valve	VIII Div. 1	Nov 15, 2018	197
A	1900E-2, 1900-30E-2 LA & DALA (Liquids)	18762	Relief Valve	VIII Div. 1	Nov 8, 2023	197
A	1900, 1900-30 1900-35 LA & DALA (Liquids)	18784	Relief Valve	VIII Div. 1	Apr 21, 2023	198

Precision Pump & Valve Service, Incorporated (PPV)

location: Cross Lanes, WV, UNITED STATES

Devices designed by: Dresser, LLC (DRJ)

<i>Cert Cat</i>	<i>Device Type</i>	<i>NB Cert #</i>	<i>Type Classification</i>	<i>Code Section</i>	<i>Expiration Date</i>	<i>Page...</i>
A	1541, 1543, 1541-3, 1543-3	18032	Safety Valve	I & VIII Div. 1	Apr 14, 2022	180
A	1811, 1511	18122	Safety Valve	I & VIII Div. 1	May 25, 2024	182
A	1900D-2, 1900-30D-2	18144	Safety Relief Valve	VIII Div. 1	Apr 14, 2022	183
A	1900E-2, 1900-30E-2	18166	Safety Relief Valve	VIII Div. 1	May 25, 2024	183
A	1900, 1900-30, 1900-35	18201	Safety Relief Valve	VIII Div. 1	Apr 14, 2022	184
A	1982	18379	Safety Relief Valve	VIII Div. 1	May 25, 2024	188
A	1982 LS, 820000LS	18380	Relief Valve	VIII Div. 1	Apr 14, 2022	188
A	19000 Series	18706	Safety Relief Valve	VIII Div. 1	Apr 17, 2019	196
A	19000 Series, Liquid	18717	Relief Valve	VIII Div. 1	Aug 8, 2019	197
A	1900D-2, 1900-30D-2 LA & DALA (Liquids)	18751	Relief Valve	VIII Div. 1	May 25, 2024	197
A	1900E-2, 1900-30E-2 LA & DALA (Liquids)	18762	Relief Valve	VIII Div. 1	Apr 14, 2022	197
A	1900, 1900-30 1900-35 LA & DALA (Liquids)	18784	Relief Valve	VIII Div. 1	Apr 17, 2019	198
A	19110M & 19110H (Liquids)	19077	Relief Valve	VIII Div. 1	Mar 5, 2024	207

Precision Services, Inc. (PUM)**location: Louisville, KY, UNITED STATES**Devices designed by: **Dresser, LLC (DRJ)**

<i>Cert Cat</i>	<i>Device Type</i>	<i>NB Cert #</i>	<i>Type Classification</i>	<i>Code Section</i>	<i>Expiration Date</i>	<i>Page...</i>
A	1700 & 2700	18100	Safety Valve	I & VIII Div. 1	Sep 19, 2023	181
A	1811, 1511	18122	Safety Valve	I & VIII Div. 1	Sep 20, 2023	182
A	1900D-2, 1900-30D-2	18144	Safety Relief Valve	VIII Div. 1	Sep 20, 2023	183
A	1900E-2, 1900-30E-2	18166	Safety Relief Valve	VIII Div. 1	Dec 20, 2023	183
A	1900, 1900-30, 1900-35	18201	Safety Relief Valve	VIII Div. 1	Sep 19, 2023	184
A	1900, 1900-30, 1900-35 (R.L.)	18223	Safety Relief Valve	VIII Div. 1	Jun 29, 2023	185
A	1982	18379	Safety Relief Valve	VIII Div. 1	Sep 19, 2023	188
A	1982 LS, 820000LS	18380	Relief Valve	VIII Div. 1	Sep 18, 2023	188
A	3900 (39PV, 39MV pilots)	18447	Pilot Operated Pressure Relief Valve	VIII Div. 1	Sep 20, 2023	192
A	3900 (39PV, 39MV pilots, liquid)	18458	Pilot Operated Pressure Relief Valve	VIII Div. 1	Dec 16, 2023	194
A	19000 Series	18706	Safety Relief Valve	VIII Div. 1	Sep 19, 2023	196
A	19000 Series, Liquid	18717	Relief Valve	VIII Div. 1	Sep 18, 2023	197
A	1900D-2, 1900-30D-2 LA & DALA (Liquids)	18751	Relief Valve	VIII Div. 1	Sep 18, 2023	197
A	1900E-2, 1900-30E-2 LA & DALA (Liquids)	18762	Relief Valve	VIII Div. 1	Sep 18, 2023	197
A	1900, 1900-30 1900-35 LA & DALA (Liquids)	18784	Relief Valve	VIII Div. 1	Sep 18, 2023	198
A	19110M & 19110H (Liquids)	19077	Relief Valve	VIII Div. 1	Dec 16, 2023	207

Puffer Sweiven, LP (PPC)**location: Corpus Christi, TX, UNITED STATES****Acceptable Abbrev.: Puffer CC**Devices designed by: **Emerson Automation Solutions Final Control US LP (AGC)**

<i>Cert Cat</i>	<i>Device Type</i>	<i>NB Cert #</i>	<i>Type Classification</i>	<i>Code Section</i>	<i>Expiration Date</i>	<i>Page...</i>
A	JLT (Liquids)	15095	Safety Relief Valve	VIII Div. 1	Jul 12, 2023	408
A	JOS-E/JBS-E/JOS-H-E 8400 AC/AB	15208	Safety Relief Valve	VIII Div. 1	Jul 11, 2023	409
A	900 Series, 7700, SNC	15411	Safety Relief Valve	VIII Div. 1	Jul 11, 2023	411
A	900 Series (Liquid), 7700, SNC	15499	Relief Valve	VIII Div. 1	Jul 11, 2023	412

Devices designed by: **Farris Engineering (TFO)**

<i>Cert Cat</i>	<i>Device Type</i>	<i>NB Cert #</i>	<i>Type Classification</i>	<i>Code Section</i>	<i>Expiration Date</i>	<i>Page...</i>
A	2600 & 2600S	57057	Safety Relief Valve	VIII Div. 1	Sep 9, 2022	236
A	2600L (Liquids)	57068	Relief Valve	VIII Div. 1	Sep 9, 2022	237
A	2700, 2700S, 3700, 3700S	57237	Safety Relief Valve	VIII Div. 1	Sep 9, 2022	238
A	2700L, 3700L (Liquids)	57248	Relief Valve	VIII Div. 1	Sep 9, 2022	239

Puffer Sweiven, LP (PPH)location: **Houston, TX,**Acceptable Abbrev.: **PS-H**Devices designed by: **Emerson Automation Solutions Final Control US LP (AGC)**

<i>Cert Cat</i>	<i>Device Type</i>	<i>NB Cert #</i>	<i>Type Classification</i>	<i>Code Section</i>	<i>Expiration Date</i>	<i>Page...</i>
A	81, 81P, 83, 86	01089	Safety Relief Valve	VIII Div. 1	Jul 11, 2023	397
A	81P (Liquids)	01102	Relief Valve	VIII Div. 1	Jul 11, 2023	397
A	243/249/443/449/546/843/849/943/5046/5049/8043/8049	01292	Pilot Operated Pressure Relief Valve	VIII Div. 1	Jul 11, 2023	402
A	253/259/453/459/853/859/953/959/5059/8053/8059	01304	Pilot Operated Pressure Relief Valve	VIII Div. 1	Jul 11, 2023	402
A	263/269/463/469/566/863/869/963/969/5066/5069	01315	Pilot Operated Pressure Relief Valve	VIII Div. 1	Jul 11, 2023	403
A	453/459/853/859/953/959/5059 (Liquids)	01326	Pilot Operated Pressure Relief Valve	VIII Div. 1	Jul 11, 2023	403
A	443/449/546/843/849/943/949/5046/5049(Liquids)	01337	Pilot Operated Pressure Relief Valve	VIII Div. 1	Jul 18, 2023	404
A	463/469/566/863/869/963/969/5066/5069 (Liquids)	01348	Pilot Operated Pressure Relief Valve	VIII Div. 1	Jun 14, 2023	404
A	H Series (HCI, HSJ, HCA, HA, HB, HC, HCB, HCP, HJO, HN,	15006	Safety Valve	I & VIII Div. 1	Mar 15, 2024	406
A	JLT (Liquids)	15095	Safety Relief Valve	VIII Div. 1	Jul 11, 2023	408
A	JOS-E/JBS-E/JOS-H-E 8400 AC/AB	15208	Safety Relief Valve	VIII Div. 1	Jul 18, 2023	409
A	900 Series, 7700, SNC	15411	Safety Relief Valve	VIII Div. 1	Jul 11, 2023	411
A	900 Series (Liquid), 7700, SNC	15499	Relief Valve	VIII Div. 1	Jul 12, 2023	412
A	JLT/JOS, JLT/JBS, 8500, ACL/ABL	15512	Safety Relief Valve	VIII Div. 1	Jul 11, 2023	413

Devices designed by: **Farris Engineering (TFO)**

<i>Cert Cat</i>	<i>Device Type</i>	<i>NB Cert #</i>	<i>Type Classification</i>	<i>Code Section</i>	<i>Expiration Date</i>	<i>Page...</i>
A	1890, 1892, 1895, 1896	57013	Safety Relief Valve	VIII Div. 1	Feb 2, 2022	232
A	3800	57024	Pilot Operated Pressure Relief Valve	VIII Div. 1	Feb 2, 2022	233
A	3800FP	57035	Pilot Operated Pressure Relief Valve	VIII Div. 1	Jun 13, 2022	234
A	2600 & 2600S	57057	Safety Relief Valve	VIII Div. 1	Feb 2, 2022	236
A	2600L (Liquids)	57068	Relief Valve	VIII Div. 1	Feb 2, 2022	237
A	1890L, 1892L, 1895L, 1896L (Liquids)	57192	Relief Valve	VIII Div. 1	Feb 2, 2022	237
A	3800L, PCL, PCM pilots	57215	Pilot Operated Pressure Relief Valve	VIII Div. 1	Feb 2, 2022	238
A	2700, 2700S, 3700, 3700S	57237	Safety Relief Valve	VIII Div. 1	Feb 2, 2022	238
A	2700L, 3700L (Liquids)	57248	Relief Valve	VIII Div. 1	Feb 2, 2022	239
A	2600L (Air & Steam)	57260	Safety Relief Valve	VIII Div. 1	Feb 2, 2022	240
A	4200 / 4400	57282	Safety Valve	I	Jun 13, 2022	241

R. Conrader Company (RCC)location: **Erie, PA, UNITED STATES**Acceptable Abbrev.: **R. Conrader**Devices designed by: **R. Conrader Company (RCC)**

<i>Cert Cat</i>	<i>Device Type</i>	<i>NB Cert #</i>	<i>Type Classification</i>	<i>Code Section</i>	<i>Expiration Date</i>	<i>Page...</i>
M	SRV 187	13509	Safety Relief Valve	VIII Div. 1	Jun 13, 2019	419
M	SRV 250	13510	Safety Relief Valve	VIII Div. 1	May 31, 2019	419
M	SRV 390	13521	Safety Relief Valve	VIII Div. 1	May 31, 2019	419
M	SRV 530	13532	Safety Relief Valve	VIII Div. 1	May 31, 2019	420
M	SRV 765	13543	Safety Relief Valve	VIII Div. 1	Feb 10, 2020	420
M	SRH 580	13576	Safety Relief Valve	VIII Div. 1	May 23, 2021	420
M	SRH 250	13598	Safety Relief Valve	VIII Div. 1	May 23, 2021	420
M	SRH 375	13600	Safety Relief Valve	VIII Div. 1	May 23, 2021	421
M	SRS250	13611	Safety Relief Valve	VIII Div. 1	Apr 20, 2023	

REMBE® GmbH Safety + Control (REM)location: **Brilon, GERMANY**Acceptable Abbrev.: **REMBE**

Safety Division

Devices designed by: **REMBE® GmbH Safety + Control (REM)**

<i>Cert Cat</i>	<i>Device Type</i>	<i>NB Cert #</i>	<i>Type Classification</i>	<i>Code Section</i>	<i>Expiration Date</i>	<i>Page...</i>
M	KUB	84002	Rupture Disk Device	VIII Div. 1	Dec 8, 2022	425
M	ODV	84013	Rupture Disk Device	VIII Div. 1	Jun 1, 2023	426
M	IKB	84024	Rupture Disk Device	VIII Div. 1	Jul 5, 2023	427
M	IG-UKB-LS-1	84035	Rupture Disk Device	VIII Div. 1	Aug 13, 2019	427
M	KUB (Liquid)	84057	Rupture Disk Device	VIII Div. 1	Mar 26, 2021	428
M	STAR-HL (HP)	84068	Rupture Disk Device	VIII Div. 1	Mar 17, 2023	

Renew Valve and Machine Company, Inc. (REN)location: **Carleton, MI, UNITED STATES**Acceptable Abbrev.: **Renew Valve**Devices designed by: **Dresser, LLC (DRJ)**

<i>Cert Cat</i>	<i>Device Type</i>	<i>NB Cert #</i>	<i>Type Classification</i>	<i>Code Section</i>	<i>Expiration Date</i>	<i>Page...</i>
A	1541, 1543, 1541-3, 1543-3	18032	Safety Valve	I & VIII Div. 1	Jul 27, 2020	180
A	1811, 1511	18122	Safety Valve	I & VIII Div. 1	Sep 15, 2023	182
A	1900D-2, 1900-30D-2	18144	Safety Relief Valve	VIII Div. 1	Sep 15, 2023	183
A	1900E-2, 1900-30E-2	18166	Safety Relief Valve	VIII Div. 1	Sep 15, 2023	183
A	1900, 1900-30, 1900-35	18201	Safety Relief Valve	VIII Div. 1	Jul 27, 2020	184
A	19000 Series	18706	Safety Relief Valve	VIII Div. 1	May 14, 2019	196
A	19000 Series, Liquid	18717	Relief Valve	VIII Div. 1	Jul 27, 2020	197
A	1900D-2, 1900-30D-2 LA & DALA (Liquids)	18751	Relief Valve	VIII Div. 1	Sep 15, 2023	197
A	1900E-2, 1900-30E-2 LA & DALA (Liquids)	18762	Relief Valve	VIII Div. 1	May 14, 2019	197
A	1900, 1900-30 1900-35 LA & DALA (Liquids)	18784	Relief Valve	VIII Div. 1	Oct 5, 2023	198
A	19110M & 19110H (Liquids)	19077	Relief Valve	VIII Div. 1	Nov 18, 2023	207

Richter Chemie-Technik GmbH (IRC)location: **Kempfen, GERMANY**Acceptable Abbrev.: **Richter**Devices designed by: **Richter Chemie-Technik GmbH (IRC)**

<i>Cert Cat</i>	<i>Device Type</i>	<i>NB Cert #</i>	<i>Type Classification</i>	<i>Code Section</i>	<i>Expiration Date</i>	<i>Page...</i>
M	KSEA Series (restricted lift liquid)	14500	Safety Relief Valve	VIII Div. 1	Nov 17, 2020	429
M	KSEA Series (liquid)	14511	Safety Relief Valve	VIII Div. 1	Nov 17, 2020	429
M	KSEA Series (restricted lift)	14522	Safety Relief Valve	VIII Div. 1	Nov 17, 2020	429
M	KSEA Series	14533	Safety Relief Valve	VIII Div. 1	Nov 17, 2020	430
M	KSEA Series (1" Liq.)	14544	Safety Relief Valve	VIII Div. 1	Nov 16, 2020	430
M	KSEA Series (1" Liq. RL)	14555	Safety Relief Valve	VIII Div. 1	Nov 16, 2020	430

Rupture Pin Technology Inc. (RPT)location: **Oklahoma City, OK, UNITED STATES**Acceptable Abbrev.: **RPT**Devices designed by: **Rupture Pin Technology Inc. (RPT)**

<i>Cert Cat</i>	<i>Device Type</i>	<i>NB Cert #</i>	<i>Type Classification</i>	<i>Code Section</i>	<i>Expiration Date</i>	<i>Page...</i>
M	Model C- Rupture Pin Relief Valve	56630	Buckling Pin Non-reclosing Device	VIII Div. 1	Nov 14, 2018	431
M	Model C- Rupture Pin Relief Valve (Liquid)	56641	Buckling Pin Non-reclosing Device	VIII Div. 1	Nov 14, 2018	431

S & S Valve Service, Inc. (SSV)**location: Metuchen, NJ, UNITED STATES**Devices designed by: **Circor Energy Products (HDS)**

<i>Cert Cat</i>	<i>Device Type</i>	<i>NB Cert #</i>	<i>Type Classification</i>	<i>Code Section</i>	<i>Expiration Date</i>	<i>Page...</i>
A	Series 1500, 1400	30126	Safety Relief Valve	VIII Div. 1	Jun 25, 2018	113
A	Series 1500 , 1400 (Liquids)	30137	Relief Valve	VIII Div. 1	Jun 25, 2018	114

Devices designed by: **Conbraco Industries, Incorporated (CNB)**

<i>Cert Cat</i>	<i>Device Type</i>	<i>NB Cert #</i>	<i>Type Classification</i>	<i>Code Section</i>	<i>Expiration Date</i>	<i>Page...</i>
A	19 Series	11282	Safety Valve	I & VIII Div. 1	Apr 4, 2019	124
A	119 Series	11361	Safety Valve	I & VIII Div. 1	Jul 9, 2019	126
A	500 Series	11462	Safety Valve	VIII Div. 1	Jul 1, 2019	128
A	500 Series (Liquids)	11473	Safety Relief Valve	VIII Div. 1	Apr 4, 2019	128

S V C Inc. (SVK)**location: Gimpo-si, Gyeonggi-Do, SOUTH KOREA****Acceptable Abbrev.: SVC**Devices designed by: **S V C Inc. (SVK)**

<i>Cert Cat</i>	<i>Device Type</i>	<i>NB Cert #</i>	<i>Type Classification</i>	<i>Code Section</i>	<i>Expiration Date</i>	<i>Page...</i>
M	SSR-S8000, SSR-S8000-B	94159	Safety Relief Valve	VIII Div. 1	Mar 31, 2023	432
M	SSRW-S8000, SSRW-S8000-B	94160	Relief Valve	VIII Div. 1	Mar 31, 2023	433
M	SSR-S1000	94216	Safety Valve	I	Mar 13, 2019	433
M	SSR-S1100	94227	Safety Valve	I	Mar 31, 2023	434
M	SSR-S8100, SSR-S8100-B	94238	Safety Relief Valve	VIII Div. 1	Mar 31, 2023	435
M	SSRW-S8100, SSRW-S8100-B	94249	Relief Valve	VIII Div. 1	Mar 31, 2023	436
M	SVR-20(SVR-01)	94250	Vacuum Relief Valve	III	Mar 20, 2019	436
M	SVR-30(SVR-02)	94261	Vacuum Relief Valve	III	Mar 19, 2019	437
M	SVR-30(SVR-03)	94272	Vacuum Relief Valve	III	Mar 19, 2019	437
M	SVR-30(SVR-04)	94283	Vacuum Relief Valve	III	Mar 19, 2019	437
M	SVR-30(SVR-05)	94294	Vacuum Relief Valve	III	Mar 19, 2019	437
M	SVR-30 (SVR-06)	94306	Vacuum Relief Valve	III NC	Mar 13, 2021	438

Schlumberger Canada Limited, Cameron - Valves and Measurement (SCL)**location: Sarnia,****Acceptable Abbrev.: Cameron- Valves and Measurement**Devices designed by: **Farris Engineering (TFO)**

<i>Cert Cat</i>	<i>Device Type</i>	<i>NB Cert #</i>	<i>Type Classification</i>	<i>Code Section</i>	<i>Expiration Date</i>	<i>Page...</i>
A	2600 & 2600S	57057	Safety Relief Valve	VIII Div. 1	Aug 11, 2023	236
A	2600L (Liquids)	57068	Relief Valve	VIII Div. 1	Aug 11, 2023	237
A	2700, 2700S, 3700, 3700S	57237	Safety Relief Valve	VIII Div. 1	Aug 10, 2023	238
A	2700L, 3700L (Liquids)	57248	Relief Valve	VIII Div. 1	Aug 11, 2023	239
A	2600 & 2600S	57057	Safety Relief Valve	VIII Div. 1	Aug 11, 2023	236
A	2600L (Liquids)	57068	Relief Valve	VIII Div. 1	Aug 11, 2023	237
A	2700, 2700S, 3700, 3700S	57237	Safety Relief Valve	VIII Div. 1	Aug 10, 2023	238
A	2700L, 3700L (Liquids)	57248	Relief Valve	VIII Div. 1	Aug 11, 2023	239

Seetru Ltd (SEE)**location: Bristol, UNITED KINGDOM**

Devices designed by: Seetru Ltd (SEE)

<i>Cert Cat</i>	<i>Device Type</i>	<i>NB Cert #</i>	<i>Type Classification</i>	<i>Code Section</i>	<i>Expiration Date</i>	<i>Page...</i>
M	81106,81706,84106,84706,81108,81708,81188,81788,84188,	06501	Safety Relief Valve	VIII Div. 1	Apr 11, 2023	439
M	63110, 64110, 65110, 63710, 64710, 65710	06523	Safety Relief Valve	VIII Div. 1	Apr 13, 2023	439
M	63113, 64113, 65113, 63713, 64713, 65713	06545	Safety Relief Valve	VIII Div. 1	Apr 13, 2023	439
M	63118, 64118, 65118, 65718	06556	Safety Relief Valve	VIII Div. 1	Apr 10, 2023	440
M	63120, 64120, 65120, 63720, 64720, 65720	06567	Safety Relief Valve	VIII Div. 1	Apr 10, 2023	440
M	63125, 64125, 65125, 63725, 64725, 65725	06578	Safety Relief Valve	VIII Div. 1	Apr 10, 2023	440
M	319 (In Line Type)	06590	Safety Relief Valve	VIII Div. 1	Apr 11, 2023	441
M	81113, 84113, 81713, 84713	06602	Safety Relief Valve	VIII Div. 1	Apr 11, 2023	441
M	81110, 84110, 81710, 84710	06613	Safety Relief Valve	VIII Div. 1	Apr 11, 2023	441
M	61118, 61718, 62118, 62718	06646	Safety Relief Valve	VIII Div. 1	Feb 15, 2023	442
M	61120, 61720, 62120, 62720	06657	Safety Relief Valve	VIII Div. 1	Feb 16, 2023	442
M	10125, 10725	06679	Safety Relief Valve	VIII Div. 1	Jul 7, 2023	442
M	81115, 81715, 84115, 84715	06680	Safety Valve	VIII Div. 1	Feb 16, 2023	443
M	359	06691	Safety Relief Valve	VIII Div. 1	Feb 14, 2023	443
M	319000488	06703	Safety Valve	VIII Div. 1	Mar 29, 2018	443
M	32931	06714	Safety Valve	VIII Div. 1	Feb 14, 2023	443

Sempell GmbH (SML)**location: Korschenbroich, GERMANY****Acceptable Abbrev.: Sempell**

Devices designed by: Sempell GmbH (SML)

<i>Cert Cat</i>	<i>Device Type</i>	<i>NB Cert #</i>	<i>Type Classification</i>	<i>Code Section</i>	<i>Expiration Date</i>	<i>Page...</i>
M	SO, SC & SB	64000	Safety Relief Valve	VIII Div. 1	Jul 16, 2018	444
M	SC & SB (Liquids)	64011	Relief Valve	VIII Div. 1	Apr 15, 2019	445
M	SM (14 MM)	64022	Safety Relief Valve	VIII Div. 1	Aug 30, 2018	445
M	SM (14 MM) (Liquids)	64033	Relief Valve	VIII Div. 1	Aug 30, 2018	446
M	VS99	64066	Pilot Operated Pressure Relief Valve	III NB	Sep 30, 2023	446
M	SEP	64077	Power Actuated Relief Valve	I	Apr 15, 2019	447

SETPOINT Integrated Solutions Inc. (ALM)**location: Mobile, AL, UNITED STATES****Acceptable Abbrev.: SETPOINT Integrated Solutions**

Devices designed by: Dresser, LLC (DRJ)

<i>Cert Cat</i>	<i>Device Type</i>	<i>NB Cert #</i>	<i>Type Classification</i>	<i>Code Section</i>	<i>Expiration Date</i>	<i>Page...</i>
A	1700 & 2700	18100	Safety Valve	I & VIII Div. 1	Dec 16, 2022	181
A	1700 & 2700 (Restricted Lift version of Cert. # 18100)	18111	Safety Valve	I & VIII Div. 1	Oct 20, 2022	182
A	1811, 1511	18122	Safety Valve	I & VIII Div. 1	Feb 9, 2021	182
A	1900D-2, 1900-30D-2	18144	Safety Relief Valve	VIII Div. 1	Feb 8, 2021	183
A	1900E-2, 1900-30E-2	18166	Safety Relief Valve	VIII Div. 1	Feb 8, 2021	183
A	1900, 1900-30, 1900-35	18201	Safety Relief Valve	VIII Div. 1	Feb 9, 2021	184
A	3900 (39PV, 39MV pilots)	18447	Pilot Operated Pressure Relief Valve	VIII Div. 1	Feb 9, 2021	192
A	3900 (39PV, 39MV pilots, liquid)	18458	Pilot Operated Pressure Relief Valve	VIII Div. 1	Feb 9, 2021	194
A	19000 Series	18706	Safety Relief Valve	VIII Div. 1	Feb 9, 2021	196
A	19000 Series, Liquid	18717	Relief Valve	VIII Div. 1	Feb 9, 2021	197
A	1900D-2, 1900-30D-2 LA & DALA (Liquids)	18751	Relief Valve	VIII Div. 1	Mar 22, 2021	197
A	1900, 1900-30 1900-35 LA & DALA (Liquids)	18784	Relief Valve	VIII Div. 1	Feb 8, 2021	198

SETPOINT Integrated Solutions Inc. (CCM)location: **Monroe, LA, UNITED STATES**Acceptable Abbrev.: **SETPOINT Integrated Solutions (CCM)**Devices designed by: **Dresser, LLC (DRJ)**

<i>Cert Cat</i>	<i>Device Type</i>	<i>NB Cert #</i>	<i>Type Classification</i>	<i>Code Section</i>	<i>Expiration Date</i>	<i>Page...</i>
A	1541, 1543, 1541-3, 1543-3	18032	Safety Valve	I & VIII Div. 1	Apr 9, 2024	180
A	1700 & 2700	18100	Safety Valve	I & VIII Div. 1	Feb 8, 2021	181
A	1811, 1511	18122	Safety Valve	I & VIII Div. 1	Apr 9, 2024	182
A	1900D-2, 1900-30D-2	18144	Safety Relief Valve	VIII Div. 1	Apr 9, 2018	183
A	1900E-2, 1900-30E-2	18166	Safety Relief Valve	VIII Div. 1	Apr 9, 2024	183
A	1900, 1900-30, 1900-35	18201	Safety Relief Valve	VIII Div. 1	May 6, 2024	184
A	1982	18379	Safety Relief Valve	VIII Div. 1	Apr 9, 2024	188
A	3900 (39PV, 39MV pilots)	18447	Pilot Operated Pressure Relief Valve	VIII Div. 1	Mar 18, 2021	192
A	19000 Series, Liquid	18717	Relief Valve	VIII Div. 1	Jun 11, 2019	197
A	1900D-2, 1900-30D-2 LA & DALA (Liquids)	18751	Relief Valve	VIII Div. 1	Apr 10, 2024	197
A	1900E-2, 1900-30E-2 LA & DALA (Liquids)	18762	Relief Valve	VIII Div. 1	Apr 10, 2024	197
A	1900, 1900-30 1900-35 LA & DALA (Liquids)	18784	Relief Valve	VIII Div. 1	Mar 14, 2024	198

SETPOINT Integrated Solutions Inc. (CCS)location: **Luling, LA, UNITED STATES**Seal Identification: **CCS**Devices designed by: **Dresser, LLC (DRJ)**

<i>Cert Cat</i>	<i>Device Type</i>	<i>NB Cert #</i>	<i>Type Classification</i>	<i>Code Section</i>	<i>Expiration Date</i>	<i>Page...</i>
A	1541, 1543, 1541-3, 1543-3	18032	Safety Valve	I & VIII Div. 1	Dec 13, 2022	180
A	1700 & 2700	18100	Safety Valve	I & VIII Div. 1	Mar 23, 2023	181
A	1700 & 2700 (Restricted Lift version of Cert. # 18100)	18111	Safety Valve	I & VIII Div. 1	May 20, 2022	182
A	1811, 1511	18122	Safety Valve	I & VIII Div. 1	Sep 7, 2021	182
A	1900D-2, 1900-30D-2	18144	Safety Relief Valve	VIII Div. 1	Dec 15, 2019	183
A	1900E-2, 1900-30E-2	18166	Safety Relief Valve	VIII Div. 1	Dec 15, 2019	183
A	1900, 1900-30, 1900-35	18201	Safety Relief Valve	VIII Div. 1	Dec 15, 2019	184
A	1900, 1900-30, 1900-35 (R.L.)	18223	Safety Relief Valve	VIII Div. 1	Nov 5, 2018	185
A	1982	18379	Safety Relief Valve	VIII Div. 1	Sep 23, 2022	188
A	1982 LS, 820000LS	18380	Relief Valve	VIII Div. 1	Oct 3, 2019	188
A	3900 (39PV, 39MV pilots)	18447	Pilot Operated Pressure Relief Valve	VIII Div. 1	Oct 13, 2020	192
A	3900 (39PV, 39MV pilots, liquid)	18458	Pilot Operated Pressure Relief Valve	VIII Div. 1	Nov 5, 2018	194
A	19000 Series	18706	Safety Relief Valve	VIII Div. 1	Mar 23, 2023	196
A	19000 Series, Liquid	18717	Relief Valve	VIII Div. 1	Oct 3, 2018	197
A	1900D-2, 1900-30D-2 LA & DALA (Liquids)	18751	Relief Valve	VIII Div. 1	Sep 7, 2021	197
A	1900E-2, 1900-30E-2 LA & DALA (Liquids)	18762	Relief Valve	VIII Div. 1	Oct 20, 2022	197
A	1900, 1900-30 1900-35 LA & DALA (Liquids)	18784	Relief Valve	VIII Div. 1	Sep 8, 2021	198
A	2900 (39PV & 39MV pilots)	18863	Pilot Operated Pressure Relief Valve	VIII Div. 1	Nov 14, 2023	200
A	2900 (39PV & 39MV pilots - Liquid)	18874	Pilot Operated Pressure Relief Valve	VIII Div. 1	Nov 14, 2023	201

SETPOINT Integrated Solutions Inc. (CPA)**location: Port Arthur, TX, UNITED STATES****Seal Identification: CPA**

Devices designed by: Dresser, LLC (DRJ)

<i>Cert Cat</i>	<i>Device Type</i>	<i>NB Cert #</i>	<i>Type Classification</i>	<i>Code Section</i>	<i>Expiration Date</i>	<i>Page...</i>
A	1541, 1543, 1541-3, 1543-3	18032	Safety Valve	I & VIII Div. 1	Jul 20, 2023	180
A	1700 & 2700	18100	Safety Valve	I & VIII Div. 1	Jul 19, 2023	181
A	1700 & 2700 (Restricted Lift version of Cert. # 18100)	18111	Safety Valve	I & VIII Div. 1	Jul 27, 2023	182
A	1811, 1511	18122	Safety Valve	I & VIII Div. 1	Jul 19, 2023	182
A	1900D-2, 1900-30D-2	18144	Safety Relief Valve	VIII Div. 1	Jul 19, 2023	183
A	1900E-2, 1900-30E-2	18166	Safety Relief Valve	VIII Div. 1	Jul 20, 2023	183
A	1900, 1900-30, 1900-35	18201	Safety Relief Valve	VIII Div. 1	Jul 18, 2023	184
A	1900, 1900-30, 1900-35 (R.L.)	18223	Safety Relief Valve	VIII Div. 1	Jul 21, 2021	185
A	3900 (39PV, 39MV pilots)	18447	Pilot Operated Pressure Relief Valve	VIII Div. 1	Jul 18, 2023	192
A	19000 Series	18706	Safety Relief Valve	VIII Div. 1	Jul 22, 2023	196
A	19000 Series, Liquid	18717	Relief Valve	VIII Div. 1	Jul 20, 2023	197
A	1900D-2, 1900-30D-2 LA & DALA (Liquids)	18751	Relief Valve	VIII Div. 1	Jul 27, 2023	197
A	1900E-2, 1900-30E-2 LA & DALA (Liquids)	18762	Relief Valve	VIII Div. 1	Jul 19, 2023	197
A	1900, 1900-30 1900-35 LA & DALA (Liquids)	18784	Relief Valve	VIII Div. 1	Jul 19, 2023	198
A	19110M & 19110H (Liquids)	19077	Relief Valve	VIII Div. 1	Jul 27, 2023	207

SETPOINT Integrated Solutions Inc. (WLS)**location: Westlake, LA, UNITED STATES**

Devices designed by: Dresser, LLC (DRJ)

<i>Cert Cat</i>	<i>Device Type</i>	<i>NB Cert #</i>	<i>Type Classification</i>	<i>Code Section</i>	<i>Expiration Date</i>	<i>Page...</i>
A	1811, 1511	18122	Safety Valve	I & VIII Div. 1	Sep 2, 2021	182
A	1900D-2, 1900-30D-2	18144	Safety Relief Valve	VIII Div. 1	Jul 19, 2018	183
A	1900E-2, 1900-30E-2	18166	Safety Relief Valve	VIII Div. 1	Jul 19, 2018	183
A	1900, 1900-30, 1900-35	18201	Safety Relief Valve	VIII Div. 1	Jul 19, 2018	184
A	1982 LS, 820000LS	18380	Relief Valve	VIII Div. 1	Jul 19, 2018	188
A	3900 (39PV, 39MV pilots)	18447	Pilot Operated Pressure Relief Valve	VIII Div. 1	Apr 24, 2021	192
A	3900 (39PV, 39MV pilots, liquid)	18458	Pilot Operated Pressure Relief Valve	VIII Div. 1	Sep 4, 2021	194
A	19000 Series	18706	Safety Relief Valve	VIII Div. 1	Jul 19, 2018	196
A	19000 Series, Liquid	18717	Relief Valve	VIII Div. 1	Jul 19, 2018	197
A	1900D-2, 1900-30D-2 LA & DALA (Liquids)	18751	Relief Valve	VIII Div. 1	Jul 19, 2018	197
A	1900E-2, 1900-30E-2 LA & DALA (Liquids)	18762	Relief Valve	VIII Div. 1	Apr 9, 2019	197
A	1900, 1900-30 1900-35 LA & DALA (Liquids)	18784	Relief Valve	VIII Div. 1	Jul 19, 2018	198

SETPOINT Integrated Solutions, Inc. (SIS)

location: La Porte, TX,

Acceptable Abbrev.: SETPOINT Integrated Solutions, Inc.

Devices designed by: Dresser, LLC (DRJ)

<i>Cert Cat</i>	<i>Device Type</i>	<i>NB Cert #</i>	<i>Type Classification</i>	<i>Code Section</i>	<i>Expiration Date</i>	<i>Page...</i>
A	1700 & 2700	18100	Safety Valve	I & VIII Div. 1	Feb 6, 2024	181
A	1811, 1511	18122	Safety Valve	I & VIII Div. 1	Feb 6, 2024	182
A	1900D-2, 1900-30D-2	18144	Safety Relief Valve	VIII Div. 1	Feb 6, 2024	183
A	1900, 1900-30, 1900-35	18201	Safety Relief Valve	VIII Div. 1	Feb 6, 2024	184
A	3900 (39PV, 39MV pilots)	18447	Pilot Operated Pressure Relief Valve	VIII Div. 1	Feb 6, 2024	192
A	19000 Series	18706	Safety Relief Valve	VIII Div. 1	Feb 6, 2024	196
A	19000 Series, Liquid	18717	Relief Valve	VIII Div. 1	Feb 8, 2024	197
A	1900D-2, 1900-30D-2 LA & DALA (Liquids)	18751	Relief Valve	VIII Div. 1	Feb 8, 2024	197
A	1900E-2, 1900-30E-2 LA & DALA (Liquids)	18762	Relief Valve	VIII Div. 1	Feb 8, 2024	197
A	1900, 1900-30 1900-35 LA & DALA (Liquids)	18784	Relief Valve	VIII Div. 1	Feb 6, 2024	198
A	1700 & 2700	18100	Safety Valve	I & VIII Div. 1	Feb 6, 2024	181
A	1811, 1511	18122	Safety Valve	I & VIII Div. 1	Feb 6, 2024	182
A	1900D-2, 1900-30D-2	18144	Safety Relief Valve	VIII Div. 1	Feb 6, 2024	183
A	1900, 1900-30, 1900-35	18201	Safety Relief Valve	VIII Div. 1	Feb 6, 2024	184
A	3900 (39PV, 39MV pilots)	18447	Pilot Operated Pressure Relief Valve	VIII Div. 1	Feb 6, 2024	192
A	19000 Series	18706	Safety Relief Valve	VIII Div. 1	Feb 6, 2024	196
A	19000 Series, Liquid	18717	Relief Valve	VIII Div. 1	Feb 8, 2024	197
A	1900D-2, 1900-30D-2 LA & DALA (Liquids)	18751	Relief Valve	VIII Div. 1	Feb 8, 2024	197
A	1900E-2, 1900-30E-2 LA & DALA (Liquids)	18762	Relief Valve	VIII Div. 1	Feb 8, 2024	197
A	1900, 1900-30 1900-35 LA & DALA (Liquids)	18784	Relief Valve	VIII Div. 1	Feb 6, 2024	198

SETPOINT Integrated Solutions, Inc. (SET)

location: Baton Rouge, LA,

Devices designed by: Dresser, LLC (DRJ)

<i>Cert Cat</i>	<i>Device Type</i>	<i>NB Cert #</i>	<i>Type Classification</i>	<i>Code Section</i>	<i>Expiration Date</i>	<i>Page...</i>
A	1541, 1543, 1541-3, 1543-3	18032	Safety Valve	I & VIII Div. 1	Sep 4, 2021	180
A	1700 & 2700	18100	Safety Valve	I & VIII Div. 1	Sep 4, 2021	181
A	1700 & 2700 (Restricted Lift version of Cert. # 18100)	18111	Safety Valve	I & VIII Div. 1	Jun 18, 2021	182
A	1811, 1511	18122	Safety Valve	I & VIII Div. 1	Jun 18, 2021	182
A	1900D-2, 1900-30D-2	18144	Safety Relief Valve	III & VIII Div.1	Jun 19, 2021	183
A	1900E-2, 1900-30E-2	18166	Safety Relief Valve	III & VIII Div.1	Jun 19, 2021	183
A	1900, 1900-30, 1900-35	18201	Safety Relief Valve	III & VIII Div.1	Jun 19, 2021	184
A	1900, 1900-30, 1900-35 (R.L.)	18223	Safety Relief Valve	VIII Div. 1	Mar 16, 2024	185
A	1982	18379	Safety Relief Valve	VIII Div. 1	Mar 16, 2024	188
A	1982 LS, 820000LS	18380	Relief Valve	VIII Div. 1	Mar 16, 2024	188
A	3900 (39PV, 39MV pilots)	18447	Pilot Operated Pressure Relief Valve	VIII Div. 1	Sep 4, 2021	192
A	3900 (39PV, 39MV pilots, liquid)	18458	Pilot Operated Pressure Relief Valve	VIII Div. 1	Sep 4, 2021	194
A	19000 Series	18706	Safety Relief Valve	VIII Div. 1	Jun 21, 2021	196
A	19000 Series, Liquid	18717	Relief Valve	VIII Div. 1	Jun 18, 2021	197
A	1900D-2, 1900-30D-2 LA & DALA (Liquids)	18751	Relief Valve	III & VIII Div.1	Jun 19, 2021	197
A	1900E-2, 1900-30E-2 LA & DALA (Liquids)	18762	Relief Valve	III & VIII Div.1	Jun 19, 2021	197
A	1900, 1900-30 1900-35 LA & DALA (Liquids)	18784	Relief Valve	III & VIII Div.1	Jun 19, 2021	198
A	19110M & 19110H (Liquids)	19077	Relief Valve	VIII Div. 1	Mar 16, 2024	207

SETPOINT Integrated Solutions, Inc. (STC)

location: Corpus Christi, TX,

Acceptable Abbrev.: SETPOINT Integrated Solutions Inc.

Devices designed by: Dresser, LLC (DRJ)

<i>Cert Cat</i>	<i>Device Type</i>	<i>NB Cert #</i>	<i>Type Classification</i>	<i>Code Section</i>	<i>Expiration Date</i>	<i>Page...</i>
A	1541, 1543, 1541-3, 1543-3	18032	Safety Valve	I & VIII Div. 1	Dec 6, 2023	180
A	1700 & 2700 (Restricted Lift version of Cert. # 18100)	18111	Safety Valve	I & VIII Div. 1	Dec 6, 2023	182
A	1811, 1511	18122	Safety Valve	I & VIII Div. 1	Dec 6, 2023	182
A	1900D-2, 1900-30D-2	18144	Safety Relief Valve	VIII Div. 1	Dec 6, 2023	183
A	1900E-2, 1900-30E-2	18166	Safety Relief Valve	VIII Div. 1	Dec 6, 2023	183
A	1900, 1900-30, 1900-35	18201	Safety Relief Valve	VIII Div. 1	Dec 6, 2023	184
A	1900, 1900-30, 1900-35 (R.L.)	18223	Safety Relief Valve	VIII Div. 1	Dec 6, 2023	185
A	3900 (39PV, 39MV pilots)	18447	Pilot Operated Pressure Relief Valve	VIII Div. 1	Dec 6, 2023	192
A	3900 (39PV, 39MV pilots, liquid)	18458	Pilot Operated Pressure Relief Valve	VIII Div. 1	Dec 7, 2023	194
A	19000 Series	18706	Safety Relief Valve	VIII Div. 1	Dec 6, 2023	196
A	19000 Series, Liquid	18717	Relief Valve	VIII Div. 1	Dec 6, 2023	197
A	1900D-2, 1900-30D-2 LA & DALA (Liquids)	18751	Relief Valve	VIII Div. 1	Dec 6, 2023	197
A	1900E-2, 1900-30E-2 LA & DALA (Liquids)	18762	Relief Valve	VIII Div. 1	Dec 6, 2023	197
A	1900, 1900-30 1900-35 LA & DALA (Liquids)	18784	Relief Valve	VIII Div. 1	Dec 6, 2023	198
A	19110M & 19110H (Liquids)	19077	Relief Valve	III & VIII Div.1	Dec 6, 2023	207

SETPOINT Integrated Solutions, Inc. (STR)

location: Richwood, TX,

Acceptable Abbrev.: EVC

Devices designed by: Dresser, LLC (DRJ)

<i>Cert Cat</i>	<i>Device Type</i>	<i>NB Cert #</i>	<i>Type Classification</i>	<i>Code Section</i>	<i>Expiration Date</i>	<i>Page...</i>
A	1700 & 2700	18100	Safety Valve	I & VIII Div. 1	Dec 5, 2023	181
A	1700 & 2700 (Restricted Lift version of Cert. # 18100)	18111	Safety Valve	I & VIII Div. 1	Dec 5, 2023	182
A	1811, 1511	18122	Safety Valve	I & VIII Div. 1	Dec 4, 2023	182
A	1900D-2, 1900-30D-2	18144	Safety Relief Valve	VIII Div. 1	Dec 4, 2023	183
A	1900E-2, 1900-30E-2	18166	Safety Relief Valve	VIII Div. 1	Dec 4, 2023	183
A	1900, 1900-30, 1900-35	18201	Safety Relief Valve	VIII Div. 1	Dec 4, 2023	184
A	1900, 1900-30, 1900-35 (R.L.)	18223	Safety Relief Valve	VIII Div. 1	Dec 4, 2023	185
A	3900 (39PV, 39MV pilots)	18447	Pilot Operated Pressure Relief Valve	VIII Div. 1	Dec 4, 2023	192
A	3900 (39PV, 39MV pilots, liquid)	18458	Pilot Operated Pressure Relief Valve	VIII Div. 1	Dec 4, 2023	194
A	19000 Series	18706	Safety Relief Valve	VIII Div. 1	Dec 4, 2023	196
A	19000 Series, Liquid	18717	Relief Valve	VIII Div. 1	Dec 4, 2023	197
A	1900D-2, 1900-30D-2 LA & DALA (Liquids)	18751	Relief Valve	VIII Div. 1	Dec 4, 2023	197
A	1900E-2, 1900-30E-2 LA & DALA (Liquids)	18762	Relief Valve	VIII Div. 1	Dec 4, 2023	197
A	1900, 1900-30 1900-35 LA & DALA (Liquids)	18784	Relief Valve	VIII Div. 1	Dec 4, 2023	198
A	2900 (39PV & 39MV pilots)	18863	Pilot Operated Pressure Relief Valve	VIII Div. 1	Dec 4, 2023	200
A	19110M & 19110H (Liquids)	19077	Relief Valve	VIII Div. 1	Dec 4, 2023	207

SETPOINT Integrated Solutions, Incorporated (CCT)**location: Kilgore, TX, UNITED STATES****Acceptable Abbrev.: Setpoint Integrated Solutions, Inc.**

Devices designed by: Dresser, LLC (DRJ)

<i>Cert Cat</i>	<i>Device Type</i>	<i>NB Cert #</i>	<i>Type Classification</i>	<i>Code Section</i>	<i>Expiration Date</i>	<i>Page...</i>
A	1700 & 2700	18100	Safety Valve	I & VIII Div. 1	Dec 9, 2019	181
A	1700 & 2700 (Restricted Lift version of Cert. # 18100)	18111	Safety Valve	I & VIII Div. 1	May 13, 2019	182
A	1811, 1511	18122	Safety Valve	I & VIII Div. 1	May 14, 2019	182
A	1900D-2, 1900-30D-2	18144	Safety Relief Valve	VIII Div. 1	May 14, 2019	183
A	1900E-2, 1900-30E-2	18166	Safety Relief Valve	VIII Div. 1	May 14, 2019	183
A	1900, 1900-30, 1900-35	18201	Safety Relief Valve	VIII Div. 1	May 13, 2019	184
A	3900 (39PV, 39MV pilots)	18447	Pilot Operated Pressure Relief Valve	VIII Div. 1	Apr 30, 2020	192
A	3900 (39PV, 39MV pilots, liquid)	18458	Pilot Operated Pressure Relief Valve	VIII Div. 1	Apr 30, 2020	194
A	19000 Series	18706	Safety Relief Valve	VIII Div. 1	Apr 30, 2020	196
A	19000 Series, Liquid	18717	Relief Valve	VIII Div. 1	Apr 30, 2020	197
A	1900D-2, 1900-30D-2 LA & DALA (Liquids)	18751	Relief Valve	VIII Div. 1	May 14, 2019	197
A	1900E-2, 1900-30E-2 LA & DALA (Liquids)	18762	Relief Valve	VIII Div. 1	May 14, 2019	197
A	1900, 1900-30 1900-35 LA & DALA (Liquids)	18784	Relief Valve	VIII Div. 1	May 13, 2019	198

Shanghai Kaite Valve Manufacture Co., Ltd. (SKV)**location: Anting, Shanghai,****Acceptable Abbrev.: SHKT**

Devices designed by: Shanghai Kaite Valve Manufacture Co., Ltd. (SKV)

<i>Cert Cat</i>	<i>Device Type</i>	<i>NB Cert #</i>	<i>Type Classification</i>	<i>Code Section</i>	<i>Expiration Date</i>	<i>Page...</i>
M	11IG14xxxx	00594	Safety Relief Valve	VIII Div. 1	Nov 9, 2021	448
M	11FH13xxxx	00617	Safety Relief Valve	VIII Div. 1	Nov 9, 2021	448
M	11KH19xxxx	00628	Safety Relief Valve	VIII Div. 1	Nov 9, 2021	448

Sherwood Valve (SPR)**location: Washington, PA, UNITED STATES****d.b.a. SUPERIOR Refrigeration Products**

Devices designed by: Sherwood Valve (SPR)

<i>Cert Cat</i>	<i>Device Type</i>	<i>NB Cert #</i>	<i>Type Classification</i>	<i>Code Section</i>	<i>Expiration Date</i>	<i>Page...</i>
M	3080A (3075TR, 5730)	52063	Safety Relief Valve	VIII Div. 1	May 17, 2018	449
M	3000A (3000, 3001, 3001X2, 3002, 3012, 3014, 3015, 3212, 3214,	54009	Safety Relief Valve	VIII Div. 1	Nov 25, 2019	449
M	3020A (3016, 3020, 3020X2, 3216, 3220, 5731AX9, 5733, 5733X2,	54010	Safety Relief Valve	VIII Div. 1	Nov 25, 2019	449
M	3030A (3030, 3031, 3031X1, 3045, 3045TR, 3045X1)	54021	Safety Relief Valve	VIII Div. 1	Nov 25, 2019	450
M	3060A (3060, 3060FL, 3060X1, 3060X7, 3061X1, 3070, 3075)	54032	Safety Relief Valve	VIII Div. 1	Nov 24, 2019	450

South Wales Industrial Valves Services Ltd. (SWI)**location: Swansea, West Glam, Wales, UNITED KINGDOM****Acceptable Abbrev.: IVS Swansea Wales UK**

Devices designed by: Farris Engineering (TFO)

<i>Cert Cat</i>	<i>Device Type</i>	<i>NB Cert #</i>	<i>Type Classification</i>	<i>Code Section</i>	<i>Expiration Date</i>	<i>Page...</i>
A	2600L (Liquids)	57068	Relief Valve	VIII Div. 1	Mar 17, 2023	237
A	2700, 2700S, 3700, 3700S	57237	Safety Relief Valve	VIII Div. 1	Jun 21, 2023	238
A	2700L, 3700L (Liquids)	57248	Relief Valve	VIII Div. 1	Jul 12, 2023	239

Spartan Controls Ltd. (FIE)**location: Edmonton, CANADA**

Devices designed by: A&R Energy Services, Corporation (ARE)

<i>Cert Cat</i>	<i>Device Type</i>	<i>NB Cert #</i>	<i>Type Classification</i>	<i>Code Section</i>	<i>Expiration Date</i>	<i>Page...</i>
A	Kunkle 6000, 6252 Series	36324	Safety Valve	VIII Div. 1	Dec 1, 2023	391

Spartan Controls Ltd. (FIE)**(continued) location: Edmonton, CANADA**Devices designed by: **Emerson Automation Solutions Final Control US LP (AGC)**

<i>Cert Cat</i>	<i>Device Type</i>	<i>NB Cert #</i>	<i>Type Classification</i>	<i>Code Section</i>	<i>Expiration Date</i>	<i>Page...</i>
A	81, 81P, 83, 86	01089	Safety Relief Valve	VIII Div. 1	Jun 22, 2023	397
A	81P (Liquids)	01102	Relief Valve	VIII Div. 1	Jun 22, 2023	397
A	243/249/443/449/546/843/849/943/5046/5049/8043/8049	01292	Pilot Operated Pressure Relief Valve	VIII Div. 1	Jun 22, 2023	402
A	253/259/453/459/853/859/953/959/5059/8053/8059	01304	Pilot Operated Pressure Relief Valve	VIII Div. 1	Jun 22, 2023	402
A	263/269/463/469/566/863/869/963/969/5066/5069	01315	Pilot Operated Pressure Relief Valve	VIII Div. 1	Jun 22, 2023	403
A	453/459/853/859/953/959/5059 (Liquids)	01326	Pilot Operated Pressure Relief Valve	VIII Div. 1	Jun 22, 2023	403
A	443/449/546/843/849/943/949/5046/5049(Liquids)	01337	Pilot Operated Pressure Relief Valve	VIII Div. 1	Jun 22, 2023	404
A	JLT (Liquids)	15095	Safety Relief Valve	VIII Div. 1	Jun 22, 2023	408
A	JOS-E/JBS-E/JOS-H-E 8400 AC/AB	15208	Safety Relief Valve	VIII Div. 1	Jun 22, 2023	409
A	900 Series, 7700, SNC	15411	Safety Relief Valve	VIII Div. 1	Jun 22, 2023	411
A	900 Series (Liquid), 7700, SNC	15499	Relief Valve	VIII Div. 1	Jun 22, 2023	412
A	JLT/JOS, JLT/JBS, 8500, ACL/ABL	15512	Safety Relief Valve	VIII Div. 1	Jun 22, 2023	413
A	BP (Liquids)	15534	Relief Valve	VIII Div. 1	Dec 1, 2023	414

Devices designed by: **Emerson Automation Solutions Final Control, US LP (KBM)**

<i>Cert Cat</i>	<i>Device Type</i>	<i>NB Cert #</i>	<i>Type Classification</i>	<i>Code Section</i>	<i>Expiration Date</i>	<i>Page...</i>
A	910 to 919	36100	Safety Relief Valve	VIII Div. 1	Mar 14, 2024	387
A	910 to 919 (Liquid)	36111	Relief Valve	VIII Div. 1	Dec 1, 2023	388
A	Kunkle 337	36278	Safety Relief Valve	VIII Div. 1	Dec 1, 2023	389
A	C776	36425	Safety Relief Valve	VIII Div. 1	Dec 1, 2023	392

Devices designed by: **Farris Engineering (TFO)**

<i>Cert Cat</i>	<i>Device Type</i>	<i>NB Cert #</i>	<i>Type Classification</i>	<i>Code Section</i>	<i>Expiration Date</i>	<i>Page...</i>
A	3800	57024	Pilot Operated Pressure Relief Valve	VIII Div. 1	Jan 10, 2024	233
A	2600 & 2600S	57057	Safety Relief Valve	VIII Div. 1	Jan 10, 2024	236
A	2600L (Liquids)	57068	Relief Valve	VIII Div. 1	Jan 10, 2024	237
A	3800L, PCL, PCM pilots	57215	Pilot Operated Pressure Relief Valve	VIII Div. 1	Jan 10, 2024	238
A	2700, 2700S, 3700, 3700S	57237	Safety Relief Valve	VIII Div. 1	Jan 10, 2024	238
A	2700L, 3700L (Liquids)	57248	Relief Valve	VIII Div. 1	Jan 10, 2024	239
A	2600L (Air & Steam)	57260	Safety Relief Valve	VIII Div. 1	Sep 22, 2022	240

Spence Engineering Company, Incorporated (SEC)**location: Walden, NY, UNITED STATES****Acceptable Abbrev.: Spence Eng. Co.**Devices designed by: **Spence Engineering Company, Incorporated (SEC)**

<i>Cert Cat</i>	<i>Device Type</i>	<i>NB Cert #</i>	<i>Type Classification</i>	<i>Code Section</i>	<i>Expiration Date</i>	<i>Page...</i>
M	Fig 10	65001	Safety Valve	IV	Jun 13, 2023	451
M	Fig 31, 41, 41A	65045	Safety Valve	I & VIII Div. 1	Jun 13, 2023	452
M	Figure 800	65089	Safety Relief Valve	VIII Div. 1	Aug 21, 2023	453

Spirax Sarco Ind. Com. Ltda. (SSB)**location: Cotia, SP, BRAZIL****Acceptable Abbrev.: Spirax Sarco-SXS**Devices designed by: **Spirax Sarco Ind. Com. Ltda. (SSB)**

<i>Cert Cat</i>	<i>Device Type</i>	<i>NB Cert #</i>	<i>Type Classification</i>	<i>Code Section</i>	<i>Expiration Date</i>	<i>Page...</i>
M	SV80H	48103	Safety Relief Valve	VIII Div. 1	Apr 23, 2018	454
M	SV80H (liquid)	48114	Safety Relief Valve	VIII Div. 1	Apr 23, 2018	455
M	SV81H	48125	Safety Relief Valve	VIII Div. 1	Apr 23, 2018	455
M	SV81H (liquid)	48136	Safety Relief Valve	VIII Div. 1	Apr 23, 2018	456

Spirax Sarco Limited (SSL)

location: Cheltenham, Gloucestershire, UNITED KINGDOM

Acceptable Abbrev.: **Spirax Sarco**

Devices designed by: **Spirax Sarco Limited (SSL)**

<i>Cert Cat</i>	<i>Device Type</i>	<i>NB Cert #</i>	<i>Type Classification</i>	<i>Code Section</i>	<i>Expiration Date</i>	<i>Page...</i>
M	SV7	71020	Safety Valve	I & VIII Div. 1	Oct 12, 2023	457

Spirax Sarco, Incorporated (SPS)

location: Blythewood, SC, UNITED STATES

Acceptable Abbrev.: **Spirax Sarco**

Devices designed by: **Spirax Sarco Limited (SSL)**

<i>Cert Cat</i>	<i>Device Type</i>	<i>NB Cert #</i>	<i>Type Classification</i>	<i>Code Section</i>	<i>Expiration Date</i>	<i>Page...</i>
A	SV7	71020	Safety Valve	I & VIII Div. 1	Oct 21, 2019	457

St. Gabriel Valve Service, LLC (SGV)

location: St. Gabriel, LA, UNITED STATES

Seal Identification: **St. Gabriel Valve**

Devices designed by: **Conbraco Industries, Incorporated (CNB)**

<i>Cert Cat</i>	<i>Device Type</i>	<i>NB Cert #</i>	<i>Type Classification</i>	<i>Code Section</i>	<i>Expiration Date</i>	<i>Page...</i>
A	19 Series	11282	Safety Valve	I & VIII Div. 1	Nov 17, 2020	124
A	119 Series	11361	Safety Valve	I & VIII Div. 1	Nov 17, 2020	126
A	500 Series	11462	Safety Valve	VIII Div. 1	Jan 17, 2023	128
A	500 Series (Liquids)	11473	Safety Relief Valve	VIII Div. 1	Jan 17, 2023	128

Stritt & Priebe, Incorporated (STP)

location: Buffalo, NY, UNITED STATES

Devices designed by: **Conbraco Industries, Incorporated (CNB)**

<i>Cert Cat</i>	<i>Device Type</i>	<i>NB Cert #</i>	<i>Type Classification</i>	<i>Code Section</i>	<i>Expiration Date</i>	<i>Page...</i>
A	19 Series	11282	Safety Valve	I & VIII Div. 1	Oct 12, 2022	124
A	119 Series	11361	Safety Valve	I & VIII Div. 1	Oct 12, 2022	126
A	500 Series	11462	Safety Valve	VIII Div. 1	Oct 12, 2022	128
A	500 Series (Liquids)	11473	Safety Relief Valve	VIII Div. 1	Oct 12, 2022	128

Suzhou BS&B Safety Systems Co., Ltd (SIP)**location: Suzhou Industrial Park, Jiangsu, PEOPLES REP/CHINA**

Devices designed by: BS & B Safety Systems, LLC (BSB)

<i>Cert Cat</i>	<i>Device Type</i>	<i>NB Cert #</i>	<i>Type Classification</i>	<i>Code Section</i>	<i>Expiration Date</i>	<i>Page...</i>
M	JRS	77015	Rupture Disk Device	VIII Div. 1	Nov 21, 2019	56
M	BV, BRV, BSV, BRSV	77026	Rupture Disk Device	VIII Div. 1	Jun 26, 2019	57
M	B, BR, BRR	77037	Rupture Disk Device	VIII Div. 1	Jun 26, 2019	58
M	RLS, RLS Welded Assembly	77059	Rupture Disk Device	VIII Div. 1	Nov 13, 2018	60
M	S90, S90 Welded Assembly	77082	Rupture Disk Device	VIII Div. 1	Jun 26, 2019	61
M	GFR-S, -SM, -SE, -SS, -SMS, -SES (1")	77105	Rupture Disk Device	VIII Div. 1	Dec 21, 2022	62
M	GFR-S, -SM, -SE (1.5")	77116	Rupture Disk Device	VIII Div. 1	Feb 10, 2023	62
M	GFR-S, -SM, -SE (2")	77127	Rupture Disk Device	VIII Div. 1	Dec 20, 2022	63
M	RB-90	77138	Rupture Disk Device	VIII Div. 1	Nov 21, 2019	63
M	S-90 (Inconel)	77206	Rupture Disk Device	VIII Div. 1	Jun 26, 2019	64
M	GFR-S 1 1/2" Liquid	77239	Rupture Disk Device	VIII Div. 1	Dec 20, 2022	65
M	BV,BRV,BSV,BRSV (liquid)	77273	Rupture Disk Device	VIII Div. 1	Jun 26, 2019	66
M	FRS	77284	Rupture Disk Device	VIII Div. 1	Jan 12, 2023	66
M	RLS, RLS Welded Assembly (liquid)	77307	Rupture Disk Device	VIII Div. 1	Nov 13, 2018	67
M	B, BR, BRR (liquid)	77318	Rupture Disk Device	VIII Div. 1	Sep 17, 2020	68
M	AV	77341	Rupture Disk Device	VIII Div. 1	Nov 21, 2019	69
M	GCR-S,SE,SM,SS,SES,SMS, SW, N, NS (2")	77420	Rupture Disk Device	VIII Div. 1	Nov 21, 2019	70
M	2" BV	77486	Rupture Disk Device	VIII Div. 1	Jun 26, 2019	71
M	2" B	77497	Rupture Disk Device	VIII Div. 1	Jun 26, 2019	71
M	GCR-S, SE, SM, SS, SES, SMS, SW, N, NS	77611	Rupture Disk Device	VIII Div. 1	Feb 11, 2023	73
M	DV, DRV, DSV, DRSV (liquids)	77734	Rupture Disk Device	VIII Div. 1	Sep 11, 2020	77
M	GCR-S, SE, SM, SS, SES, SMS, SW, N, NS (liquids)	78195	Rupture Disk Device	VIII Div. 1	Dec 20, 2022	
M	GCR-S,SE,SM,SS,SES,SMS, SW, N, NS (2" liquids)	78207	Rupture Disk Device	VIII Div. 1	Dec 20, 2022	

Devices designed by: BS & B Safety Systems, Ltd. (BSI)

<i>Cert Cat</i>	<i>Device Type</i>	<i>NB Cert #</i>	<i>Type Classification</i>	<i>Code Section</i>	<i>Expiration Date</i>	<i>Page...</i>
A	XT	77149	Rupture Disk Device	VIII Div. 1	Sep 11, 2020	87
M	XT (Liquid)	78094	Rupture Disk Device	VIII Div. 1	Sep 11, 2020	94
M	SRD & CCS	78229	Rupture Disk Device	VIII Div. 1	Jan 12, 2023	
M	SRD & CCS (Liquid)	78230	Rupture Disk Device	VIII Div. 1	Jan 12, 2023	
M	SRD-L & CCS-L	78241	Rupture Disk Device	VIII Div. 1	Jan 12, 2023	
M	SRD-L & CCS-L (Liquid)	78252	Rupture Disk Device	VIII Div. 1	Jan 12, 2023	

Swan Associates, Incorporated (SWA)**location: Benicia, CA, UNITED STATES****Seal Identification: SAI**

Devices designed by: Emerson Automation Solutions Final Control US LP (AGC)

<i>Cert Cat</i>	<i>Device Type</i>	<i>NB Cert #</i>	<i>Type Classification</i>	<i>Code Section</i>	<i>Expiration Date</i>	<i>Page...</i>
A	JLT (Liquids)	15095	Safety Relief Valve	VIII Div. 1	Mar 11, 2024	408
A	JOS-E/JBS-E/JOS-H-E 8400 AC/AB	15208	Safety Relief Valve	VIII Div. 1	May 2, 2024	409
A	900 Series, 7700, SNC	15411	Safety Relief Valve	VIII Div. 1	Mar 11, 2024	411
A	900 Series (Liquid), 7700, SNC	15499	Relief Valve	VIII Div. 1	Mar 11, 2024	412

Devices designed by: Farris Engineering (TFO)

<i>Cert Cat</i>	<i>Device Type</i>	<i>NB Cert #</i>	<i>Type Classification</i>	<i>Code Section</i>	<i>Expiration Date</i>	<i>Page...</i>
A	2600 & 2600S	57057	Safety Relief Valve	VIII Div. 1	Jan 30, 2020	236
A	2600L (Liquids)	57068	Relief Valve	VIII Div. 1	Nov 5, 2019	237
A	2700, 2700S, 3700, 3700S	57237	Safety Relief Valve	VIII Div. 1	Jan 31, 2020	238
A	2700L, 3700L (Liquids)	57248	Relief Valve	VIII Div. 1	May 6, 2020	239

TAI Milano SpA (TAI)**location: Guardamiglio (Lodi), ITALY**

Devices designed by: TAI Milano SpA (TAI)

<i>Cert Cat</i>	<i>Device Type</i>	<i>NB Cert #</i>	<i>Type Classification</i>	<i>Code Section</i>	<i>Expiration Date</i>	<i>Page...</i>
M	Series 3000A	45515	Safety Valve	VIII Div. 1	Apr 12, 2021	458
M	Series 3000W	45526	Safety Relief Valve	VIII Div. 1	Apr 12, 2021	459
M	Series 4000	45537	Safety Valve	VIII Div. 1	Apr 14, 2021	459
M	Series 4000W	45548	Safety Relief Valve	VIII Div. 1	Jul 18, 2022	460
M	Series 9000 / 60, 70, 90 pilots Air/Gas	45559	Pilot Operated Pressure Relief Valve	VIII Div. 1	Feb 4, 2022	460
M	Series 9000 / 70, 603,701, 703 Pilots (Liquids)	45560	Pilot Operated Pressure Relief Valve	VIII Div. 1	Feb 4, 2022	461
M	Series 9000 R / 60, 70, 90 pilots, Air/Gas	45582	Pilot Operated Pressure Relief Valve	VIII Div. 1	Feb 4, 2022	462
M	Series 9000 R / 70, 603, 701, 703 Pilots (Liquid)	45593	Pilot Operated Pressure Relief Valve	VIII Div. 1	Feb 4, 2022	463
M	3000W (Steam & Air/Gas)	45616	Safety Relief Valve	VIII Div. 1	Apr 12, 2021	464

Taizhou Luqiao Jia Ben Pump Casting Factory (CBM)**location: Taizhou, Zhejiang,****Acceptable Abbrev.: Jiaben**

Devices designed by: Taizhou Luqiao Jia Ben Pump Casting Factory (CBM)

<i>Cert Cat</i>	<i>Device Type</i>	<i>NB Cert #</i>	<i>Type Classification</i>	<i>Code Section</i>	<i>Expiration Date</i>	<i>Page...</i>
M	V100	00673	Safety Relief Valve	VIII Div. 1	Mar 17, 2022	

Target Rock Corporation (TRC)**location: East Farmingdale, NY, UNITED STATES**

Devices designed by: Target Rock Corporation (TRC)

<i>Cert Cat</i>	<i>Device Type</i>	<i>NB Cert #</i>	<i>Type Classification</i>	<i>Code Section</i>	<i>Expiration Date</i>	<i>Page...</i>
M	6AB (Class 1,2 & 3)	55099	Safety Valve	III	Mar 1, 2023	465
M	6AC (Class 1,2 & 3)	55101	Safety Valve	III NB, NC, ND	Mar 1, 2023	465
M	6BH	55123	Vacuum Relief Valve	III NC, ND	Jul 14, 2020	465
M	6-AF-1 (Class 1,2 & 3)	55134	Safety Relief Valve	III	Oct 25, 2018	466
M	6AH (Class 2 & 3)	55156	Safety Relief Valve	III	Mar 1, 2023	466
M	6AK (78D016 Class 1, 2 & 3)	55167	Safety Relief Valve	III	Mar 1, 2023	466
M	67F	55213	Pilot Operated Pressure Relief Valve	III	Mar 1, 2023	467
M	69C	55224	Pilot Operated Pressure Relief Valve	III NB, NC, ND	Oct 7, 2021	467
M	76A	55235	Safety Valve	III	Mar 1, 2023	467
M	7567F	55246	Pilot Operated Pressure Relief Valve	III	Mar 1, 2023	468
M	2VRES-S-1	55280	Vacuum Relief Valve	III	Oct 25, 2018	468
M	6AD, Liquids	55291	Safety Relief Valve	III NB, NC, ND	Jul 10, 2018	468
M	6AR	55303	Safety Relief Valve	III	Oct 25, 2018	469
M	6AS	55314	Safety Relief Valve	III	Oct 25, 2018	469
M	6AO, 93R-024	55325	Safety Relief Valve	III	Oct 25, 2018	469
M	6AM	55347	Safety Relief Valve	III	Oct 25, 2018	470
M	6AN	55369	Safety Relief Valve	III	Oct 25, 2018	470
M	93R-022A	55370	Safety Relief Valve	III	Mar 1, 2023	470
M	6AU	55381	Relief Valve	III NB, NC, ND	Jan 25, 2021	471
M	6AV	55392	Safety Relief Valve	III	Sep 27, 2018	471
M	6AW (98V-005-3)	55415	Safety Relief Valve	III	Jul 7, 2021	471
M	6AX (98V-005-2)	55426	Safety Relief Valve	III	Jun 9, 2021	471
M	6AY (97N-006)	55437	Safety Relief Valve	III	Jun 9, 2021	472
M	6BA (97N-016)	55493	Vacuum Relief Valve	III NB, NC, ND	Nov 3, 2021	472
M	6AZ (97N-014)	55505	Safety Relief Valve	III	Aug 1, 2021	472
M	6BB	55516	Vacuum Relief Valve	III ND	Feb 13, 2023	472
M	6BC	55527	Safety Relief Valve	III	Oct 31, 2019	473
M	6BD	55538	Safety Valve	III NB, NC, ND	Mar 20, 2020	473
M	6BE (08U-007)	55549	Vacuum Relief Valve	III ND	May 27, 2023	473
M	6BF (08U-017)	55550	Vacuum Relief Valve	III ND	May 5, 2023	474
M	6BG (08U-011)	55561	Vacuum Relief Valve	III ND	Jul 8, 2023	474

Taylor Valve Technology, Incorporated (TTS)**location: Oklahoma City, OK, UNITED STATES**

Devices designed by: Taylor Valve Technology, Incorporated (TTS)

<i>Cert Cat</i>	<i>Device Type</i>	<i>NB Cert #</i>	<i>Type Classification</i>	<i>Code Section</i>	<i>Expiration Date</i>	<i>Page...</i>
M	82-025000, 82-035000	56146	Safety Relief Valve	VIII Div. 1	Aug 25, 2018	475
M	82-025000, 82-035000 (Liquids)	56157	Relief Valve	VIII Div. 1	Aug 24, 2018	476
M	82-055000, 82-065000	56168	Safety Relief Valve	VIII Div. 1	Aug 24, 2018	476
M	82-055000, 82-065000 (Liquids)	56179	Relief Valve	VIII Div. 1	Aug 24, 2018	476
M	82-005000	56180	Safety Relief Valve	VIII Div. 1	Jun 23, 2019	477
M	83-001000 (Liquids)	56191	Safety Relief Valve	VIII Div. 1	Sep 21, 2022	477
M	83-001000 (Air and Gas)	56203	Safety Relief Valve	VIII Div. 1	Aug 4, 2019	477
M	83-002000 (Air and Gas)	56214	Safety Relief Valve	VIII Div. 1	Oct 22, 2019	478
M	82-004000	56225	Safety Relief Valve	VIII Div. 1	Sep 10, 2018	478
M	82-007000	56247	Safety Relief Valve	VIII Div. 1	Nov 13, 2019	478
M	82-006000	56269	Safety Relief Valve	VIII Div. 1	Sep 10, 2018	479
M	632 Series (Liquids)	56304	Relief Valve	VIII Div. 1	Jun 27, 2021	479
M	9300, 9300M & 9300S	56315	Pilot Operated Pressure Relief Valve	VIII Div. 1	Feb 3, 2019	480
M	9300FB	56326	Pilot Operated Pressure Relief Valve	VIII Div. 1	Feb 13, 2019	480
M	9300M	56371	Pilot Operated Pressure Relief Valve	VIII Div. 1	Feb 2, 2024	481

Team Industrial Services Inc. (FAB)**location: Benicia, CA, UNITED STATES**

Devices designed by: Emerson Automation Solutions Final Control US LP (AGC)

<i>Cert Cat</i>	<i>Device Type</i>	<i>NB Cert #</i>	<i>Type Classification</i>	<i>Code Section</i>	<i>Expiration Date</i>	<i>Page...</i>
A	81, 81P, 83, 86	01089	Safety Relief Valve	VIII Div. 1	Nov 12, 2019	397
A	81P (Liquids)	01102	Relief Valve	VIII Div. 1	Nov 12, 2019	397
A	H Series (HCI, HSJ, HCA, HA, HB, HC, HCB, HCP, HJO, HN,	15006	Safety Valve	I & VIII Div. 1	Feb 7, 2020	406
A	JLT (Liquids)	15095	Safety Relief Valve	VIII Div. 1	Nov 12, 2019	408
A	JOS-E/JBS-E/JOS-H-E 8400 AC/AB	15208	Safety Relief Valve	VIII Div. 1	Feb 7, 2020	409
A	900 Series, 7700, SNC	15411	Safety Relief Valve	VIII Div. 1	Jan 31, 2020	411
A	900 Series (Liquid), 7700, SNC	15499	Relief Valve	VIII Div. 1	Nov 12, 2019	412

Devices designed by: Farris Engineering (TFO)

<i>Cert Cat</i>	<i>Device Type</i>	<i>NB Cert #</i>	<i>Type Classification</i>	<i>Code Section</i>	<i>Expiration Date</i>	<i>Page...</i>
A	2600 & 2600S	57057	Safety Relief Valve	VIII Div. 1	Aug 2, 2023	236
A	2600L (Liquids)	57068	Relief Valve	VIII Div. 1	Aug 2, 2023	237
A	2700, 2700S, 3700, 3700S	57237	Safety Relief Valve	VIII Div. 1	Aug 2, 2023	238
A	2700L, 3700L (Liquids)	57248	Relief Valve	VIII Div. 1	Aug 2, 2023	239
A	2600L (Air & Steam)	57260	Safety Relief Valve	VIII Div. 1	Aug 2, 2023	240

Team Industrial Services Inc. / TeamFurmanite Div. (HMT)**location: Kent, WA, UNITED STATES****Acceptable Abbrev.: TEAMFURMANITE**

Devices designed by: Farris Engineering (TFO)

<i>Cert Cat</i>	<i>Device Type</i>	<i>NB Cert #</i>	<i>Type Classification</i>	<i>Code Section</i>	<i>Expiration Date</i>	<i>Page...</i>
A	2600 & 2600S	57057	Safety Relief Valve	VIII Div. 1	Apr 30, 2018	236
A	2600L (Liquids)	57068	Relief Valve	VIII Div. 1	Nov 17, 2018	237
A	2700, 2700S, 3700, 3700S	57237	Safety Relief Valve	VIII Div. 1	Apr 30, 2018	238
A	2700L, 3700L (Liquids)	57248	Relief Valve	VIII Div. 1	Apr 30, 2018	239
A	4200 / 4400	57282	Safety Valve	I & VIII Div. 1	Apr 30, 2018	241

Team Industrial Services Inc. / TeamFurmanite Div. (PSL)**location: Sulphur, LA, UNITED STATES****Acceptable Abbrev.: TeamFurmanite**

Devices designed by: Farris Engineering (TFO)

<i>Cert Cat</i>	<i>Device Type</i>	<i>NB Cert #</i>	<i>Type Classification</i>	<i>Code Section</i>	<i>Expiration Date</i>	<i>Page...</i>
A	3800	57024	Pilot Operated Pressure Relief Valve	VIII Div. 1	Feb 5, 2024	233
A	3800FP	57035	Pilot Operated Pressure Relief Valve	VIII Div. 1	Feb 5, 2024	234
A	6400/6600 (previously 2500 & 4600)	57046	Safety Valve	I & VIII Div. 1	Feb 5, 2024	235
A	2600 & 2600S	57057	Safety Relief Valve	VIII Div. 1	Feb 5, 2024	236
A	2600L (Liquids)	57068	Relief Valve	VIII Div. 1	Feb 5, 2024	237
A	3800L, PCL, PCM pilots	57215	Pilot Operated Pressure Relief Valve	VIII Div. 1	Feb 5, 2024	238
A	2700, 2700S, 3700, 3700S	57237	Safety Relief Valve	VIII Div. 1	Feb 5, 2024	238
A	2700L, 3700L (Liquids)	57248	Relief Valve	VIII Div. 1	Feb 5, 2024	239
A	2600L (Air & Steam)	57260	Safety Relief Valve	VIII Div. 1	Feb 5, 2024	240
A	4200 / 4400	57282	Safety Valve	I	Feb 5, 2024	241

Team Industrial Services Inc. / TeamFurmanite Div. (SVS)**location: Saraland, AL, UNITED STATES****Acceptable Abbrev.: TEAMFURMANITE**

Devices designed by: Farris Engineering (TFO)

<i>Cert Cat</i>	<i>Device Type</i>	<i>NB Cert #</i>	<i>Type Classification</i>	<i>Code Section</i>	<i>Expiration Date</i>	<i>Page...</i>
A	1850, 1850H, 1851, 1852, 1855, 1856M, 2850, 2852, 2856, 2850H	57002	Safety Relief Valve	VIII Div. 1	Aug 4, 2021	232
A	1890, 1892, 1895, 1896	57013	Safety Relief Valve	VIII Div. 1	Sep 11, 2018	232
A	3800	57024	Pilot Operated Pressure Relief Valve	VIII Div. 1	Sep 30, 2018	233
A	3800FP	57035	Pilot Operated Pressure Relief Valve	VIII Div. 1	Aug 4, 2021	234
A	6400/6600 (previously 2500 & 4600)	57046	Safety Valve	I	Sep 11, 2018	235
A	2600 & 2600S	57057	Safety Relief Valve	VIII Div. 1	Sep 11, 2018	236
A	2600L (Liquids)	57068	Relief Valve	VIII Div. 1	Sep 11, 2018	237
A	1890L, 1892L, 1895L, 1896L (Liquids)	57192	Relief Valve	VIII Div. 1	Sep 11, 2018	237
A	3800L, PCL, PCM pilots	57215	Pilot Operated Pressure Relief Valve	VIII Div. 1	Sep 13, 2018	238
A	2700, 2700S, 3700, 3700S	57237	Safety Relief Valve	VIII Div. 1	Sep 11, 2018	238
A	2700L, 3700L (Liquids)	57248	Relief Valve	VIII Div. 1	Sep 11, 2018	239
A	2600L (Air & Steam)	57260	Safety Relief Valve	VIII Div. 1	Sep 12, 2018	240
A	4200 / 4400	57282	Safety Valve	I	Sep 11, 2018	241

Team Industrial Services Inc. / TeamFurmanite Div. (TMF)**location: Mobile, AL,****Acceptable Abbrev.: TeamFurmanite**

Devices designed by: Farris Engineering (TFO)

<i>Cert Cat</i>	<i>Device Type</i>	<i>NB Cert #</i>	<i>Type Classification</i>	<i>Code Section</i>	<i>Expiration Date</i>	<i>Page...</i>
A	1890, 1892, 1895, 1896	57013	Safety Relief Valve	VIII Div. 1	Mar 13, 2023	232
A	3800	57024	Pilot Operated Pressure Relief Valve	VIII Div. 1	May 1, 2023	233
A	3800FP	57035	Pilot Operated Pressure Relief Valve	VIII Div. 1	Mar 13, 2023	234
A	6400/6600 (previously 2500 & 4600)	57046	Safety Valve	I	Mar 14, 2023	235
A	2600 & 2600S	57057	Safety Relief Valve	VIII Div. 1	Mar 13, 2023	236
A	2600L (Liquids)	57068	Relief Valve	VIII Div. 1	Mar 13, 2023	237
A	1890L, 1892L, 1895L, 1896L (Liquids)	57192	Relief Valve	VIII Div. 1	Mar 13, 2023	237
A	3800L, PCL, PCM pilots	57215	Pilot Operated Pressure Relief Valve	VIII Div. 1	Mar 13, 2023	238
A	2700, 2700S, 3700, 3700S	57237	Safety Relief Valve	VIII Div. 1	Mar 14, 2023	238
A	2700L, 3700L (Liquids)	57248	Relief Valve	VIII Div. 1	Mar 13, 2023	239
A	2600L (Air & Steam)	57260	Safety Relief Valve	VIII Div. 1	Mar 13, 2023	240
A	4200 / 4400	57282	Safety Valve	I	Mar 14, 2023	241

Team Industrial Services Inc. / TeamFurmanite Div. (VCI)**location: Parkersburg, WV, UNITED STATES****Acceptable Abbrev.: TEAMFURMANITE**

Devices designed by: Emerson Automation Solutions Final Control US LP (AGC)

<i>Cert Cat</i>	<i>Device Type</i>	<i>NB Cert #</i>	<i>Type Classification</i>	<i>Code Section</i>	<i>Expiration Date</i>	<i>Page...</i>
A	H Series (HCI, HSJ, HCA, HA, HB, HC, HCB, HCP, HJO, HN,	15006	Safety Valve	I	Jan 14, 2022	406
A	JLT (Liquids)	15095	Safety Relief Valve	VIII Div. 1	Jan 14, 2022	408
A	JOS-E/JBS-E/JOS-H-E 8400 AC/AB	15208	Safety Relief Valve	VIII Div. 1	Jan 14, 2022	409
A	900 Series, 7700, SNC	15411	Safety Relief Valve	VIII Div. 1	Apr 19, 2022	411
A	900 Series (Liquid), 7700, SNC	15499	Relief Valve	VIII Div. 1	Jan 14, 2022	412

Team Industrial Services, Inc. / D.K. Amans Div. (FTO)**location: Long Beach, CA, UNITED STATES****Acceptable Abbrev.: DK Amans Valve**

Devices designed by: Farris Engineering (TFO)

<i>Cert Cat</i>	<i>Device Type</i>	<i>NB Cert #</i>	<i>Type Classification</i>	<i>Code Section</i>	<i>Expiration Date</i>	<i>Page...</i>
A	2600 & 2600S	57057	Safety Relief Valve	VIII Div. 1	Apr 5, 2023	236
A	2600L (Liquids)	57068	Relief Valve	VIII Div. 1	Mar 28, 2023	237
A	2700, 2700S, 3700, 3700S	57237	Safety Relief Valve	VIII Div. 1	Mar 28, 2023	238
A	2700L, 3700L (Liquids)	57248	Relief Valve	VIII Div. 1	Mar 28, 2023	239
A	2600L (Air & Steam)	57260	Safety Relief Valve	VIII Div. 1	Mar 28, 2023	240
A	4200 / 4400	57282	Safety Valve	I	Apr 5, 2023	241

Team Industrial Services, Inc. / TEAMFURMANITE Div. (TME)**location: Geismar, LA,****Acceptable Abbrev.: TeamFurmanite**

Devices designed by: Farris Engineering (TFO)

<i>Cert Cat</i>	<i>Device Type</i>	<i>NB Cert #</i>	<i>Type Classification</i>	<i>Code Section</i>	<i>Expiration Date</i>	<i>Page...</i>
A	2600 & 2600S	57057	Safety Relief Valve	VIII Div. 1	Mar 19, 2024	236
A	2600L (Liquids)	57068	Relief Valve	VIII Div. 1	Nov 27, 2023	237
A	3800L, PCL, PCM pilots	57215	Pilot Operated Pressure Relief Valve	VIII Div. 1	Nov 27, 2023	238
A	2700, 2700S, 3700, 3700S	57237	Safety Relief Valve	VIII Div. 1	Nov 27, 2023	238
A	2700L, 3700L (Liquids)	57248	Relief Valve	VIII Div. 1	Nov 27, 2023	239
A	2600L (Air & Steam)	57260	Safety Relief Valve	VIII Div. 1	Nov 27, 2023	240
A	4200 / 4400	57282	Safety Valve	I	Nov 28, 2023	241

Technical S.R.L. (TCI)**location: Vignate, Milano, ITALY**

Devices designed by: Technical S.R.L. (TCI)

<i>Cert Cat</i>	<i>Device Type</i>	<i>NB Cert #</i>	<i>Type Classification</i>	<i>Code Section</i>	<i>Expiration Date</i>	<i>Page...</i>
M	Series 10000	74135	Safety Relief Valve	VIII Div. 1	Jun 14, 2023	482
M	Series 20000	74146	Safety Relief Valve	VIII Div. 1	Dec 13, 2022	482
M	Series 30000	74157	Safety Relief Valve	VIII Div. 1	Dec 13, 2022	483
M	Series 30000 (Liquid)	74179	Safety Relief Valve	VIII Div. 1	Jan 18, 2023	483

Thorco Holdings, LLC (THI)**location: Santa Fe Springs, CA, UNITED STATES****Acceptable Abbrev.: THORCO-SANTA FE SPRINGS, CA**

Devices designed by: Farris Engineering (TFO)

<i>Cert Cat</i>	<i>Device Type</i>	<i>NB Cert #</i>	<i>Type Classification</i>	<i>Code Section</i>	<i>Expiration Date</i>	<i>Page...</i>
A	2700, 2700S, 3700, 3700S	57237	Safety Relief Valve	VIII Div. 1	May 14, 2020	238
A	2700L, 3700L (Liquids)	57248	Relief Valve	VIII Div. 1	Jul 14, 2020	239

Thorco Holdings, LLC (THI)(continued) location: **Santa Fe Springs, CA, UNITED STATES**Acceptable Abbrev.: **THORCO-SANTA FE SPRINGS, CA**Devices designed by: **LESER GmbH & Company KG (LES)**

<i>Cert Cat</i>	<i>Device Type</i>	<i>NB Cert #</i>	<i>Type Classification</i>	<i>Code Section</i>	<i>Expiration Date</i>	<i>Page...</i>
A	459/462 liquids	37101	Relief Valve	VIII Div. 1	Jun 9, 2023	319
A	459/462	37112	Safety Relief Valve	VIII Div. 1	Mar 2, 2023	319
A	437 (Liquids)	37189	Relief Valve	VIII Div. 1	Mar 2, 2023	321
A	438 Sub Types 481, 439	37190	Safety Relief Valve	VIII Div. 1	Mar 2, 2023	322
A	438 Sub Types 481, 439, Liquids	37202	Safety Relief Valve	VIII Div. 1	Mar 2, 2023	322
A	437	37213	Safety Relief Valve	VIII Div. 1	Mar 2, 2023	322
A	526	37224	Safety Relief Valve	VIII Div. 1	Mar 2, 2023	323
A	526 (Liquids)	37235	Relief Valve	VIII Div. 1	Mar 2, 2023	324
A	526D	37246	Safety Relief Valve	VIII Div. 1	Mar 2, 2023	324
A	526D Liquids	37257	Relief Valve	VIII Div. 1	Mar 2, 2023	324
A	820 (liquid) (821)	37268	Pilot Operated Pressure Relief Valve	VIII Div. 1	Mar 2, 2023	325
A	810/820 (811/821)	37280	Pilot Operated Pressure Relief Valve	VIII Div. 1	Mar 2, 2023	326

TOA Valve Engineering Inc. (TOA)location: **Amagasaki-shi, Hyogo, JAPAN**Acceptable Abbrev.: **TVE**Devices designed by: **TOA Valve Engineering Inc. (TOA)**

<i>Cert Cat</i>	<i>Device Type</i>	<i>NB Cert #</i>	<i>Type Classification</i>	<i>Code Section</i>	<i>Expiration Date</i>	<i>Page...</i>
M	A1700	01450	Safety Valve	I & VIII Div. 1	Sep 26, 2023	
M	A1900	01461	Power Actuated Relief Valve	I	Aug 25, 2023	

Total Valve Systems (TVO)location: **Broken Arrow, OK, UNITED STATES**Acceptable Abbrev.: **TVS**Devices designed by: **Farris Engineering (TFO)**

<i>Cert Cat</i>	<i>Device Type</i>	<i>NB Cert #</i>	<i>Type Classification</i>	<i>Code Section</i>	<i>Expiration Date</i>	<i>Page...</i>
A	3800	57024	Pilot Operated Pressure Relief Valve	VIII Div. 1	Mar 14, 2023	233
A	2600 & 2600S	57057	Safety Relief Valve	VIII Div. 1	Apr 11, 2024	236
A	2600L (Liquids)	57068	Relief Valve	VIII Div. 1	Apr 4, 2023	237
A	2700, 2700S, 3700, 3700S	57237	Safety Relief Valve	VIII Div. 1	Apr 11, 2023	238
A	2700L, 3700L (Liquids)	57248	Relief Valve	VIII Div. 1	Apr 4, 2023	239
A	2600L (Air & Steam)	57260	Safety Relief Valve	VIII Div. 1	Apr 11, 2023	240
A	4200 / 4400	57282	Safety Valve	I	Apr 11, 2023	241

Devices designed by: **Total Valve Systems (TVO)**

<i>Cert Cat</i>	<i>Device Type</i>	<i>NB Cert #</i>	<i>Type Classification</i>	<i>Code Section</i>	<i>Expiration Date</i>	<i>Page...</i>
M	TRV 6820	00606		VIII Div. 1	Sep 22, 2020	484

TRANSWATER API SDN. BHD. (TRW)location: **Shah Alam,**Devices designed by: **Farris Engineering (TFO)**

<i>Cert Cat</i>	<i>Device Type</i>	<i>NB Cert #</i>	<i>Type Classification</i>	<i>Code Section</i>	<i>Expiration Date</i>	<i>Page...</i>
A	2600 & 2600S	57057	Safety Relief Valve	VIII Div. 1	Oct 21, 2022	236
A	2600L (Liquids)	57068	Relief Valve	VIII Div. 1	Oct 21, 2022	237
A	2700, 2700S, 3700, 3700S	57237	Safety Relief Valve	VIII Div. 1	Oct 21, 2022	238
A	2700L, 3700L (Liquids)	57248	Relief Valve	VIII Div. 1	Oct 21, 2022	239
A	2600L (Air & Steam)	57260	Safety Relief Valve	VIII Div. 1	Oct 21, 2022	240

Tristate Valves & Controls, Inc. (PLD)**location: Indianapolis, IN, UNITED STATES****Acceptable Abbrev.: Tristate Valves & Controls**

Devices designed by: A&R Energy Services, Corporation (ARE)

<i>Cert Cat</i>	<i>Device Type</i>	<i>NB Cert #</i>	<i>Type Classification</i>	<i>Code Section</i>	<i>Expiration Date</i>	<i>Page...</i>
A	Kunkle 6000, 6252 Series	36324	Safety Valve	I & VIII Div. 1	Feb 14, 2020	391

Devices designed by: Emerson Automation Solutions Final Control, US LP (KBM)

<i>Cert Cat</i>	<i>Device Type</i>	<i>NB Cert #</i>	<i>Type Classification</i>	<i>Code Section</i>	<i>Expiration Date</i>	<i>Page...</i>
A	300,600	36076	Safety Valve	I	Jan 31, 2020	386
A	910 to 919	36100	Safety Relief Valve	VIII Div. 1	Aug 31, 2020	387
A	910 to 919 (Liquid)	36111	Relief Valve	VIII Div. 1	Oct 28, 2019	388

Tundra Process Solutions Ltd. (TPS)**location: Edmonton, AB,**

Devices designed by: Farris Engineering (TFO)

<i>Cert Cat</i>	<i>Device Type</i>	<i>NB Cert #</i>	<i>Type Classification</i>	<i>Code Section</i>	<i>Expiration Date</i>	<i>Page...</i>
A	3800	57024	Pilot Operated Pressure Relief Valve	VIII Div. 1	Jan 4, 2024	233
A	3800FP	57035	Pilot Operated Pressure Relief Valve	VIII Div. 1	Jan 4, 2024	234
A	2600 & 2600S	57057	Safety Relief Valve	VIII Div. 1	Jan 4, 2024	236
A	2600L (Liquids)	57068	Relief Valve	VIII Div. 1	Jan 4, 2024	237
A	3800L, PCL, PCM pilots	57215	Pilot Operated Pressure Relief Valve	VIII Div. 1	Mar 6, 2024	238
A	2700, 2700S, 3700, 3700S	57237	Safety Relief Valve	VIII Div. 1	Jan 4, 2024	238
A	2700L, 3700L (Liquids)	57248	Relief Valve	VIII Div. 1	Jan 4, 2024	239

TVI, Inc (TVC)**location: Calvert City, KY, UNITED STATES****Acceptable Abbrev.: TVI - KY**

Devices designed by: Farris Engineering (TFO)

<i>Cert Cat</i>	<i>Device Type</i>	<i>NB Cert #</i>	<i>Type Classification</i>	<i>Code Section</i>	<i>Expiration Date</i>	<i>Page...</i>
A	1850, 1850H, 1851, 1852, 1855, 1856M, 2850, 2852, 2856, 2850H	57002	Safety Relief Valve	VIII Div. 1	Sep 22, 2020	232
A	1890, 1892, 1895, 1896	57013	Safety Relief Valve	VIII Div. 1	Apr 24, 2018	232
A	2600 & 2600S	57057	Safety Relief Valve	VIII Div. 1	Sep 22, 2020	236
A	2600L (Liquids)	57068	Relief Valve	VIII Div. 1	Sep 22, 2020	237
A	2700, 2700S, 3700, 3700S	57237	Safety Relief Valve	VIII Div. 1	Jun 15, 2023	238
A	2700L, 3700L (Liquids)	57248	Relief Valve	VIII Div. 1	Jun 17, 2023	239
A	2600L (Air & Steam)	57260	Safety Relief Valve	VIII Div. 1	Apr 29, 2020	240
A	4200 / 4400	57282	Safety Valve	I	Apr 29, 2020	241

TVI, Inc. (TRA)**location: El Dorado, AR, UNITED STATES****Acceptable Abbrev.: TVI-AR**

Devices designed by: Farris Engineering (TFO)

<i>Cert Cat</i>	<i>Device Type</i>	<i>NB Cert #</i>	<i>Type Classification</i>	<i>Code Section</i>	<i>Expiration Date</i>	<i>Page...</i>
A	2600 & 2600S	57057	Safety Relief Valve	VIII Div. 1	Jul 25, 2023	236
A	2600L (Liquids)	57068	Relief Valve	VIII Div. 1	Jul 25, 2023	237
A	2700, 2700S, 3700, 3700S	57237	Safety Relief Valve	VIII Div. 1	Jul 25, 2023	238
A	2700L, 3700L (Liquids)	57248	Relief Valve	VIII Div. 1	Jul 25, 2023	239

TVI, Inc. (TVI)**location: Memphis, TN, UNITED STATES****Acceptable Abbrev.: TVI - TN**Devices designed by: **Farris Engineering (TFO)**

<i>Cert Cat</i>	<i>Device Type</i>	<i>NB Cert #</i>	<i>Type Classification</i>	<i>Code Section</i>	<i>Expiration Date</i>	<i>Page...</i>
A	1890, 1892, 1895, 1896	57013	Safety Relief Valve	VIII Div. 1	Apr 28, 2020	232
A	2600 & 2600S	57057	Safety Relief Valve	VIII Div. 1	Mar 23, 2023	236
A	2600L (Liquids)	57068	Relief Valve	VIII Div. 1	Nov 2, 2023	237
A	2700, 2700S, 3700, 3700S	57237	Safety Relief Valve	VIII Div. 1	Mar 23, 2023	238
A	2700L, 3700L (Liquids)	57248	Relief Valve	VIII Div. 1	Apr 28, 2020	239
A	4200 / 4400	57282	Safety Valve	I & VIII Div. 1	Mar 23, 2023	241

Devices designed by: **Spence Engineering Company, Incorporated (SEC)**

<i>Cert Cat</i>	<i>Device Type</i>	<i>NB Cert #</i>	<i>Type Classification</i>	<i>Code Section</i>	<i>Expiration Date</i>	<i>Page...</i>
A	Fig 31, 41, 41A	65045	Safety Valve	I & VIII Div. 1	Mar 23, 2023	452

V TEX Corporation (VTX)**location: Hitachinaka-City, Ibaraki, JAPAN****Acceptable Abbrev.: VTEX**Devices designed by: **V TEX Corporation (VTX)**

<i>Cert Cat</i>	<i>Device Type</i>	<i>NB Cert #</i>	<i>Type Classification</i>	<i>Code Section</i>	<i>Expiration Date</i>	<i>Page...</i>
M	FB Series	00471	Rupture Disk Device	VIII Div. 1	Dec 2, 2020	485
M	FMB Series	01584	Rupture Disk Device	VIII Div. 1	Jan 26, 2024	

Valserve, LLC (VLS)**location: Evanston, WY, UNITED STATES**Devices designed by: **Farris Engineering (TFO)**

<i>Cert Cat</i>	<i>Device Type</i>	<i>NB Cert #</i>	<i>Type Classification</i>	<i>Code Section</i>	<i>Expiration Date</i>	<i>Page...</i>
A	3800	57024	Pilot Operated Pressure Relief Valve	VIII Div. 1	Feb 25, 2022	233
A	3800FP	57035	Pilot Operated Pressure Relief Valve	VIII Div. 1	Feb 25, 2022	234
A	2600 & 2600S	57057	Safety Relief Valve	VIII Div. 1	Feb 25, 2022	236
A	2600L (Liquids)	57068	Relief Valve	VIII Div. 1	Feb 25, 2022	237
A	3800L, PCL, PCM pilots	57215	Pilot Operated Pressure Relief Valve	VIII Div. 1	Feb 25, 2022	238
A	2700, 2700S, 3700, 3700S	57237	Safety Relief Valve	VIII Div. 1	Feb 25, 2022	238
A	2700L, 3700L (Liquids)	57248	Relief Valve	VIII Div. 1	Feb 25, 2022	239
A	2600L (Air & Steam)	57260	Safety Relief Valve	VIII Div. 1	Feb 25, 2022	240

The Valve Automation Center Inc. (TVA)**location: Sarnia,****Seal Identification: VAC**Devices designed by: **A&R Energy Services, Corporation (ARE)**

<i>Cert Cat</i>	<i>Device Type</i>	<i>NB Cert #</i>	<i>Type Classification</i>	<i>Code Section</i>	<i>Expiration Date</i>	<i>Page...</i>
A	Kunkle 6000, 6252 Series	36324	Safety Valve	I & VIII Div. 1	Nov 1, 2023	391

Devices designed by: **Emerson Automation Solutions Final Control US LP (AGC)**

<i>Cert Cat</i>	<i>Device Type</i>	<i>NB Cert #</i>	<i>Type Classification</i>	<i>Code Section</i>	<i>Expiration Date</i>	<i>Page...</i>
A	243/249/443/449/546/843/849/943/5046/5049/8043/8049	01292	Pilot Operated Pressure Relief Valve	VIII Div. 1	Nov 1, 2023	402
A	JOS-E/JBS-E/JOS-H-E 8400 AC/AB	15208	Safety Relief Valve	VIII Div. 1	Jul 31, 2023	409
A	900 Series, 7700, SNC	15411	Safety Relief Valve	VIII Div. 1	Jul 31, 2023	411
A	900 Series (Liquid), 7700, SNC	15499	Relief Valve	VIII Div. 1	Jul 31, 2023	412

The Valve Automation Center Inc. (TVA)

(continued) location: **Sarnia,**
Seal Identification: **VAC**

Devices designed by: **Emerson Automation Solutions Final Control, US LP (KBM)**

<i>Cert Cat</i>	<i>Device Type</i>	<i>NB Cert #</i>	<i>Type Classification</i>	<i>Code Section</i>	<i>Expiration Date</i>	<i>Page...</i>
A	300,600	36076	Safety Valve	I	Nov 1, 2023	386
A	910 to 919	36100	Safety Relief Valve	VIII Div. 1	Jul 31, 2023	387

The Valve Automation Center Inc. (VAC)

location: **Guelph, CANADA**
Seal Identification: **VAC**

Devices designed by: **Emerson Automation Solutions Final Control US LP (AGC)**

<i>Cert Cat</i>	<i>Device Type</i>	<i>NB Cert #</i>	<i>Type Classification</i>	<i>Code Section</i>	<i>Expiration Date</i>	<i>Page...</i>
A	81, 81P, 83, 86	01089	Safety Relief Valve	VIII Div. 1	Jul 31, 2023	397
A	243/249/443/449/546/843/849/943/5046/5049/8043/8049	01292	Pilot Operated Pressure Relief Valve	VIII Div. 1	Nov 1, 2023	402
A	253/259/453/459/853/859/953/959/5059/8053/8059	01304	Pilot Operated Pressure Relief Valve	VIII Div. 1	Jul 31, 2023	402
A	263/269/463/469/566/863/869/963/969/5066/5069	01315	Pilot Operated Pressure Relief Valve	VIII Div. 1	Aug 1, 2023	403
A	453/459/853/859/953/959/5059 (Liquids)	01326	Pilot Operated Pressure Relief Valve	VIII Div. 1	Jul 31, 2023	403
A	443/449/546/843/849/943/949/5046/5049(Liquids)	01337	Pilot Operated Pressure Relief Valve	VIII Div. 1	Jul 31, 2023	404
A	463/469/566/863/869/963/969/5066/5069 (Liquids)	01348	Pilot Operated Pressure Relief Valve	VIII Div. 1	Aug 17, 2023	404
A	JLT (Liquids)	15095	Safety Relief Valve	VIII Div. 1	Jul 31, 2023	408
A	JOS-E/JBS-E/JOS-H-E 8400 AC/AB	15208	Safety Relief Valve	VIII Div. 1	Jul 31, 2023	409
A	900 Series, 7700, SNC	15411	Safety Relief Valve	VIII Div. 1	Jul 31, 2023	411
A	900 Series (Liquid), 7700, SNC	15499	Relief Valve	VIII Div. 1	Jul 31, 2023	412

Devices designed by: **Emerson Automation Solutions Final Control, US LP (KBM)**

<i>Cert Cat</i>	<i>Device Type</i>	<i>NB Cert #</i>	<i>Type Classification</i>	<i>Code Section</i>	<i>Expiration Date</i>	<i>Page...</i>
A	910 to 919	36100	Safety Relief Valve	VIII Div. 1	Nov 1, 2023	387
A	910 to 919 (Liquid)	36111	Relief Valve	VIII Div. 1	Jul 31, 2023	388

Devices designed by: **Farris Engineering (TFO)**

<i>Cert Cat</i>	<i>Device Type</i>	<i>NB Cert #</i>	<i>Type Classification</i>	<i>Code Section</i>	<i>Expiration Date</i>	<i>Page...</i>
A	3800FP	57035	Pilot Operated Pressure Relief Valve	VIII Div. 1	Jul 12, 2019	234

ValvTechnologies, Incorporated (VLC)

location: **Houston, TX, UNITED STATES**

Devices designed by: **ValvTechnologies, Incorporated (VLC)**

<i>Cert Cat</i>	<i>Device Type</i>	<i>NB Cert #</i>	<i>Type Classification</i>	<i>Code Section</i>	<i>Expiration Date</i>	<i>Page...</i>
M	E*L114	59015	Power Actuated Relief Valve	I	Jan 6, 2020	486
M	E*L111	59026	Power Actuated Relief Valve	I	Jan 6, 2020	486
M	ERV 3 1/16" Bore	59037	Power Actuated Relief Valve	I	Jun 9, 2018	486
M	Z***-05*****_*****_***	59059	Power Actuated Relief Valve	I	Feb 23, 2024	
M	E*9121	59060	Power Actuated Relief Valve	I	Jun 16, 2018	487
M	EOL121NRA*P1-MK1H	59082	Power Actuated Relief Valve	I	Aug 1, 2019	487
M	Z***-105***8*	59105	Power Actuated Relief Valve	I	Oct 9, 2021	487
M	Z***1135R55P1 (1.06" Bore)	59127	Power Actuated Relief Valve	I	May 9, 2020	487

Valvulas Nacional S. A. (VNS)

location: **Rubi (Barcelona), SPAIN**
Acceptable Abbrev.: **Nacional Safety Valves**

Devices designed by: **Valvulas Nacional S. A. (VNS)**

<i>Cert Cat</i>	<i>Device Type</i>	<i>NB Cert #</i>	<i>Type Classification</i>	<i>Code Section</i>	<i>Expiration Date</i>	<i>Page...</i>
M	6400	96016	Safety Relief Valve	VIII Div. 1	Mar 5, 2020	488
M	6400 (Liquid)	96027	Safety Relief Valve	VIII Div. 1	Mar 5, 2020	488

Vaptec Inc. Equipement de Vapeur Industrielle (VEV)location: **St. Laurent, CANADA**Acceptable Abbrev.: **Vaptec Inc.**Devices designed by: **Spence Engineering Company, Incorporated (SEC)**

<i>Cert Cat</i>	<i>Device Type</i>	<i>NB Cert #</i>	<i>Type Classification</i>	<i>Code Section</i>	<i>Expiration Date</i>	<i>Page...</i>
A	Fig 31, 41, 41A	65045	Safety Valve	I & VIII Div. 1	Jan 5, 2023	452

VRC Protx , LLC. (Evanston) (VRR)location: **Evanston, WY, UNITED STATES**Acceptable Abbrev.: **VRC Protx Evanston, Wyoming**Devices designed by: **Emerson Automation Solutions Final Control US LP (AGC)**

<i>Cert Cat</i>	<i>Device Type</i>	<i>NB Cert #</i>	<i>Type Classification</i>	<i>Code Section</i>	<i>Expiration Date</i>	<i>Page...</i>
A	81, 81P, 83, 86	01089	Safety Relief Valve	VIII Div. 1	Jun 19, 2021	397
A	81P (Liquids)	01102	Relief Valve	VIII Div. 1	Jun 20, 2021	397
A	243/249/443/449/546/843/849/943/5046/5049/8043/8049	01292	Pilot Operated Pressure Relief Valve	VIII Div. 1	Feb 3, 2021	402
A	253/259/453/459/853/859/953/959/5059/8053/8059	01304	Pilot Operated Pressure Relief Valve	VIII Div. 1	Jun 19, 2021	402
A	263/269/463/469/566/863/869/963/969/5066/5069	01315	Pilot Operated Pressure Relief Valve	VIII Div. 1	Jun 19, 2021	403
A	453/459/853/859/953/959/5059 (Liquids)	01326	Pilot Operated Pressure Relief Valve	VIII Div. 1	Feb 3, 2021	403
A	443/449/546/843/849/943/949/5046/5049(Liquids)	01337	Pilot Operated Pressure Relief Valve	VIII Div. 1	Jun 20, 2021	404
A	463/469/566/863/869/963/969/5066/5069 (Liquids)	01348	Pilot Operated Pressure Relief Valve	VIII Div. 1	May 5, 2021	404
A	JLT (Liquids)	15095	Safety Relief Valve	VIII Div. 1	Feb 3, 2021	408
A	JOS-E/JBS-E/JOS-H-E 8400 AC/AB	15208	Safety Relief Valve	VIII Div. 1	Jun 8, 2021	409
A	900 Series, 7700, SNC	15411	Safety Relief Valve	VIII Div. 1	Jun 13, 2021	411
A	900 Series (Liquid), 7700, SNC	15499	Relief Valve	VIII Div. 1	Jun 8, 2021	412
A	JLT/JOS, JLT/JBS, 8500, ACL/ABL	15512	Safety Relief Valve	VIII Div. 1	Feb 3, 2021	413

Devices designed by: **Farris Engineering (TFO)**

<i>Cert Cat</i>	<i>Device Type</i>	<i>NB Cert #</i>	<i>Type Classification</i>	<i>Code Section</i>	<i>Expiration Date</i>	<i>Page...</i>
A	3800	57024	Pilot Operated Pressure Relief Valve	VIII Div. 1	Jan 30, 2024	233
A	3800FP	57035	Pilot Operated Pressure Relief Valve	VIII Div. 1	Jan 29, 2024	234
A	6400/6600 (previously 2500 & 4600)	57046	Safety Valve	I & VIII Div. 1	Jan 29, 2024	235
A	2600 & 2600S	57057	Safety Relief Valve	VIII Div. 1	Jan 29, 2024	236
A	2600L (Liquids)	57068	Relief Valve	VIII Div. 1	Jan 29, 2024	237
A	3800L, PCL, PCM pilots	57215	Pilot Operated Pressure Relief Valve	VIII Div. 1	Jan 29, 2024	238
A	2700, 2700S, 3700, 3700S	57237	Safety Relief Valve	VIII Div. 1	Jan 29, 2024	238
A	2700L, 3700L (Liquids)	57248	Relief Valve	VIII Div. 1	Jan 29, 2024	239
A	2600L (Air & Steam)	57260	Safety Relief Valve	VIII Div. 1	Jan 29, 2024	240
A	4200 / 4400	57282	Safety Valve	I & VIII Div. 1	Jan 29, 2024	241

Devices designed by: **Emerson Automation Solutions Final Control US LP (AGC)**

<i>Cert Cat</i>	<i>Device Type</i>	<i>NB Cert #</i>	<i>Type Classification</i>	<i>Code Section</i>	<i>Expiration Date</i>	<i>Page...</i>
A	81, 81P, 83, 86	01089	Safety Relief Valve	VIII Div. 1	Jun 19, 2021	397
A	81P (Liquids)	01102	Relief Valve	VIII Div. 1	Jun 20, 2021	397
A	243/249/443/449/546/843/849/943/5046/5049/8043/8049	01292	Pilot Operated Pressure Relief Valve	VIII Div. 1	Feb 3, 2021	402
A	253/259/453/459/853/859/953/959/5059/8053/8059	01304	Pilot Operated Pressure Relief Valve	VIII Div. 1	Jun 19, 2021	402
A	263/269/463/469/566/863/869/963/969/5066/5069	01315	Pilot Operated Pressure Relief Valve	VIII Div. 1	Jun 19, 2021	403
A	453/459/853/859/953/959/5059 (Liquids)	01326	Pilot Operated Pressure Relief Valve	VIII Div. 1	Feb 3, 2021	403
A	443/449/546/843/849/943/949/5046/5049(Liquids)	01337	Pilot Operated Pressure Relief Valve	VIII Div. 1	Jun 20, 2021	404
A	463/469/566/863/869/963/969/5066/5069 (Liquids)	01348	Pilot Operated Pressure Relief Valve	VIII Div. 1	May 5, 2021	404
A	JLT (Liquids)	15095	Safety Relief Valve	VIII Div. 1	Feb 3, 2021	408
A	JOS-E/JBS-E/JOS-H-E 8400 AC/AB	15208	Safety Relief Valve	VIII Div. 1	Jun 8, 2021	409
A	900 Series, 7700, SNC	15411	Safety Relief Valve	VIII Div. 1	Jun 13, 2021	411
A	900 Series (Liquid), 7700, SNC	15499	Relief Valve	VIII Div. 1	Jun 8, 2021	412
A	JLT/JOS, JLT/JBS, 8500, ACL/ABL	15512	Safety Relief Valve	VIII Div. 1	Feb 3, 2021	413

VRC Protx , LLC. (Evanston) (VRR)*(continued)* location: **Evanston, WY, UNITED STATES**Acceptable Abbrev.: **VRC Protx Evanston, Wyoming**Devices designed by: **Farris Engineering (TFO)**

<i>Cert Cat</i>	<i>Device Type</i>	<i>NB Cert #</i>	<i>Type Classification</i>	<i>Code Section</i>	<i>Expiration Date</i>	<i>Page...</i>
A	3800	57024	Pilot Operated Pressure Relief Valve	VIII Div. 1	Jan 30, 2024	233
A	3800FP	57035	Pilot Operated Pressure Relief Valve	VIII Div. 1	Jan 29, 2024	234
A	6400/6600 (previously 2500 & 4600)	57046	Safety Valve	I & VIII Div. 1	Jan 29, 2024	235
A	2600 & 2600S	57057	Safety Relief Valve	VIII Div. 1	Jan 29, 2024	236
A	2600L (Liquids)	57068	Relief Valve	VIII Div. 1	Jan 29, 2024	237
A	3800L, PCL, PCM pilots	57215	Pilot Operated Pressure Relief Valve	VIII Div. 1	Jan 29, 2024	238
A	2700, 2700S, 3700, 3700S	57237	Safety Relief Valve	VIII Div. 1	Jan 29, 2024	238
A	2700L, 3700L (Liquids)	57248	Relief Valve	VIII Div. 1	Jan 29, 2024	239
A	2600L (Air & Steam)	57260	Safety Relief Valve	VIII Div. 1	Jan 29, 2024	240
A	4200 / 4400	57282	Safety Valve	I & VIII Div. 1	Jan 29, 2024	241

VRC Protx, LLC (RIL)location: **New Berlin, WI, UNITED STATES**Acceptable Abbrev.: **VRC-NB**Devices designed by: **A&R Energy Services, Corporation (ARE)**

<i>Cert Cat</i>	<i>Device Type</i>	<i>NB Cert #</i>	<i>Type Classification</i>	<i>Code Section</i>	<i>Expiration Date</i>	<i>Page...</i>
A	Kunkle 6000, 6252 Series	36324	Safety Valve	VIII Div. 1	Feb 13, 2019	391

Devices designed by: **Emerson Automation Solutions Final Control US LP (AGC)**

<i>Cert Cat</i>	<i>Device Type</i>	<i>NB Cert #</i>	<i>Type Classification</i>	<i>Code Section</i>	<i>Expiration Date</i>	<i>Page...</i>
A	81, 81P, 83, 86	01089	Safety Relief Valve	VIII Div. 1	May 28, 2018	397
A	81P (Liquids)	01102	Relief Valve	VIII Div. 1	May 27, 2018	397
A	243/249/443/449/546/843/849/943/5046/5049/8043/8049	01292	Pilot Operated Pressure Relief Valve	VIII Div. 1	May 28, 2018	402
A	253/259/453/459/853/859/953/959/5059/8053/8059	01304	Pilot Operated Pressure Relief Valve	VIII Div. 1	May 28, 2018	402
A	263/269/463/469/566/863/869/963/969/5066/5069	01315	Pilot Operated Pressure Relief Valve	VIII Div. 1	May 27, 2018	403
A	453/459/853/859/953/959/5059 (Liquids)	01326	Pilot Operated Pressure Relief Valve	VIII Div. 1	May 27, 2018	403
A	443/449/546/843/849/943/949/5046/5049(Liquids)	01337	Pilot Operated Pressure Relief Valve	VIII Div. 1	May 27, 2018	404
A	JLT (Liquids)	15095	Safety Relief Valve	VIII Div. 1	May 27, 2018	408
A	JOS-E/JBS-E/JOS-H-E 8400 AC/AB	15208	Safety Relief Valve	VIII Div. 1	May 28, 2018	409
A	900 Series, 7700, SNC	15411	Safety Relief Valve	VIII Div. 1	May 27, 2018	411
A	900 Series (Liquid), 7700, SNC	15499	Relief Valve	VIII Div. 1	May 27, 2018	412
A	HL, HSL	15589	Safety Valve	I & VIII Div. 1	May 27, 2018	416

Devices designed by: **Emerson Automation Solutions Final Control, US LP (KBM)**

<i>Cert Cat</i>	<i>Device Type</i>	<i>NB Cert #</i>	<i>Type Classification</i>	<i>Code Section</i>	<i>Expiration Date</i>	<i>Page...</i>
A	910 to 919	36100	Safety Relief Valve	VIII Div. 1	Jan 29, 2019	387
A	910 to 919 (Liquid)	36111	Relief Valve	VIII Div. 1	Oct 31, 2018	388

Devices designed by: **Farris Engineering (TFO)**

<i>Cert Cat</i>	<i>Device Type</i>	<i>NB Cert #</i>	<i>Type Classification</i>	<i>Code Section</i>	<i>Expiration Date</i>	<i>Page...</i>
A	3800	57024	Pilot Operated Pressure Relief Valve	VIII Div. 1	Feb 20, 2024	233
A	3800FP	57035	Pilot Operated Pressure Relief Valve	VIII Div. 1	Feb 20, 2024	234
A	6400/6600 (previously 2500 & 4600)	57046	Safety Valve	I & VIII Div. 1	Feb 20, 2024	235
A	2600 & 2600S	57057	Safety Relief Valve	VIII Div. 1	Feb 20, 2024	236
A	2600L (Liquids)	57068	Relief Valve	VIII Div. 1	Feb 20, 2024	237
A	3800L, PCL, PCM pilots	57215	Pilot Operated Pressure Relief Valve	VIII Div. 1	Feb 20, 2024	238
A	2700, 2700S, 3700, 3700S	57237	Safety Relief Valve	VIII Div. 1	Feb 20, 2024	238
A	2700L, 3700L (Liquids)	57248	Relief Valve	VIII Div. 1	Feb 20, 2024	239
A	2600L (Air & Steam)	57260	Safety Relief Valve	VIII Div. 1	Feb 20, 2024	240
A	4200 / 4400	57282	Safety Valve	I & VIII Div. 1	Feb 20, 2024	241

VRC Protx, LLC. Monroe (VRC)location: **Monroe, MI,**Acceptable Abbrev.: **VRC Protx, LLC. Monroe Michigan**Devices designed by: **Emerson Automation Solutions Final Control US LP (AGC)**

<i>Cert Cat</i>	<i>Device Type</i>	<i>NB Cert #</i>	<i>Type Classification</i>	<i>Code Section</i>	<i>Expiration Date</i>	<i>Page...</i>
A	JLT (Liquids)	15095	Safety Relief Valve	VIII Div. 1	Aug 13, 2021	408
A	JOS-E/JBS-E/JOS-H-E 8400 AC/AB	15208	Safety Relief Valve	VIII Div. 1	Aug 13, 2021	409
A	900 Series, 7700, SNC	15411	Safety Relief Valve	VIII Div. 1	Aug 13, 2021	411
A	900 Series (Liquid), 7700, SNC	15499	Relief Valve	VIII Div. 1	Aug 13, 2021	412

Wal-Tech Valve, Inc. (WTM)location: **Mobile, AL, UNITED STATES**Acceptable Abbrev.: **WTM**Devices designed by: **Emerson Automation Solutions Final Control US LP (AGC)**

<i>Cert Cat</i>	<i>Device Type</i>	<i>NB Cert #</i>	<i>Type Classification</i>	<i>Code Section</i>	<i>Expiration Date</i>	<i>Page...</i>
A	81, 81P, 83, 86	01089	Safety Relief Valve	VIII Div. 1	Feb 27, 2019	397
A	81P (Liquids)	01102	Relief Valve	VIII Div. 1	Apr 9, 2019	397
A	243/249/443/449/546/843/849/943/5046/5049/8043/8049	01292	Pilot Operated Pressure Relief Valve	VIII Div. 1	Oct 19, 2018	402
A	253/259/453/459/853/859/953/959/5059/8053/8059	01304	Pilot Operated Pressure Relief Valve	VIII Div. 1	Feb 26, 2019	402
A	JLT (Liquids)	15095	Safety Relief Valve	VIII Div. 1	Feb 26, 2019	408
A	JOS-E/JBS-E/JOS-H-E 8400 AC/AB	15208	Safety Relief Valve	VIII Div. 1	Oct 19, 2018	409
A	900 Series, 7700, SNC	15411	Safety Relief Valve	VIII Div. 1	Oct 18, 2018	411
A	900 Series (Liquid), 7700, SNC	15499	Relief Valve	VIII Div. 1	Feb 26, 2019	412

Devices designed by: **Spence Engineering Company, Incorporated (SEC)**

<i>Cert Cat</i>	<i>Device Type</i>	<i>NB Cert #</i>	<i>Type Classification</i>	<i>Code Section</i>	<i>Expiration Date</i>	<i>Page...</i>
A	Fig 31, 41, 41A	65045	Safety Valve	I & VIII Div. 1	Oct 18, 2018	452
A	Figure 800	65089	Safety Relief Valve	VIII Div. 1	Oct 18, 2018	453

Watts Regulator Company (WWF)location: **Franklin, NH, UNITED STATES**Acceptable Abbrev.: **Watts**

Webster Valve Division

Devices designed by: **Watts Regulator Company (WWF)**

<i>Cert Cat</i>	<i>Device Type</i>	<i>NB Cert #</i>	<i>Type Classification</i>	<i>Code Section</i>	<i>Expiration Date</i>	<i>Page...</i>
M	3L, 10L, (F, SL, L, LL, LLL, RL) 100XL Mod. M7 (LF prefix also)	63009	Temperature Actuated Pressure Relief Valve	IV	Jan 26, 2023	489
M	3/4" 40L, (LL, LLL) 40XL, 140S, 140X, (Z2) Mod. M15 (LF prefix	63021	Temperature Actuated Pressure Relief Valve	IV	Jan 26, 2023	489
M	1" 40L (LL) 40XL (Z2) , Mod 15 (LF prefix also)	63032	Temperature Actuated Pressure Relief Valve	IV	Jan 26, 2023	489
M	1" 140S, 140X (Mod. M15) (LF prefix also)	63043	Temperature Actuated Pressure Relief Valve	IV	Jan 26, 2023	490
M	174A M3, 474A M2, M474-M2 (3/4")(also LF prefix)	63054	Safety Relief Valve	IV	Jan 25, 2023	490
M	174A Model M1 (1")(also LF prefix)	63065	Safety Relief Valve	IV	Jan 25, 2023	490
M	174A, LF174A M1 (1-1/4")	63076	Safety Relief Valve	IV	Jan 5, 2023	490
M	174A, LF174A Model M (1-1/2")	63087	Safety Relief Valve	IV	Oct 11, 2021	491
M	174A, LF174A Model M (2")	63098	Safety Relief Valve	IV	Oct 31, 2021	491
M	1" N240X(-6,-9),1-1/4 N241X(-5,-8) Mod. M15 (LF prefix also)	63100	Temperature Actuated Pressure Relief Valve	IV	Nov 2, 2023	491
M	340-3, 340X-8 M15, 342-3, 342X-8 M15 (T & P) (LF prefix also)	63122	Temperature Actuated Pressure Relief Valve	IV	Nov 2, 2023	492
M	374A & M374 Model M & TACO Inc. 333-1(also LF prefix)	63144	Safety Relief Valve	IV	Apr 9, 2021	492
M	740 Model M1 (3/4")	63177	Safety Relief Valve	IV	Mar 6, 2021	492
M	740 Model M (1")	63188	Safety Relief Valve	IV	Mar 6, 2021	492
M	740 Model M (1 1/4")	63199	Safety Relief Valve	IV	Mar 16, 2021	493
M	740 Model M (1 1/2")	63201	Safety Relief Valve	IV	Nov 2, 2023	493
M	740 Model M (2")	63212	Safety Relief Valve	IV	Mar 6, 2021	493
M	(L) 315 Mod. M1 and M2	63223	Safety Valve	IV	Aug 29, 2023	493
M	415 M1 (3/4")	63245	Safety Valve	IV	Jan 25, 2023	494
M	(LF, M) 335 Mod. M1 & M2	63256	Safety Relief Valve	IV	Jan 25, 2023	494
M	330-M1 & M330-M1	63267	Safety Relief Valve	IV	Aug 24, 2023	494
M	415 Model M (1 1/4")	63278	Safety Valve	IV	Feb 23, 2021	494
M	415 Model M (1 1/2")	63289	Safety Valve	IV	Feb 23, 2021	495
M	375-M1 & M375-M1	63302	Safety Relief Valve	IV	Jan 26, 2023	495
M	415-M1 (1")	63324	Safety Valve	IV	Jan 25, 2023	495
M	4L, LF4L, M7 (3/4")	63335	Safety Relief Valve	IV	May 9, 2018	495
M	3/4" (M)354A	63403	Safety Relief Valve	IV	Nov 2, 2023	496

Watts Water Technologies (Canada) Inc. (WBC)location: **Burlington, CANADA**Acceptable Abbrev.: **Watts, Burlington, Ontario Canada**Devices designed by: **Spence Engineering Company, Incorporated (SEC)**

<i>Cert Cat</i>	<i>Device Type</i>	<i>NB Cert #</i>	<i>Type Classification</i>	<i>Code Section</i>	<i>Expiration Date</i>	<i>Page...</i>
A	Fig 31, 41, 41A	65045	Safety Valve	I & VIII Div. 1	Jul 1, 2020	452

Weir BDK Valves (WIN)location: **Hubli, Karnataka, INDIA**Devices designed by: **Weir Power & Industrial - France (SAR)**

<i>Cert Cat</i>	<i>Device Type</i>	<i>NB Cert #</i>	<i>Type Classification</i>	<i>Code Section</i>	<i>Expiration Date</i>	<i>Page...</i>
M	9 Series (Liquids)	44020	Safety Relief Valve	VIII Div. 1	Jan 9, 2021	497
M	P3, P4 (liquids)	92012	Relief Valve	VIII Div. 1	Dec 15, 2023	502

Weir Group Energy Equipment (Suzhou) Co., Ltd. (WSZ)**location: Suzhou, Jiangsu, PEOPLES REP/CHINA****Acceptable Abbrev.: WVCS**

Devices designed by: Weir Power & Industrial - France (SAR)

<i>Cert Cat</i>	<i>Device Type</i>	<i>NB Cert #</i>	<i>Type Classification</i>	<i>Code Section</i>	<i>Expiration Date</i>	<i>Page...</i>
M	P3, P4, P5	92001	Safety Relief Valve	VIII Div. 1	Jan 17, 2024	501
M	P3, P4 (liquids)	92012	Relief Valve	VIII Div. 1	Apr 16, 2024	502

Weir Power & Industrial - France (SAR)**location: Vendin-le-Vieil, FRANCE**

Sarasin-RSBD

Devices designed by: Weir Power & Industrial - France (SAR)

<i>Cert Cat</i>	<i>Device Type</i>	<i>NB Cert #</i>	<i>Type Classification</i>	<i>Code Section</i>	<i>Expiration Date</i>	<i>Page...</i>
M	9 Series	44019	Safety Relief Valve	VIII Div. 1	Jun 30, 2020	497
M	9 Series (Liquids)	44020	Safety Relief Valve	VIII Div. 1	Nov 17, 2020	497
M	76 Series Steam & Liquid (Water K=0.850)	44031	Pilot Operated Pressure Relief Valve	I	Dec 3, 2021	
M	76 Series	44042	Pilot Operated Pressure Relief Valve	VIII Div. 1	Jun 29, 2020	498
M	78 (Pilot Operated)	44053	Pilot Operated Pressure Relief Valve	VIII Div. 1	Apr 17, 2024	499
M	78 (Pilot Operated, Liquid)	44064	Pilot Operated Pressure Relief Valve	VIII Div. 1	Apr 17, 2024	500
M	74 Series	44097	Pilot Operated Pressure Relief Valve	VIII Div. 1	Aug 4, 2022	
M	78LP Series	44109	Pilot Operated Pressure Relief Valve	VIII Div. 1	Feb 28, 2023	
M	STARFLOW-V	44110	Safety Valve	I & VIII Div. 1	Dec 20, 2023	
M	STARFLOW-V (Restricted Lift)	44121	Safety Valve	I & VIII Div. 1	Dec 20, 2023	
M	P3, P4, P5	92001	Safety Relief Valve	VIII Div. 1	Dec 20, 2024	501
M	P3, P4 (liquids)	92012	Relief Valve	VIII Div. 1	Apr 17, 2024	502
M	Starsteam V Series	92034	Safety Relief Valve	I & VIII Div. 1	Jan 24, 2019	502
M	Starsteam V Series (Res. Lift)	92045	Safety Valve	I & VIII Div. 1	Jan 24, 2019	503
M	76 Series (Liquid)	92056	Pilot Operated Pressure Relief Valve	VIII Div. 1	Mar 19, 2020	503

Westech Industrial Ltd. (YCO)**location: Burlington, CANADA**

Devices designed by: Emerson Automation Solutions Final Control US LP (AGC)

<i>Cert Cat</i>	<i>Device Type</i>	<i>NB Cert #</i>	<i>Type Classification</i>	<i>Code Section</i>	<i>Expiration Date</i>	<i>Page...</i>
A	81, 81P, 83, 86	01089	Safety Relief Valve	VIII Div. 1	May 2, 2023	397
A	81P (Liquids)	01102	Relief Valve	VIII Div. 1	May 2, 2023	397
A	243/249/443/449/546/843/849/943/5046/5049/8043/8049	01292	Pilot Operated Pressure Relief Valve	VIII Div. 1	May 2, 2023	402
A	253/259/453/459/853/859/953/959/5059/8053/8059	01304	Pilot Operated Pressure Relief Valve	VIII Div. 1	May 2, 2023	402
A	263/269/463/469/566/863/869/963/969/5066/5069	01315	Pilot Operated Pressure Relief Valve	VIII Div. 1	May 2, 2023	403
A	453/459/853/859/953/959/5059 (Liquids)	01326	Pilot Operated Pressure Relief Valve	VIII Div. 1	May 2, 2023	403
A	443/449/546/843/849/943/949/5046/5049(Liquids)	01337	Pilot Operated Pressure Relief Valve	VIII Div. 1	May 2, 2023	404
A	463/469/566/863/869/963/969/5066/5069 (Liquids)	01348	Pilot Operated Pressure Relief Valve	VIII Div. 1	May 2, 2023	404
A	JOS-E/JBS-E/JOS-H-E 8400 AC/AB	15208	Safety Relief Valve	VIII Div. 1	May 2, 2023	409
A	900 Series, 7700, SNC	15411	Safety Relief Valve	VIII Div. 1	May 2, 2023	411
A	900 Series (Liquid), 7700, SNC	15499	Relief Valve	VIII Div. 1	May 2, 2023	412

Westech Industrial Ltd. (YCO)*(continued)* **location: Burlington, CANADA**Devices designed by: **LESER GmbH & Company KG (LES)**

<i>Cert Cat</i>	<i>Device Type</i>	<i>NB Cert #</i>	<i>Type Classification</i>	<i>Code Section</i>	<i>Expiration Date</i>	<i>Page...</i>
A	459/462 liquids	37101	Relief Valve	VIII Div. 1	Mar 20, 2024	319
A	459/462	37112	Safety Relief Valve	VIII Div. 1	Mar 20, 2024	319
A	437 (Liquids)	37189	Relief Valve	VIII Div. 1	Mar 20, 2024	321
A	438 Sub Types 481, 439	37190	Safety Relief Valve	VIII Div. 1	Mar 20, 2024	322
A	437	37213	Safety Relief Valve	VIII Div. 1	Mar 20, 2024	322
A	526	37224	Safety Relief Valve	VIII Div. 1	Mar 20, 2024	323
A	526 (Liquids)	37235	Relief Valve	VIII Div. 1	Mar 20, 2024	324
A	526D	37246	Safety Relief Valve	VIII Div. 1	Mar 20, 2024	324
A	526D Liquids	37257	Relief Valve	VIII Div. 1	Mar 20, 2024	324
A	820 (liquid) (821)	37268	Pilot Operated Pressure Relief Valve	VIII Div. 1	Mar 20, 2024	325
A	810/820 (811/821)	37280	Pilot Operated Pressure Relief Valve	VIII Div. 1	Mar 20, 2024	326

Xuzhou Bafang Safety Device Co., Ltd (XBA)**location: Xuzhou City, Jiangsu Province, PEOPLES REP/CHINA**Devices designed by: **Xuzhou Bafang Safety Device Co., Ltd (XBA)**

<i>Cert Cat</i>	<i>Device Type</i>	<i>NB Cert #</i>	<i>Type Classification</i>	<i>Code Section</i>	<i>Expiration Date</i>	<i>Page...</i>
M	FCD	00684	Rupture Disk Device	VIII Div. 1	Oct 13, 2022	
M	RCD Series Rupture Disc	00954	Rupture Disk Device	VIII Div. 1	Oct 13, 2022	
M	9100 Series Buckling Pin Relief Valve	00965	Buckling Pin Non-reclosing Device	VIII Div. 1	Oct 13, 2022	

YONGYI VALVE GROUP CO., LTD. (YOY)**location: Oubei Town, Yongjia, Zhejiang, PEOPLES REP/CHINA****Acceptable Abbrev.: YOY**Devices designed by: **YONGYI VALVE GROUP CO., LTD. (YOY)**

<i>Cert Cat</i>	<i>Device Type</i>	<i>NB Cert #</i>	<i>Type Classification</i>	<i>Code Section</i>	<i>Expiration Date</i>	<i>Page...</i>
M	YFA42C-300aC 1-1/2G3	04116	Safety Relief Valve	VIII Div. 1	Aug 3, 2023	
M	YFA42C-150C 2J3	04127	Safety Relief Valve	VIII Div. 1	Aug 3, 2023	

Yusuf Bin Ahmed Kanoo Co. Limited (YAK)**location: Dammam, SAUDI ARABIA****Acceptable Abbrev.: YBA Kanoo - Oil & Gas Div., Kanoo Flow Control**Devices designed by: **Farris Engineering (TFO)**

<i>Cert Cat</i>	<i>Device Type</i>	<i>NB Cert #</i>	<i>Type Classification</i>	<i>Code Section</i>	<i>Expiration Date</i>	<i>Page...</i>
A	3800	57024	Pilot Operated Pressure Relief Valve	VIII Div. 1	Jun 3, 2020	233
A	3800FP	57035	Pilot Operated Pressure Relief Valve	VIII Div. 1	Jun 3, 2020	234
A	2600 & 2600S	57057	Safety Relief Valve	VIII Div. 1	Apr 27, 2021	236
A	2600L (Liquids)	57068	Relief Valve	VIII Div. 1	Jun 3, 2020	237
A	3800L, PCL, PCM pilots	57215	Pilot Operated Pressure Relief Valve	VIII Div. 1	Jul 28, 2019	238
A	2700, 2700S, 3700, 3700S	57237	Safety Relief Valve	VIII Div. 1	Jul 28, 2019	238
A	2700L, 3700L (Liquids)	57248	Relief Valve	VIII Div. 1	Jul 28, 2019	239

Zeeco, Inc. (ZCO)**location: Broken Arrow, OK, UNITED STATES**Devices designed by: **Zeeco, Inc. (ZCO)**

<i>Cert Cat</i>	<i>Device Type</i>	<i>NB Cert #</i>	<i>Type Classification</i>	<i>Code Section</i>	<i>Expiration Date</i>	<i>Page...</i>
M	DA-BPV	03317	Buckling Pin Non-reclosing Device	VIII Div. 1	Nov 22, 2023	

Zhejiang Chaochao Safety Valve Manufacturing Co., Ltd. (CXI)

location: Cixi City, Zhejiang Province, 315321, PEOPLES REP/CHINA

Acceptable Abbrev.: CHAOCHAO

Devices designed by: Zhejiang Chaochao Safety Valve Manufacturing Co., Ltd. (CXI)

<i>Cert Cat</i>	<i>Device Type</i>	<i>NB Cert #</i>	<i>Type Classification</i>	<i>Code Section</i>	<i>Expiration Date</i>	<i>Page...</i>
M	AX2.II	12755	Safety Relief Valve	VIII Div. 1	May 3, 2023	505
M	CAXL4-2.5	12812	Safety Valve	VIII Div. 1	Feb 11, 2022	
M	CAX3.11-2.5	12823	Safety Valve	VIII Div. 1	Feb 11, 2022	
M	CAXL6-2.5	12834	Safety Valve	VIII Div. 1	Feb 11, 2022	
M	CAXL8-2.5	12845	Safety Valve	VIII Div. 1	Feb 11, 2022	
M	CAXL8.II - 2.5	12856	Safety Valve	VIII Div. 1	Feb 11, 2022	
M	CAGU24	12867	Safety Valve	VIII Div. 1	Apr 12, 2023	

ZOOK Canada Inc. (PEL)

location: Burlington, CANADA

Acceptable Abbrev.: ZOOK

Devices designed by: ZOOK Canada Inc. (PEL)

<i>Cert Cat</i>	<i>Device Type</i>	<i>NB Cert #</i>	<i>Type Classification</i>	<i>Code Section</i>	<i>Expiration Date</i>	<i>Page...</i>
M	RL-PB-LVR Series	82000	Rupture Disk Device	VIII Div. 1	Jan 26, 2020	506
M	R-PB-R	82011	Rupture Disk Device	VIII Div. 1	Dec 21, 2020	507
M	R-D-R Series	82022	Rupture Disk Device	VIII Div. 1	Jan 26, 2020	508
M	R-D-VR Series	82033	Rupture Disk Device	VIII Div. 1	Jan 26, 2020	508
M	SFAL & SFA-II-L Series	82044	Rupture Disk Device	VIII Div. 1	Jan 27, 2020	509
M	SB90-L Series	82055	Rupture Disk Device	VIII Div. 1	Jan 27, 2020	509
M	URA-L, URA	82066	Rupture Disk Device	VIII Div. 1	Feb 17, 2021	510
M	RA4, RLP	82077	Rupture Disk Device	VIII Div. 1	Jun 25, 2019	510
M	SRA, SRA-L, SRA-C, SRA-LC, SRA-X, RAX	82101	Rupture Disk Device	VIII Div. 1	Oct 27, 2022	511
M	RA6 (Liquid)	82112	Rupture Disk Device	VIII Div. 1	Jul 23, 2019	511
M	RA6 (Air/Gas)	82123	Rupture Disk Device	VIII Div. 1	Oct 1, 2018	512
M	RA8 (Liquid)	82134	Rupture Disk Device	VIII Div. 1	Jul 23, 2019	512
M	RA8 (Gas)	82145	Rupture Disk Device	VIII Div. 1	Oct 1, 2018	513
M	RAUS (Liquid)	82156	Rupture Disk Device	VIII Div. 1	Apr 17, 2020	513
M	RAUS (Air/Gas)	82167	Rupture Disk Device	VIII Div. 1	Jul 23, 2019	514
M	Throwaway (TA), Screw Type (ST) Assemblies	82178	Rupture Disk Device	VIII Div. 1	Sep 30, 2021	514
M	FAX-L,SFAZ-L and SFA-II-L and SFA-L Series Rupture Disks	82189	Rupture Disk Device	VIII Div. 1	Sep 30, 2021	515

Zook Enterprises, LLC (ZOE)

location: Chagrin Falls, OH, UNITED STATES

Devices designed by: Zook Enterprises, LLC (ZOE)

<i>Cert Cat</i>	<i>Device Type</i>	<i>NB Cert #</i>	<i>Type Classification</i>	<i>Code Section</i>	<i>Expiration Date</i>	<i>Page...</i>
M	Mono	76003	Rupture Disk Device	VIII Div. 1	May 27, 2019	516
M	Inverted	76014	Rupture Disk Device	VIII Div. 1	May 27, 2019	517
M	Mono Style W/Plate Vac. Support	76025	Rupture Disk Device	VIII Div. 1	Mar 24, 2020	518
M	Mono Style W/Cross Vac. Support	76036	Rupture Disk Device	VIII Div. 1	Mar 24, 2020	518
M	Mono W/Ring Vac. Support	76047	Rupture Disk Device	VIII Div. 1	May 27, 2019	519
M	Mono Style W/Bar Vacuum Support	76058	Rupture Disk Device	VIII Div. 1	Feb 25, 2020	519

LISTING OF CERTIFIED DEVICE TYPES

This publication includes certification tables for each design type presently certified. These tables are listed in alphabetical order according to the manufacturer. The following is an example and brief description of the listings and certification tables.

1 Certification Number:	15567	2 Design Series: or catalog number	H Series (Restricted Lift version of Cert # 15006)									
3 Type Classification:	Safety Valve											
4 Capacity Tests:	Sec. I at Crosby Valve & Gage on Tuesday, August 06, 1996											
5 Method of Establishing Relieving Capacity:	Flow Capacity, K											
6 Certified Value:	.878 Unitless											
7 Certification Provisions:	per CC 1923 &/or 1945											
8 Test Medium:	Steam											
9 Certified Medium:	Steam											
10 Set Pressure Definition:	Pop											
11 Blowdown:	Adjustable											
Scope of Nominal Size and Set Pressure Ranges:												
12 Inlet Size	12 Outlet Size	13 Flow Area	14 Orifice [designator] diameter	15 Lift	16 Set Pressure Range	17 Media	18 Code Section					
0.75 NPS	1.5 NPS	0.11 sq in	0.375 in	0.08 in	15 - 500 psi	Steam	I					
		0.196 sq in	0.5 in	0.08 in	15 - 500 psi	Steam	I					
1 - 1.5 NPS	2, 2.5, 3 NPS	0.307 sq in	0.625 in	0.08 in	15 - 3100 psi	Steam	I					
1 - 2 NPS	2.5, 3 NPS	0.503 sq in	0.8 in	0.08 in	15 - 3100 psi	Steam	I					
1.5 NPS	3 NPS	0.865 sq in	1.05 in	0.08 in	15 - 3100 psi	Steam	I					
		0.994 sq in	1.125 in	0.084 in	15 - 3100 psi	Steam	I					

- 1 The National Board capacity certification number given solely to this valve type.
- 2 The design series or catalog number is the commercial designation specified by the manufacturer.
- 3 The Classification of the pressure relief device type as defined in ASME PTC 25.
- 4 This indicates the requirements of the Construction Code used during the initial certification testing. Also listed, the National Board accepted testing laboratory where the testing was performed. In some cases, the device may be certified for additional Code Section as noted in the tables.
- 5 There are several methods of establishing a certified value used to determine capacity:
 - the valve average capacity method is used when a manufacturer has only one size and one set pressure to be certified (Flow Capacity, 1 or 3 Valve Method).
 - the slope (flow factor for liquid) method is used when a manufacturer has one valve design of one size to be certified for a range of set pressures (Flow Capacity, Flow Factor or Flow Capacity, Slope).
 - the coefficient of discharge method is used when a manufacturer has one design type and wishes to have it certified for a range of sizes and set pressures (Flow Capacity, K).
 - the flow resistance method is used to certify non-reclosing devices such as rupture disk devices (Resistance Factor, K_r).
- 6 The quantitative value and applicable unit used to determine device relieving capacity.
- 7 Special provisions of rules, such as Code Cases, and special applications that apply to the device.
- 8 The test medium listed is the medium that was used during the initial testing. Either air, gas, steam or water could be indicated as the test medium.
- 9 The certified mediums are the mediums for which the device may be used in service.
- 10 Set pressure is the valve of increasing inlet static pressure at which a pressure relief device displays an operational characteristic. These characteristics are defined in ASME PTC-25.
- 11 Blowdown is the difference between actual popping pressure of a pressure relief valve and actual reseating pressure expressed as a percentage of set pressure or in pressure units. This indicates whether the valve has a fixed or adjustable blowdown construction.
- 12 The NPS (DN) and outlet size or range of sizes of a pressure relief device.
- 13 For pressure relief valves, flow area is the measured minimum flow area through the valve. For non-reclosing pressure relief devices (e.g. rupture disk devices), flow area is the minimum net flow area to be marked on the device.
- 14 The orifice diameter is the minimum diameter of the nozzle.
- 15 The minimum lift is the lift that the valve is expected to have to meet its rated capacity.
- 16 This column indicates the minimum and maximum set pressures valid for the size, Code Section and medium.
- 17 This column lists the medium of the certified capacity and is associated with the minimum and maximum set pressures in column 16.
- 18 This column lists the Code Section associated with the minimum and maximum set pressures in column 16.

A&R Energy Services, Corporation (ARE)

NB#: 36324

Location: 517 Jancy St., Robinson, TX 76706 United States

Acceptable Abbrev.: A&R Energy Services

A&R Energy Services, Corporation (ARE)

Location: 517 Jancy St., Robinson, TX 76706 United States

Acceptable Abbrev.: A&R Energy Services

Certification
Number: **36324**Design Series
or catalog number **Kunkle 6000, 6252 Series**Type Classification: **Safety Valve**Capacity Tests: **Sec. I at National Board T L (Picaway) on March 24, 1982**Method of Establishing Relieving Capacity: **Flow Capacity, K**Certified Value: **.878 Unitless**Test Medium: **Steam**Certified Medium: **Steam & Air/Gas**Set Pressure Definition: **Pop**Blowdown: **Adjustable by Dual Ring**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
0.5 - 0.75 NPS	.75 NPS	0.121 sq in	[D] 0.393 in	0.094 in	15 - 300 psi	Air	VIII
						Steam	I VIII
0.75 - 1 NPS	1, 1.25 NPS	0.216 sq in	[E] 0.524 in	0.125 in	15 - 300 psi	Air	VIII
						Steam	I VIII
1 - 1.25 NPS	1.25, 1.5 NPS	0.336 sq in	[F] 0.654 in	0.156 in	15 - 300 psi	Air	VIII
						Steam	I VIII
1.25 - 1.5 NPS	1.5, 2 NPS	0.554 sq in	[G] 0.84 in	0.2 in	15 - 300 psi	Air	VIII
						Steam	I VIII
1.5 - 2 NPS	2, 2.5 NPS	0.863 sq in	[H] 1.048 in	0.25 in	15 - 300 psi	Air	VIII
						Steam	I VIII
1.5 - 2.5 NPS	2.5, 3 NPS	1.414 sq in	[J] 1.342 in	0.32 in	15 - 300 psi	Air	VIII
						Steam	I VIII
2 - 3 NPS	3 NPS	2.022 sq in	[K] 1.605 in	0.432 in	15 - 250 psi	Air	VIII
						Steam	I VIII
2.5 - 4 NPS	4 NPS	3.138 sq in	[L] 1.999 in	0.539 in	15 - 250 psi	Air	VIII
						Steam	I VIII
3 - 4 NPS	4 NPS	3.96 sq in	[M] 2.246 in	0.605 in	15 - 250 psi	Air	VIII
						Steam	I VIII
4 NPS	6 NPS	4.774 sq in	[N] 2.466 in	0.664 in	15 - 250 psi	Air	VIII
						Steam	I VIII
		7.018 sq in	[P] 2.99 in	0.805 in	15 - 250 psi	Air	VIII
						Steam	I VIII
6 NPS	8 NPS	12.155 sq in	[Q] 3.935 in	1.06 in	15 - 250 psi	Air	VIII
						Steam	I VIII
		17.6 sq in	[R] 4.735 in	1.276 in	15 - 250 psi	Air	VIII
						Steam	I VIII

Albert Handtmann Armaturenfabrik GmbH & Co. KG (AHA)

NB#: 00639

location: Arthur-Handtmann-Str. 11, Biberach/Riss 88400 Germany

Acceptable Abbrev.: AHA

Albert Handtmann Armaturenfabrik GmbH & Co. KG (AHA)

location: Arthur-Handtmann-Str. 11, Biberach/Riss 88400 Germany

Acceptable Abbrev.: AHA

Certification Number: **00639** Design Series or catalog number: **33551 and 33651**

Type Classification: **Safety Relief Valve**Capacity Tests: **Sec. VIII Div. 1 at National Board T L (Worthington) on October 02, 2015**Method of Establishing Relieving Capacity: **Flow Capacity, K**Certified Value: **0.640 Unitless**Test Medium: **Air**Certified Medium: **Air/Gas**Special Service: **None**Set Pressure Definition: **Initial Audible Discharge**Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
1.5 NPS	2.5 NPS	0.5369 sq in	0.8268 in	0.2323 in	1 - 10 bar	Air	VIII Div. 1
					15 - 145 psi	Air	VIII Div. 1
2 NPS	3 NPS	1.3662 sq in	1.3189 in	0.3543 in	1 - 10 bar	Air	VIII Div. 1
					15 - 145 psi	Air	VIII Div. 1
2.5 NPS	3.5 NPS	2.5759 sq in	1.811 in	0.5039 in	1 - 10 bar	Air	VIII Div. 1
					15 - 145 psi	Air	VIII Div. 1
3 NPS	4 NPS	4.2377 sq in	2.3228 in	0.5827 in	1 - 10 bar	Air	VIII Div. 1
					15 - 145 psi	Air	VIII Div. 1
3.5 NPS	5 NPS	6.1367 sq in	2.7953 in	0.7559 in	1 - 10 bar	Air	VIII Div. 1
					15 - 145 psi	Air	VIII Div. 1

Certification Number: **00640** Design Series or catalog number: **33551 and 33651 (Liquid)**

Type Classification: **Safety Relief Valve**Capacity Tests: **Sec. VIII Div. 1 at National Board T L (Worthington) on March 31, 2015**Method of Establishing Relieving Capacity: **Flow Capacity, K**Certified Value: **0.436 Unitless**Test Medium: **Water**Certified Medium: **Liquid**Special Service: **None**Set Pressure Definition: **First Steady Stream**Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
1.5 NPS	2.5 NPS	0.5369 in	0.8268 in	0.2323 in	1 - 10 bar	Water	VIII Div. 1
					15 - 145 psi	Water	VIII Div. 1
2 NPS	3 NPS	1.3662 in	1.3189 in	0.3543 in	1 - 10 bar	Water	VIII Div. 1
					15 - 145 psi	Water	VIII Div. 1
2.5 NPS	3.5 NPS	2.5759 in	1.811 in	0.5039 in	1 - 10 bar	Water	VIII Div. 1
					15 - 145 psi	Water	VIII Div. 1
3 NPS	4 NPS	4.2377 in	2.3228 in	0.5827 in	1 - 10 bar	Water	VIII Div. 1
					15 - 145 psi	Water	VIII Div. 1
3.5 NPS	5 NPS	6.1367 in	2.7953 in	0.7559 in	1 - 10 bar	Water	VIII Div. 1
					15 - 145 psi	Water	VIII Div. 1

Apparecchi Di Sicurezza e Tenuta S.p.A. (ADS)

NB#: 07108

location: Via Merendi 40, Cornaredo (Milano) 20010 Italy

Acceptable Abbrev.: A.S.T. S.p.A.

Apparecchi Di Sicurezza e Tenuta S.p.A. (ADS)

location: Via Merendi 40, Cornaredo (Milano) 20010 Italy

Acceptable Abbrev.: A.S.T. S.p.A.

Certification Number: 07108	Design Series or catalog number SVP-7200 Restrict Lift (Liquid)
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Type Classification: Pilot Operated Pressure Relief Valve

Capacity Tests: Sec. VIII Div. 1 at National Board T L (Worthington) on May 14, 2013

Method of Establishing Relieving Capacity: Flow Capacity, K

Certified Value: .765 Unitless

Test Medium: Water

Certified Medium: Water

Set Pressure Definition: First Steady Stream

Blowdown: Fixed

Scope of Nominal Size and Set Pressure Ranges:

Inlet Size	Outlet Size	Flow Area	Orifice [designator] diameter	Lift	Set Pressure Range	Media	Code Section
1 - 1.8125 NPS	2, 3 NPS	0.3945 sq in	[D] 0.709 in	0.079 in	15 - 15000 psi	Water	VIII Div. 1
			[E] 0.709 in	0.154 in	15 - 15000 psi	Water	VIII Div. 1
1.5 - 1.8125 NPS	3 NPS	0.9207 sq in	[G1] 1.083 in	0.326 in	15 - 15000 psi	Water	VIII Div. 1
1.8125 - 2.0625 NPS	3 NPS	1.4913 sq in	[G1] 1.378 in	0.28 in	15 - 15000 psi	Water	VIII Div. 1
			[H1] 1.378 in	0.425 in	15 - 15000 psi	Water	VIII Div. 1
2.5625 - 4 NPS	4, 6 NPS	3.2917 sq in	[J1] 2.047 in	0.445 in	15 - 10000 psi	Water	VIII Div. 1
			[K1] 2.047 in	0.61 in	15 - 10000 psi	Water	VIII Div. 1
			[K2] 2.047 in	0.772 in	15 - 10000 psi	Water	VIII Div. 1
4 NPS	6 NPS	7.5977 sq in	[L1] 3.11 in	0.61 in	15 - 3775 psi	Water	VIII Div. 1
			[M1] 3.11 in	0.732 in	15 - 3775 psi	Water	VIII Div. 1
			[N1] 3.11 in	0.898 in	15 - 3775 psi	Water	VIII Div. 1
6 NPS	8 NPS	18.4176 sq in	[P2] 4.843 in	1.138 in	15 - 2264 psi	Water	VIII Div. 1
			[Q1] 4.843 in	1.402 in	15 - 2264 psi	Water	VIII Div. 1
			[Q2] 4.843 in	1.705 in	15 - 2264 psi	Water	VIII Div. 1
8 NPS	10, 12 NPS	30.3905 sq in	[R2] 6.22 in	2.047 in	15 - 2264 psi	Water	VIII Div. 1

Certification Number: **07119** Design Series or catalog number **SVP-7200 Restrict Lift**

Type Classification: **Pilot Operated Pressure Relief Valve**

Capacity Tests: **Sec. VIII Div. 1 at National Board T L (Worthington) on May 15, 2013**

Method of Establishing Relieving Capacity: **Flow Capacity, K**

Certified Value: **.876 Unitless**

Test Medium: **Steam & Air/Gas**

Certified Medium: **Steam & Air/Gas**

Set Pressure Definition: **Initial Audible Discharge**

Blowdown: **Adjustable and Fixed for Mod. Pilot**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
1 - 1.8125 NPS	2, 3 NPS	0.3945 sq in	[D] 0.709 in	0.079 in	15 - 15000 psi	Air	VIII Div. 1
					15 - 6000 psi	Steam	VIII Div. 1
			[E] 0.709 in	0.154 in	15 - 15000 psi	Air	VIII Div. 1
					15 - 6000 psi	Steam	VIII Div. 1
1.5 - 1.8125 NPS	3 NPS	0.9207 sq in	[G1] 1.083 in	0.326 in	15 - 15000 psi	Air	VIII Div. 1
					15 - 6000 psi	Steam	VIII Div. 1
1.8125 - 2.0625 NPS	3 NPS	1.4913 sq in	[G1] 1.378 in	0.28 in	15 - 15000 psi	Air	VIII Div. 1
					15 - 6000 psi	Steam	VIII Div. 1
1.8125 - 2.0626 NPS	3 NPS	1.4913 sq in	[H1] 1.378 in	0.425 in	15 - 15000 psi	Air	VIII Div. 1
					15 - 6000 psi	Steam	VIII Div. 1
2.5625 - 4 NPS	4,6 NPS	3.2917 sq in	[J1] 2.047 in	0.445 in	15 - 10000 psi	Air	VIII Div. 1
					15 - 3697 psi	Steam	VIII Div. 1
	4, 6 NPS	3.2917 sq in	[K1] 2.047 in	0.61 in	15 - 10000 psi	Air	VIII Div. 1
					15 - 3697 psi	Steam	VIII Div. 1
			[K2] 2.047 in	0.772 in	15 - 10000 psi	Air	VIII Div. 1
					15 - 3697 psi	Steam	VIII Div. 1
4 NPS	6 NPS	7.5977 sq in	[L1] 3.11 in	0.61 in	15 - 3775 psi	Air	VIII Div. 1
						Steam	VIII Div. 1
			[M1] 3.11 in	0.732 in	15 - 3775 psi	Air	VIII Div. 1
						Steam	VIII Div. 1
			[N1] 3.11 in	0.898 in	15 - 3775 psi	Air	VIII Div. 1
						Steam	VIII Div. 1
6 NPS	8 NPS	18.4176 sq in	[P2] 4.843 in	1.138 in	15 - 2264 psi	Air	VIII Div. 1
						Steam	VIII Div. 1
			[Q1] 4.843 in	1.402 in	15 - 2264 psi	Air	VIII Div. 1
						Steam	VIII Div. 1
			[Q2] 4.843 in	1.705 in	15 - 2264 psi	Air	VIII Div. 1
						Steam	VIII Div. 1
8 NPS	10, 12 NPS	30.3905 sq in	[R2] 6.22 in	2.047 in	15 - 2264 psi	Air	VIII Div. 1
						Steam	VIII Div. 1

Certification Number: **07120** Design Series or catalog number: **SVP-7200 (Full Lift) (Liquid)**

Type Classification: **Pilot Operated Pressure Relief Valve**

Capacity Tests: **Sec. VIII Div. 1 at National Board T L (Worthington) on May 14, 2013**

Method of Establishing Relieving Capacity: **Flow Capacity, K**

Certified Value: **.765 Unitless**

Test Medium: **Water**

Certified Medium: **Liquid**

Special Service: **None**

Set Pressure Definition: **First Steady Stream**

Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
1 - 1.8125 NPS	2, 3 NPS	0.3945 sq in	[F] 0.709 in	0.25 in	15 - 15000 psi	Water	VIII Div. 1
1.5 - 1.8125 NPS	3 NPS	0.9207 sq in	[H] 1.083 in	0.512 in	15 - 15000 psi	Water	VIII Div. 1
1.8125 - 2.0625 NPS	3 NPS	1.4913 sq in	[J] 1.378 in	0.709 in	15 - 15000 psi	Water	VIII Div. 1
2.5625 - 4 NPS	4, 6 NPS	3.2917 sq in	[L] 2.047 in	0.984 in	15 - 10000 psi	Water	VIII Div. 1
4 NPS	6 NPS	7.5977 sq in	[P] 3.11 in	1.409 in	15 - 3775 psi	Water	VIII Div. 1
6 NPS	8 NPS	18.4176 sq in	[R] 4.843 in	2.122 in	15 - 2264 psi	Water	VIII Div. 1
8 NPS	10, 12 NPS	30.3905 sq in	[T] 6.22 in	2.713 in	15 - 2264 psi	Water	VIII Div. 1

Certification Number: **07131** Design Series or catalog number: **SVP-7200 (Full Lift)**

Type Classification: **Pilot Operated Pressure Relief Valve**

Capacity Tests: **Sec. VIII Div. 1 at National Board T L (Worthington) on May 15, 2013**

Method of Establishing Relieving Capacity: **Flow Capacity, K**

Certified Value: **.876 Unitless**

Test Medium: **Steam & Air/Gas**

Certified Medium: **Steam & Air/Gas**

Set Pressure Definition: **Initial Audible Discharge**

Blowdown: **Adjustable and Fixed for Mod. Pilot**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
1 - 1.8125 NPS	2, 3 NPS	0.3945 sq in	[F] 0.709 in	0.25 in	15 - 15000 psi	Air	VIII Div. 1
					15 - 6000 psi	Steam	VIII Div. 1
1.5 - 1.8125 NPS	3 NPS	0.9207 sq in	[H] 1.083 in	0.512 in	15 - 15000 psi	Air	VIII Div. 1
					15 - 6000 psi	Steam	VIII Div. 1
1.8125 - 2.0625 NPS	3 NPS	1.4913 sq in	[J] 1.378 in	0.709 in	15 - 15000 psi	Air	VIII Div. 1
					15 - 6000 psi	Steam	VIII Div. 1
2.5625 - 4 NPS	4, 6 NPS	3.2917 sq in	[L] 2.047 in	0.984 in	15 - 10000 psi	Air	VIII Div. 1
					15 - 6000 psi	Steam	VIII Div. 1
4 NPS	6 NPS	7.5977 sq in	[P] 3.11 in	1.409 in	15 - 3775 psi	Air	VIII Div. 1
						Steam	VIII Div. 1
6 NPS	8 NPS	18.4176 sq in	[R] 4.843 in	2.122 in	15 - 2264 psi	Air	VIII Div. 1
						Steam	VIII Div. 1
8 NPS	10, 12 NPS	30.3905 sq in	[T] 6.22 in	2.713 in	15 - 2264 psi	Air	VIII Div. 1
						Steam	VIII Div. 1

Certification
Number: **07175**Design Series
or catalog number **SMG-7000**Type Classification: **Safety Relief Valve**Capacity Tests: **Sec. VIII Div. 1 at National Board T L (Worthington) on May 13, 2015**Method of Establishing Relieving Capacity: **Flow Capacity, K**Certified Value: **0.869 Unitless**Test Medium: **Steam & Air/Gas**Certified Medium: **Steam & Air/Gas**Set Pressure Definition: **Initial Audible Discharge**Blowdown: **Adjustable by Single Ring**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
1 - 1.5 NPS	2-3 NPS	0.335 sq in	[F] 0.654 in	0.213 in	15 - 6000 psi	Steam	VIII Div. 1
					15 - 6291 psi	Air	VIII Div. 1
1.5 - 2 NPS	2.5, 3 NPS	0.547 sq in	[G] 0.835 in	0.217 in	15 - 6000 psi	Steam	VIII Div. 1
					15 - 6291 psi	Air	VIII Div. 1
	3 NPS	0.855 sq in	[H] 1.043 in	0.299 in	15 - 3775 psi	Air	VIII Div. 1
						Steam	VIII Div. 1
2 - 3 NPS	3, 4 NPS	1.407 sq in	[J] 1.339 in	0.35 in	15 - 3775 psi	Air	VIII Div. 1
						Steam	VIII Div. 1
3 NPS	4, 6 NPS	2.007 sq in	[K] 1.598 in	0.419 in	15 - 3775 psi	Air	VIII Div. 1
						Steam	VIII Div. 1
		2.576 sq in	[K2] 1.811 in	0.472 in	15 - 3775 psi	Air	VIII Div. 1
						Steam	VIII Div. 1
3 - 4 NPS	4, 6 NPS	3.117 sq in	[L] 1.992 in	0.52 in	15 - 3775 psi	Air	VIII Div. 1
						Steam	VIII Div. 1
4 NPS	6 NPS	3.928 sq in	[M] 2.236 in	0.583 in	15 - 2264 psi	Air	VIII Div. 1
						Steam	VIII Div. 1
		4.74 sq in	[N] 2.457 in	0.643 in	15 - 2264 psi	Air	VIII Div. 1
						Steam	VIII Div. 1
		6.976 sq in	[P] 2.98 in	0.778 in	15 - 2264 psi	Air	VIII Div. 1
						Steam	VIII Div. 1
6 NPS	8, 10 NPS	9.861 sq in	[P2] 3.543 in	0.923 in	15 - 3775 psi	Air	VIII Div. 1
						Steam	VIII Div. 1
	8 NPS	12.077 sq in	[Q] 3.921 in	1.024 in	15 - 1509 psi	Air	VIII Div. 1
						Steam	VIII Div. 1
	8, 10 NPS	14.784 sq in	[Q2] 4.339 in	1.134 in	15 - 3775 psi	Air	VIII Div. 1
						Steam	VIII Div. 1
		17.472 sq in	[R] 4.717 in	1.228 in	15 - 1509 psi	Air	VIII Div. 1
						Steam	VIII Div. 1
8 NPS	10 NPS	22.949 sq in	[R2] 5.406 in	1.411 in	15 - 754 psi	Air	VIII Div. 1
						Steam	VIII Div. 1
	10, 12 NPS	28.423 sq in	[T] 6.016 in	1.569	15 - 754 psi	Air	VIII Div. 1
						Steam	VIII Div. 1

Location: Via Merendi 40, Cornaredo (Milano) 20010 Italy

Acceptable Abbrev.: A.S.T. S.p.A.

Certification Number: **07186** Design Series or catalog number: **SML-7000 (Liquid)**

Type Classification: **Relief Valve**Capacity Tests: **Sec. VIII Div. 1 at National Board T L (Worthington) on May 13, 2015**Method of Establishing Relieving Capacity: **Flow Capacity, K**Certified Value: **0.699 Unitless**Test Medium: **Water**Certified Medium: **Liquid**Set Pressure Definition: **First Steady Stream**Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
1 - 1.5 NPS	2-3 NPS	0.121 sq in	[D] 0.394 in	0.15 in	15 - 10000 psi	Water	VIII Div. 1
		0.215 sq in	[E] 0.524 in	0.196 in	15 - 6291 psi	Water	VIII Div. 1
		0.335 sq in	[F] 0.654 in	0.24 in	15 - 6291 psi	Water	VIII Div. 1
1 - 2 NPS	2-3 NPS	0.547 sq in	[G] 0.835 in	0.265 in	15 - 6291 psi	Water	VIII Div. 1
1.5 - 2 NPS	3 NPS	0.855 sq in	[H] 1.043 in	0.299 in	15 - 3775 psi	Water	VIII Div. 1
2 - 3 NPS	3, 4 NPS	1.407 sq in	[J] 1.339 in	0.425 in	15 - 3775 psi	Water	VIII Div. 1
3 NPS	4, 6 NPS	2.007 sq in	[K] 1.598 in	0.501 in	15 - 3775 psi	Water	VIII Div. 1
		2.576 sq in	[K2] 1.811 in	0.576 in	15 - 3775 psi	Water	VIII Div. 1
3 - 4 NPS	4, 6 NPS	3.117 sq in	[L] 1.992 in	0.633 in	15 - 3775 psi	Water	VIII Div. 1
4 NPS	6 NPS	3.928 sq in	[M] 2.236 in	0.712 in	15 - 2264 psi	Water	VIII Div. 1
		4.74 sq in	[N] 2.547 in	0.781 in	15 - 2264 psi	Water	VIII Div. 1
		6.976 sq in	[P] 2.98 in	0.948 in	15 - 2264 psi	Water	VIII Div. 1
6 NPS	8, 10 NPS	9.861 sq in	[P2] 3.543 in	1.124 in	15 - 3775 psi	Water	VIII Div. 1
	8 NPS	12.077 sq in	[Q] 3.921 in	1.244 in	15 - 1509 psi	Water	VIII Div. 1
	8, 10 NPS	14.784 sq in	[Q2] 4.339 in	1.38 in	15 - 3775 psi	Water	VIII Div. 1
		17.472 sq in	[R] 4.717 in	1.502 in	15 - 1509 psi	Water	VIII Div. 1
8 NPS	10 NPS	22.949 sq in	[R2] 5.406 in	1.732 in	15 - 754 psi	Water	VIII Div. 1
	10, 12 NPS	28.423 sq in	[T] 6.016 in	1.937 in	15 - 754 psi	Water	VIII Div. 1

Certification Number: **07197** Design Series or catalog number **SMG-7000 (Restricted Lift)**

Type Classification: **Safety Relief Valve**

Capacity Tests: **Sec. VIII Div. 1 at National Board T L (Worthington) on May 13, 2015**

Method of Establishing Relieving Capacity: **Flow Capacity, K**

Certified Value: **0.869 Unitless**

Certified Value (alternate medium): **N/A**

Test Medium: **Steam & Air/Gas**

Certified Medium: **Steam & Air/Gas**

Set Pressure Definition: **Initial Audible Discharge**

Blowdown: **Adjustable by Single Ring**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
1 - 1.5 NPS	2-3 NPS	0.335 sq in	[D1] 0.654 in	0.087 in	15 - 6000 psi	Steam	VIII Div. 1
					15 - 6291 psi	Air	VIII Div. 1
			[D2] 0.654 in	0.118 in	15 - 6000 psi	Steam	VIII Div. 1
					15 - 6291 psi	Air	VIII Div. 1
			[E] 0.654 in	0.138 in	15 - 6000 psi	Steam	VIII Div. 1
1.5 - 2 NPS	3 NPS	0.855 sq in			15 - 6291 psi	Air	VIII Div. 1
					15 - 6000 psi	Steam	VIII Div. 1
			[G2] 1.043 in	0.244 in	15 - 3775 psi	Air	VIII Div. 1
					15 - 3775 psi	Steam	VIII Div. 1
			[G3] 1.043 in	0.264 in	15 - 3775 psi	Air	VIII Div. 1
2 - 3 NPS	3, 4 NPS	1.407 sq in			15 - 3775 psi	Steam	VIII Div. 1
					15 - 3775 psi	Air	VIII Div. 1
			[H1] 1.339 in	0.236 in	15 - 3775 psi	Air	VIII Div. 1
					15 - 3775 psi	Steam	VIII Div. 1
			[H3] 1.339 in	0.268 in	15 - 3775 psi	Air	VIII Div. 1
4 NPS	6 NPS	6.976 sq in			15 - 3775 psi	Steam	VIII Div. 1
					15 - 3775 psi	Air	VIII Div. 1
			[L] 2.98 in	0.346 in	15 - 2264 psi	Air	VIII Div. 1
					15 - 2264 psi	Steam	VIII Div. 1
			[M] 2.98 in	0.437 in	15 - 2264 psi	Air	VIII Div. 1
6 NPS	8, 10 NPS	17.472 sq in			15 - 2264 psi	Steam	VIII Div. 1
					15 - 2264 psi	Air	VIII Div. 1
			[N] 2.98 in	0.528 in	15 - 2264 psi	Air	VIII Div. 1
					15 - 2264 psi	Steam	VIII Div. 1
			[N2] 2.98 in	0.622 in	15 - 2264 psi	Air	VIII Div. 1
					15 - 2264 psi	Steam	VIII Div. 1
					15 - 2264 psi	Air	VIII Div. 1
			[P2] 4.717 in	0.693 in	15 - 1509 psi	Air	VIII Div. 1
					15 - 1509 psi	Steam	VIII Div. 1
			[Q] 4.717 in	0.846 in	15 - 1509 psi	Air	VIII Div. 1
					15 - 1509 psi	Steam	VIII Div. 1
					15 - 1509 psi	Air	VIII Div. 1
			[Q2] 4.717 in	1.039 in	15 - 1509 psi	Air	VIII Div. 1
						Steam	VIII Div. 1

Certification Number: **07209** Design Series or catalog number **SML-7000 (Liquid) (Restricted Lift)**

Type Classification: **Relief Valve**

Capacity Tests: **Sec. VIII Div. 1 at National Board T L (Worthington) on May 13, 2015**

Method of Establishing Relieving Capacity: **Flow Capacity, K**

Certified Value: **0.699 Unitless**

Test Medium: **Water**

Certified Medium: **Liquid**

Set Pressure Definition: **First Steady Stream**

Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
1 - 1.5 NPS	2-3 NPS	0.335 sq in	[D1] 0.654 in	0.098 in	15 - 6291 psi	Water	VIII Div. 1
			[D2] 0.654 in	0.134 in	15 - 6291 psi	Water	VIII Div. 1
			[E] 0.654 in	0.154 in	15 - 6291 psi	Water	VIII Div. 1
1.5 - 2 NPS	3 NPS	0.855 sq in	[G2] 1.043 in	0.244 in	15 - 3775 psi	Water	VIII Div. 1
			[G3] 1.043 in	0.264 in	15 - 3775 psi	Water	VIII Div. 1
			[G4] 1.043 in	0.28 in	15 - 3775 psi	Water	VIII Div. 1
2 - 3 NPS	3, 4 NPS	1.407 sq in	[H1] 1.339 in	0.287 in	15 - 3775 psi	Water	VIII Div. 1
			[H3] 1.339 in	0.327 in	15 - 3775 psi	Water	VIII Div. 1
			[H4] 1.339 in	0.362 in	15 - 3775 psi	Water	VIII Div. 1
4 NPS	6 NPS	6.976 sq in	[L] 2.98 in	0.425 in	15 - 2264 psi	Water	VIII Div. 1
			[M] 2.98 in	0.535 in	15 - 2264 psi	Water	VIII Div. 1
			[N] 2.98 in	0.646 in	15 - 2264 psi	Water	VIII Div. 1
			[N2] 2.98 in	0.76 in	15 - 2264 psi	Water	VIII Div. 1
6 NPS	8, 10 NPS	17.472 sq in	[P2] 4.717 in	0.846 in	15 - 1509 psi	Water	VIII Div. 1
			[Q] 4.717 in	1.039 in	15 - 1509 psi	Water	VIII Div. 1
			[Q2] 4.717 in	1.272 in	15 - 1509 psi	Water	VIII Div. 1

Certification Number: **07210** Design Series or catalog number **SML-7000 (Steam & Air/Gas)**

Type Classification: **Relief Valve**

Capacity Tests: **Sec. VIII Div. 1 at National Board T L (Worthington) on September 14, 2016**

Method of Establishing Relieving Capacity: **Flow Capacity, K**

Certified Value: **0.869 Unitless**

Test Medium: **Steam & Air/Gas**

Certified Medium: **Steam & Air/Gas**

Set Pressure Definition: **Initial Audible Discharge**

Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
1 - 1.5 NPS	2-3 NPS	0.121 sq in	[D] 0.394 in	0.15 in	15 - 10000 psi	Air	VIII Div. 1
					15 - 6000 psi	Steam	VIII Div. 1
		0.215 sq in	[E] 0.524 in	0.196 in	15 - 6000 psi	Steam	VIII Div. 1
					15 - 6291 psi	Air	VIII Div. 1
		0.335 sq in	[F] 0.654 in	0.24 in	15 - 6000 psi	Steam	VIII Div. 1
					15 - 6291 psi	Air	VIII Div. 1
1 - 2 NPS	2-3 NPS	0.547 sq in	[G] 0.835 in	0.265 in	15 - 6000 psi	Steam	VIII Div. 1
					15 - 6291 psi	Air	VIII Div. 1
1.5 - 2 NPS	3 NPS	0.855 sq in	[H] 1.043 in	0.299 in	15 - 3775 psi	Air	VIII Div. 1
						Steam	VIII Div. 1
2 - 3 NPS	3, 4 NPS	1.407 sq in	[J] 1.339 in	0.425 in	15 - 3775 psi	Air	VIII Div. 1
						Steam	VIII Div. 1
3 NPS	4, 6 NPS	2.007 sq in	[K] 1.598 in	0.501 in	15 - 3775 psi	Air	VIII Div. 1
						Steam	VIII Div. 1
		2.576 sq in	[K2] 1.811 in	0.576 in	15 - 3775 psi	Air	VIII Div. 1
						Steam	VIII Div. 1
3 - 4 NPS	4, 6 NPS	3.117 sq in	[L] 1.992 in	0.633 in	15 - 3775 psi	Air	VIII Div. 1
						Steam	VIII Div. 1
4 NPS	6 NPS	3.928 sq in	[M] 2.236 in	0.712 in	15 - 2264 psi	Air	VIII Div. 1
						Steam	VIII Div. 1
		4.74 sq in	[N] 2.547 in	0.781 in	15 - 2264 psi	Air	VIII Div. 1
						Steam	VIII Div. 1
		6.976 sq in	[P] 2.98 in	0.948 in	15 - 2264 psi	Air	VIII Div. 1
						Steam	VIII Div. 1
6 NPS	8, 10 NPS	9.861 sq in	[P2] 3.543 in	1.124 in	15 - 3775 psi	Air	VIII Div. 1
						Steam	VIII Div. 1
	8 NPS	12.077 sq in	[Q] 3.921 in	1.244 in	15 - 1509 psi	Air	VIII Div. 1
						Steam	VIII Div. 1
	8, 10 NPS	14.784 sq in	[Q2] 4.339 in	1.38 in	15 - 3775 psi	Air	VIII Div. 1
						Steam	VIII Div. 1
		17.472 sq in	[R] 4.717 in	1.502 in	15 - 1509 psi	Air	VIII Div. 1
						Steam	VIII Div. 1
8 NPS	10 NPS	22.949 sq in	[R2] 5.406 in	1.732 in	15 - 754 psi	Air	VIII Div. 1
						Steam	VIII Div. 1
	10, 12 NPS	28.423 sq in	[T] 6.016 in	1.937 in	15 - 754 psi	Air	VIII Div. 1
						Steam	VIII Div. 1

Certification
Number: **07221**Design Series
or catalog number**SML-7000 (Steam & Air/Gas) (Restricted Lift)**Type Classification: **Relief Valve**Capacity Tests: **Sec. VIII Div. 1 at National Board T L (Worthington) on September 14, 2016**Method of Establishing Relieving Capacity: **Flow Capacity, K**Certified Value: **0.869 Unitless**Test Medium: **Steam & Air/Gas**Certified Medium: **Steam & Air/Gas**Set Pressure Definition: **Initial Audible Discharge**Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
1 - 1.5 NPS	2-3 NPS	0.335 sq in	[D1] 0.654 in	0.098 in	15 - 6000 psi	Steam	VIII Div. 1
					15 - 6291 psi	Air	VIII Div. 1
			[D2] 0.654 in	0.134 in	15 - 6000 psi	Steam	VIII Div. 1
					15 - 6291 psi	Air	VIII Div. 1
			[E] 0.654 in	0.154 in	15 - 6000 psi	Steam	VIII Div. 1
					15 - 6291 psi	Air	VIII Div. 1
1.5 - 2 NPS	3 NPS	0.855 sq in	[G2] 1.043 in	0.244 in	15 - 3775 psi	Air	VIII Div. 1
						Steam	VIII Div. 1
			[G3] 1.043 in	0.264 in	15 - 3775 psi	Air	VIII Div. 1
						Steam	VIII Div. 1
			[G4] 1.043 in	0.28 in	15 - 3775 psi	Air	VIII Div. 1
						Steam	VIII Div. 1
2 - 3 NPS	3, 4 NPS	1.407 sq in	[H1] 1.339 in	0.287 in	15 - 3775 psi	Air	VIII Div. 1
						Steam	VIII Div. 1
			[H3] 1.339 in	0.327 in	15 - 3775 psi	Air	VIII Div. 1
						Steam	VIII Div. 1
			[H4] 1.339 in	0.362 in	15 - 3775 psi	Air	VIII Div. 1
						Steam	VIII Div. 1
4 NPS	6 NPS	6.976 sq in	[L] 2.98 in	0.425 in	15 - 2264 psi	Air	VIII Div. 1
						Steam	VIII Div. 1
			[M] 2.98 in	0.535 in	15 - 2264 psi	Air	VIII Div. 1
						Steam	VIII Div. 1
			[N] 2.98 in	0.646 in	15 - 2264 psi	Air	VIII Div. 1
						Steam	VIII Div. 1
6 NPS	8, 10 NPS	17.472 sq in	[P2] 4.717 in	0.846 in	15 - 1509 psi	Air	VIII Div. 1
						Steam	VIII Div. 1
			[Q] 4.717 in	1.039 in	15 - 1509 psi	Air	VIII Div. 1
						Steam	VIII Div. 1
			[Q2] 4.717 in	1.272 in	15 - 1509 psi	Air	VIII Div. 1
						Steam	VIII Div. 1

Apparecchi Di Sicurezza e Tenuta S.p.A. (ADS)

NB#: 07232

Location: Via Merendi 40, Cornaredo (Milano) 20010 Italy

Acceptable Abbrev.: A.S.T. S.p.A.

Certification Number: **07232** Design Series or catalog number: **SHL-7000 / SUL-7000**

Type Classification: **Safety Relief Valve**Capacity Tests: **Sec. VIII Div. 1 at National Board T L (Worthington) on February 07, 2017**Method of Establishing Relieving Capacity: **Flow Capacity, Slope**Certified Value: **1.901 SCFM/PSIA**Certified Value (alternate medium): **5.340 PPH/PSIA**Test Medium: **Steam & Air/Gas**Certified Medium: **Steam & Air/Gas**Set Pressure Definition: **Initial Audible Discharge**Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
0.75 - 1 NPS	1-1.5 NPS	0.121 sq in	[D] 0.394 in	0.102 in	15 - 10000 psi	Air	VIII Div. 1
					15 - 6000 psi	Steam	VIII Div. 1

Certification Number: **07243** Design Series or catalog number: **SHL-7000 / SUL-7000 (Liquid)**

Type Classification: **Relief Valve**Capacity Tests: **Sec. VIII Div. 1 at National Board T L (Worthington) on February 07, 2017**Method of Establishing Relieving Capacity: **Flow Capacity, Flow Factor**Certified Value: **3.166 GPM/SQ.RT. PSID**Test Medium: **Water**Certified Medium: **Liquid**Set Pressure Definition: **First Steady Stream**Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
0.75 - 1 NPS	1-1.5 NPS	0.121 sq in	[D] 0.394 in	0.102 in	15 - 10000 psi	Water	VIII Div. 1

Aquatrol, Incorporated (AQT)

NB#: 02002

location: 600 E North Street, Elburn, IL 60119-8012 United States

Acceptable Abbrev.: AQ

Aquatrol, Incorporated (AQT)

location: 600 E North Street, Elburn, IL 60119-8012 United States

Acceptable Abbrev.: AQ

Certification Number: **02002** Design Series or catalog number: **88A, 89A**

Type Classification: **Safety Relief Valve**Capacity Tests: **Sec. VIII Div. 1 at National Board T L (Picaway) on October 15, 1980**Method of Establishing Relieving Capacity: **Flow Capacity, Slope**Certified Value: **.644 SCFM/PSIA**Certified Value (alternate medium): **1.81 PPH/PSIA**Test Medium: **Air/Gas**Certified Medium: **Steam & Air/Gas**Set Pressure Definition: **Pop**Blowdown: **Adjustable**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
0.5 NPS	.75 NPS		0.5 in	0.036 in	15 - 250 psi	Air	VIII Div. 1
						Steam	VIII Div. 1

Certification Number: **02013** Design Series or catalog number: **88B, 89B**

Type Classification: **Safety Relief Valve**Capacity Tests: **Sec. VIII Div. 1 at National Board T L (Picaway) on October 15, 1980**Method of Establishing Relieving Capacity: **Flow Capacity, Slope**Certified Value: **.930 SCFM/PSIA**Certified Value (alternate medium): **2.61 PPH/PSIA**Test Medium: **Air/Gas**Certified Medium: **Steam & Air/Gas**Set Pressure Definition: **Pop**Blowdown: **Adjustable**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
0.75 NPS	1 NPS		0.75 in	0.04 in	15 - 250 psi	Air	VIII Div. 1
						Steam	VIII Div. 1

Certification Number: **02024** Design Series or catalog number: **88C, 89C**

Type Classification: **Safety Relief Valve**Capacity Tests: **Sec. VIII Div. 1 at National Board T L (Picaway) on October 14, 1980**Method of Establishing Relieving Capacity: **Flow Capacity, Slope**Certified Value: **2.274 SCFM/PSIA**Certified Value (alternate medium): **6.39 PPH/PSIA**Test Medium: **Air/Gas**Certified Medium: **Steam & Air/Gas**Set Pressure Definition: **Pop**Blowdown: **Adjustable**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
1 NPS	1.25 NPS		1 in	0.075 in	15 - 250 psi	Air	VIII Div. 1
						Steam	VIII Div. 1

Aquatrol, Incorporated (AQT)

NB#: 02035

Location: 600 E North Street, Elburn, IL 60119-8012 United States

Acceptable Abbrev.: AQ

Certification
Number: **02035**Design Series
or catalog number **88D, 89D**Type Classification: **Safety Relief Valve**Capacity Tests: **Sec. VIII Div. 1 at National Board T L (Picaway) on October 14, 1980**Method of Establishing Relieving Capacity: **Flow Capacity, Slope**Certified Value: **3.504 SCFM/PSIA**Test Medium: **Air/Gas**Certified Medium: **Air/Gas**Set Pressure Definition: **Pop**Blowdown: **Adjustable**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
1.25 NPS	1.5 NPS		1.25 in	0.086 in	15 - 250 psi	Air	VIII Div. 1

Certification
Number: **02046**Design Series
or catalog number **88E, 89E**Type Classification: **Safety Relief Valve**Capacity Tests: **Sec. VIII Div. 1 at National Board T L (Picaway) on October 14, 1980**Method of Establishing Relieving Capacity: **Flow Capacity, Slope**Certified Value: **4.900 SCFM/PSIA**Test Medium: **Air/Gas**Certified Medium: **Air/Gas**Set Pressure Definition: **Pop**Blowdown: **Adjustable**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
1.5 NPS	2 NPS		1.5 in	0.1 in	15 - 250 psi	Air	VIII Div. 1
						Steam	VIII Div. 1

Certification
Number: **02057**Design Series
or catalog number **88F, 89F**Type Classification: **Safety Relief Valve**Capacity Tests: **Sec. VIII Div. 1 at National Board T L (Picaway) on October 14, 1981**Method of Establishing Relieving Capacity: **Flow Capacity, Slope**Certified Value: **7.404 SCFM/PSIA**Test Medium: **Air/Gas**Certified Medium: **Air/Gas**Set Pressure Definition: **Pop**Blowdown: **Adjustable**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
2 NPS	2.5 NPS		2 in	0.12 in	15 - 250 psi	Air	VIII Div. 1
						Steam	VIII Div. 1

Aquatrol, Incorporated (AQT)

NB#: 02068

Location: 600 E North Street, Elburn, IL 60119-8012 United States

Acceptable Abbrev.: AQ

Certification Number: **02068** Design Series or catalog number: **120, 121, 125, 126**

Type Classification: **Safety Relief Valve**Capacity Tests: **Sec. VIII Div. 1 at National Board T L (Picaway) on February 03, 1982**Method of Establishing Relieving Capacity: **Flow Capacity, Slope**Certified Value: **1.037 SCFM/PSIA**Certified Value (alternate medium): **2.91 PPH/PSIA**Test Medium: **Air/Gas**Certified Medium: **Steam & Air/Gas**Set Pressure Definition: **Pop**Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
0.5 - 1 NPS	.75, top NPS		0.75 in	0.045 in	15 - 200 psi	Air	VIII Div. 1
						Steam	VIII Div. 1

Certification Number: **02079** Design Series or catalog number: **130, 132, 133, 135**

Type Classification: **Safety Relief Valve**Capacity Tests: **Sec. VIII Div. 1 at National Board T L (Picaway) on October 15, 1980**Method of Establishing Relieving Capacity: **Flow Capacity, Slope**Certified Value: **.403 SCFM/PSIA**Certified Value (alternate medium): **1.13 PPH/PSIA**Test Medium: **Air/Gas**Certified Medium: **Steam & Air/Gas**Set Pressure Definition: **Pop**Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
0.25 - 0.5 NPS	.5, Top NPS		0.5 in	0.024 in	15 - 200 psi	Air	VIII Div. 1
						Steam	VIII Div. 1

Certification Number: **02080** Design Series or catalog number: **560, 570**

Type Classification: **Safety Valve**Capacity Tests: **Sec. I at National Board T L (Worthington) on November 10, 2005**Method of Establishing Relieving Capacity: **Flow Capacity, K**Certified Value: **0.856 Unitless**Test Medium: **Steam**Certified Medium: **Steam & Air/Gas**Special Service: **None**Set Pressure Definition: **Pop**Blowdown: **Adjustable by Dual Ring**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
0.5 - 0.75 NPS	.75 NPS	0.125 sq in	[D] 0.4 in	0.1 in	15 - 250 psi	Steam	I & VIII Div. 1
					15 - 300 psi	Air	VIII Div. 1
0.75 - 1 NPS	1 NPS	0.221 sq in	[E] 0.53 in	0.132 in	15 - 250 psi	Steam	I & VIII Div. 1
					15 - 300 psi	Air	VIII Div. 1
1 - 1.25 NPS	1.25 NPS	0.352 sq in	[F] 0.67 in	0.167 in	15 - 250 psi	Steam	I & VIII Div. 1
					15 - 300 psi	Air	VIII Div. 1
1.25 - 1.5 NPS	1.5 NPS	0.567 sq in	[G] 0.85 in	0.212 in	15 - 250 psi	Steam	I & VIII Div. 1
					15 - 300 psi	Air	VIII Div. 1
1.5 - 2 NPS	2 NPS	0.899 sq in	[H] 1.07 in	0.267 in	15 - 250 psi	Steam	I & VIII Div. 1
					15 - 300 psi	Air	VIII Div. 1
2 - 2.5 NPS	2.5 NPS	1.463 sq in	[J] 1.365 in	0.41 in	15 - 250 psi	Steam	I & VIII Div. 1
					15 - 300 psi	Air	VIII Div. 1

Aquatrol, Incorporated (AQT)

NB#: 02091

Location: 600 E North Street, Elburn, IL 60119-8012 United States

Acceptable Abbrev.: AQ

Certification
Number: **02091**Design Series
or catalog number **Series 740**Type Classification: **Safety Relief Valve**Capacity Tests: **Sec. VIII Div. 1 at National Board T L (Worthington) on November 21, 2013**Method of Establishing Relieving Capacity: **Flow Capacity, K**Certified Value: **.878 Unitless**Test Medium: **Steam & Air/Gas**Certified Medium: **Steam & Air/Gas**Special Service: **None**Set Pressure Definition: **Pop**Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
0.5 - 1 NPS	0.75, 1 NPS	0.125 sq in	[D] 0.4 in	0.105 in	15 - 300 psi	Steam	VIII Div. 1
					15 - 750 psi	Air	VIII Div. 1
0.75 - 1 NPS	1, 1.25 NPS	0.221 sq in	[E] 0.53 in	0.135 in	15 - 300 psi	Steam	VIII Div. 1
					15 - 750 psi	Air	VIII Div. 1
1 - 1.5 NPS	1.5 NPS	0.353 sq in	[F] 0.67 in	0.17 in	15 - 300 psi	Steam	VIII Div. 1
					15 - 600 psi	Air	VIII Div. 1
1.25 - 2 NPS	2 NPS	0.554 sq in	[G] 0.84 in	0.215 in	15 - 300 psi	Steam	VIII Div. 1
					15 - 500 psi	Air	VIII Div. 1
1.5 NPS	2.5 NPS	0.923 sq in	[H] 1.084 in	0.28 in	15 - 300 psi	Steam	VIII Div. 1
					15 - 500 psi	Air	VIII Div. 1
2 NPS	3 NPS	1.421 sq in	[J] 1.345 in	0.34 in	15 - 300 psi	Steam	VIII Div. 1
					15 - 500 psi	Air	VIII Div. 1

Certification
Number: **02103**Design Series
or catalog number **Series 740 (Liquid)**Type Classification: **Safety Relief Valve**Capacity Tests: **Sec. VIII Div. 1 at National Board T L (Worthington) on November 20, 2012**Method of Establishing Relieving Capacity: **Flow Capacity, K**Certified Value: **.791 Unitless**Test Medium: **Liquid**Certified Medium: **Liquid**Special Service: **None**Set Pressure Definition: **First Steady Stream**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
0.5 - 1 NPS	0.75, 1 NPS	0.125 sq in	[D] 0.4 in	0.105 in	15 - 750 psi	Water	VIII Div. 1
0.75 - 1 NPS	1, 1.25 NPS	0.221 sq in	[E] 0.53 in	0.135 in	15 - 750 psi	Water	VIII Div. 1
1 - 1.5 NPS	1.5 NPS	0.353 sq in	[F] 0.67 in	0.17 in	15 - 600 psi	Water	VIII Div. 1
1.25 - 2 NPS	2 NPS	0.554 sq in	[G] 0.84 in	0.215 in	15 - 500 psi	Water	VIII Div. 1
1.5 NPS	2.5 NPS	0.923 sq in	[H] 1.084 in	0.28 in	15 - 500 psi	Water	VIII Div. 1
2 NPS	3 NPS	1.421 sq in	[J] 1.345 in	0.34 in	15 - 500 psi	Water	VIII Div. 1

ARI - Armaturen USA, LP (TAR)

NB#: 73000

location: 125 Magellan Circle, Webster, TX 77598 United States

ARI - Armaturen USA, LP (TAR)

location: 125 Magellan Circle, Webster, TX 77598 United States

Certification Number: **73000** Design Series or catalog number: **Reyco R, RB & RO (Fig. 971, 973, 974)**

Type Classification: **Safety Relief Valve**Capacity Tests: **Sec. VIII Div. 1 at National Board T L (Worthington) on March 19, 1997**Method of Establishing Relieving Capacity: **Flow Capacity, K**Certified Value: **.86 Unitless**Test Medium: **Steam & Air/Gas**Certified Medium: **Steam & Air/Gas**Special Service: **None**Set Pressure Definition: **Pop**Blowdown: **Adjustable by Single Ring**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
1 - 1.5 NPS	2 - 3 NPS	0.122 sq in	[D] 0.394 in	0.12 in	15 - 2900 psi	Steam	VIII Div. 1
					15 - 6250 psi	Air	VIII Div. 1
		0.217 sq in	[E] 0.526 in	0.16 in	15 - 2900 psi	Steam	VIII Div. 1
					15 - 6250 psi	Air	VIII Div. 1
1.5 NPS	2 - 3 NPS	0.34 sq in	[F] 0.658 in	0.2 in	15 - 2900 psi	Steam	VIII Div. 1
					15 - 6250 psi	Air	VIII Div. 1
1.5 - 2 NPS	2.5, 3 NPS	0.558 sq in	[G] 0.843 in	0.26 in	15 - 2900 psi	Steam	VIII Div. 1
					15 - 4905 psi	Air	VIII Div. 1
	3 NPS	0.869 sq in	[H] 1.052 in	0.32 in	15 - 2900 psi	Steam	VIII Div. 1
					15 - 3300 psi	Air	VIII Div. 1
2 - 3 NPS	3, 4 NPS	1.427 sq in	[J] 1.348 in	0.41 in	15 - 2900 psi	Steam	VIII Div. 1
					15 - 3300 psi	Air	VIII Div. 1
3 NPS	4, 6 NPS	2.036 sq in	[K] 1.61 in	0.49 in	15 - 2900 psi	Steam	VIII Div. 1
					15 - 3300 psi	Air	VIII Div. 1
3 - 4 NPS	4, 6 NPS	3.16 sq in	[L] 2.006 in	0.61 in	15 - 2900 psi	Air	VIII Div. 1
						Steam	VIII Div. 1
4 NPS	6 NPS	3.987 sq in	[M] 2.253 in	0.69 in	15 - 1600 psi	Air	VIII Div. 1
						Steam	VIII Div. 1
		4.807 sq in	[N] 2.474 in	0.75 in	15 - 1600 psi	Air	VIII Div. 1
						Steam	VIII Div. 1
6 NPS	8 NPS	12.24 sq in	[Q] 3.948 in	1.2 in	15 - 925 psi	Air	VIII Div. 1
						Steam	VIII Div. 1
	8, 10 NPS	17.72 sq in	[R] 4.75 in	1.45 in	15 - 350 psi	Air	VIII Div. 1
						Steam	VIII Div. 1
8 NPS	10 NPS	29.75 sq in	[T] 6.155 in	1.84 in	15 - 325 psi	Air	VIII Div. 1
						Steam	VIII Div. 1

Location: 125 Magellan Circle, Webster, TX 77598 United States

Certification Number: **73011** Design Series or catalog number **Reyco R, RB, RO, RBO (Fig. 971, 973, 974) (liquid)**

Type Classification: **Safety Relief Valve**Capacity Tests: **Sec. VIII Div. 1 at National Board T L (Worthington) on September 27, 2001**Method of Establishing Relieving Capacity: **Flow Capacity, K**Certified Value: **.724 Unitless**Test Medium: **Water**Certified Medium: **Liquid**Special Service: **None**Set Pressure Definition: **First Steady Stream**Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
1 - 1.5 NPS	2, 2.5, 3 NPS	0.122 sq in	[D] 0.394 in	0.12 in	15 - 6250 psi	Water	VIII Div. 1
		0.217 sq in	[E] 0.526 in	0.16 in	15 - 6250 psi	Water	VIII Div. 1
1.5 NPS	2 - 3 NPS	0.34 sq in	[F] 0.658 in	0.2 in	15 - 6250 psi	Water	VIII Div. 1
1.5 - 2 NPS	2.5, 3 NPS	0.558 sq in	[G] 0.843 in	0.26 in	15 - 4905 psi	Water	VIII Div. 1
	3 NPS	0.869 sq in	[H] 1.052 in	0.32 in	15 - 3300 psi	Water	VIII Div. 1
2 - 3 NPS	3, 4 NPS	1.427 sq in	[J] 1.348 in	0.41 in	15 - 3300 psi	Water	VIII Div. 1
3 NPS	4, 6 NPS	2.036 sq in	[K] 1.61 in	0.49 in	15 - 3300 psi	Water	VIII Div. 1
3 - 4 NPS	4, 6 NPS	3.16 sq in	[L] 2.006 in	0.61 in	15 - 2900 psi	Water	VIII Div. 1
4 NPS	6 NPS	3.987 sq in	[M] 2.253 in	0.69 in	15 - 1600 psi	Water	VIII Div. 1
		4.807 sq in	[N] 2.474 in	0.75 in	15 - 1600 psi	Water	VIII Div. 1
		7.07 sq in	[P] 3 in	0.92 in	15 - 1600 psi	Water	VIII Div. 1
6 NPS	8 NPS	12.24 sq in	[Q] 3.948 in	1.2 in	15 - 925 psi	Water	VIII Div. 1
	8, 10 NPS	17.72 sq in	[R] 4.75 in	1.45 in	15 - 350 psi	Water	VIII Div. 1
8 NPS	10 NPS	28.8 sq in	[T] 6.155 in	1.84 in	15 - 325 psi	Water	VIII Div. 1

Certification Number: **73044** Design Series or catalog number **RL-14 & RLO-14**

Type Classification: **Safety Relief Valve**Capacity Tests: **Sec. VIII Div. 1 at National Board T L (Worthington) on June 08, 2010**Method of Establishing Relieving Capacity: **Flow Capacity, Slope**Certified Value: **1.23 SCFM/PSIA**Certified Value (alternate medium): **3.46 PPH/PSIA**Test Medium: **Steam & Air/Gas**Certified Medium: **Steam & Air/Gas**Special Service: **None**Set Pressure Definition: **Pop**Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
0.5 - 1 NPS	1 NPS	0.078 sq in	0.315 in	0.078 in	15 - 2900 psi	Steam	VIII Div. 1
					15 - 5000 psi	Air	VIII Div. 1

Location: 125 Magellan Circle, Webster, TX 77598 United States

Certification Number: **73055** Design Series or catalog number: **RL-14 & RLO-14 (Liquids)**

Type Classification: **Safety Relief Valve**Capacity Tests: **Sec. VIII Div. 1 at National Board T L (Worthington) on June 04, 2010**Method of Establishing Relieving Capacity: **Flow Capacity, Flow Factor**Certified Value: **1.88 GPM/SQ.RT. PSID**Test Medium: **Water**Certified Medium: **Liquid**Special Service: **None**Set Pressure Definition: **First Steady Stream**Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
0.5 - 1 NPS	1 NPS	0.078 sq in	0.315 in	0.078 in	15 - 5000 psi	Water	VIII Div. 1

Certification Number: **73145** Design Series or catalog number: **RL40, RLO40, RL41, RLO41**

Type Classification: **Safety Relief Valve**Capacity Tests: **Sec. VIII Div. 1 at National Board T L (Worthington) on June 10, 2010**Method of Establishing Relieving Capacity: **Flow Capacity, Slope**Certified Value: **1.86 SCFM/PSIA**Certified Value (alternate medium): **5.23 PPH/PSIA**Test Medium: **Steam & Air/Gas**Certified Medium: **Steam & Air/Gas**Special Service: **None**Set Pressure Definition: **Pop**Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
0.75 - 1 NPS	1-2 NPS	0.152 sq in	0.44 in	0.365 in	15 - 2900 psi	Steam	VIII Div. 1
					15 - 5000 psi	Air	VIII Div. 1

Certification Number: **73156** Design Series or catalog number: **RL40, RLO40, RL41, RLO41 (Liquids)**

Type Classification: **Safety Relief Valve**Capacity Tests: **Sec. VIII Div. 1 at National Board T L (Worthington) on July 26, 2010**Method of Establishing Relieving Capacity: **Flow Capacity, Flow Factor**Certified Value: **2.684 GPM/SQ.RT. PSID**Test Medium: **Water**Certified Medium: **Liquid**Special Service: **None**Set Pressure Definition: **First Steady Stream**Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
0.75 - 1 NPS	1-2 NPS	0.152 sq in	0.44 in		15 - 5000 psi	Water	VIII Div. 1

Location: 125 Magellan Circle, Webster, TX 77598 United States

Certification Number: **73167** Design Series or catalog number **RL40, RL040 (0.847 in. orif.)**

Type Classification: **Safety Relief Valve**Capacity Tests: **Sec. VIII Div. 1 at National Board T L (Worthington) on November 03, 2010**Method of Establishing Relieving Capacity: **Flow Capacity, Slope**Certified Value: **8.86 SCFM/PSIA**Certified Value (alternate medium): **24.89 PPH/PSIA**Test Medium: **Air**Certified Medium: **Steam & Air/Gas**Special Service: **None**Set Pressure Definition: **Pop**Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
1.5 - 2 NPS	2 NPS	0.563 sq in	0.847 in		15 - 1500 psi	Air	VIII Div. 1
						Steam	VIII Div. 1

Certification Number: **73178** Design Series or catalog number **RL40, RL040 (0.847 in. orif.)(liquid)**

Type Classification: **Safety Relief Valve**Capacity Tests: **Sec. VIII Div. 1 at National Board T L (Worthington) on November 03, 2010**Method of Establishing Relieving Capacity: **Flow Capacity, Flow Factor**Certified Value: **13.05 GPM/SQ.RT. PSID**Test Medium: **Water**Certified Medium: **Liquid**Special Service: **None**Set Pressure Definition: **First Steady Stream**Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
1.5 - 2 NPS	2 NPS	0.563 sq in	0.847 in		15 - 1500 psi	Water	VIII Div. 1

Certification Number: **73202** Design Series or catalog number **RL14 & RLO14 (0.394 in.)**

Type Classification: **Safety Relief Valve**Capacity Tests: **Sec. VIII Div. 1 at National Board T L (Worthington) on September 30, 2014**Method of Establishing Relieving Capacity: **Flow Capacity, Slope**Certified Value: **1.637 SCFM/PSIA**Certified Value (alternate medium): **4.60 PPH/PSIA**Test Medium: **Steam & Air/Gas**Certified Medium: **Steam & Air/Gas**Set Pressure Definition: **Pop**Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
0.5 - 1 NPS	1 NPS	0.122 sq in	0.394 in	0.0985 in	15 - 2900 psi	Steam	VIII Div. 1
					15 - 5000 psi	Air	VIII Div. 1

Location: 125 Magellan Circle, Webster, TX 77598 United States

Certification Number: **73213** Design Series or catalog number **RL14 & RLO14 (0.394 in.) (Liquid)**

Type Classification: Relief Valve

Capacity Tests: Sec. VIII Div. 1 at National Board T L (Worthington) on September 30, 2014

Method of Establishing Relieving Capacity: Flow Capacity, Flow Factor

Certified Value: 3.021 GPM/SQ.RT. PSID

Test Medium: Water

Certified Medium: Liquid

Set Pressure Definition: First Steady Stream

Blowdown: Fixed

Scope of Nominal Size and Set Pressure Ranges:

Inlet Size	Outlet Size	Flow Area	Orifice [designator] diameter	Lift	Set Pressure Range	Media	Code Section
0.5 - 1 NPS	1 NPS	0.122 sq in	0.394 in	0.0985 in	15 - 5000 psi	Water	VIII Div. 1

Certification Number: **73224** Design Series or catalog number **RL40, RLO40, RL41, RLO41 (0.547 in orifice), Design Rev. A**

Type Classification: Safety Relief Valve

Capacity Tests: Sec. VIII Div. 1 at National Board T L (Worthington) on March 04, 2014

Method of Establishing Relieving Capacity: Flow Capacity, Slope

Certified Value: 3.76 SCFM/PSIA

Certified Value (alternate medium): 10.53 PPH/PSIA

Test Medium: Steam & Air/Gas

Certified Medium: Steam & Air/Gas

Set Pressure Definition: Pop

Blowdown: Fixed

Scope of Nominal Size and Set Pressure Ranges:

Inlet Size	Outlet Size	Flow Area	Orifice [designator] diameter	Lift	Set Pressure Range	Media	Code Section
1 - 1.5 NPS	1-2 NPS	0.235 sq in	0.547 in	0.137 in	15 - 2900 psi	Steam	VIII Div. 1
					15 - 3000 psi	Air	VIII Div. 1

Certification Number: **73235** Design Series or catalog number **RL40, RLO40, RL41, RLO41 (0.547 in. orifice) (Liquid), Design Rev. A**

Type Classification: Relief Valve

Capacity Tests: Sec. VIII Div. 1 at National Board T L (Worthington) on March 04, 2014

Method of Establishing Relieving Capacity: Flow Capacity, Slope

Certified Value: 5.635 GPM/SQ.RT. PSID

Test Medium: Liquid

Certified Medium: Liquid

Set Pressure Definition: First Steady Stream

Blowdown: Fixed

Scope of Nominal Size and Set Pressure Ranges:

Inlet Size	Outlet Size	Flow Area	Orifice [designator] diameter	Lift	Set Pressure Range	Media	Code Section
1 - 1.5 NPS	1-2 NPS	0.235 sq in	0.547 in	0.137 in	15 - 3000 psi	Water	VIII Div. 1

ARI-Armaturen Albert Richter GmbH & Co. KG (ARI)

NB#: 08008

location: Mergelheide 56-60, D-33758 Schloss Holte-Stukenbrock Germany

Acceptable Abbrev.: ARI

ARI-Armaturen Albert Richter GmbH & Co. KG (ARI)

location: Mergelheide 56-60, D-33758 Schloss Holte-Stukenbrock Germany

Acceptable Abbrev.: ARI

Certification Number: **08008** Design Series or catalog number: **901/902/911/912**

Type Classification: **Safety Relief Valve**Capacity Tests: **Sec. VIII Div. 1 at National Board T L (Worthington) on November 09, 2001**Method of Establishing Relieving Capacity: **Flow Capacity, K**Certified Value: **.817 Unitless**Test Medium: **Air/Gas**Certified Medium: **Steam & Air/Gas**Set Pressure Definition: **Initial Audible Discharge**Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
1 NPS	1.5, 2.0 NPS	0.617 sq in	0.886 in	0.22 in	30 - 493 psi	Air	VIII Div. 1
						Steam	VIII Div. 1
1.25 NPS	2.0 NPS	1.024 sq in	1.142 in	0.29 in	30 - 493 psi	Air	VIII Div. 1
						Steam	VIII Div. 1
1.5 NPS	2, 2.5 NPS	1.024 sq in	1.142 in	0.29 in	30 - 493 psi	Air	VIII Div. 1
						Steam	VIII Div. 1
	2.5, 3.0 NPS	1.578 sq in	1.417 in	0.37 in	30 - 493 psi	Air	VIII Div. 1
						Steam	VIII Div. 1
2 NPS	3 NPS	2.465 sq in	1.772 in	0.45 in	30 - 493 psi	Air	VIII Div. 1
						Steam	VIII Div. 1
2.5 - 3 NPS	4 NPS	4.166 sq in	2.303 in	0.61 in	30 - 406 psi	Air	VIII Div. 1
						Steam	VIII Div. 1
4 NPS	6 NPS	9.861 sq in	3.543 in	0.98 in	30 - 276 psi	Air	VIII Div. 1
						Steam	VIII Div. 1
5 - 6 NPS	8 NPS	13.678 sq in	4.173 in	1.34 in	30 - 392 psi	Air	VIII Div. 1
						Steam	VIII Div. 1
6 NPS	10 NPS	19.022 sq in	4.921 in	1.46 in	30 - 305 psi	Air	VIII Div. 1
						Steam	VIII Div. 1

Certification Number: **08019** Design Series or catalog number: **901/902/911/912 (Liquids)**

Type Classification: **Relief Valve**Capacity Tests: **Sec. VIII Div. 1 at National Board T L (Worthington) on October 15, 2001**Method of Establishing Relieving Capacity: **Flow Capacity, K**Certified Value: **.545 Unitless**Test Medium: **Water**Certified Medium: **Liquid**Set Pressure Definition: **Opening Pressure**Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
1.25 NPS	2 NPS	1.024 sq in	1.142 in	0.29 in	15 - 493 psi	Water	VIII Div. 1
1.5 NPS	2, 2.5 NPS	1.024 sq in	1.142 in	0.29 in	15 - 493 psi	Water	VIII Div. 1
	2.5, 3 NPS	1.578 sq in	1.417 in	0.37 in	15 - 493 psi	Water	VIII Div. 1
2 NPS	3 NPS	2.465 sq in	1.772 in	0.45 in	15 - 493 psi	Water	VIII Div. 1
2.5 - 3 NPS	4 NPS	4.166 sq in	2.303 in	0.61 in	15 - 406 psi	Water	VIII Div. 1
4 NPS	6 NPS	9.861 sq in	3.543 in	0.98 in	15 - 276 psi	Water	VIII Div. 1
5 - 6 NPS	8 NPS	13.678 sq in	4.173 in	1.34 in	15 - 392 psi	Water	VIII Div. 1
6 NPS	10 NPS	19.022 sq in	4.921 in	1.46 in	15 - 305 psi	Water	VIII Div. 1

location: Mergelheide 56-60, D-33758 Schloss Holte-Stukenbrock Germany

Acceptable Abbrev.: ARI

Certification Number: **08020** Design Series or catalog number: **901/902/911/912 (1" liquid)**

Type Classification: **Relief Valve**Capacity Tests: **Sec. VIII Div. 1 at National Board T L (Worthington) on August 24, 2001**Method of Establishing Relieving Capacity: **Flow Capacity, Flow Factor**Certified Value: **14.41 GPM/SQ.RT. PSID**Test Medium: **Water**Certified Medium: **Liquid**Set Pressure Definition: **Opening Pressure**Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
1 NPS	1.5, 2.0 NPS	0.617 sq in	0.886 in	0.22 in	15 - 493 psi	Water	VIII Div. 1

Certification Number: **08031** Design Series or catalog number: **901/902/911/912 {15-30}**

Type Classification: **Safety Relief Valve**Capacity Tests: **Sec. VIII Div. 1 at National Board T L (Worthington) on May 09, 2007**Method of Establishing Relieving Capacity: **Flow Capacity, K**Certified Value: **.769 Unitless**Test Medium: **Steam & Air/Gas**Certified Medium: **Steam & Air/Gas**Special Service: **None**Set Pressure Definition: **Initial Audible Discharge**Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
1 NPS	1.5, 2.0 NPS	0.394 sq in	0.709 in	0.205 in	15 - 30 psi	Air	VIII Div. 1
						Steam	VIII Div. 1
1.25 NPS	2.0 NPS	1.024 sq in	1.142 in	0.29 in	15 - 30 psi	Air	VIII Div. 1
						Steam	VIII Div. 1
1.5 NPS	2, 2.5 NPS	1.024 sq in	1.142 in	0.29 in	15 - 30 psi	Air	VIII Div. 1
						Steam	VIII Div. 1
	2.5, 3.0 NPS	1.578 sq in	1.417 in	0.37 in	15 - 30 psi	Air	VIII Div. 1
						Steam	VIII Div. 1
2 NPS	3 NPS	2.465 sq in	1.772 in	0.45 in	15 - 30 psi	Air	VIII Div. 1
						Steam	VIII Div. 1
2.5 - 3 NPS	4 NPS	4.166 sq in	2.303 in	0.61 in	15 - 30 psi	Air	VIII Div. 1
						Steam	VIII Div. 1
4 NPS	6 NPS	9.861 sq in	3.543 in	0.98 in	15 - 30 psi	Air	VIII Div. 1
						Steam	VIII Div. 1
5 - 6 NPS	8 NPS	13.678 sq in	4.173 in	1.34 in	15 - 30 psi	Air	VIII Div. 1
						Steam	VIII Div. 1
6 NPS	10 NPS	19.022 sq in	4.921 in	1.46 in	15 - 30 psi	Air	VIII Div. 1
						Steam	VIII Div. 1

Baird Manufacturing (BRD)

NB#: 04004

location: 3105 Charles Page Boulevard, Tulsa, OK 74127 United States

Baird Manufacturing (BRD)

location: 3105 Charles Page Boulevard, Tulsa, OK 74127 United States

Certification Number: **04004** Design Series or catalog number: **731-1-GS**

Type Classification: **Safety Relief Valve**Capacity Tests: **Sec. VIII Div. 1 at National Board T L (Picaway) on October 10, 1984**Method of Establishing Relieving Capacity: **Flow Capacity, Slope**Certified Value: **.963 SCFM/PSIA**Test Medium: **Air/Gas**Certified Medium: **Gas**Set Pressure Definition: **Pop**Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
0.5 - 1 NPS	1 NPS	0.066 sq in	0.456 in	0.125 in	25 - 2500 psi	Air	VIII Div. 1

Certification Number: **04037** Design Series or catalog number: **831**

Type Classification: **Safety Relief Valve**Capacity Tests: **Sec. VIII Div. 1 at National Board T L (Picaway) on March 12, 1986**Method of Establishing Relieving Capacity: **Flow Capacity, Slope**Certified Value: **1.128 SCFM/PSIA**Test Medium: **Air/Gas**Certified Medium: **Air/Gas**Set Pressure Definition: **Pop**Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
1 NPS	1 NPS	0.02449 sq in	0.375 in		25 - 300 psi	Air	VIII Div. 1

Certification Number: **04048** Design Series or catalog number: **7100-2 G**

Type Classification: **Safety Relief Valve**Capacity Tests: **Sec. VIII Div. 1 at Louisiana State University on December 04, 1971**Method of Establishing Relieving Capacity: **Flow Capacity, Slope**Certified Value: **3.97 SCFM/PSIA**Test Medium: **Air/Gas**Certified Medium: **Air/Gas**Set Pressure Definition: **Pop**Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
2 NPS	2 NPS	0.442 sq in	0.75 in	0.218 in	20 - 600 psi	Air	VIII Div. 1

location: 3105 Charles Page Boulevard, Tulsa, OK 74127 United States

Certification
Number: **04059**Design Series
or catalog number **7100-2 GHP**Type Classification: **Safety Relief Valve**Capacity Tests: **Sec. VIII Div. 1 at Louisiana State University on December 04, 1971**Method of Establishing Relieving Capacity: **Flow Capacity, Slope**Certified Value: **2.45 SCFM/PSIA**Test Medium: **Air/Gas**Certified Medium: **Air/Gas**Set Pressure Definition: **Pop**Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
2 NPS	2 NPS	0.196 sq in	0.5 in	0.156 in	20 - 2500 psi	Air	VIII Div. 1

Beaumont Manufacturing and Distribution Company, LLC (MPV)
 location: 1009 Laurel Street, Beaumont, TX 77701 United States
 Acceptable Abbrev.: BMD

NB#: 00910

Beaumont Manufacturing and Distribution Company, LLC (MPV)

location: 1009 Laurel Street, Beaumont, TX 77701 United States
 Acceptable Abbrev.: BMD

Certification Number: **00910** Design Series or catalog number **RV10**

Type Classification: **Safety Relief Valve**

Capacity Tests: **Sec. VIII Div. 1 at National Board T L (Worthington) on July 06, 2016**

Method of Establishing Relieving Capacity: **Flow Capacity, K**

Certified Value: **.756 Unitless**

Test Medium: **Air/Gas**

Certified Medium: **Air/Gas**

Set Pressure Definition: **Pop**

Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
0.75 - 2 NPS	.75-2 NPS	0.13 sq in	[D] 0.407 in	0.2 in	15 - 3000 psi	Air	VIII Div. 1
		0.22 sq in	[E] 0.529 in	0.23 in	15 - 2400 psi	Air	VIII Div. 1
1.5 - 2 NPS	1.5-2.5 NPS	0.357 sq in	[F] 0.674 in	0.31 in	15 - 2400 psi	Air	VIII Div. 1
	1.5- 2.5 NPS	0.478 sq in	[G] 0.78 in	0.35 in	15 - 2000 psi	Air	VIII Div. 1
2 NPS	2, 2.5 NPS	0.913 sq in	[H] 1.078 in	0.44 in	15 - 2000 psi	Air	VIII Div. 1
2 - 3 NPS	3, 4 NPS	1.44 sq in	[J] 1.354 in	0.61 in	15 - 1800 psi	Air	VIII Div. 1
3 NPS	3, 4 NPS	2.1 sq in	[K] 1.635 in	0.72 in	15 - 1500 psi	Air	VIII Div. 1
3 - 4 NPS	4, 6 NPS	3.3 sq in	[L] 2.05 in	0.895 in	15 - 1250 psi	Air	VIII Div. 1
4 NPS	6 NPS	4.1 sq in	[M] 2.085 in	1.01 in	15 - 1000 psi	Air	VIII Div. 1

location: No. 11, Yuncheng Street,

Acceptable Abbrev.: BAPC

Beijing Aerospace Petrochemical Technology & Equipment Engineering Corporation Limited (BAP)

location: No. 11, Yuncheng Street,

Acceptable Abbrev.: BAPC

Certification Number: **12407** Design Series or catalog number **HT Series**

Type Classification: **Safety Relief Valve**Capacity Tests: **Sec. VIII Div. 1 at National Board T L (Worthington) on August 20, 2010**Method of Establishing Relieving Capacity: **Flow Capacity, K**Certified Value: **.872 Unitless**Test Medium: **Steam & Air/Gas**Certified Medium: **Steam & Air/Gas**Special Service: **None**Set Pressure Definition: **Initial Audible Discharge**Blowdown: **Adjustable by Single Ring**

Scope of Nominal Size and Set Pressure Ranges:

Inlet Size	Outlet Size	Flow Area	Orifice [designator] diameter	Lift	Set Pressure Range	Media	Code Section
1 - 1.5 NPS	2, 3 NPS	0.134 sq in	[D] 0.4134 in	0.124 in	15 - 6000 psi	Air	VIII Div. 1
		0.239 sq in	[E] 0.5512 in	0.165 in	15 - 6000 psi	Air	VIII Div. 1
1.5 NPS	2, 3 NPS	0.352 sq in	[F] 0.6693 in	0.201 in	15 - 5000 psi	Air	VIII Div. 1
1.5 - 2 NPS	2.5, 3 NPS	0.589 sq in	[G] 0.866 in	0.26 in	15 - 3705 psi	Air	VIII Div. 1
	3 NPS	0.887 sq in	[H] 1.063 in	0.319 in	15 - 2750 psi	Air	VIII Div. 1
2 - 3 NPS	3, 4 NPS	1.448 sq in	[J] 1.358 in	0.407 in	15 - 2700 psi	Air	VIII Div. 1
3 NPS	4, 6 NPS	2.097 sq in	[K] 1.634 in	0.19 in	15 - 2220 psi	Air	VIII Div. 1
3 - 4 NPS	4, 6 NPS	3.23 sq in	[L] 2.028 in	0.608 in	15 - 1500 psi	Air	VIII Div. 1
4 NPS	6 NPS	4.097 sq in	[M] 2.284 in	0.685 in	15 - 1100 psi	Air	VIII Div. 1
		4.988 sq in	[N] 2.52 in	0.756 in	15 - 1000 psi	Air	VIII Div. 1
		7.22 sq in	[P] 3.032 in	0.909 in	15 - 1000 psi	Air	VIII Div. 1
6 NPS	8 NPS	12.667 sq in	[Q] 4.016 in	1.206 in	15 - 600 psi	Air	VIII Div. 1
	8, 10 NPS	18.118 sq in	[R] 4.803 in	1.441 in	15 - 300 psi	Air	VIII Div. 1
8 NPS	10 NPS	29.628 sq in	[T] 6.142 in	1.843 in	15 - 300 psi	Air	VIII Div. 1
10 NPS	14 NPS	43.943 sq in	[V] 7.48 in	2.244 in	15 - 285 psi	Air	VIII Div. 1
12 NPS	16 NPS	61.626 sq in	[W] 8.858 in	5.658 in	15 - 285 psi	Air	VIII Div. 1
14 NPS	18 NPS	82.291 sq in	[Y] 10.236 in	3.071 in	15 - 145 psi	Air	VIII Div. 1
16 NPS	18 NPS	95.448 sq in	[Z] 11.024 in	3.307 in	15 - 145 psi	Air	VIII Div. 1
	20 NPS	109.563 sq in	[Z1] 11.811 in	3.543 in	15 - 145 psi	Air	VIII Div. 1
18 NPS	24 NPS	140.732 sq in	[AA] 13.386 in	4.016 in	15 - 145 psi	Air	VIII Div. 1
20 NPS	24 NPS	166.66 sq in	[BB] 14.567 in	4.37 in	15 - 145 psi	Air	VIII Div. 1

Certification Number: **12418** Design Series or catalog number **HTXO Series (Liquid)**

Type Classification: **Safety Relief Valve**Capacity Tests: **Sec. VIII Div. 1 at National Board T L (Worthington) on May 20, 2014**Method of Establishing Relieving Capacity: **Flow Capacity, Flow Factor**Certified Value: **3.30 GPM/SQ.RT. PSID**Test Medium: **Water**Certified Medium: **Liquid**Set Pressure Definition: **First Steady Stream**Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

Inlet Size	Outlet Size	Flow Area	Orifice [designator] diameter	Lift	Set Pressure Range	Media	Code Section
0.5 - 1 NPS	.5-1.0 NPS	0.122 sq in	0.394 in	0.118 in	15 - 6000 psi	Water	VIII Div. 1

location: No. 11, Yuncheng Street,

Acceptable Abbrev.: BAPC

Certification Number: **12429** Design Series or catalog number **HT Series (Liquid)**

Type Classification: **Safety Relief Valve**Capacity Tests: **Sec. VIII Div. 1 at National Board T L (Worthington) on May 20, 2014**Method of Establishing Relieving Capacity: **Flow Capacity, K**Certified Value: **0.751 Unitless**Test Medium: **Water**Certified Medium: **Liquid**Set Pressure Definition: **First Steady Stream**Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
1 - 1.5	2-3 NPS	0.134 sq in	[D] 0.4134 in	0.124 in	15 - 6000 psi	Water	VIII Div. 1
		0.239 sq in	[E] 0.5512 in	0.165 in	15 - 6000 psi	Water	VIII Div. 1
1.5	2-3 NPS	0.352 sq in	[F] 0.6693 in	0.201 in	15 - 5000 psi	Water	VIII Div. 1
1.5 - 2	2.5-3 NPS	0.589 sq in	[G] 0.8661 in	0.26 in	15 - 3705 psi	Water	VIII Div. 1
	3 NPS	0.887 sq in	[H] 1.063 in	0.319 in	15 - 2750 psi	Water	VIII Div. 1
2 - 3	3-4 NPS	1.448 sq in	[J] 1.358 in	0.407 in	15 - 2700 psi	Water	VIII Div. 1
3	4-6 NPS	2.097 sq in	[K] 1.634 in	0.49 in	15 - 2220 psi	Water	VIII Div. 1
3 - 4	4-6 NPS	3.23 sq in	[L] 2.028 in	0.608 in	15 - 1500 psi	Water	VIII Div. 1
4	6 NPS	4.097 sq in	[M] 2.284 in	0.685 in	15 - 1100 psi	Water	VIII Div. 1
		4.988 sq in	[N] 2.52 in	0.756 in	15 - 1000 psi	Water	VIII Div. 1
		7.22 sq in	[P] 3.032 in	0.909 in	15 - 1000 psi	Water	VIII Div. 1
6	8 NPS	12.667 sq in	[Q] 4.016 in	1.206 in	15 - 600 psi	Water	VIII Div. 1
	8-10 NPS	18.118 sq in	[R] 4.803 in	1.441 in	15 - 300 psi	Water	VIII Div. 1
8	10 NPS	29.628 sq in	[T] 6.142 in	1.843 in	15 - 300 psi	Water	VIII Div. 1
10	14 NPS	43.943 sq in	[V] 7.48 in	2.244 in	15 - 285 psi	Water	VIII Div. 1
12	16 NPS	61.626 sq in	[W] 8.858 in	2.658 in	15 - 285 psi	Water	VIII Div. 1
14	18 NPS	82.291 sq in	[Y] 10.236 in	3.071 in	15 - 145 psi	Water	VIII Div. 1
16	18 NPS	95.448 sq in	[Z] 11.024 in	3.307 in	15 - 145 psi	Water	VIII Div. 1
	20 NPS	109.563 sq in	[Z1] 11.811 in	3.543 in	15 - 145 psi	Water	VIII Div. 1
18	24 NPS	140.732 sq in	[AA] 13.386 in	4.016 in	15 - 145 psi	Water	VIII Div. 1
20	24 NPS	166.66 sq in	[BB] 14.567 in	4.37 in	15 - 145 psi	Water	VIII Div. 1

location: No. 11, Yuncheng Street,

Acceptable Abbrev.: BAPC

Certification Number: **12430** Design Series or catalog number **HTXD Series (Liquid)**

Type Classification: **Pilot Operated Pressure Relief Valve**Capacity Tests: **Sec. VIII Div. 1 at National Board T L (Worthington) on May 21, 2014**Method of Establishing Relieving Capacity: **Flow Capacity, K**Certified Value: **.763 Unitless**Test Medium: **Water**Certified Medium: **Liquid**Set Pressure Definition: **First Steady Stream**Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
1 - 1.5 NPS	2 NPS	0.134 sq in	[D] 0.4134 in	0.165 in	30 - 6170 psi	Water	VIII Div. 1
		0.239 sq in	[E] 0.5512 in	0.22 in	30 - 6170 psi	Water	VIII Div. 1
		0.373 sq in	[F] 0.689 in	0.276 in	30 - 6170 psi	Water	VIII Div. 1
1.5 - 2 NPS	3 NPS	0.616 sq in	[G] 0.8858 in	0.355 in	30 - 6170 psi	Water	VIII Div. 1
		0.954 sq in	[H] 1.102 in	0.441 in	30 - 6170 psi	Water	VIII Div. 1
2 - 3 NPS	3, 4 NPS	1.578 sq in	[J] 1.4173 in	0.567 in	30 - 4620 psi	Water	VIII Div. 1
3 NPS	4 NPS	2.251 sq in	[K] 1.693 in	0.677 in	30 - 3705 psi	Water	VIII Div. 1
3 - 4 NPS	4, 6 NPS	3.484 sq in	[L] 2.1063 in	0.843 in	30 - 3705 psi	Water	VIII Div. 1
4 NPS	6 NPS	4.383 sq in	[M] 2.3622 in	0.945 in	30 - 3705 psi	Water	VIII Div. 1
		5.303 sq in	[N] 2.5984 in	1.04 in	30 - 3705 psi	Water	VIII Div. 1
		7.791 sq in	[P] 3.1496 in	1.26 in	30 - 3705 psi	Water	VIII Div. 1
6 NPS	8 NPS	13.421 sq in	[Q] 4.1339 in	1.653 in	30 - 1480 psi	Water	VIII Div. 1
		19.327 sq in	[R] 4.961 in	1.984 in	30 - 1020 psi	Water	VIII Div. 1
8 NPS	10 NPS	30.39 sq in	[T] 6.2205 in	2.488 in	30 - 985 psi	Water	VIII Div. 1
10 NPS	14 NPS	43.943 sq in	[V] 7.48 in	2.992 in	30 - 765 psi	Water	VIII Div. 1
12 NPS	16 NPS	61.626 sq in	[W] 8.858 in	3.543 in	30 - 765 psi	Water	VIII Div. 1
14 NPS	18 NPS	82.291 sq in	[Y] 10.236 in	4.095 in	30 - 765 psi	Water	VIII Div. 1
16 NPS	18 NPS	95.448 sq in	[Z] 11.024 in	4.409 in	30 - 765 psi	Water	VIII Div. 1
	20 NPS	109.563 sq in	[Z1] 11.811 in	4.724 in	30 - 765 psi	Water	VIII Div. 1
18 NPS	24 NPS	140.732 sq in	[AA] 13.386 in	5.355 in	30 - 765 psi	Water	VIII Div. 1
20 NPS	24 NPS	166.66 sq in	[BB] 14.567 in	5.827 in	30 - 765 psi	Water	VIII Div. 1

location: No. 11, Yuncheng Street,

Acceptable Abbrev.: BAPC

Certification
Number: **12441**Design Series
or catalog number **HTXD Series**Type Classification: **Pilot Operated Pressure Relief Valve**Capacity Tests: **Sec. VIII Div. 1 at National Board T L (Worthington) on June 30, 2015**Method of Establishing Relieving Capacity: **Flow Capacity, K**Certified Value: **.853 Unitless**Test Medium: **Gas**Certified Medium: **Air/Gas**Special Service: **None**Set Pressure Definition: **1.Pop 3.Initial Audible Discharge**Blowdown: **Adjustable and Fixed for Mod. Pilot**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
1 - 1.5 NPS	2 NPS	0.134 sq in	[D] 0.4134 in	0.165 in	30 - 6170 psi	Air	VIII Div. 1
		0.239 sq in	[E] 0.5512 in	0.22 in	30 - 6170 psi	Air	VIII Div. 1
		0.373 sq in	[F] 0.689 in	0.276 in	30 - 6170 psi	Air	VIII Div. 1
1.5 - 2 NPS	3 NPS	0.616 sq in	[G] 0.8858 in	0.355 in	30 - 6170 psi	Air	VIII Div. 1
		0.954 sq in	[H] 1.1024 in	0.441 in	30 - 6170 psi	Air	VIII Div. 1
2 - 3 NPS	3, 4 NPS	1.578 sq in	[J] 1.4173 in	0.567 in	30 - 4620 psi	Air	VIII Div. 1
3 NPS	4 NPS	2.251 sq in	[K] 1.6929 in	0.677 in	30 - 3705 psi	Air	VIII Div. 1
3 - 4 NPS	4, 6 NPS	3.484 sq in	[L] 2.1063 in	0.843 in	30 - 3705 psi	Air	VIII Div. 1
4 NPS	6 NPS	4.383 sq in	[M] 2.3622 in	0.945 in	30 - 3705 psi	Air	VIII Div. 1
		5.303 sq in	[N] 2.5984 in	1.04 in	30 - 3705 psi	Air	VIII Div. 1
		7.791 sq in	[P] 3.1496 in	1.26 in	30 - 3705 psi	Air	VIII Div. 1
6 NPS	8 NPS	13.421 sq in	[Q] 4.1339 in	1.653 in	30 - 1480 psi	Air	VIII Div. 1
		19.327 sq in	[R] 4.9606 in	1.984 in	30 - 1020 psi	Air	VIII Div. 1
8 NPS	10 NPS	30.39 sq in	[T] 6.2205 in	2.488 in	30 - 985 psi	Air	VIII Div. 1
10 NPS	14 NPS	43.943 sq in	[V] 7.48 in	2.992 in	30 - 765 psi	Air	VIII Div. 1
12 NPS	16 NPS	61.626 sq in	[W] 8.858 in	3.543 in	30 - 765 psi	Air	VIII Div. 1
14 NPS	18 NPS	82.291 sq in	[Y] 10.236 in	4.095 in	30 - 765 psi	Air	VIII Div. 1
16 NPS	18 NPS	95.448 sq in	[Z] 11.024 in	4.409 in	30 - 765 psi	Air	VIII Div. 1
	20 NPS	109.563 sq in	[Z1] 11.811 in	4.724 in	30 - 765 psi	Air	VIII Div. 1
18 NPS	24 NPS	140.732 sq in	[AA] 13.386 in	5.355 in	30 - 765 psi	Air	VIII Div. 1
20 NPS	24 NPS	166.66 sq in	[BB] 14.567 in	5.827 in	30 - 765 psi	Air	VIII Div. 1

Certification
Number: **12452**Design Series
or catalog number **HTXO Series**Type Classification: **Safety Relief Valve**Capacity Tests: **Sec. VIII Div. 1 at National Board T L (Worthington) on June 30, 2015**Method of Establishing Relieving Capacity: **Flow Capacity, Slope**Certified Value: **1.823 SCFM/PSIA**Test Medium: **Gas**Certified Medium: **Air/Gas**Special Service: **None**Set Pressure Definition: **Initial Audible Discharge**Blowdown: **Adjustable by Single Ring**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
0.5 - 1 NPS	.5-1 NPS	0.122 sq in	0.394 in	0.118 in	15 - 6000 psi	Air	VIII Div. 1

location: No. 11, Yuncheng Street,

Acceptable Abbrev.: BAPC

Certification Number: **12463** Design Series or catalog number: **HTBPO**

Type Classification: **Buckling Pin Non-reclosing Device**Capacity Tests: **Sec. VIII Div. 1 at National Board T L (Worthington) on November 01, 2016**Method of Establishing Relieving Capacity: **Flow Capacity, K**Certified Value: **0.790 Unitless**Test Medium: **Air/Gas**Certified Medium: **Air/Gas**Set Pressure Definition: **Buckling Pressure**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
1 NPS	2 NPS	0.77 sq in	0.99 in	0.81 in	50 - 1480 psi	Air	VIII Div. 1
1.5 NPS	2, 3 NPS	1.89 sq in	1.55 in	0.98 in	15 - 1480 psi	Air	VIII Div. 1
2 NPS	3 NPS	2.92 sq in	1.93 in	1.09 in	15 - 1480 psi	Air	VIII Div. 1
3 NPS	4 NPS	7.63 sq in	3.12 in	1.45 in	15 - 1480 psi	Air	VIII Div. 1
4 NPS	6 NPS	11.74 sq in	3.87 in	1.67 in	15 - 1480 psi	Air	VIII Div. 1
6 NPS	8 NPS	27.03 sq in	5.87 in	2.27 in	15 - 1480 psi	Air	VIII Div. 1
8 NPS	10 NPS	45.52 sq in	7.61 in	2.8 in	15 - 1480 psi	Air	VIII Div. 1
10 NPS	12 NPS	72.58 sq in	9.61 in	3.4 in	15 - 1480 psi	Air	VIII Div. 1
12 NPS	14 NPS	101.42 sq in	11.36 in	3.92 in	15 - 1480 psi	Air	VIII Div. 1
14 NPS	16 NPS	140.26 sq in	13.36 in	4.52 in	15 - 740 psi	Air	VIII Div. 1
16 NPS	18 NPS	185.38 sq in	15.36 in	5.12 in	15 - 740 psi	Air	VIII Div. 1
18 NPS	20 NPS	239.55 sq in	17.46 in	5.75 in	15 - 740 psi	Air	VIII Div. 1
20 NPS	24 NPS	297.55 sq in	19.46 in	6.35 in	15 - 285 psi	Air	VIII Div. 1
24 NPS	30 NPS	431.87 sq in	23.44 in	7.55 in	15 - 285 psi	Air	VIII Div. 1
26 NPS	32 NPS	508.68 sq in	25.44 in	8.15 in	15 - 285 psi	Air	VIII Div. 1
28 NPS	34 NPS	554.34 sq in	26.57 in	8.48 in	15 - 285 psi	Air	VIII Div. 1
30 NPS	36 NPS	633.72 sq in	28.41 in	9.03 in	15 - 285 psi	Air	VIII Div. 1

location: No. 11, Yuncheng Street,

Acceptable Abbrev.: BAPC

Certification
Number: **12474**Design Series
or catalog number **HTBPX**Type Classification: **Buckling Pin Non-reclosing Device**Capacity Tests: **Sec. VIII Div. 1 at National Board T L (Worthington) on November 01, 2016**Method of Establishing Relieving Capacity: **Resistance Factor, 3 Size, Krg**Certified Value: **1.86 Unitless**Test Medium: **Air/Gas**Certified Medium: **Air/Gas**Set Pressure Definition: **Buckling Pressure**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
4 NPS	4 NPS	11.74 sq in	3.87 in	2.87 in	15 - 720 psi	Air	VIII Div. 1
6 NPS	6 NPS	27.03 sq in	5.87 in	4.06 in	5 - 720 psi	Air	VIII Div. 1
8 NPS	8 NPS	45.52 sq in	7.61 in	5.24 in	5 - 720 psi	Air	VIII Div. 1
10 NPS	10 NPS	72.58 sq in	9.61 in	6.42 in	5 - 720 psi	Air	VIII Div. 1
12 NPS	12 NPS	101.42 sq in	11.36 in	7.6 in	5 - 720 psi	Air	VIII Div. 1
14 NPS	14 NPS	140.26 sq in	13.36 in	8.78 in	5 - 720 psi	Air	VIII Div. 1
16 NPS	16 NPS	185.38 sq in	15.36 in	9.96 in	5 - 720 psi	Air	VIII Div. 1
18 NPS	18 NPS	239.55 sq in	17.46 in	11.14 in	5 - 720 psi	Air	VIII Div. 1
20 NPS	20 NPS	297.55 sq in	19.46 in	12.32 in	5 - 720 psi	Air	VIII Div. 1
24 NPS	24 NPS	431.87 sq in	23.44 in	14.69 in	5 - 720 psi	Air	VIII Div. 1
26 NPS	26 NPS	508.65 sq in	25.44 in	15.87 in	5 - 720 psi	Air	VIII Div. 1
28 NPS	28 NPS	554.34 sq in	26.57 in	17.05 in	5 - 720 psi	Air	VIII Div. 1
30 NPS	30 NPS	631.08 sq in	28.35 in	18.23 in	5 - 145 psi	Air	VIII Div. 1
32 NPS	32 NPS	722.53 sq in	30.33 in	19.41 in	5 - 145 psi	Air	VIII Div. 1
34 NPS	34 NPS	813.97 sq in	32.19 in	20.59 in	5 - 145 psi	Air	VIII Div. 1
36 NPS	36 NPS	912.55 sq in	34.09 in	21.77 in	5 - 145 psi	Air	VIII Div. 1
38 NPS	38 NPS	1014.65 sq in	35.94 in	22.95 in	5 - 145 psi	Air	VIII Div. 1
40 NPS	40 NPS	1126.61 sq in	37.87 in	24.13 in	5 - 145 psi	Air	VIII Div. 1
42 NPS	42 NPS	1249.84 sq in	39.89 in	25.31 in	5 - 145 psi	Air	VIII Div. 1
44 NPS	44 NPS	1366.03 sq in	41.7 in	26.5 in	5 - 145 psi	Air	VIII Div. 1
46 NPS	46 NPS	1469.14 sq in	43.65 in	27.68 in	5 - 145 psi	Air	VIII Div. 1
48 NPS	48 NPS	1632.45 sq in	45.59 in	28.86 in	5 - 145 psi	Air	VIII Div. 1

Bopp & Reuther Sicherheits (BOP)

NB#: 72009

location: Carl Reuther Strasse 1, Mannheim D-68305 Germany

Acceptable Abbrev.: IMI BuR; IMI B&R IMI B&R SR; IMI Bopp & Reuther SR

Bopp & Reuther Sicherheits (BOP)

location: Carl Reuther Strasse 1, Mannheim D-68305 Germany

Acceptable Abbrev.: IMI BuR; IMI B&R IMI B&R SR; IMI Bopp & Reuther SR

Bopp & Reuther Sicherheits (BOP)

NB#: 72009

location: Carl Reuther Strasse 1, Mannheim D-68305 Germany

Acceptable Abbrev.: IMI BuR; IMI B&R IMI B&R SR; IMI Bopp & Reuther SR

Certification
Number: **72009**Design Series
or catalog number **Si 81/83/84**Type Classification: **Safety Relief Valve**Capacity Tests: **Sec. VIII Div. 1 at National Board T L (Worthington) on June 19, 1995**Method of Establishing Relieving Capacity: **Flow Capacity, K**Certified Value: **.860 Unitless**Test Medium: **Steam & Air/Gas**Certified Medium: **Steam & Air/Gas**Special Service: **None**Set Pressure Definition: **Initial Audible Discharge**Blowdown: **Adjustable by Single Ring**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
1 - 1.5 NPS	2, 3 NPS	0.2252 sq in	[E] 0.535 in	0.185 in	15 - 2900 psi	Steam	III VIII Div. 1
					15 - 6000 psi	Air	III VIII Div. 1
1.5 NPS	2, 2.5, 3 NPS	0.3518 sq in	[F] 0.669 in	0.236 in	15 - 2900 psi	Steam	III VIII Div. 1
					15 - 5000 psi	Air	III
					15 - 5500 psi	Air	VIII Div. 1
1.5 - 2 NPS	2.5, 3 NPS	0.5785 sq in	[G] 0.858 in	0.295 in	15 - 2900 psi	Steam	III VIII Div. 1
					15 - 3705 psi	Air	III VIII Div. 1
					15 - 2750 psi	Air	III
	3 NPS	0.9007 sq in	[H] 1.071 in	0.374 in		Steam	III VIII Div. 1
					15 - 5080 psi	Air	VIII Div. 1
2 - 3 NPS	3, 4 NPS	1.4743 sq in	[J] 1.37 in	0.472 in	15 psi	Steam	III
					15 - 2700 psi	Air	III VIII Div. 1
						Steam	VIII Div. 1
3 NPS	4, 6 NPS	2.1067 sq in	[K] 1.638 in	0.571 in	15 - 2220 psi	Air	III VIII Div. 1
						Steam	III VIII Div. 1
3 - 4 NPS	4, 6 NPS	3.2665 sq in	[L] 2.039 in	0.709 in	15 - 1500 psi	Air	III VIII Div. 1
						Steam	III VIII Div. 1
4 NPS	6 NPS	4.1235 sq in	[M] 2.291 in	0.787 in	15 - 1100 psi	Air	III VIII Div. 1
						Steam	III VIII Div. 1
		4.9708 sq in	[N] 2.516 in	0.866 in	15 - 1000 psi	Air	III VIII Div. 1
						Steam	III VIII Div. 1
		7.3118 sq in	[P] 3.051 in	1.063 in	15 - 1000 psi	Air	III VIII Div. 1
						Steam	III VIII Div. 1

Bopp & Reuther Sicherheits (BOP)

NB#: 72009

location: Carl Reuther Strasse 1, Mannheim D-68305 Germany

Acceptable Abbrev.: IMI BuR; IMI B&R IMI B&R SR; IMI Bopp & Reuther SR

...Continued

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
6 NPS	8 NPS	12.6655 sq in	[Q] 4.016 in	1.417 in	15 - 600 psi	Air	III VIII Div. 1
						Steam	III VIII Div. 1
	8, 10 NPS	18.3279 sq in	[R] 4.831 in	1.693 in	15 - 300 psi	Air	III VIII Div. 1
						Steam	III VIII Div. 1
8 NPS	10 NPS	29.778 sq in	[T] 6.157 in	2.165 in	15 - 300 psi	Air	III VIII Div. 1
						Steam	III VIII Div. 1
10 NPS	14 NPS	49087 sq mm	[V] 204.5 mm	72 mm	15 - 300 psi	Air	VIII Div. 1
12 NPS	16 NPS	125664 sq mm	[W] 245 mm	86 mm	15 - 300 psi	Air	VIII Div. 1

Certification
Number: 72010Design Series
or catalog number Si/83/84/81 (RL)

Type Classification: Safety Relief Valve

Capacity Tests: Sec. VIII Div. 1 at National Board T L (Worthington) on June 19, 1995

Method of Establishing Relieving Capacity: Flow Capacity, Slope

Certified Value: 2.20 SCFM/PSIA

Certified Value (alternate medium): 6.18 PPH/PSIA

Test Medium: Steam & Air/Gas

Certified Medium: Steam & Air/Gas

Special Service: None

Set Pressure Definition: Initial Audible Discharge

Blowdown: Adjustable by Single Ring

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
1 - 1.5 NPS	2, 3 NPS	0.1267 sq in	[D] 0.402 in	0.087 in	15 - 2900 psi	Steam	III VIII Div. 1
					15 - 6000 psi	Air	III VIII Div. 1

Certification
Number: 72021Design Series
or catalog number Si 81/83/84 (Liquids) (RL)

Type Classification: Relief Valve

Capacity Tests: Sec. VIII Div. 1 at National Board T L (Worthington) on June 14, 1995

Method of Establishing Relieving Capacity: Flow Capacity, Flow Factor

Certified Value: 3.51 GPM/SQ.RT. PSID

Test Medium: Water

Certified Medium: Liquid

Special Service: None

Set Pressure Definition: Start-to-Leak

Blowdown: Adjustable by Single Ring

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
1 - 1.5 NPS	2, 3 NPS	0.1267 sq in	[D] 0.402 in	0.087 in	15 - 6000 psi	Water	III VIII Div. 1

Bopp & Reuther Sicherheits (BOP)

NB#: 72032

location: Carl Reuther Strasse 1, Mannheim D-68305 Germany

Acceptable Abbrev.: IMI BuR; IMI B&R IMI B&R SR; IMI Bopp & Reuther SR

Certification
Number: **72032**Design Series
or catalog number **SiZ 2507**Type Classification: **Safety Valve**Capacity Tests: **Sec. III at National Board T L (Worthington) on January 31, 2000**Method of Establishing Relieving Capacity: **Flow Capacity, K**Certified Value: **.878 Unitless**Test Medium: **Steam**Certified Medium: **Steam**Set Pressure Definition: **Initial Audible Discharge**Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
200 mm	300 mm	24.2 sq in	141 mm	51 mm	726 - 745 psi	Steam	III

Certification
Number: **72043**Design Series
or catalog number **SiC 11/13/14**Type Classification: **Safety Relief Valve**Capacity Tests: **Sec. VIII Div. 1 at National Board T L (Worthington) on July 19, 2000**Method of Establishing Relieving Capacity: **Flow Capacity, K**Certified Value: **.878 Unitless**Test Medium: **Steam & Air/Gas**Certified Medium: **Steam & Air/Gas**Special Service: **None**Set Pressure Definition: **Initial Audible Discharge**Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
0.5 - 0.75 NPS	1 NPS	0.099 sq in	0.355 in	0.107 in	15 - 2900 psi	Air	III VIII Div. 1
						Steam	III VIII Div. 1
0.75 - 1 NPS	1 NPS	0.181 sq in	0.481 in	0.146 in	15 - 1500 psi	Air	III VIII Div. 1
						Steam	III VIII Div. 1
1 - 1.5 NPS	1.5 NPS	0.352 sq in	0.67 in	0.201 in	15 - 750 psi	Air	III VIII Div. 1
						Steam	III VIII Div. 1

Bopp & Reuther Sicherheits (BOP)

NB#: 72054

location: Carl Reuther Strasse 1, Mannheim D-68305 Germany

Acceptable Abbrev.: IMI BuR; IMI B&R IMI B&R SR; IMI Bopp & Reuther SR

Certification
Number: **72054**Design Series
or catalog number **SiC 11/13/14 (Liquids)**Type Classification: **Relief Valve**Capacity Tests: **Sec. VIII Div. 1 at National Board T L (Worthington) on July 19, 2000**Method of Establishing Relieving Capacity: **Flow Capacity, K**Certified Value: **.647 Unitless**Test Medium: **Water**Certified Medium: **Liquid**Set Pressure Definition: **Start-to-Leak**Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
0.5 - 0.75 NPS	1 NPS	0.099 sq in	0.355 in	0.107 in	15 - 2900 psi	Water	III VIII Div. 1
0.75 - 1 NPS	1 NPS	0.181 sq in	0.481 in	0.146 in	15 - 1500 psi	Water	III VIII Div. 1
1 NPS	1.5 NPS	0.352 sq in	0.67 in	0.201 in	15 - 750 psi	Water	III VIII Div. 1

Bopp & Reuther Sicherheits (BOP)

NB#: 72065

location: Carl Reuther Strasse 1, Mannheim D-68305 Germany

Acceptable Abbrev.: IMI BuR; IMI B&R IMI B&R SR; IMI Bopp & Reuther SR

Certification
Number: **72065**Design Series
or catalog number **Si 83/84/81 (Liquids)**Type Classification: **Relief Valve**Capacity Tests: **Sec. VIII Div. 1 at National Board T L (Worthington) on June 13, 1995**Method of Establishing Relieving Capacity: **Flow Capacity, K**Certified Value: **.675 Unitless**Test Medium: **Water**Certified Medium: **Liquid**Special Service: **None**Set Pressure Definition: **Start-to-Leak**Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
1 - 1.5 NPS	2, 3 NPS	0.2252 sq in	[E] 0.535 in	0.185 in	15 - 6000 psi	Water	III VIII Div. 1
	2, 2.5, 3 NPS	0.3518 sq in	[F] 0.669 in	0.236 in	15 - 5000 psi	Water	III VIII Div. 1
1.5 - 2 NPS	2.5, 3 NPS	0.5785 sq in	[G] 0.858 in	0.295 in	15 - 3705 psi	Water	III VIII Div. 1
	3 NPS	0.9007 sq in	[H] 1.071 in	0.374 in	15 - 2750 psi	Water	III VIII Div. 1
2 - 3 NPS	3, 4 NPS	1.4743 sq in	[J] 1.37 in	0.472 in	15 - 2700 psi	Water	III VIII Div. 1
3 NPS	4, 6 NPS	2.1067 sq in	[K] 1.638 in	0.571 in	15 - 2220 psi	Water	III VIII Div. 1
3 - 4 NPS	4, 6 NPS	3.2665 sq in	[L] 2.039 in	0.709 in	15 - 1500 psi	Water	III VIII Div. 1
4 NPS	6 NPS	4.1235 sq in	[M] 2.291 in	0.787 in	15 - 1100 psi	Water	III VIII Div. 1
		4.9708 sq in	[N] 2.516 in	0.866 in	15 - 1000 psi	Water	III VIII Div. 1
		7.3118 sq in	[P] 3.051 in	1.063 in	15 - 1000 psi	Water	III VIII Div. 1
6 NPS	8 NPS	12.6655 sq in	[Q] 4.016 in	1.417 in	15 - 600 psi	Water	III VIII Div. 1
	8, 10 NPS	18.3279 sq in	[R] 4.831 in	1.693 in	15 - 300 psi	Water	III VIII Div. 1
8 NPS	10 NPS	29.778 sq in	[T] 6.157 in	2.165 in	15 - 300 psi	Water	III VIII Div. 1
10 NPS	14 NPS	49087 sq mm	[V] 204.5 mm	72 mm	15 - 300 psi	Water	VIII Div. 1
12 NPS	16 NPS	125664 sq mm	[W] 245 mm	86 mm	15 - 300 psi	Air	VIII Div. 1

Bopp & Reuther Sicherheits (BOP)

NB#: 72076

location: Carl Reuther Strasse 1, Mannheim D-68305 Germany

Acceptable Abbrev.: IMI BuR; IMI B&R IMI B&R SR; IMI Bopp & Reuther SR

Certification
Number: **72076**Design Series
or catalog number **Si 91/95, SiZ 2507 RL**Type Classification: **Safety Valve**Capacity Tests: **Sec. I at National Board T L (Worthington) on April 07, 2005**Method of Establishing Relieving Capacity: **Flow Capacity, K**Certified Value: **.826 Unitless**Test Medium: **Steam**Certified Medium: **Steam**Special Service: **Force Flow Steam Generator or High Temperature Water Boilers**Set Pressure Definition: **Initial Audible Discharge**Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
1.5 NPS	2.5, 3 NPS	0.487 sq in	0.787 in	0.236 in	44 - 4351 psi	Steam	I III VIII
		0.761 sq in	0.984 in	0.295 in	44 - 4351 psi	Steam	I III VIII
		1.247 sq in	1.26 in	0.378 in	44 - 4351 psi	Steam	I III VIII
2 NPS	3 NPS	1.578 sq in	1.417 in	0.425 in	44 - 3626 psi	Steam	I III VIII
		1.948 sq in	1.575 in	0.472 in	44 - 3626 psi	Steam	I III VIII
2.5 NPS	3, 4 NPS	2.465 sq in	1.772 in	0.531 in	44 - 4786 psi	Steam	I III VIII
		3.292 sq in	2.047 in	0.614 in	44 - 4786 psi	Steam	I III VIII
3 NPS	6 NPS	4.095 sq in	2.283 in	0.685 in	44 - 3916 psi	Steam	I III VIII
		4.832 sq in	2.48 in	0.744 in	44 - 3916 psi	Steam	I III VIII
4 NPS	6 NPS	5.629 sq in	2.677 in	0.803 in	44 - 3626 psi	Steam	I III VIII
		6.487 sq in	2.874 in	0.862 in	44 - 3626 psi	Steam	I III VIII
		7.598 sq in	3.11 in	0.933 in	44 - 3626 psi	Steam	I III VIII

Bopp & Reuther Sicherheits (BOP)

NB#: 72076

location: Carl Reuther Strasse 1, Mannheim D-68305 Germany

Acceptable Abbrev.: IMI BuR; IMI B&R IMI B&R SR; IMI Bopp & Reuther SR

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<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
6 NPS	8, 8 Dual NPS	9.004 sq in	3.386 in	1.016 in	44 - 2611 psi	Steam	I III VIII
		10.99 sq in	3.74 in	1.122 in	44 - 2611 psi	Steam	I III VIII
		13.42 sq in	4.134 in	1.24 in	44 - 2611 psi	Steam	I III VIII
	10, 10 Dual NPS	15.27 sq in	4.409 in	1.323 in	44 - 2176 psi	Steam	I III VIII
		17.53 sq in	4.724 in	1.417 in	44 - 2176 psi	Steam	I III VIII
8 NPS	10, 12, 14, 10 Dual, 12 Du	21.21 sq in	5.197 in	1.559 in	44 - 1870 psi	Steam	I III VIII
	12, 14, 12 Dual, 14 Dual N	21.86 sq in	5.276 in	1.583 in	44 - 1814 psi	Steam	I III VIII
	12, 12 Dual NPS	24.271 sq in	5.559 in	1.668 in	44 - 1549 psi	Steam	I III VIII
10 NPS	10 Dual, 12, 14, 12 Dual, 1	25.6 sq in	5.709 in	1.713 in	44 - 1549 psi	Steam	I III VIII
		30.39 sq in	6.22 in	1.866 in	44 - 1450 psi	Steam	I III VIII
10 NPS	16, 16 Dual NPS	35.18 sq in	6.693 in	2.008 in	44 - 1450 psi	Steam	I III VIII
		40.77 sq in	7.205 in	2.161 in	44 - 1450 psi	Steam	I III VIII
		47.25 sq in	7.756 in	2.327 in	44 - 1450 psi	Steam	I III VIII
12 NPS	20, 20 Dual NPS	57.85 sq in	8.583 in	2.575 in	44 - 609 psi	Steam	I III VIII
		67.23 sq in	9.252 in	2.776 in	44 - 609 psi	Steam	I III VIII

Bopp & Reuther Sicherheits (BOP)

NB#: 72087

location: Carl Reuther Strasse 1, Mannheim D-68305 Germany

Acceptable Abbrev.: IMI BuR; IMI B&R IMI B&R SR; IMI Bopp & Reuther SR

Certification Number: **72087** Design Series or catalog number: **Si 91/95 01-07 Type L + H (restricted lift)**

Type Classification: **Safety Valve**Capacity Tests: **Sec. I at National Board T L (Worthington) on August 03, 2010**Method of Establishing Relieving Capacity: **Flow Capacity, K**Certified Value: **0.826 Unitless**Test Medium: **Steam**Certified Medium: **Steam**Special Service: **None**Set Pressure Definition: **Initial Audible Discharge**Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
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Bopp & Reuther Sicherheits (BOP)

NB#: 72098

location: Carl Reuther Strasse 1, Mannheim D-68305 Germany

Acceptable Abbrev.: IMI BuR; IMI B&R IMI B&R SR; IMI Bopp & Reuther SR

Certification
Number: **72098**Design Series
or catalog number **Si 41/43/44 02-05**Type Classification: **Safety Valve**Capacity Tests: **Sec. VIII Div. 1 at National Board T L (Worthington) on May 18, 2010**Method of Establishing Relieving Capacity: **Flow Capacity, K**Certified Value: **0.848 Unitless**Test Medium: **Steam & Air/Gas**Certified Medium: **Steam & Air/Gas**Special Service: **None**Set Pressure Definition: **Initial Audible Discharge**Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
0.75 - 1 NPS	1.25 NPS	0.351 sq in	0.669 in	0.22 in	15 - 4351 psi	Air	VIII Div. 1
						Steam	VIII Div. 1
1 NPS	2 NPS	0.486 sq in	0.787 in	0.26 in	15 - 4351 psi	Air	VIII Div. 1
						Steam	VIII Div. 1
	1.5 NPS	0.588 sq in	0.866 in	0.287 in	15 - 4351 psi	Air	VIII Div. 1
						Steam	VIII Div. 1
1.25 - 1.5 NPS	2 NPS	0.92 sq in	1.083 in	0.358 in	15 - 3626 psi	Air	VIII Div. 1
						Steam	VIII Div. 1
1.5 - 2 NPS	3 NPS	1.49 sq in	1.378 in	0.457 in	15 - 3191 psi	Air	VIII Div. 1
						Steam	VIII Div. 1
2 NPS	3 NPS	1.947 sq in	1.575 in	0.52 in	15 - 2321 psi	Air	VIII Div. 1
						Steam	VIII Div. 1
		2.147 sq in	1.654 in	0.547 in	15 - 2321 psi	Air	VIII Div. 1
						Steam	VIII Div. 1
2.5 - 3 NPS	4 NPS	3.289 sq in	2.047 in	0.677 in	15 - 2321 psi	Air	VIII Div. 1
						Steam	VIII Div. 1
3 NPS	4 NPS	3.816 sq in	2.205 in	0.728 in	15 - 1668 psi	Air	VIII Div. 1
						Steam	VIII Div. 1
	5,6 NPS	5.14 sq in	2.559 in	0.846 in	15 - 1668 psi	Air	VIII Div. 1
						Steam	VIII Div. 1
4 NPS	6 NPS	5.962 sq in	2.756 in	0.909 in	15 - 1160 psi	Air	VIII Div. 1
						Steam	VIII Div. 1
		7.592 sq in	3.11 in	1.028 in	15 - 1160 psi	Air	VIII Div. 1
						Steam	VIII Div. 1
5 - 6 NPS	8,9,10 NPS	10.521 sq in	3.661 in	1.209 in	15 - 943 psi	Air	VIII Div. 1
						Steam	VIII Div. 1
6 NPS	10 NPS	15.259 sq in	4.409 in	1.457 in	15 - 943 psi	Air	VIII Div. 1
						Steam	VIII Div. 1
8 NPS	10 NPS	19.009 sq in	4.921 in	1.626 in	15 - 435 psi	Air	VIII Div. 1
						Steam	VIII Div. 1
	12 NPS	29.61 sq in	6.142 in	2.028 in	15 - 435 psi	Air	VIII Div. 1
						Steam	VIII Div. 1
10 - 12 NPS	14, 16 NPS	39.42 sq in	7.087 in	2.339 in	15 - 290 psi	Air	VIII Div. 1
						Steam	VIII Div. 1
12 NPS	16 NPS	58.88 sq in	8.661 in	2.22 in	15 - 290 psi	Air	VIII Div. 1
						Steam	VIII Div. 1
14 NPS	20 NPS	67.19 sq in	9.252 in	3.055 in	15 - 290 psi	Air	VIII Div. 1
						Steam	VIII Div. 1
16 NPS	20 NPS	79.11 sq in	10.039 in	3.315 in	15 - 290 psi	Air	VIII Div. 1
						Steam	VIII Div. 1
		95.39 sq in	11.024 in	3.638 in	15 - 290 psi	Air	VIII Div. 1
						Steam	VIII Div. 1

Bopp & Reuther Sicherheits (BOP)

NB#: 72100

location: Carl Reuther Strasse 1, Mannheim D-68305 Germany

Acceptable Abbrev.: IMI BuR; IMI B&R IMI B&R SR; IMI Bopp & Reuther SR

Certification Number: **72100** Design Series or catalog number **Si 41/43/44 02-05 (Liquids)**

Type Classification: **Safety Valve**Capacity Tests: **Sec. VIII Div. 1 at National Board T L (Worthington) on May 17, 2010**Method of Establishing Relieving Capacity: **Flow Capacity, K**Certified Value: **.575 Unitless**Test Medium: **Water**Certified Medium: **Liquid**Special Service: **None**Set Pressure Definition: **Start-to-Leak**Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
0.75 - 1 NPS	1.25, 1.50 NPS	0.352 sq in	0.669 in	0.22 in	15 - 4351 psi	Water	VIII Div. 1
1 NPS	2 NPS	0.486 sq in	0.787 in	0.26 in	15 - 4351 psi	Water	VIII Div. 1
	1.5 NPS	0.589 sq in	0.866 in	0.287 in	15 - 4351 psi	Water	VIII Div. 1
1.25 - 1.5 NPS	2 NPS	0.921 sq in	1.083 in	0.358 in	15 - 3626 psi	Water	VIII Div. 1
1.5 - 2 NPS	2 NPS	1.491 sq in	1.378 in	0.457 in	15 - 3626 psi	Water	VIII Div. 1
2 NPS	3 NPS	1.948 sq in	1.575 in	0.52 in	15 - 2321 psi	Water	VIII Div. 1
		2.149 sq in	1.654 in	0.547 in	15 - 2321 psi	Water	VIII Div. 1
2.5 - 3 NPS	4 NPS	3.291 sq in	2.047 in	0.677 in	15 - 2321 psi	Water	VIII Div. 1
3 NPS	4 NPS	3.819 sq in	2.205 in	0.728 in	15 - 1668 psi	Water	VIII Div. 1
	5, 6 NPS	5.143 sq in	2.559 in	0.846 in	15 - 1668 psi	Water	VIII Div. 1
4 NPS	6 NPS	5.966 sq in	2.756 in	0.909 in	15 - 1160 psi	Water	VIII Div. 1
		7.596 sq in	3.11 in	1.028 in	15 - 1160 psi	Water	VIII Div. 1
5 - 6 NPS	8, 10 NPS	10.53 sq in	3.661 in	1.209 in	15 - 943 psi	Water	VIII Div. 1
6 NPS	10 NPS	15.27 sq in	4.409 in	1.457 in	15 - 943 psi	Water	VIII Div. 1
8 NPS	10 NPS	19.02 sq in	4.921 in	1.626 in	15 - 435 psi	Water	VIII Div. 1
	12 NPS	29.63 sq in	6.142 in	2.028 in	15 - 435 psi	Water	VIII Div. 1
10 - 12 NPS	16 NPS	39.45 sq in	7.087 in	2.339 in	15 - 290 psi	Water	VIII Div. 1
12 NPS	16 NPS	58.92 sq in	8.661 in	2.858 in	15 - 290 psi	Water	VIII Div. 1
14 NPS	20 NPS	67.23 sq in	9.252 in	3.055 in	15 - 290 psi	Water	VIII Div. 1
16 NPS	20 NPS	95.44 sq in	11.024 in	3.638 in	15 - 290 psi	Water	VIII Div. 1

Certification Number: **72122** Design Series or catalog number **Si 11, Si 13, Si 14 (B, C, D, E orif.)**

Type Classification: **Safety Relief Valve**Capacity Tests: **Sec. VIII Div. 1 at National Board T L (Worthington) on June 07, 2013**Method of Establishing Relieving Capacity: **Flow Capacity, K**Certified Value: **.841 Unitless**Test Medium: **Steam & Air/Gas**Certified Medium: **Steam & Air/Gas**Special Service: **None**Set Pressure Definition: **Initial Audible Discharge**Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
0.375 - 0.5 NPS	1/2 NPS	0.063 sq in	[B] 0.283 in	0.091 in	15 - 5800 psi	Air	VIII Div. 1
						Steam	VIII Div. 1
0.375 - 0.75 NPS	1/2, 3/4, 1 NPS	0.099 sq in	[C] 0.354 in	0.114 in	15 - 5800 psi	Air	VIII Div. 1
						Steam	VIII Div. 1
0.5 - 1 NPS	3/4, 1 NPS	0.139 sq in	[D] 0.421 in	0.138 in	15 - 5800 psi	Air	VIII Div. 1
						Steam	VIII Div. 1
1 - 1.5 NPS	1.5, 2 NPS	0.245 sq in	[E] 0.559 in	0.181 in	15 - 2900 psi	Air	VIII Div. 1
						Steam	VIII Div. 1

Bopp & Reuther Sicherheits (BOP)**NB#: 72133**

location: Carl Reuther Strasse 1, Mannheim D-68305 Germany

Acceptable Abbrev.: IMI BuR; IMI B&R IMI B&R SR; IMI Bopp & Reuther SR

Certification Number: **72133** Design Series or catalog number **Si 11, Si 13, Si 14 (F orif.)**

Type Classification: **Safety Relief Valve**Capacity Tests: **Sec. VIII Div. 1 at National Board T L (Worthington) on June 06, 2013**Method of Establishing Relieving Capacity: **Flow Capacity, K**Certified Value: **6.41 SCFM/PSIA**Test Medium: **Steam & Air/Gas**Certified Medium: **Steam & Air/Gas**Special Service: **None**Set Pressure Definition: **Initial Audible Discharge**Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
1.5 - 2 NPS	2 NPS	0.463 sq in	[F] 0.768 in	0.252 in	15 - 1450 psi	Air	VIII Div. 1
						Steam	VIII Div. 1

Certification Number: **72144** Design Series or catalog number **Si 11, Si 13, Si 14 (B, C, D, E orif., Liquid)**

Type Classification: **Safety Relief Valve**Capacity Tests: **Sec. VIII Div. 1 at National Board T L (Worthington) on June 05, 2013**Method of Establishing Relieving Capacity: **Flow Capacity, K**Certified Value: **.620 Unitless**Test Medium: **Water**Certified Medium: **Liquid**Special Service: **None**Set Pressure Definition: **First Steady Stream**Blowdown: **(none)**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
0.375 - 0.5 NPS	1/2 NPS	0.063 sq in	[B] 0.283 in	0.091 in	15 - 5800 psi	Water	VIII Div. 1
0.375 - 0.75 NPS	1/2, 3/4, 1 NPS	0.099 sq in	[C] 0.354 in	0.114 in	15 - 5800 psi	Water	VIII Div. 1
0.5 - 1 NPS	3/4, 1 NPS	0.139 sq in	[D] 0.421 in	0.138 in	15 - 5800 psi	Water	VIII Div. 1
1 NPS	2 NPS	0.245 sq in	[E] 0.559 in	0.181 in	15 - 1450 psi	Water	VIII Div. 1
1 - 1.5 NPS	1.5 NPS	0.245 sq in	[E] 0.559 in	0.181 in	15 - 2900 psi	Water	VIII Div. 1

Certification Number: **72155** Design Series or catalog number **Si 11, Si 13, Si 14 (F orif., Liquid)**

Type Classification: **Safety Relief Valve**Capacity Tests: **Sec. VIII Div. 1 at National Board T L (Worthington) on June 05, 2013**Method of Establishing Relieving Capacity: **Flow Capacity, K**Certified Value: **9.16 GPM/SQ.RT. PSID**Test Medium: **Water**Certified Medium: **Liquid**Special Service: **None**Set Pressure Definition: **First Steady Stream**Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
1.5 - 2 NPS	2 NPS	0.463 sq in	[F] 0.768 in	0.252 in	15 - 1450 psi	Water	VIII Div. 1

Bopp & Reuther Sicherheits (BOP)

NB#: 72166

location: Carl Reuther Strasse 1, Mannheim D-68305 Germany

Acceptable Abbrev.: IMI BuR; IMI B&R IMI B&R SR; IMI Bopp & Reuther SR

Certification Number: **72166** Design Series or catalog number **Si 63 (High Press.)**

Type Classification: **Safety Relief Valve**Capacity Tests: **Sec. III NC at National Board T L (Worthington) on December 06, 2012**Method of Establishing Relieving Capacity: **Flow Capacity, K**Certified Value: **.819 Unitless**Test Medium: **Air/Gas**Certified Medium: **Air/Gas**Set Pressure Definition: **Initial Audible Discharge**Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
0.75 NPS	.75, 1.5 NPS	0.175 sq in	0.472 in	0.158 in	15 - 4350 psi	Air	III NC
0.75 - 1 NPS	1, 1.25 NPS	0.312 sq in	0.63 in	0.217 in	15 - 4350 psi	Air	III NC
1 NPS	1, 1.5, 2 NPS	0.312 sq in	0.63 in	0.217 in	15 - 4350 psi	Air	III NC
	1.5, 2 NPS	0.487 sq in	0.787 in	0.276 in	15 - 3625 psi	Air	III NC
1.25 - 1.5 NPS	1.25, 2 NPS	0.487 sq in	0.787 in	0.276 in	15 - 3625 psi	Air	III NC
	1.5, 2 NPS	0.761 sq in	0.984 in	0.335 in	15 - 3625 psi	Air	III NC
1.5 NPS	2.5, 3 NPS	1.247 sq in	1.26 in	0.434 in	15 - 3190 psi	Air	III NC
2 NPS	2 NPS	1.247 sq in	1.26 in	0.434 in	15 - 3190 psi	Air	III NC
2 - 2.5 NPS	3, 4 NPS	1.948 sq in	1.575 in	0.552 in	15 - 2900 psi	Air	III NC
2.5 - 3 NPS	4 NPS	3.043 sq in	1.969 in	0.67 in	15 - 2320 psi	Air	III NC
3 NPS	5 NPS	4.832 sq in	2.48 in	0.847 in	15 - 1740 psi	Air	III NC
4 NPS	6 NPS	4.832 sq in	2.48 in	0.847 in	15 - 1740 psi	Air	III NC
		7.218 sq in	3.031 in	1.044 in	15 - 1305 psi	Air	III NC
5 - 6 NPS	8 NPS	10.529 sq in	3.661 in	1.26 in	15 - 870 psi	Air	III NC

Certification Number: **72177** Design Series or catalog number **Si 63 (Low Press.)**

Type Classification: **Safety Relief Valve**Capacity Tests: **Sec. III NC at National Board T L (Worthington) on December 04, 2012**Method of Establishing Relieving Capacity: **Flow Capacity, K**Certified Value: **.701 Unitless**Test Medium: **Air/Gas**Certified Medium: **Air/Gas**Set Pressure Definition: **Pop**Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
0.75 NPS	.75, 1.5 NPS	0.175 sq in	0.472 in	0.158 in	6 - 15 psi	Air	III NC
	1, 1.25 NPS	0.312 sq in	0.63 in	0.217 in	6 - 15 psi	Air	III NC
1 NPS	1, 1.5, 2 NPS	0.312 sq in	0.63 in	0.217 in	6 - 15 psi		III NC
	1.5, 2 NPS	0.487 sq in	0.787 in	0.276 in	6 - 15 psi	Air	III NC
1.25 - 1.5 NPS	1.25, 2 NPS	0.487 sq in	0.787 in	0.276 in	6 - 15 psi	Air	III NC
	1.5, 2 NPS	0.761 sq in	0.984 in	0.335 in	6 - 15 psi	Air	III NC
1.5 NPS	2.5, 3 NPS	1.247 sq in	1.26 in	0.434 in	6 - 15 psi	Air	III NC
2 NPS	2 NPS	1.247 sq in	1.26 in	0.434 in	6 - 15 psi	Air	III NC
2 - 2.5 NPS	3 NPS	1.948 sq in	1.575 in	0.552 in	6 - 15 psi	Air	III NC
2.5 - 3 NPS	4 NPS	3.043 sq in	1.969 in	0.67 in	6 - 15 psi	Air	III NC
3 NPS	5 NPS	4.832 sq in	2.48 in	0.847 in	6 - 15 psi		III NC
4 NPS	6 NPS	4.832 sq in	2.48 in	0.847 in	6 - 15 psi	Air	III NC
		7.218 sq in	3.031 in	1.044 in	6 - 15 psi	Air	III NC
5 - 6 NPS	8 NPS	10.529 sq in	3.661 in	1.26 in	6 - 15 psi	Air	III NC

Bopp & Reuther Sicherheits (BOP)

NB#: 72188

location: Carl Reuther Strasse 1, Mannheim D-68305 Germany

Acceptable Abbrev.: IMI BuR; IMI B&R IMI B&R SR; IMI Bopp & Reuther SR

Certification
Number: **72188**Design Series
or catalog number**Si 25/ Si 63RL (Low Press., Restricted lift)**Type Classification: **Safety Relief Valve**Capacity Tests: **Sec. III NC at National Board T L (Worthington) on December 06, 2012**Method of Establishing Relieving Capacity: **Flow Capacity, K**Certified Value: **.701 Unitless**Test Medium: **Air/Gas**Certified Medium: **Air/Gas**Set Pressure Definition: **Pop**Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
0.75 NPS	.75, 1.5 NPS	0.175 sq in	0.472 in	0.08 in	6 - 15 psi	Air	III NC
	1, 1.25 NPS	0.312 sq in	0.63 in	0.08 in	6 - 15 psi	Air	III NC
1 NPS	1, 1.5, 2 NPS	0.312 sq in	0.63 in	0.08 in	6 - 15 psi	Air	III NC
	1.5, 2 NPS	0.487 sq in	0.787 in	0.083 in	6 - 15 psi	Air	III NC
1.25 - 1.5 NPS	1.25, 2 NPS	0.487 sq in	0.787 in	0.083 in	6 - 15 psi	Air	III NC
	1.5, 2 NPS	0.761 sq in	0.984 in	0.1 in	6 - 15 psi	Air	III NC
1.5 NPS	2.5, 3 NPS	1.247 sq in	1.26 in	0.13 in	6 - 15 psi	Air	III NC
2 NPS	2 NPS	1.247 sq in	1.26 in	0.13 in	6 - 15 psi	Air	III NC
2 - 2.5 NPS	3, 4 NPS	1.948 sq in	1.575 in	0.165 in	6 - 15 psi	Air	III NC
2.5 - 3 NPS	4 NPS	3.043 sq in	1.969 in	0.201 in	65 - 15 psi	Air	III NC
3 NPS	5 NPS	4.832 sq in	2.48 in	0.254 in	6 - 15 psi	Air	III NC
4 NPS	6 NPS	4.832 sq in	2.48 in	0.254 in	6 - 15 psi	Air	III NC
		7.218 sq in	3.031 in	0.313 in	6 - 15 psi	Air	III NC
5 - 6 NPS	8 NPS	10.529 sq in	3.661 in	0.378 in	6 - 15 psi	Air	III NC

Certification
Number: **72199**Design Series
or catalog number**Si 25/ Si 63RL (High Press., Restricted lift)**Type Classification: **Safety Relief Valve**Capacity Tests: **Sec. III NC at National Board T L (Worthington) on December 06, 2012**Method of Establishing Relieving Capacity: **Flow Capacity, K**Certified Value: **0.819 Unitless**Test Medium: **Air/Gas**Certified Medium: **Air/Gas**Set Pressure Definition: **Initial Audible Discharge**Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
0.75 NPS	.75, 1.5 NPS	0.175 sq in	0.472 in	0.08 in	15 - 4350 psi	Air	III NC
	1, 1.25 NPS	0.312 sq in	0.63 in	0.08 in	15 - 4350 psi	Air	III NC
1 NPS	1, 1.5, 2 NPS	0.312 sq in	0.63 in	0.08 in	15 - 4350 psi	Air	III NC
	1.5, 2 NPS	0.487 sq in	0.787 in	0.083 in	15 - 3625 psi	Air	III NC
1.25 - 1.5 NPS	1.25, 2 NPS	0.487 sq in	0.787 in	0.083 in	15 - 3625 psi	Air	III NC
	1.5, 2 NPS	0.761 sq in	0.984 in	0.1 in	15 - 3625 psi	Air	III NC
1.5 NPS	2.5, 3 NPS	1.247 sq in	1.26 in	0.13 in	15 - 3190 psi	Air	III NC
2 NPS	2 NPS	1.247 sq in	1.26 in	0.13 in	15 - 3190 psi	Air	III NC
2 - 2.5 NPS	3, 4 NPS	1.948 sq in	1.575 in	0.165 in	15 - 2900 psi	Air	III NC
2.5 - 3 NPS	4 NPS	3.043 sq in	1.969 in	0.201 in	15 - 2320 psi	Air	III NC
3 NPS	5 NPS	4.832 sq in	2.48 in	0.254 in	15 - 1740 psi	Air	III NC
4 NPS	6 NPS	4.832 sq in	2.48 in	0.254 in	15 - 1740 psi	Air	III NC
		7.218 sq in	3.031 in	0.313 in	15 - 1305 psi	Air	III NC
5 - 6 NPS	8 NPS	10.529 sq in	3.661 in	0.378 in	15 - 870 psi	Air	III NC

Bopp & Reuther Sicherheits (BOP)

NB#: 72201

Location: Carl Reuther Strasse 1, Mannheim D-68305 Germany

Acceptable Abbrev.: IMI BuR; IMI B&R IMI B&R SR; IMI Bopp & Reuther SR

Certification
Number: **72201**Design Series
or catalog number **Si 91 / 95, SiZ 2507**Type Classification: **Safety Valve**Capacity Tests: **Sec. III NC at National Board T L (Worthington) on January 27, 2015**Method of Establishing Relieving Capacity: **Flow Capacity, K**Certified Value: **.843 Unitless**Test Medium: **Steam**Certified Medium: **Steam**Special Service: **None**Set Pressure Definition: **Pop**Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
1.5 NPS	2.5, 3 NPS	0.486 sq in	0.787 in	0.236 in	44 - 4785 psi		III NC, ND
		0.76 sq in	0.984 in	0.295 in	44 - 4785 psi		III NC, ND
		1.247 sq in	1.26 in	0.378 in	44 - 4785 psi		III NC, ND
2 NPS	3 NPS	1.577 sq in	1.417 in	0.425 in	44 - 4785 psi		III NC, ND
		1.948 sq in	1.575 in	0.472 in	44 - 4785 psi		III NC, ND
2.5 - 3 NPS	4 NPS	2.466 sq in	1.772 in	0.531 in	44 - 4785 psi		III NC, ND
		3.291 sq in	2.047 in	0.614 in	44 - 4785 psi		III NC, ND
3 NPS	6 NPS	4.094 sq in	2.283 in	0.685 in	44 - 3915 psi		III NC, ND
		4.831 sq in	2.48 in	0.744 in	44 - 3915 psi		III NC, ND
4 NPS	6 NPS	5.628 sq in	2.677 in	0.803 in	44 - 3625 psi		III NC, ND
		6.487 sq in	2.874 in	0.862 in	44 - 3625 psi		III NC, ND
		7.596 sq in	3.11 in	0.933 in	44 - 3625 psi		III NC, ND
6 NPS	8, 8 (Dual) NPS	9.005 sq in	3.386 in	1.016 in	44 - 2610 psi		III NC, ND
		10.986 sq in	3.74 in	1.122 in	44 - 2610 psi		III NC, ND
		13.422 sq in	4.134 in	1.24 in	44 - 2610 psi		III NB, NC
	10, 10 (Dual) NPS	15.268 sq in	4.409 in	1.323 in	44 - 2175 psi		III NC, ND
		17.527 sq in	4.724 in	1.417 in	44 - 2175 psi		III NC, ND
8 NPS	10-14, 10-14 (Dual) NPS	21.213 sq in	5.197 in	1.559 in	44 - 1885 psi		III NC, ND
	12-14, 12-14 (Dual) NPS	21.862 sq in	5.276 in	1.583 in	44 - 1885 psi		III NC, ND
	12, 12 (Dual) NPS	24.201 sq in	5.551 in	1.665 in	44 - 1595 psi		III NC, ND
		24.271 sq in	5.559 in	1.669 in	44 - 1595 psi		III NC, ND
	10-14, 10-14 (Dual) NPS	25.598 sq in	5.709 in	1.713 in	44 - 1595 psi		III NC, ND
		30.386 sq in	6.22 in	1.866 in	44 - 1595 psi		III NC, ND
10 NPS	16, 16 (Dual) NPS	35.183 sq in	6.693 in	2.008 in	44 - 1305 psi		III NC, ND
		40.772 sq in	7.205 in	2.161 in	44 - 1305 psi		III NC, ND
		47.246 sq in	7.756 in	2.327 in	44 - 870 psi		III NC, ND
12 NPS	20, 20 (Dual) NPS	57.859 sq in	8.583 in	2.575 in	44 - 870 psi		III NC, ND
		67.23 sq in	9.252 in	2.776 in	44 - 870 psi		III NC, ND

Certification
Number: **72212**Design Series
or catalog number **Si 91 / 95, SiZ 2507 (Restricted Lift)**Type Classification: **Safety Valve**Capacity Tests: **Sec. III NC at National Board T L (Worthington) on January 27, 2015**Method of Establishing Relieving Capacity: **Flow Capacity, K**Certified Value: **.843 Unitless**Test Medium: **Steam**Certified Medium: **Steam**Special Service: **None**Set Pressure Definition: **Pop**Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
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Broady Flow Control Limited (BVL)

NB#: 93002

location: English Street, Kingston-Upon-Hull, East Yorkshire HU3 2DU United Kingdom

Acceptable Abbrev.: Broady - Valvitalia

Broady Flow Control Limited (BVL)

location: English Street, Kingston-Upon-Hull, East Yorkshire HU3 2DU United Kingdom

Acceptable Abbrev.: Broady - Valvitalia

Certification
Number: **93002**Design Series
or catalog number **3500**

Design Comments: 6R10 added 8/11/17

Type Classification: **Safety Relief Valve**Capacity Tests: **Sec. VIII Div. 1 at National Board T L (Worthington) on February 01, 2001**Method of Establishing Relieving Capacity: **Flow Capacity, K**Certified Value: **.861 Unitless**Test Medium: **Steam & Air/Gas**Certified Medium: **Steam & Air/Gas**Set Pressure Definition: **Initial Audible Discharge**Blowdown: **Adjustable**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
1 - 1.5 NPS	2, 3 NPS	0.121 sq in	[D] 10 mm	2.5 mm	15 - 2900 psi	Steam	VIII Div. 1
					15 - 6400 psi	Air	VIII Div. 1
		0.215 sq in	[E] 13.3 mm	3.32 mm	15 - 2900 psi	Steam	VIII Div. 1
					15 - 6200 psi	Air	VIII Div. 1
1.5 NPS	2, 3 NPS	0.335 sq in	[F] 16.6 mm	4.15 mm	15 - 2900 psi	Steam	VIII Div. 1
					15 - 5100 psi	Air	VIII Div. 1
1.5 - 2 NPS	3 NPS	0.547 sq in	[G] 21.2 mm	5.3 mm	15 - 2800 psi	Air	VIII Div. 1
						Steam	VIII Div. 1
		0.855 sq in	[H] 26.5 mm	6.63 mm	15 - 2800 psi	Air	VIII Div. 1
						Steam	VIII Div. 1
2 - 3 NPS	3, 4 NPS	1.405 sq in	[J] 34 mm	8.5 mm	15 - 2850 psi	Air	VIII Div. 1
						Steam	VIII Div. 1
3 NPS	4, 6 NPS	2.003 sq in	[K] 40.6 mm	10.2 mm	15 - 2160 psi	Air	VIII Div. 1
						Steam	VIII Div. 1
3 - 4 NPS	4, 6 NPS	3.115 sq in	[L] 50.6 mm	12.7 mm	15 - 1560 psi	Air	VIII Div. 1 VIII Div. 1
4 NPS	6 NPS	3.927 sq in	[M] 56.8 in	14.2 mm	15 - 1140 psi	Air	VIII Div. 1
						Steam	VIII Div. 1
		4.73 sq in	[N] 62.4 mm	15.7 mm	15 - 1050 psi	Air	VIII Div. 1
						Steam	VIII Div. 1
		6.97 sq in	[P] 75.7 mm	19 mm	15 - 1020 psi	Air	VIII Div. 1
						Steam	VIII Div. 1
6 NPS	8 NPS	12.06 sq in	[Q] 99.6 mm	25 mm	15 - 630 psi	Air	VIII Div. 1
						Steam	VIII Div. 1
	8, 10 NPS	17.42 sq in	[R] 119.8 mm	30 mm	15 - 630 psi	Air	VIII Div. 1
						Steam	VIII Div. 1
8 NPS	10 NPS	28.4 sq in	[T] 152.8 mm	38.5 mm	15 - 300 psi	Air	VIII Div. 1
						Steam	VIII Div. 1

Broady Flow Control Limited (BVL)

NB#: 93013

location: English Street, Kingston-Upon-Hull, East Yorkshire HU3 2DU United Kingdom

Acceptable Abbrev.: Broady - Valvitalia

Certification Number: **93013** Design Series or catalog number: **3500 (Liquid)**

Design Comments: 6R10 added 8/11/17

Type Classification: Safety Relief Valve

Capacity Tests: Sec. VIII Div. 1 at National Board T L (Worthington) on February 11, 2011

Method of Establishing Relieving Capacity: Flow Capacity, K

Certified Value: .635 Unitless

Test Medium: Water

Certified Medium: Liquid

Special Service: None

Set Pressure Definition: Start-to-Leak

Blowdown: Fixed

Scope of Nominal Size and Set Pressure Ranges:

Inlet Size	Outlet Size	Flow Area	Orifice [designator] diameter	Lift	Set Pressure Range	Media	Code Section
1 - 1.5 NPS	2,3 NPS	0.121 sq in	[D] 10 mm	2.5 mm	15 - 6400 psi	Water	VIII Div. 1
		0.215 sq in	[E] 13.3 mm	3.32 mm	15 - 6200 psi	Water	VIII Div. 1
1.5 NPS	2,3 NPS	0.335 sq in	[F] 16.6 mm	4.15 mm	15 - 5100 psi	Water	VIII Div. 1
1.5 - 2 NPS	3 NPS	0.547 sq in	[G] 21.2 mm	5.3 mm	15 - 2800 psi	Water	VIII Div. 1
		0.855 sq in	[H] 26.5 mm	6.63 mm	15 - 2800 psi	Water	VIII Div. 1
2 - 3 NPS	3,4 NPS	1.405 sq in	[J] 34 mm	8.5 mm	15 - 2850 psi	Water	VIII Div. 1
3 NPS	4,6 NPS	2.003 sq in	[K] 40.6 mm	10.2 mm	15 - 2160 psi	Water	VIII Div. 1
3 - 4 NPS	4,6 NPS	3.115 sq in	[L] 50.6 mm	12.7 mm	15 - 1560 psi	Water	VIII Div. 1
4 NPS	6 NPS	3.927 sq in	[M] 56.8 mm	14.2 mm	15 - 1140 psi	Water	VIII Div. 1
		4.73 sq in	[N] 62.4 mm	15.7 mm	15 - 1050 psi	Water	VIII Div. 1
		6.97 sq in	[P] 75.7 mm	19 mm	15 - 1020 psi	Water	VIII Div. 1
6 NPS	8 NPS	12.06 sq in	[Q] 99.6 in	25 mm	15 - 630 psi	Water	VIII Div. 1
	8, 10 NPS	17.42 sq in	[R] 119.8 mm	30 mm	15 - 630 psi	Water	VIII Div. 1
8 NPS	10 NPS	28.4 sq in	[T] 152.8 mm	38.5 mm	15 - 300 psi	Water	VIII Div. 1

Certification Number: **93024** Design Series or catalog number: **3600**

Type Classification: Safety Relief Valve

Capacity Tests: Sec. VIII Div. 1 at National Board T L (Worthington) on March 01, 2010

Method of Establishing Relieving Capacity: Flow Capacity, Slope

Certified Value: 1.97 SCFM/PSIA

Certified Value (alternate medium): 5.54 PPH/PSIA

Test Medium: Steam & Air/Gas

Certified Medium: Steam & Air/Gas

Special Service: None

Set Pressure Definition: Initial Audible Discharge

Blowdown: Fixed

Scope of Nominal Size and Set Pressure Ranges:

Inlet Size	Outlet Size	Flow Area	Orifice [designator] diameter	Lift	Set Pressure Range	Media	Code Section
0.5 - 1 NPS	1 NPS	84.9 sq mm	10.4 mm	2.5 mm	15 - 2900 psi	Steam	VIII Div. 1
					15 - 3625 psi	Air	VIII Div. 1

Broady Flow Control Limited (BVL)

NB#: 93035

location: English Street, Kingston-Upon-Hull, East Yorkshire HU3 2DU United Kingdom

Acceptable Abbrev.: Broady - Valvitalia

Certification Number: **93035** Design Series or catalog number: **3600 (Liquid)**

Type Classification: **Safety Relief Valve**Capacity Tests: **Sec. VIII Div. 1 at National Board T L (Worthington) on July 25, 2011**Method of Establishing Relieving Capacity: **Flow Capacity, Flow Factor**Certified Value: **2.69 GPM/SQ.RT. PSID**Test Medium: **Water**Certified Medium: **Liquid**Special Service: **None**Set Pressure Definition: **First Steady Stream**Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
0.5 - 1 NPS	1 NPS	70.9 sq mm	9.5 mm	2.4 mm	1 - 250 bar	Water	VIII Div. 1

Certification Number: **93046** Design Series or catalog number: **4000 (Full Bore, Modulating & Snap Acting Pilot, Air/gas))**

Type Classification: **Pilot Operated Pressure Relief Valve**Capacity Tests: **Sec. VIII Div. 1 at National Board T L (Worthington) on April 15, 2015**Method of Establishing Relieving Capacity: **Flow Capacity, K**Certified Value: **0.729 Unitless**Test Medium: **Air/Gas**Certified Medium: **Air/Gas**Special Service: **None**Set Pressure Definition: **Initial Audible Discharge**Blowdown: **Adjustable and Fixed for Mod. Pilot**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
25 DN	50 DN	508.7 sq mm	[G1] 25.45 mm	10 mm	29 - 6400 psi	Air	VIII Div. 1
40 DN	80 DN	1256.6 sq mm	[J1] 40 mm	15 mm	29 - 6170 psi	Air	VIII Div. 1
50 DN	80 DN	2030.8 sq mm	[L1] 50.85 mm	19 mm	29 - 6170 psi	Air	VIII Div. 1
80 DN	100 DN	5032.8 sq mm	[P1] 80.05 mm	29 mm	29 - 3705 psi	Air	VIII Div. 1
100 DN	150 DN	8123.3 sq mm	[Q1] 101.7 mm	37 mm	29 - 3705 psi	Air	VIII Div. 1
150 DN	200 DN	17695 sq mm	[R1] 150.1 mm	53 mm	29 - 1480 psi	Air	VIII Div. 1
200 DN	250 DN	32445.24 sq mm	[T1] 203.25 mm	71 mm	29 - 985 psi	Air	VIII Div. 1

Broady Flow Control Limited (BVL)

NB#: 93068

location: English Street, Kingston-Upon-Hull, East Yorkshire HU3 2DU United Kingdom

Acceptable Abbrev.: Broady - Valvitalia

Certification
Number: **93068**Design Series
or catalog number **4000 (API Nozzle -Modulating & Snap Acting Pilot, Air/gas)**Type Classification: **Pilot Operated Pressure Relief Valve**Capacity Tests: **Sec. VIII Div. 1 at National Board T L (Worthington) on April 15, 2015**Method of Establishing Relieving Capacity: **Flow Capacity, K**Certified Value: **0.821 Unitless**Test Medium: **Air/Gas**Certified Medium: **Air/Gas**Special Service: **None**Set Pressure Definition: **Initial Audible Discharge**Blowdown: **Adjustable and Fixed for Mod. Pilot**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
25 - 40 DN	50 DN	78.54 sq mm	[D] 10 mm	10 mm	29 - 6400 psi	Air	VIII Div. 1
		136.85 sq mm	[E] 13.25 mm	10 mm	29 - 6400 psi	Air	VIII Div. 1
		216.42 sq mm	[F] 16.6 mm	10 mm	29 - 6170 psi	Air	VIII Div. 1
40 - 50 DN	50, 80 DN	354.66 sq mm	[G] 21.25 mm	15 mm	29 - 6170 psi	Air	VIII Div. 1
	80 DN	551.55 sq mm	[H] 26.5 mm	15 mm	29 - 6170 psi	Air	VIII Div. 1
50 - 80 DN	80, 100 DN	913.27 sq mm	[J] 34.1 mm	19 mm	29 - 4620 psi	Air	VIII Div. 1
80 DN	100 DN	1294.62 sq mm	[K] 40.6 mm	29 mm	29 - 3705 psi	Air	VIII Div. 1
80 - 100 DN	100, 150 DN	2010.9 sq mm	[L] 50.6 mm	29 mm	29 - 3705 psi	Air	VIII Div. 1
100 DN	150 DN	2524.97 sq mm	[M] 56.7 mm	37 mm	29 - 3705 psi	Air	VIII Div. 1
		3058.15 sq mm	[N] 62.4 mm	37 mm	29 - 3705 psi	Air	VIII Div. 1
		4417.86 sq mm	[P] 75 mm	37 mm	29 - 3705 psi	Air	VIII Div. 1
150 DN	200 DN	7791.28 sq mm	[Q] 99.6 mm	53 mm	29 - 1480 psi	Air	VIII Div. 1
		11122.02 sq mm	[R] 119 mm	53 mm	29 - 1020 psi	Air	VIII Div. 1
200 DN	250 DN	18337.35 sq mm	[T] 152.8 mm	71 mm	29 - 985 psi	Air	VIII Div. 1

BS & B Premco Latinoamerica S.A. De C.V. (PLS)

NB#: 13004

location: Fragua 122 & Av. Benito Juarez S.A. De C.V., Guadalupe, Nuevo Leon 67180 Mexico

BS & B Premco Latinoamerica S.A. De C.V. (PLS)

location: Fragua 122 & Av. Benito Juarez S.A. De C.V., Guadalupe, Nuevo Leon 67180 Mexico

Certification Number: **13004** Design Series or catalog number: **REL**

Holder Designation: REL-7R, REL-7F

Type Classification: Rupture Disk Device

Capacity Tests: Sec. VIII Div. 1 at BS & B on August 28, 2001

Method of Establishing Relieving Capacity: Resistance Factor, 3 Size, Krgl

Certified Value: .16 Unitless

Test Medium: Air or gases, and liquid (Krgl)

Certified Medium: Air or gases, and liquid (Krgl)

Set Pressure Definition: Burst Pressure

Scope of Nominal Size and Set Pressure Ranges:

Inlet Size	Outlet Size	Flow Area	Orifice [designator] diameter	Lift	Set Pressure Range	Media	Code Section
1 NPS		0.864 sq in			10 - 435 psi		VIII Div. 1
1.5 NPS		2.036 sq in			7 - 290 psi		VIII Div. 1
2 NPS		3.36 sq in			3 - 217 psi		VIII Div. 1
2.5 NPS		4.78 sq in			3 - 174 psi		VIII Div. 1
3 NPS		7.39 sq in			2.2 - 145 psi		VIII Div. 1
4 NPS		12.73 sq in			2.2 - 116 psi		VIII Div. 1
5 NPS		20.01 sq in			1.5 - 87 psi		VIII Div. 1
6 NPS		28.89 sq in			1 - 72 psi		VIII Div. 1
8 NPS		50.03 sq in			1 - 58 psi		VIII Div. 1
10 NPS		78.85 sq in			1 - 43 psi		VIII Div. 1
12 NPS		113.1 sq in			1 - 36 psi		VIII Div. 1
14 NPS		137.9 sq in			1 - 29 psi		VIII Div. 1
16 NPS		182.7 sq in			1 - 21 psi		VIII Div. 1
18 NPS		233.7 sq in			1 - 21 psi		VIII Div. 1
20 NPS		291.4 sq in			1 - 17 psi		VIII Div. 1
24 NPS		424.6 sq in			1 - 17 psi		VIII Div. 1

location: Fragua 122 & Av. Benito Juarez S.A. De C.V., Guadalupe, Nuevo Leon 67180 Mexico

Certification
Number: **13015**Design Series
or catalog number **REV**Holder Designation: **REV-7R**Type Classification: **Rupture Disk Device**Capacity Tests: **Sec. VIII Div. 1 at BS & B on August 21, 2001**Method of Establishing Relieving Capacity: **Resistance Factor, 3 Size, Krgl**Certified Value: **3.15 Unitless**Test Medium: **Air/Gas & Liquid**Certified Medium: **Air or gases, and liquid (Krgl)**Set Pressure Definition: **Burst Pressure**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
1 NPS		0.691 sq in			10 - 435 psi		VIII Div. 1
1.5 NPS		1.767 sq in			7 - 290 psi		VIII Div. 1
2 NPS		3.092 sq in			3 - 217 psi		VIII Div. 1
2.5 NPS		4.79 sq in			3 - 174 psi		VIII Div. 1
3 NPS		6.29 sq in			2.2 - 145 psi		VIII Div. 1
4 NPS		10.27 sq in			2.2 - 116 psi		VIII Div. 1
5 NPS		14.71 sq in			1.5 - 87 psi		VIII Div. 1
6 NPS		20.95 sq in			1 - 72 psi		VIII Div. 1
8 NPS		37.12 sq in			1 - 58 psi		VIII Div. 1
10 NPS		56.54 sq in			1 - 43 psi		VIII Div. 1
12 NPS		77.6 sq in			1 - 36 psi		VIII Div. 1
14 NPS		99.2 sq in			1 - 29 psi		VIII Div. 1
16 NPS		125.3 sq in			1 - 21 psi		VIII Div. 1
18 NPS		158.7 sq in			1 - 21 psi		VIII Div. 1
20 NPS		190 sq in			1 - 17 psi		VIII Div. 1
24 NPS		269.4 sq in			1 - 17 psi		VIII Div. 1

Certification
Number: **13026**Design Series
or catalog number **RE**Holder Designation: **RETR, RETF**Type Classification: **Rupture Disk Device**Capacity Tests: **Sec. VIII Div. 1 at BS & B on August 23, 2001**Method of Establishing Relieving Capacity: **Resistance Factor, 3 Size, Krgl**Certified Value: **.15 Unitless**Test Medium: **Air/Gas & Liquid**Certified Medium: **Air or gases, and liquid (Krgl)**Set Pressure Definition: **Burst Pressure**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
1 NPS		0.864 sq in			10 - 435 psi		VIII Div. 1
1.5 NPS		2.036 sq in			7 - 290 psi		VIII Div. 1
2 NPS		3.36 sq in			3 - 217 psi		VIII Div. 1
2.5 NPS		4.79 sq in			3 - 174 psi		VIII Div. 1
3 NPS		7.39 sq in			2.2 - 145 psi		VIII Div. 1
4 NPS		12.73 sq in			2.2 - 116 psi		VIII Div. 1
5 NPS		20.01 sq in			1.5 - 87 psi		VIII Div. 1
6 NPS		28.89 sq in			1 - 72 psi		VIII Div. 1
8 NPS		50.03 sq in			1 - 58 psi		VIII Div. 1
10 NPS		78.85 sq in			1 - 43 psi		VIII Div. 1
12 NPS		113.1 sq in			1 - 36 psi		VIII Div. 1
14 NPS		137.9 sq in			1 - 29 psi		VIII Div. 1
16 NPS		182.6 sq in			1 - 21 psi		VIII Div. 1
18 NPS		233.7 sq in			1 - 21 psi		VIII Div. 1
20 NPS		291 sq in			1 - 17 psi		VIII Div. 1
24 NPS		424.6 sq in			1 - 17 psi		VIII Div. 1

location: Fragua 122 & Av. Benito Juarez S.A. De C.V., Guadalupe, Nuevo Leon 67180 Mexico

Certification
Number: **13037**Design Series
or catalog number**AMBV & MBV W/Bar Type Vacuum Support**Type Classification: **Rupture Disk Device**Capacity Tests: **Sec. VIII Div. 1 at BS & B on August 10, 2001**Method of Establishing Relieving Capacity: **Resistance Factor, 3 Size, Krgl**Certified Value: **1.9 Unitless**Test Medium: **Air/Gas & Liquid**Certified Medium: **Air or gases, and liquid (Krgl)**Set Pressure Definition: **Burst Pressure**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
1 NPS		0.63 sq in			10 - 150 psi		VIII Div. 1
1.5 NPS		1.66 sq in			10 - 150 psi		VIII Div. 1
2 NPS		2.693 sq in			10 - 150 psi		VIII Div. 1
2.5 NPS		4.33 sq in			10 - 150 psi		VIII Div. 1
3 NPS		5.923 sq in			10 - 150 psi		VIII Div. 1
4 NPS		10.41 sq in			10 - 150 psi		VIII Div. 1
5 NPS		16.15 sq in			10 - 150 psi		VIII Div. 1
6 NPS		23.15 sq in			10 - 150 psi		I, IV & VIII (limited per NB-514, 4.0)
8 NPS		40.92 sq in			10 - 150 psi		VIII Div. 1
10 NPS		63.73 sq in			10 - 125 psi		VIII Div. 1
12 NPS		91.55 sq in			10 - 125 psi		VIII Div. 1
14 NPS		110.3 sq in			10 - 100 psi		VIII Div. 1
16 NPS		146.1 sq in			10 - 100 psi		VIII Div. 1
18 NPS		187 sq in			10 - 100 psi		VIII Div. 1
20 NPS		232.9 sq in			10 - 50 psi		VIII Div. 1
24 NPS		339.7 sq in			10 - 50 psi		VIII Div. 1

Certification
Number: **13048**Design Series
or catalog number**IMB, AIMB, IMBL & AIMBL**Type Classification: **Rupture Disk Device**Capacity Tests: **Sec. VIII Div. 1 at BS & B on August 10, 2001**Method of Establishing Relieving Capacity: **Resistance Factor, 3 Size, Krgl**Certified Value: **.31 Unitless**Test Medium: **Air/Gas & Liquid**Certified Medium: **Air or gases, and liquid (Krgl)**Set Pressure Definition: **Burst Pressure**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
1 NPS		0.864 sq in			10 - 1000 psi		VIII Div. 1
1.5 NPS		2.036 sq in			7 - 1000 psi		VIII Div. 1
2 NPS		3.36 sq in			3 - 500 psi		VIII Div. 1
2.5 NPS		4.79 sq in			2 - 500 psi		VIII Div. 1
3 NPS		7.39 sq in			2 - 500 psi		VIII Div. 1
4 NPS		12.73 sq in			1.5 - 500 psi		VIII Div. 1
5 NPS		20.01 sq in			1 - 450 psi		VIII Div. 1
6 NPS		28.89 sq in			1 - 450 psi		VIII Div. 1
8 NPS		50.03 sq in			.5 - 450 psi		VIII Div. 1
10 NPS		78.85 sq in			.25 - 150 psi		VIII Div. 1
12 NPS		113.1 sq in			.25 - 150 psi		VIII Div. 1
14 NPS		137.9 sq in			.25 - 150 psi		VIII Div. 1
16 NPS		182.7 sq in			.25 - 150 psi		VIII Div. 1
18 NPS		233.7 sq in			.25 - 150 psi		VIII Div. 1
20 NPS		291 sq in			.25 - 150 psi		VIII Div. 1
24 NPS		424.6 sq in			.25 - 150 psi		VIII Div. 1

location: Fragua 122 & Av. Benito Juarez S.A. De C.V., Guadalupe, Nuevo Leon 67180 Mexico

Certification Number: **13059** Design Series or catalog number: **MB & AMB**

Type Classification: **Rupture Disk Device**Capacity Tests: **Sec. VIII Div. 1 at BS & B on August 10, 2001**Method of Establishing Relieving Capacity: **Resistance Factor, 3 Size, Krgl**Certified Value: **.193 Unitless**Test Medium: **Air/Gas & Liquid**Certified Medium: **Air or gases, and liquid (Krgl)**Set Pressure Definition: **Burst Pressure**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
1 NPS		0.864 sq in			10 - 150 psi		VIII Div. 1
1.5 NPS		2.035 sq in			7 - 150 psi		VIII Div. 1
2 NPS		3.36 sq in			2 - 150 psi		VIII Div. 1
2.5 NPS		4.79 sq in			2 - 150 psi		VIII Div. 1
3 NPS		7.39 sq in			1 - 150 psi		VIII Div. 1
4 NPS		12.73 sq in			1 - 150 psi		VIII Div. 1
5 NPS		20 sq in			1 - 150 psi		VIII Div. 1
6 NPS		28.89 sq in			1 - 150 psi		VIII Div. 1
8 NPS		50.03 sq in			.5 - 150 psi		VIII Div. 1
10 NPS		78.85 sq in			.25 - 125 psi		VIII Div. 1
12 NPS		113.1 sq in			.25 - 125 psi		VIII Div. 1
14 NPS		137.9 sq in			.25 - 100 psi		VIII Div. 1
16 NPS		182.7 sq in			.25 - 100 psi		VIII Div. 1
18 NPS		233.7 sq in			.25 - 100 psi		VIII Div. 1
20 NPS		291 sq in			.25 - 50 psi		VIII Div. 1
24 NPS		424.6 sq in			.25 - 50 psi		VIII Div. 1

Certification Number: **13060** Design Series or catalog number: **MBV, AMBV w. Dial Vac. Support**

Type Classification: **Rupture Disk Device**Capacity Tests: **Sec. VIII Div. 1 at BS & B on September 21, 2001**Method of Establishing Relieving Capacity: **Resistance Factor, 3 Size, Krgl**Certified Value: **5.4 Unitless**Test Medium: **Air/Gas & Liquid**Certified Medium: **Air or gases, and liquid (Krgl)**Set Pressure Definition: **Burst Pressure**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
1.5 NPS		1.02 sq in			7 - 150 psi		VIII Div. 1
2 NPS		1.75 sq in			2 - 150 psi		VIII Div. 1
2.5 NPS		3.05 sq in			2 - 150 psi		VIII Div. 1
3 NPS		4.2 sq in			1 - 150 psi		VIII Div. 1
4 NPS		7.61 sq in			1 - 150 psi		VIII Div. 1
5 NPS		11.61 sq in			1 - 150 psi		VIII Div. 1
6 NPS		15.82 sq in			1 - 150 psi		VIII Div. 1
8 NPS		25.87 sq in			.5 - 150 psi		VIII Div. 1
10 NPS		41.1 sq in			.25 - 125 psi		VIII Div. 1
12 NPS		59.1 sq in			.25 - 125 psi		VIII Div. 1
14 NPS		88.4 sq in			.25 - 100 psi		VIII Div. 1
16 NPS		95.7 sq in			.25 - 100 psi		VIII Div. 1
18 NPS		124.3 sq in			.25 - 100 psi		VIII Div. 1
20 NPS		153.9 sq in			.25 - 50 psi		VIII Div. 1
24 NPS		226.1 sq in			.25 - 50 psi		VIII Div. 1

BS & B Premco LLC (PRL)

NB#: 77813

location: 7422 - B E 46th Place, Tulsa, OK 74145 United States

Acceptable Abbrev.: BSB

BS & B Premco LLC (PRL)

location: 7422 - B E 46th Place, Tulsa, OK 74145 United States

Acceptable Abbrev.: BSB

Certification
Number: **77813**Design Series
or catalog number **BPRV, BPIV**

Type Classification: Buckling Pin Non-reclosing Device

Capacity Tests: Sec. VIII Div. 1 at BS & B on April 12, 2004

Method of Establishing Relieving Capacity: Resistance Factor, 3 Size, Krgl

Certified Value: 1.22 Unitless

Test Medium: Air/Gas & Liquid

Certified Medium: Air or gases, and liquid (Krgl)

Set Pressure Definition: Buckling Pressure

Scope of Nominal Size and Set Pressure Ranges:

Inlet Size	Outlet Size	Flow Area	Orifice [designator] diameter	Lift	Set Pressure Range	Media	Code Section
2 NPS		2.75 sq in			15 - 3700 psi		VIII Div. 1
3 NPS		6 sq in			15 - 3700 psi		VIII Div. 1
4 NPS		10 sq in			15 - 2250 psi		VIII Div. 1
6 NPS		23.5 sq in			1 - 2250 psi		VIII Div. 1
8 NPS		39.65 sq in			1 - 2250 psi		VIII Div. 1
10 NPS		62.48 sq in			1 - 2250 psi		VIII Div. 1
12 NPS		90.5 sq in			1 - 2250 psi		VIII Div. 1
14 NPS		109 sq in			1 - 1440 psi		VIII Div. 1
16 NPS		149 sq in			1 - 1440 psi		VIII Div. 1
18 NPS		196.2 sq in			1 - 1440 psi		VIII Div. 1
20 NPS		239.1 sq in			1 - 720 psi		VIII Div. 1
24 NPS		367.6 sq in			1 - 720 psi		VIII Div. 1
26 NPS		400.6 sq in			1 - 720 psi		VIII Div. 1
28 NPS		466.8 sq in			1 - 720 psi		VIII Div. 1
30 NPS		601 sq in			1 - 720 psi		VIII Div. 1
32 NPS		614 sq in			1 - 720 psi		VIII Div. 1
34 NPS		695 sq in			1 - 720 psi		VIII Div. 1
36 NPS		781 sq in			1 - 720 psi		VIII Div. 1
38 NPS		872 sq in			1 - 720 psi		VIII Div. 1
40 NPS		968 sq in			1 - 720 psi		VIII Div. 1
42 NPS		1069 sq in			1 - 720 psi		VIII Div. 1
44 NPS		1175 sq in			1 - 720 psi		VIII Div. 1
46 NPS		1286 sq in			1 - 160 psi		VIII Div. 1
48 NPS		1403 sq in			1 - 160 psi		VIII Div. 1
50 NPS		1524 sq in			1 - 160 psi		VIII Div. 1
52 NPS		1650 sq in			1 - 160 psi		VIII Div. 1
54 NPS		1784 sq in			1 - 160 psi		VIII Div. 1
56 NPS		1918 sq in			1 - 160 psi		VIII Div. 1
58 NPS		2059.4 sq in			1 - 160 psi		VIII Div. 1
60 NPS		2206 sq in			1 - 160 psi		VIII Div. 1
62 NPS		2357 sq in			1 - 160 psi		VIII Div. 1
64 NPS		2514 sq in			1 - 160 psi		VIII Div. 1
66 NPS		2675 sq in			1 - 160 psi		VIII Div. 1
68 NPS		2842 sq in			1 - 160 psi		VIII Div. 1
70 NPS		3013 sq in			1 - 160 psi		VIII Div. 1
72 NPS		3190 sq in			1 - 160 psi		VIII Div. 1
74 NPS		3371 sq in			1 - 160 psi		VIII Div. 1
76 NPS		3558 sq in			1 - 160 psi		VIII Div. 1
78 NPS		3750 sq in			1 - 160 psi		VIII Div. 1

BS & B Premco LLC (PRL)

NB#: 77970

Location: 7422 - B E 46th Place, Tulsa, OK 74145 United States

Acceptable Abbrev.: BSB

Certification
Number: **77970**Design Series
or catalog number: **BPAV (Liquid)**Type Classification: **Buckling Pin Non-reclosing Device**Capacity Tests: **Sec. VIII Div. 1 at National Board T L (Worthington) on May 03, 2012**Method of Establishing Relieving Capacity: **Flow Capacity, K**Certified Value: **0.686 Unitless**Test Medium: **Water**Certified Medium: **Liquid**Special Service: **None**Set Pressure Definition: **Buckling Pressure**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
1 NPS	1.5 NPS	0.72 sq in	0.957 in		2100 - 3500 psi	Water	VIII Div. 1
		0.86 sq in	1.046 in		50 - 2100 psi	Water	VIII Div. 1
1.5 NPS	2 NPS	2.04 sq in	1.612 in		15 - 1440 psi	Water	VIII Div. 1
2 NPS	3 NPS	3.36 sq in	2.067 in		15 - 720 psi	Water	VIII Div. 1
3 NPS	4 NPS	7.39 sq in	3.067 in		15 - 720 psi	Water	VIII Div. 1
4 NPS	6 NPS	12.73 sq in	4.026 in		15 - 720 psi	Water	VIII Div. 1
6 NPS	8 NPS	28.89 sq in	6.065 in		15 - 275 psi	Water	VIII Div. 1
8 NPS	10 NPS	50.03 sq in	7.981 in		15 - 275 psi	Water	VIII Div. 1

Certification
Number: **77981**Design Series
or catalog number: **BPAV (air/gas)**Type Classification: **Buckling Pin Non-reclosing Device**Capacity Tests: **Sec. VIII Div. 1 at BS & B on October 27, 2011**Method of Establishing Relieving Capacity: **Flow Capacity, K**Certified Value: **.80 Unitless**Test Medium: **Air**Certified Medium: **Air/Gas**Special Service: **None**Set Pressure Definition: **Buckling Pressure**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
1 NPS	1.5 NPS	0.72 sq in	0.957 in		2100 - 3500 psi	Air	VIII Div. 1
		0.86 sq in	1.046 in		15 - 2100 psi	Air	VIII Div. 1
1.5 NPS	2 NPS	2.04 sq in	1.612 in		15 - 1440 psi	Air	VIII Div. 1
2 NPS	3 NPS	3.36 sq in	2.067 in		15 - 720 psi	Air	VIII Div. 1
3 NPS	4 NPS	7.39 sq in	3.067 in		15 - 720 psi	Air	VIII Div. 1
4 NPS	6 NPS	12.73 sq in	4.026 in		15 - 720 psi	Air	VIII Div. 1
6 NPS	8 NPS	28.89 sq in	6.065 in		15 - 275 psi	Air	VIII Div. 1
8 NPS	10 NPS	50.03 sq in	7.981 in		15 - 275 psi	Air	VIII Div. 1

BS & B Premco LLC (PRL)

NB#: 77992

Location: 7422 - B E 46th Place, Tulsa, OK 74145 United States

Acceptable Abbrev.: BSB

Certification
Number: **77992**Design Series
or catalog number **BPPV**

Type Classification: Buckling Pin Non-reclosing Device

Capacity Tests: Sec. VIII Div. 1 at BS & B on December 20, 2011

Method of Establishing Relieving Capacity: Resistance Factor, 1 Size, Krg

Certified Value: 2.2 Unitless

Certification Provisions: per CC 2397

Test Medium: Air or gases (Krg)

Certified Medium: Air or gases (Krg)

Special Service: None

Set Pressure Definition: Buckling Pressure

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
6 NPS	6 NPS	28.27 sq in	6 in	3 in	15 - 275 psi	Air	VIII Div. 1
8 NPS	8 NPS	49.02 sq in	7.9 in	3.95 in	15 - 275 psi	Air	VIII Div. 1
10 NPS	10 NPS	77.91 sq in	9.92 in	4.96 in	15 - 275 psi	Air	VIII Div. 1
12 NPS	12 NPS	110.85 sq in	11.88 in	5.94 in	15 - 275 psi	Air	VIII Div. 1
14 NPS	14 NPS	135.2 sq in	13.12 in	6.56 in	15 - 275 psi	Air	VIII Div. 1
16 NPS	16 NPS	179.08 sq in	15.1 in	7.55 in	15 - 275 psi	Air	VIII Div. 1
18 NPS	18 NPS	229.12 sq in	17.08 in	8.54 in	15 - 275 psi	Air	VIII Div. 1
20 NPS	20 NPS	285.32 sq in	19.06 in	9.53 in	15 - 275 psi	Air	VIII Div. 1
24 NPS	24 NPS	416.2 sq in	23.02 in	11.51 in	15 - 275 psi	Air	VIII Div. 1
30 NPS	30 NPS	658.7 sq in	28.96 in	14.48 in	15 - 275 psi	Air	VIII Div. 1

Certification
Number: **79017**Design Series
or catalog number **RDV-HP**

Type Classification: Safety Relief Valve

Capacity Tests: Sec. VIII Div. 1 at National Board T L (Worthington) on March 20, 2014

Method of Establishing Relieving Capacity: Flow Capacity, 3 valve average

Certified Value: 3261 SCFM

Test Medium: Air

Certified Medium: Air

Set Pressure Definition: Bubble

Blowdown: Fixed

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
3 NPS	3 NPS	4.345 sq in	2.352 in	0.384 in	50 - 50 psi	Air	VIII Div. 1

BS & B Safety Systems, LLC (BSB)

NB#: 77004

location: 7455 East 46th Street, Tulsa, OK 74145 United States

Acceptable Abbrev.: BSB

BS & B Safety Systems, LLC (BSB)

location: 7455 East 46th Street, Tulsa, OK 74145 United States

Acceptable Abbrev.: BSB

Certification
Number: **77004**Design Series
or catalog number **CSR**Holder Designation: **CSR-7RS, CSR-7FS, CSI-7RS**Type Classification: **Rupture Disk Device**Capacity Tests: **Sec. VIII Div. 1 at National Board T L (Worthington) on July 13, 1998**Method of Establishing Relieving Capacity: **Resistance Factor, 3 Size, Krg**Certified Value: **1.00 Unitless**Test Medium: **Air/Gas**Certified Medium: **Air or gases (Krg)**Set Pressure Definition: **Burst Pressure**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
1 NPS		0.86 sq in			120 - 800 psi		N/A
1.5 NPS		2.03 sq in			50 - 800 psi		VIII Div. 1
2 NPS		3.35 sq in			50 - 800 psi		VIII Div. 1
3 NPS		7.39 sq in			50 - 800 psi		VIII Div. 1
4 NPS		12.73 sq in			50 - 800 psi		VIII Div. 1
6 NPS		28.89 sq in			30 - 800 psi		VIII Div. 1
8 NPS		50.03 sq in			50 - 800 psi		VIII Div. 1

Certification
Number: **77015**Design Series
or catalog number **JRS**Holder Designation: **SRB-7RS, SRB-7RS-TR, SRB-7FS, SRI-7RS**Type Classification: **Rupture Disk Device**Capacity Tests: **Sec. VIII Div. 1 at National Board T L (Worthington) on July 10, 1998**Method of Establishing Relieving Capacity: **Resistance Factor, 3 Size, Krg**Certified Value: **.31 Unitless**Test Medium: **Air or gases (Krg)**Certified Medium: **Air or gases (Krg)**Set Pressure Definition: **Burst Pressure**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
1 NPS		0.86 sq in			22 - 180 psi		VIII Div. 1
1.5 NPS		1.89 sq in			20 - 150 psi		VIII Div. 1
2 NPS		3.35 sq in			18 - 120 psi		VIII Div. 1
3 NPS		6.53 sq in			16 - 80 psi		VIII Div. 1
4 NPS		11.86 sq in			14 - 70 psi		VIII Div. 1
6 NPS		25.08 sq in			12 - 50 psi		VIII Div. 1
8 NPS		42.07 sq in			12 - 42 psi		VIII Div. 1
10 NPS		68.65 sq in			12 - 36 psi		VIII Div. 1
12 NPS		102.28 sq in			12 - 33 psi		VIII Div. 1
14 NPS		121.86 sq in			9 - 30 psi		VIII Div. 1
16 NPS		156 sq in			7 - 28 psi		VIII Div. 1
18 NPS		198 sq in			6 - 26 psi		VIII Div. 1
20 NPS		246 sq in			5 - 24 psi		VIII Div. 1
24 NPS		357 sq in			5 - 22 psi		VIII Div. 1
30 NPS		592 sq in			5 - 14 psi		VIII Div. 1
32 NPS		706.9 sq in			5 - 14 psi		VIII Div. 1
36 NPS		868 sq in			5 - 14 psi		VIII Div. 1
42 NPS		1111 sq in			5 - 14 psi		VIII Div. 1

BS & B Safety Systems, LLC (BSB)

NB#: 77026

Location: 7455 East 46th Street, Tulsa, OK 74145 United States

Acceptable Abbrev.: BSB

Certification Number: **77026** Design Series or catalog number: **BV, BRV, BSV, BRSV**

Holder Designation: FA-7R, FA-7, FA-1,2,3,4,5,6,7,8,9, UA-2,3,5,6

Type Classification: Rupture Disk Device

Capacity Tests: Sec. VIII Div. 1 at National Board T L (Worthington) on July 13, 1998

Method of Establishing Relieving Capacity: Resistance Factor, 3 Size, Krg

Certified Value: .80 Unitless

Test Medium: Air or gases (Krg)

Certified Medium: Air or gases (Krg)

Special Service: None

Set Pressure Definition: Burst Pressure

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
1 NPS		0.57 sq in			145 - 12000 psi	Air	VIII Div. 1
1.5 NPS		1.44 sq in			95 - 6000 psi	Air	VIII Div. 1
2 NPS		2.24 sq in			55 - 6000 psi	Air	VIII Div. 1
3 NPS		5.41 sq in			41 - 6000 psi		VIII Div. 1
4 NPS		9.62 sq in			31 - 6000 psi		VIII Div. 1
6 NPS		23.76 sq in			23 - 3600 psi		VIII Div. 1
8 NPS		44.18 sq in			18 - 3600 psi		VIII Div. 1
10 NPS		70.88 sq in			14 - 1400 psi		VIII Div. 1
12 NPS		101.5 sq in			12 - 1000 psi		VIII Div. 1
14 NPS		130.3 sq in			11 - 750 psi		VIII Div. 1
16 NPS		176.7 sq in			9 - 500 psi		VIII Div. 1
18 NPS		202.4 sq in			8 - 475 psi		VIII Div. 1
20 NPS		280 sq in			8 - 450 psi		VIII Div. 1
24 NPS		380.1 sq in			37 - 230 psi		VIII Div. 1
30 NPS		615.7 sq in			20 - 184 psi		VIII Div. 1
32 NPS		728 sq in			31 - 181 psi		VIII Div. 1
36 NPS		927 sq in			28 - 160 psi		VIII Div. 1
40 NPS		1149 sq in			25 - 145 psi		VIII Div. 1
42 NPS		1269 sq in			24 - 138 psi		VIII Div. 1
44 NPS		1395 sq in			23 - 132 psi		VIII Div. 1

BS & B Safety Systems, LLC (BSB)

NB#: 77037

Location: 7455 East 46th Street, Tulsa, OK 74145 United States

Acceptable Abbrev.: BSB

Certification
Number: **77037**Design Series
or catalog number **B, BR, BRR**

Holder Designation: FA-7R, FA1,2,3,4,5,6,7,8,9,UA-2,3,5,6

Type Classification: Rupture Disk Device

Capacity Tests: Sec. VIII Div. 1 at National Board T L (Worthington) on September 15, 1998

Method of Establishing Relieving Capacity: Resistance Factor, 3 Size, Krg

Certified Value: .71 Unitless

Test Medium: Air or gases (Krg)

Certified Medium: Air or gases (Krg)

Set Pressure Definition: Burst Pressure

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
0.5 NPS		0.189 sq in			80 - 30000 psi		VIII Div. 1
1 NPS		0.801 sq in			40 - 12000 psi		VIII Div. 1
1.5 NPS		1.76 sq in			26 - 6000 psi	Air	VIII Div. 1
2 NPS		3.33 sq in			16 - 6000 psi		VIII Div. 1
3 NPS		6.514 sq in			12 - 6000 psi		VIII Div. 1
4 NPS		11.82 sq in			9 - 6000 psi		VIII Div. 1
6 NPS		28.84 sq in			7 - 3600 psi		VIII Div. 1
8 NPS		49.9 sq in			5 - 3600 psi		VIII Div. 1
10 NPS		78.85 sq in			4 - 1400 psi		VIII Div. 1
12 NPS		112.5 sq in			4 - 1000 psi		VIII Div. 1
14 NPS		137.9 sq in			3 - 750 psi		VIII Div. 1
16 NPS		182.7 sq in			3 - 500 psi		VIII Div. 1
18 NPS		233.7 sq in			3 - 475 psi		VIII Div. 1
20 NPS		291 sq in			2 - 450 psi		VIII Div. 1
24 NPS		424.6 sq in			2 - 230 psi		VIII Div. 1
30 NPS		672 sq in			2 - 184 psi		VIII Div. 1
32 NPS		767 sq in			2 - 181 psi		VIII Div. 1
36 NPS		976 sq in			6 - 160 psi		VIII Div. 1
40 NPS		1210 sq in			6 - 145 psi		VIII Div. 1
42 NPS		1336 sq in			6 - 138 psi		VIII Div. 1
44 NPS		1469 sq in			6 - 132 psi		VIII Div. 1

BS & B Safety Systems, LLC (BSB)

NB#: 77048

location: 7455 East 46th Street, Tulsa, OK 74145 United States

Acceptable Abbrev.: BSB

Certification
Number: **77048**Design Series
or catalog number **DV, D, DR, DRR, DRV**Holder Designation: **FA-7R, FA-1F - 9F, UA-2,3,5,6, FF-***Type Classification: **Rupture Disk Device**Capacity Tests: **Sec. VIII Div. 1 at National Board T L (Worthington) on September 15, 1998**Method of Establishing Relieving Capacity: **Resistance Factor, 3 Size, Krg**Certified Value: **1.19 Unitless**Test Medium: **Air/Gas**Certified Medium: **Air or gases (Krg)**Set Pressure Definition: **Burst Pressure**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
1 NPS		0.69 sq in			44 - 2000 psi		VIII Div. 1
1.5 NPS		1.62 sq in			31 - 1400 psi		VIII Div. 1
2 NPS		2.95 sq in			15 - 1100 psi		VIII Div. 1
3 NPS		6.49 sq in			11 - 900 psi		VIII Div. 1
4 NPS		11 sq in			8 - 830 psi		VIII Div. 1
6 NPS		25.9 sq in			6 - 640 psi		VIII Div. 1
8 NPS		47.1 sq in			5 - 590 psi		VIII Div. 1
10 NPS		74.6 sq in			4 - 480 psi		VIII Div. 1
12 NPS		106 sq in			3 - 400 psi		VIII Div. 1
14 NPS		135 sq in			3 - 350 psi		VIII Div. 1
16 NPS		176 sq in			3 - 300 psi		VIII Div. 1
18 NPS		223 sq in			3 - 270 psi		VIII Div. 1
20 NPS		277 sq in			3 - 240 psi		VIII Div. 1
24 NPS		397 sq in			3 - 200 psi		VIII Div. 1
28 NPS	NPS	584 sq in			3 - 170 psi	Air	VIII Div. 1
30 NPS		661 sq in			3 - 170 psi		VIII Div. 1
36 NPS		907 sq in			3 - 170 psi		VIII Div. 1
40 NPS		1120 sq in			3 - 170 psi		VIII Div. 1
42 NPS		1234 sq in			3 - 170 psi		VIII Div. 1
44 NPS		1355 sq in			3 - 170 psi		VIII Div. 1

BS & B Safety Systems, LLC (BSB)

NB#: 77059

location: 7455 East 46th Street, Tulsa, OK 74145 United States

Acceptable Abbrev.: BSB

Certification
Number: **77059**Design Series
or catalog number **RLS, RLS Welded Assembly**Holder Designation: **SRB-7RS, SRB-7RS-TR, S90-7R, SRB-7FS, SMR-7R, SRI-7RS, SRB-7RS Special**Type Classification: **Rupture Disk Device**Capacity Tests: **Sec. VIII Div. 1 at National Board T L (Worthington) on August 12, 1998**Method of Establishing Relieving Capacity: **Resistance Factor, 3 Size, Krg**Certified Value: **1.14 Unitless**Test Medium: **Air/Gas**Certified Medium: **Air or gases (Krg)**Special Service: **None**Set Pressure Definition: **Burst Pressure**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
0.75 NPS		0.5 sq in			300 - 2000 psi		VIII Div. 1
1 NPS		0.84 sq in			125 - 2000 psi		VIII Div. 1
1.5 NPS		1.77 sq in			85 - 1800 psi		VIII Div. 1
2 NPS		3.23 sq in			70 - 1800 psi		VIII Div. 1
3 NPS		6.44 sq in			55 - 1600 psi		VIII Div. 1
4 NPS		11.54 sq in			45 - 1500 psi		VIII Div. 1
6 NPS		26.4 sq in			35 - 650 psi		VIII Div. 1
8 NPS		47 sq in			35 - 400 psi		VIII Div. 1
10 NPS		73.9 sq in			35 - 250 psi		VIII Div. 1
12 NPS		99 sq in			35 - 150 psi		VIII Div. 1
14 NPS		131 sq in			35 - 130 psi		VIII Div. 1
16 NPS		172 sq in			25 - 110 psi		VIII Div. 1
18 NPS		219 sq in			25 - 90 psi		VIII Div. 1
20 NPS		270 sq in			20 - 90 psi		VIII Div. 1

Certification
Number: **77060**Design Series
or catalog number **GFN, GFA**Holder Designation: **NF-7RS, NF-7R**Type Classification: **Rupture Disk Device**Capacity Tests: **Sec. VIII Div. 1 at National Board T L (Worthington) on December 18, 1998**Method of Establishing Relieving Capacity: **Resistance Factor, 3 Size, Krg**Certified Value: **.55 Unitless**Test Medium: **Air/Gas**Certified Medium: **Air or gases (Krg)**Set Pressure Definition: **Burst Pressure**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
1 NPS		0.86 sq in			113 - 1800 psi		VIII Div. 1
1.5 NPS		2.03 sq in			81 - 1800 psi		VIII Div. 1
2 NPS		3.36 sq in			68 - 1800 psi		VIII Div. 1
3 NPS		7.39 sq in			54 - 1600 psi		VIII Div. 1
4 NPS		12.7 sq in			45 - 1400 psi		VIII Div. 1
6 NPS		28.9 sq in			36 - 1400 psi		VIII Div. 1
8 NPS		50 sq in			53 - 1300 psi		VIII Div. 1
10 NPS		78.8 sq in			45 - 1300 psi		VIII Div. 1
12 NPS		111.9 sq in			41 - 1100 psi		VIII Div. 1
14 NPS		137.9 sq in			37 - 750 psi		VIII Div. 1
16 NPS		176.7 sq in			35 - 270 psi		VIII Div. 1
18 NPS		223.3 sq in			33 - 240 psi		VIII Div. 1
20 NPS		277.9 sq in			32 - 213 psi		VIII Div. 1
24 NPS		402 sq in			30 - 177 psi		VIII Div. 1

BS & B Safety Systems, LLC (BSB)

NB#: 77071

location: 7455 East 46th Street, Tulsa, OK 74145 United States

Acceptable Abbrev.: BSB

Certification
Number: **77071**Design Series
or catalog number **ECR**Holder Designation: **EC-7RS**Type Classification: **Rupture Disk Device**Capacity Tests: **Sec. VIII Div. 1 at National Board T L (Worthington) on July 02, 1998**Method of Establishing Relieving Capacity: **Resistance Factor, 3 Size, Krg**Certified Value: **.58 Unitless**Test Medium: **Air/Gas**Certified Medium: **Air or gases (Krg)**Set Pressure Definition: **Burst Pressure**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
1 NPS		0.864 sq in			2 - 180 psi		VIII Div. 1
1.5 NPS		2.03 sq in			2 - 80 psi		VIII Div. 1
2 NPS		3.36 sq in			2 - 80 psi		VIII Div. 1
3 NPS		7.3 sq in			1 - 50 psi		VIII Div. 1
4 NPS		12.1 sq in			1 - 50 psi		VIII Div. 1
6 NPS		25.4 sq in			1 - 50 psi		VIII Div. 1
8 NPS		43.6 sq in			1 - 15 psi		VIII Div. 1
10 NPS		66.3 sq in			1 - 15 psi		VIII Div. 1
12 NPS		94.7 sq in			1 - 15 psi		VIII Div. 1
14 NPS		118 sq in			1 - 15 psi		VIII Div. 1
16 NPS		154 sq in			1 - 15 psi		VIII Div. 1
18 NPS		195 sq in			1 - 15 psi		VIII Div. 1
20 NPS		241 sq in			1 - 15 psi		VIII Div. 1
24 NPS		348 sq in			1 - 15 psi		VIII Div. 1

Certification
Number: **77082**Design Series
or catalog number **S90, S90 Welded Assembly**Holder Designation: **SRB-7RS, SRB-7RS-TR, S90-7R, SMR-7R, SRB-7FS, SRI-7RS**Type Classification: **Rupture Disk Device**Capacity Tests: **Sec. VIII Div. 1 at National Board T L (Worthington) on July 27, 1998**Method of Establishing Relieving Capacity: **Resistance Factor, 3 Size, Krg**Certified Value: **1.13 Unitless**Test Medium: **Air/Gas**Certified Medium: **Air or gases (Krg)**Special Service: **None**Set Pressure Definition: **Burst Pressure**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
1 NPS		0.86 sq in			75 - 1000 psi		VIII Div. 1
1.5 NPS		2.03 sq in			54 - 1000 psi		VIII Div. 1
2 NPS		3.36 sq in			45 - 1000 psi		VIII Div. 1
3 NPS		7.39 sq in			36 - 1000 psi		VIII Div. 1
4 NPS		12.7 sq in			30 - 800 psi		VIII Div. 1
6 NPS		28.8 sq in			24 - 800 psi		VIII Div. 1
8 NPS		50 sq in			35 - 700 psi		VIII Div. 1
10 NPS		78.8 sq in			30 - 700 psi		VIII Div. 1
12 NPS		111 sq in			27 - 600 psi		VIII Div. 1
14 NPS		135 sq in			25 - 500 psi		VIII Div. 1
16 NPS		176 sq in			23 - 200 psi		VIII Div. 1
18 NPS		223 sq in			22 - 160 psi		VIII Div. 1
20 NPS		277 sq in			20 - 142 psi		VIII Div. 1
24 NPS		402 sq in			20 - 118 psi		VIII Div. 1
28 NPS		583 sq in			20 - 100 psi		VIII Div. 1
30 NPS		672 sq in			20 - 80 psi		VIII Div. 1
40 NPS	NPS	1195 sq in			20 - 250 psi	Air	VIII Div. 1

Location: 7455 East 46th Street, Tulsa, OK 74145 United States

Acceptable Abbrev.: BSB

Certification
Number: **77093**Design Series
or catalog number **CSR (liquid)**Holder Designation: **CSR-7RS, CRS-7FS, CSI-7RS**Type Classification: **Rupture Disk Device**Capacity Tests: **Sec. VIII Div. 1 at National Board T L (Worthington) on September 15, 1998**Method of Establishing Relieving Capacity: **Resistance Factor, 3 Size, Krl**Certified Value: **3.19 Unitless**Test Medium: **Air/Gas & Liquid**Certified Medium: **Liquid (Krl)**Set Pressure Definition: **Burst Pressure**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
1 NPS		0.86 sq in			120 - 800 psi		VIII Div. 1
1.5 NPS		2.03 sq in			50 - 800 psi		VIII Div. 1
2 NPS		3.35 sq in			50 - 800 psi		VIII Div. 1
3 NPS		7.39 sq in			50 - 800 psi		VIII Div. 1
4 NPS		12.73 sq in			50 - 800 psi		VIII Div. 1
6 NPS		28.89 sq in			30 - 800 psi		VIII Div. 1
8 NPS		50.03 sq in			50 - 800 psi		VIII Div. 1

Certification
Number: **77105**Design Series
or catalog number **GFR-S, -SM, -SE, -SS, -SMS, -SES (1")**Holder Designation: **GRC**Type Classification: **Rupture Disk Device**Capacity Tests: **Sec. VIII Div. 1 at National Board T L (Worthington) on December 19, 1998**Method of Establishing Relieving Capacity: **Resistance Factor, 1 Size, Krgl**Certified Value: **19.14 Unitless**Test Medium: **Air/Gas**Certified Medium: **Air or gases, and liquid (Krgl)**Set Pressure Definition: **Burst Pressure**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
1 NPS		0.2 sq in			45 - 175 psi		VIII Div. 1

Certification
Number: **77116**Design Series
or catalog number **GFR-S, -SM, -SE (1.5")**Holder Designation: **GRC**Type Classification: **Rupture Disk Device**Capacity Tests: **Sec. VIII Div. 1 at National Board T L (Worthington) on December 18, 1998**Method of Establishing Relieving Capacity: **Resistance Factor, 1 Size, Krg**Certified Value: **9.92 Unitless**Test Medium: **Air/Gas**Certified Medium: **Air or gases (Krg)**Set Pressure Definition: **Burst Pressure**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
1.5 NPS		0.79 sq in			13.5 - 100 psi		VIII Div. 1

BS & B Safety Systems, LLC (BSB)

NB#: 77127

Location: 7455 East 46th Street, Tulsa, OK 74145 United States

Acceptable Abbrev.: BSB

Certification Number: **77127** Design Series or catalog number: **GFR-S, -SM, -SE (2")**

Holder Designation: **GRC-C, FM-C, FT-C**Type Classification: **Rupture Disk Device**Capacity Tests: **Sec. VIII Div. 1 at National Board T L (Worthington) on December 19, 1998**Method of Establishing Relieving Capacity: **Resistance Factor, 1 Size, Krgl**Certified Value: **4.76 Unitless**Test Medium: **Air/Gas & Liquid**Certified Medium: **Air or gases, and liquid (Krgl)**Set Pressure Definition: **Burst Pressure**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
2 NPS		1.77 sq in			11.5 - 105 psi		VIII Div. 1

Certification Number: **77138** Design Series or catalog number: **RB-90**

Holder Designation: **RB-7R, RB-7F, RB-7FF, RB-7FS**Type Classification: **Rupture Disk Device**Capacity Tests: **Sec. VIII Div. 1 at National Board T L (Worthington) on February 19, 1999**Method of Establishing Relieving Capacity: **Resistance Factor, 3 Size, Krg**Certified Value: **3.47 Unitless**Test Medium: **Air/Gas**Certified Medium: **Air or gases (Krg)**Set Pressure Definition: **Burst Pressure**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
1 NPS		0.831 sq in			30 - 1800 psi		VIII Div. 1
1.5 NPS		1.805 sq in			25 - 1700 psi		VIII Div. 1
2 NPS		3.153 sq in			22 - 1600 psi		VIII Div. 1
3 NPS		6.849 sq in			21 - 1500 psi		VIII Div. 1
4 NPS		11.84 sq in			20 - 1500 psi		VIII Div. 1
6 NPS		25.45 sq in			20 - 850 psi		VIII Div. 1
8 NPS		47.68 sq in			15 - 800 psi		VIII Div. 1
10 NPS		67.62 sq in			15 - 800 psi		VIII Div. 1
12 NPS		101.8 sq in			15 - 800 psi		VIII Div. 1
14 NPS		121.7 sq in			15 - 800 psi		VIII Div. 1
16 NPS		162.8 sq in			15 - 800 psi		VIII Div. 1
18 NPS		209.99 sq in			13 - 700 psi		VIII Div. 1
20 NPS		262.9 sq in			13 - 700 psi		VIII Div. 1
24 NPS		386.9 sq in			10 - 700 psi		VIII Div. 1
26 NPS		465 sq in			10 - 700 psi		VIII Div. 1
28 NPS		530.7 sq in			10 - 700 psi		VIII Div. 1
30 NPS		617.7 sq in			10 - 700 psi		VIII Div. 1
32 NPS		698.4 sq in			10 - 700 psi		VIII Div. 1
34 NPS		790.1 sq in			10 - 700 psi		VIII Div. 1
36 NPS		872.8 sq in			10 - 700 psi		VIII Div. 1

BS & B Safety Systems, LLC (BSB)

NB#: 77194

location: 7455 East 46th Street, Tulsa, OK 74145 United States

Acceptable Abbrev.: BSB

Certification Number: **77194** Design Series or catalog number: **GFR-S, -SM, -SE (Combined)**

Holder Designation: **GRC**Type Classification: **Rupture Disk Device**Capacity Tests: **Sec. VIII Div. 1 at National Board T L (Worthington) on December 19, 1998**Method of Establishing Relieving Capacity: **Resistance Factor, 3 Size, Krg**Certified Value: **23.47 Unitless**Test Medium: **Air/Gas**Certified Medium: **Air or gases (Krg)**Set Pressure Definition: **Burst Pressure**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
3 NPS		4.91 sq in			11.5 - 75 psi		VIII Div. 1

Certification Number: **77206** Design Series or catalog number: **S-90 (Inconel)**

Holder Designation: **S90-7R, SRB-7RS, SRB-7RS-TR, SMR-7R, SRB-7FS, SRI-7RS**Type Classification: **Rupture Disk Device**Capacity Tests: **Sec. VIII Div. 1 at BS & B on April 24, 1999**Method of Establishing Relieving Capacity: **Resistance Factor, 3 Size, Krg**Certified Value: **.23 Unitless**Test Medium: **Air or gases (Krg)**Certified Medium: **Air or gases (Krg)**Special Service: **None**Set Pressure Definition: **Burst Pressure**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
1 NPS		0.864 sq in			170 - 1000 psi		VIII Div. 1
1.5 NPS		2.03 sq in			128 - 1000 psi		VIII Div. 1
2 NPS		3.36 sq in			96 - 1000 psi		VIII Div. 1
3 NPS		7.39 sq in			72 - 1000 psi		VIII Div. 1
4 NPS		12.7 sq in			60 - 800 psi		VIII Div. 1
6 NPS		28.9 sq in			48 - 800 psi		VIII Div. 1
8 NPS		50 sq in			42 - 700 psi		VIII Div. 1
10 NPS		78.8 sq in			36 - 700 psi		VIII Div. 1
12 NPS		111 sq in			33 - 600 psi		VIII Div. 1
14 NPS		135 sq in			30 - 500 psi		VIII Div. 1
16 NPS		176 sq in			28 - 200 psi		VIII Div. 1
18 NPS		223 sq in			26 - 160 psi		VIII Div. 1
20 NPS		277 sq in			24 - 142 psi		VIII Div. 1
24 NPS		402 sq in			22 - 118 psi		VIII Div. 1
30 NPS		672 sq in			20 - 80 psi		VIII Div. 1

Certification Number: **77217** Design Series or catalog number: **1/2" FRB A-6 M x F & M x M Stakul**

Holder Designation: **A-6**Type Classification: **Rupture Disk Device**Capacity Tests: **Sec. VIII Div. 1 at BS & B on June 08, 1999**Method of Establishing Relieving Capacity: **Resistance Factor, 1 Size, Krg**Certified Value: **2.19 Unitless**Test Medium: **Air/Gas**Certified Medium: **Air or gases (Krg)**Set Pressure Definition: **Burst Pressure**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
0.5 NPS	0.5 NPS	0.196 sq in			35 - 600 psi		VIII Div. 1

BS & B Safety Systems, LLC (BSB)

NB#: 77228

Location: 7455 East 46th Street, Tulsa, OK 74145 United States

Acceptable Abbrev.: BSB

Certification Number: **77228** Design Series or catalog number: **3/4" B assembly**

Holder Designation: **Single use**Type Classification: **Rupture Disk Device**Capacity Tests: **Sec. VIII Div. 1 at BS & B on February 18, 2000**Method of Establishing Relieving Capacity: **Resistance Factor, 1 Size, Krg**Certified Value: **3.85 Unitless**Test Medium: **Air/Gas**Certified Medium: **Air or gases (Krg)**Special Service: **None**Set Pressure Definition: **Burst Pressure**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
0.75 NPS		0.44 sq in			108 - 1000 psi		VIII Div. 1

Certification Number: **77239** Design Series or catalog number: **GFR-S 1 1/2" Liquid**

Holder Designation: **GR-C**Type Classification: **Rupture Disk Device**Capacity Tests: **Sec. VIII Div. 1 at BS & B on April 26, 1999**Method of Establishing Relieving Capacity: **Resistance Factor, 1 Size, Krl**Certified Value: **11.5 Unitless**Test Medium: **Air/Gas**Certified Medium: **Liquid (Krl)**Set Pressure Definition: **Burst Pressure**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
1.5 NPS		0.79 sq in			13.5 - 150 psi		VIII Div. 1

BS & B Safety Systems, LLC (BSB)

NB#: 77273

Location: 7455 East 46th Street, Tulsa, OK 74145 United States

Acceptable Abbrev.: BSB

Certification Number: **77273** Design Series or catalog number **BV,BRV,BSV,BRSV (liquid)**

Holder Designation: FA-7R, FA-1 - FA-9,UA-,3,5,6

Type Classification: Rupture Disk Device

Capacity Tests: Sec. VIII Div. 1 at BS & B on July 01, 1999

Method of Establishing Relieving Capacity: Resistance Factor, 3 Size, Krl

Certified Value: 2.45 Unitless

Test Medium: Liquid (Krl)

Certified Medium: Liquid (Krl)

Special Service: None

Set Pressure Definition: Burst Pressure

Scope of Nominal Size and Set Pressure Ranges:

Inlet Size	Outlet Size	Flow Area	Orifice [designator] diameter	Lift	Set Pressure Range	Media	Code Section
1 NPS		0.57 sq in			145 - 12000 psi		VIII Div. 1
1.5 NPS		1.44 sq in			95 - 6000 psi		VIII Div. 1
2 NPS		2.24 sq in			55 - 6000 psi		VIII Div. 1
3 NPS		5.41 sq in			41 - 6000 psi		VIII Div. 1
4 NPS		9.62 sq in			31 - 6000 psi		VIII Div. 1
6 NPS		23.76 sq in			23 - 3600 psi		VIII Div. 1
8 NPS		44.18 sq in			18 - 3600 psi		VIII Div. 1
10 NPS		70.88 sq in			14 - 1400 psi		VIII Div. 1
12 NPS		101.5 sq in			12 - 1000 psi		VIII Div. 1
14 NPS		130.3 sq in			11 - 750 psi		VIII Div. 1
16 NPS		176.7 sq in			9 - 500 psi		VIII Div. 1
18 NPS		202.4 sq in			8 - 475 psi		VIII Div. 1
20 NPS		280 sq in			8 - 450 psi		VIII Div. 1
24 NPS		380.1 sq in			37 - 230 psi		VIII Div. 1
30 NPS		615.8 sq in			20 - 184 psi		VIII Div. 1
32 NPS		728 sq in			31 - 181 psi		VIII Div. 1
36 NPS		927 sq in			28 - 160 psi		VIII Div. 1
40 NPS		1149 sq in			25 - 145 psi		VIII Div. 1
42 NPS		1269 sq in			24 - 138 psi		VIII Div. 1
44 NPS		1395 sq in			23 - 132 psi		VIII Div. 1

Certification Number: **77284** Design Series or catalog number **FRS**

Holder Designation: SRB-7RS, SRB-7RS-TR, SRB-7FS, S90-7R, SRI-7RS

Type Classification: Rupture Disk Device

Capacity Tests: Sec. VIII Div. 1 at BS & B on June 23, 1999

Method of Establishing Relieving Capacity: Resistance Factor, 3 Size, Krg

Certified Value: 0.80 Unitless

Test Medium: Air/Gas

Certified Medium: Air or gases (Krg)

Set Pressure Definition: Burst Pressure

Scope of Nominal Size and Set Pressure Ranges:

Inlet Size	Outlet Size	Flow Area	Orifice [designator] diameter	Lift	Set Pressure Range	Media	Code Section
1 NPS		0.86 sq in			13.5 - 150 psi		VIII Div. 1
1.5 NPS		1.94 sq in			11.5 - 70 psi		VIII Div. 1
2 NPS		3.36 sq in			11.5 - 50 psi		VIII Div. 1

BS & B Safety Systems, LLC (BSB)

NB#: 77307

Location: 7455 East 46th Street, Tulsa, OK 74145 United States

Acceptable Abbrev.: BSB

Certification Number: **77307** Design Series or catalog number: **RLS, RLS Welded Assembly (liquid)**

Holder Designation: SRB-7RS, SRB-7RS-TR, SRB-7FS, S90-7R, SMR-7R, SRI-7RS, SRB-7RS Special

Type Classification: Rupture Disk Device

Capacity Tests: Sec. VIII Div. 1 at BS & B on July 16, 1999

Method of Establishing Relieving Capacity: Resistance Factor, 3 Size, Krl

Certified Value: 5.83 Unitless

Test Medium: Air or gases, and liquid (Krgl)

Certified Medium: Liquid (Krl)

Special Service: None

Set Pressure Definition: Burst Pressure

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
0.75 NPS		0.5 sq in			300 - 6000 psi		VIII Div. 1
1 NPS		0.84 sq in			125 - 6000 psi		VIII Div. 1
1.5 NPS		1.77 sq in			85 - 5400 psi		VIII Div. 1
2 NPS		3.23 sq in			70 - 4800 psi		VIII Div. 1
3 NPS		6.44 sq in			55 - 3800 psi		VIII Div. 1
4 NPS		11.54 sq in			45 - 2800 psi		VIII Div. 1
6 NPS		26.4 sq in			35 - 2000 psi		VIII Div. 1
8 NPS		47 sq in			35 - 1600 psi		VIII Div. 1
10 NPS		73.9 sq in			35 - 1200 psi		VIII Div. 1
12 NPS		99 sq in			35 - 900 psi		VIII Div. 1
14 NPS		131 sq in			35 - 650 psi		VIII Div. 1
16 NPS		172 sq in			25 - 550 psi		VIII Div. 1
18 NPS		219 sq in			25 - 450 psi		VIII Div. 1
20 NPS		270 sq in			20 - 350 psi		VIII Div. 1

BS & B Safety Systems, LLC (BSB)

NB#: 77318

Location: 7455 East 46th Street, Tulsa, OK 74145 United States

Acceptable Abbrev.: BSB

Certification
Number: **77318**Design Series
or catalog number **B, BR, BRR (liquid)**

Holder Designation: FA-7R, FA-1 - FA9, UA-2,3,5,6

Type Classification: Rupture Disk Device

Capacity Tests: Sec. VIII Div. 1 at BS & B on July 12, 1999

Method of Establishing Relieving Capacity: Resistance Factor, 3 Size, Krl

Certified Value: 1.47 Unitless

Test Medium: Air/Gas & Liquid

Certified Medium: Liquid (Krl)

Set Pressure Definition: Burst Pressure

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
0.5 NPS		0.189 sq in			80 - 30000 psi		VIII Div. 1
1 NPS		0.801 sq in			40 - 12000 psi		VIII Div. 1
1.5 NPS		1.76 sq in			26 - 6000 psi		VIII Div. 1
2 NPS		3.33 sq in			16 - 6000 psi		VIII Div. 1
3 NPS		6.514 sq in			12 - 6000 psi		VIII Div. 1
4 NPS		11.82 sq in			9 - 6000 psi		VIII Div. 1
6 NPS		28.84 sq in			7 - 3600 psi		VIII Div. 1
8 NPS		49.89 sq in			5 - 3600 psi		VIII Div. 1
10 NPS		78.85 sq in			4 - 1400 psi		VIII Div. 1
12 NPS		112.5 sq in			4 - 1000 psi		VIII Div. 1
14 NPS		137.9 sq in			3 - 750 psi		VIII Div. 1
16 NPS		182.7 sq in			3 - 500 psi		VIII Div. 1
18 NPS		233.7 sq in			3 - 475 psi		VIII Div. 1
20 NPS		291 sq in			2 - 450 psi		VIII Div. 1
24 NPS		424.6 sq in			2 - 230 psi		VIII Div. 1
30 NPS		672 sq in			2 - 184 psi		VIII Div. 1
32 NPS		767 sq in			2 - 181 psi		VIII Div. 1
36 NPS		976 sq in			6 - 160 psi		VIII Div. 1
40 NPS		1210 sq in			6 - 145 psi		VIII Div. 1
42 NPS		1336 sq in			3 - 138 psi		VIII Div. 1
44 NPS		1469 sq in			6 - 132 psi		VIII Div. 1

BS & B Safety Systems, LLC (BSB)

NB#: 77341

location: 7455 East 46th Street, Tulsa, OK 74145 United States

Acceptable Abbrev.: BSB

Certification
Number: **77341**Design Series
or catalog number **AV**

Holder Designation: AV7R, AV-1, -2, -3, -4, -5, -6, -7, -8, -9

Type Classification: Rupture Disk Device

Capacity Tests: Sec. VIII Div. 1 at BS & B on November 04, 1999

Method of Establishing Relieving Capacity: Resistance Factor, 3 Size, Krgl

Certified Value: 4.35 Unitless

Test Medium: Air/Gas & Liquid

Certified Medium: Air or gases, and liquid (Krgl)

Set Pressure Definition: Burst Pressure

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
1 NPS		0.864 sq in			10 - 150 psi		VIII Div. 1
1.25 NPS		1.4 sq in			8 - 150 psi		VIII Div. 1
1.5 NPS		2.036 sq in			7 - 150 psi		VIII Div. 1
2 NPS		3.356 sq in			5 - 150 psi		VIII Div. 1
2.5 NPS		4.787 sq in			5 - 150 psi		VIII Div. 1
3 NPS		7.392 sq in			4 - 150 psi		VIII Div. 1
4 NPS		12.73 sq in			2 - 150 psi		VIII Div. 1
5 NPS		20 sq in			2 - 100 psi		VIII Div. 1
6 NPS		28.89 sq in			1 - 100 psi		VIII Div. 1
8 NPS		50.02 sq in			1 - 100 psi		VIII Div. 1
10 NPS		78.85 sq in			.6 - 60 psi		VIII Div. 1
12 NPS		113.1 sq in			.6 - 60 psi		VIII Div. 1
14 NPS		137.9 sq in			0.6 - 60 psi		VIII Div. 1
16 NPS		182.7 sq in			.6 - 60 psi		VIII Div. 1
18 NPS		233.7 sq in			.5 - 60 psi		VIII Div. 1
20 NPS		291 sq in			.5 - 60 psi		VIII Div. 1
22 NPS		354.7 sq in			.5 - 60 psi		VIII Div. 1
24 NPS		424.6 sq in			.5 - 60 psi		VIII Div. 1
26 NPS		500.7 sq in			.5 - 40 psi		VIII Div. 1
28 NPS		583.2 sq in			.5 - 40 psi		VIII Div. 1
30 NPS		672 sq in			.5 - 40 psi		VIII Div. 1
32 NPS		767 sq in			.35 - 40 psi		VIII Div. 1
34 NPS		868.3 sq in			.35 - 40 psi		VIII Div. 1
36 NPS		975.9 sq in			.25 - 40 psi		VIII Div. 1
38 NPS		1090 sq in			.25 - 40 psi		VIII Div. 1
40 NPS		1210 sq in			.25 - 40 psi		VIII Div. 1
42 NPS		1336 sq in			.25 - 40 psi		VIII Div. 1
44 NPS		1469 sq in			.25 - 40 psi		VIII Div. 1
46 NPS		1608 sq in			.25 - 40 psi		VIII Div. 1
48 NPS		1753 sq in			.25 - 40 psi		VIII Div. 1

BS & B Safety Systems, LLC (BSB)

NB#: 77352

location: 7455 East 46th Street, Tulsa, OK 74145 United States

Acceptable Abbrev.: BSB

Certification Number: **77352** Design Series or catalog number: **D Series (liquid) DR, DRR**

Holder Designation: FA-7R, FA-1 - FA-9,UA-2,3,5,6, FF-*

Type Classification: Rupture Disk Device

Capacity Tests: Sec. VIII Div. 1 at BS & B on October 28, 1999

Method of Establishing Relieving Capacity: Resistance Factor, 3 Size, Krl

Certified Value: 1.3 Unitless

Test Medium: Air/Gas & Liquid

Certified Medium: Liquid (Krl)

Set Pressure Definition: Burst Pressure

Scope of Nominal Size and Set Pressure Ranges:

Inlet Size	Outlet Size	Flow Area	Orifice [designator] diameter	Lift	Set Pressure Range	Media	Code Section
1 NPS		0.801 sq in			44 - 2000 psi		VIII Div. 1
1.5 NPS		1.76 sq in			31 - 1400 psi		VIII Div. 1
2 NPS		3.33 sq in			15 - 1100 psi		VIII Div. 1
3 NPS		6.51 sq in			11 - 900 psi		VIII Div. 1
4 NPS		11.8 sq in			8 - 830 psi		VIII Div. 1
6 NPS		28.84 sq in			6 - 640 psi		VIII Div. 1
8 NPS		49.9 sq in			5 - 590 psi		VIII Div. 1
10 NPS		78.8 sq in			4 - 480 psi		VIII Div. 1
12 NPS		112.5 sq in			3 - 1000 psi		VIII Div. 1
14 NPS		137.9 sq in			3 - 350 psi		VIII Div. 1
16 NPS		182.7 sq in			3 - 300 psi		VIII Div. 1
18 NPS		233.7 sq in			3 - 270 psi		VIII Div. 1
20 NPS		291 sq in			3 - 240 psi		VIII Div. 1
24 NPS		424.6 sq in			3 - 200 psi		VIII Div. 1
28 NPS		584 sq in			3 - 170 psi	Air	VIII Div. 1
30 NPS		672 sq in			3 - 170 psi		VIII Div. 1
32 NPS		767 sq in			3 - 170 psi		VIII Div. 1
36 NPS		976 sq in			3 - 170 psi		VIII Div. 1
40 NPS		1210 sq in			3 - 170 psi		VIII Div. 1
42 NPS		1336 sq in			3 - 170 psi		VIII Div. 1
44 NPS		1465 sq in			3 - 170 psi		VIII Div. 1

Certification Number: **77420** Design Series or catalog number: **GCR-S,SE,SM,SS,SES,SMS, SW, N, NS (2")**

Holder Designation: GR-C, FM-C , not req'd for -SM

Type Classification: Rupture Disk Device

Capacity Tests: Sec. VIII Div. 1 at BS & B on January 10, 2000

Method of Establishing Relieving Capacity: Resistance Factor, 1 Size, Krg

Certified Value: 1.25 Unitless

Test Medium: Air/Gas

Certified Medium: Air or gases (Krg)

Special Service: None

Set Pressure Definition: Burst Pressure

Scope of Nominal Size and Set Pressure Ranges:

Inlet Size	Outlet Size	Flow Area	Orifice [designator] diameter	Lift	Set Pressure Range	Media	Code Section
2 NPS		2.7 sq in			10 - 300 psi	Air	VIII Div. 1

BS & B Safety Systems, LLC (BSB)

NB#: 77442

Location: 7455 East 46th Street, Tulsa, OK 74145 United States

Acceptable Abbrev.: BSB

Certification Number: **77442** Design Series or catalog number: **1/2" Welded FRB with 3/4" Sanitary Clamp Connection (A/G/L)**

Type Classification: Rupture Disk Device

Capacity Tests: Sec. VIII Div. 1 at BS & B on April 11, 2000

Method of Establishing Relieving Capacity: Resistance Factor, 1 Size, Krgl

Certified Value: 12.0 Unitless

Test Medium: Air/Gas & Liquid

Certified Medium: Air or gases, and liquid (Krgl)

Set Pressure Definition: Burst Pressure

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
0.75 NPS	0.75 NPS	0.22 sq in	0.62 in		100 - 300 psi		VIII Div. 1

Certification Number: **77486** Design Series or catalog number: **2" BV**

Holder Designation: FA-7R, FA-1F - 9F, UA-2,3,5,6

Type Classification: Rupture Disk Device

Capacity Tests: Sec. VIII Div. 1 at National Board T L (Worthington) on August 11, 1998

Method of Establishing Relieving Capacity: Resistance Factor, 1 Size, Krg

Certified Value: .55 Unitless

Test Medium: Air/Gas

Certified Medium: Air or gases (Krg)

Special Service: None

Set Pressure Definition: Burst Pressure

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
2 NPS		2.24 sq in			16 - 6000 psi		VIII Div. 1

Certification Number: **77497** Design Series or catalog number: **2" B**

Holder Designation: FA-7R, 1F - 9F, UA-2,3,5,6

Type Classification: Rupture Disk Device

Capacity Tests: Sec. VIII Div. 1 at National Board T L (Worthington) on August 11, 1998

Method of Establishing Relieving Capacity: Resistance Factor, 1 Size, Krg

Certified Value: .23 Unitless

Test Medium: Air/Gas

Certified Medium: Air or gases (Krg)

Special Service: None

Set Pressure Definition: Burst Pressure

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
2 NPS		3.33 sq in			16 - 6000 psi		VIII Div. 1

BS & B Safety Systems, LLC (BSB)

NB#: 77565

Location: 7455 East 46th Street, Tulsa, OK 74145 United States

Acceptable Abbrev.: BSB

Certification
Number: **77565**Design Series
or catalog number **CSI**Holder Designation: **CSR-7RS, CSR-7FS, CSI-7RS**Type Classification: **Rupture Disk Device**Capacity Tests: **Sec. VIII Div. 1 at BS & B on August 30, 2000**Method of Establishing Relieving Capacity: **Resistance Factor, 3 Size, Krg**Certified Value: **0.62 Unitless**Test Medium: **Air/Gas**Certified Medium: **Air or gases (Krg)**Set Pressure Definition: **Burst Pressure**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
1 NPS	1 NPS	0.86 sq in			70 - 800 psi		VIII Div. 1
1.5 NPS	1.5 NPS	1.89 sq in			50 - 800 psi		VIII Div. 1
2 NPS	2 NPS	3.36 sq in			50 - 800 psi	Air	VIII Div. 1
3 NPS	3 NPS	7.29 sq in			45 - 800 psi		VIII Div. 1
4 NPS	4 NPS	11.2 sq in			45 - 800 psi		VIII Div. 1
6 NPS	6 NPS	22.65 sq in			30 - 800 psi		VIII Div. 1
8 NPS	8 NPS	42.72 sq in			30 - 800 psi		VIII Div. 1

Certification
Number: **77587**Design Series
or catalog number **A-10 SK 1" SCD B**Holder Designation: **Integral**Type Classification: **Rupture Disk Device**Capacity Tests: **Sec. VIII Div. 1 at BS & B on September 06, 2000**Method of Establishing Relieving Capacity: **Resistance Factor, 1 Size, Krg**Certified Value: **.415 Unitless**Test Medium: **Air/Gas**Certified Medium: **Air or gases (Krg)**Set Pressure Definition: **Burst Pressure**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
1 NPS	1 NPS	0.785 sq in			150 - 900 psi		VIII Div. 1

Certification
Number: **77598**Design Series
or catalog number **A-2 SK 0.5 FRB**Holder Designation: **Integral**Type Classification: **Rupture Disk Device**Capacity Tests: **Sec. VIII Div. 1 at BS & B on September 01, 2000**Method of Establishing Relieving Capacity: **Resistance Factor, 1 Size, Krg**Certified Value: **2.2 Unitless**Test Medium: **Air/Gas**Certified Medium: **Air or gases (Krg)**Set Pressure Definition: **Burst Pressure**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
0.5 NPS	0.5 NPS	0.196 sq in			50 - 650 psi		VIII Div. 1

BS & B Safety Systems, LLC (BSB)

NB#: 77600

Location: 7455 East 46th Street, Tulsa, OK 74145 United States

Acceptable Abbrev.: BSB

Certification Number: **77600** Design Series or catalog number: **0.5" FRB WFT**

Holder Designation: **Single use assembly**Type Classification: **Rupture Disk Device**Capacity Tests: **Sec. VIII Div. 1 at BS & B on September 07, 2000**Method of Establishing Relieving Capacity: **Resistance Factor, 1 Size, Krg**Certified Value: **35.7 Unitless**Test Medium: **Air/Gas**Certified Medium: **Air or gases (Krg)**Set Pressure Definition: **Burst Pressure**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
1 NPS	1 NPS	0.216 sq in			85 - 450 psi	Air	VIII Div. 1

Certification Number: **77611** Design Series or catalog number: **GCR-S, SE, SM, SS, SES, SMS, SW, N, NS**

Holder Designation: **GR-C, FM-C, not req'd for -SM**Type Classification: **Rupture Disk Device**Capacity Tests: **Sec. VIII Div. 1 at BS & B on November 22, 2000**Method of Establishing Relieving Capacity: **Resistance Factor, 3 Size, Krg**Certified Value: **1.95 Unitless**Test Medium: **Air/Gas**Certified Medium: **Air or gases (Krg)**Special Service: **None**Set Pressure Definition: **Burst Pressure**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
1.5 NPS		1.5 sq in			10 - 300 psi	Air	VIII Div. 1
3 NPS		5.29 sq in			10 - 175 psi		VIII Div. 1
4 NPS		9.78 sq in			10 - 150 psi		VIII Div. 1
6 NPS		22.5 sq in			10 - 75 psi		VIII Div. 1

Certification Number: **77622** Design Series or catalog number: **GCR-S, SE, SM, SS, SES, SMS, SW, N, NS (liquids)**

Holder Designation: **GR-C, FM-C (not req'd for SM)**Type Classification: **Rupture Disk Device**Capacity Tests: **Sec. VIII Div. 1 at BS & B on November 29, 2000**Method of Establishing Relieving Capacity: **Resistance Factor, 3 Size, Krl**Certified Value: **4.95 Unitless**Test Medium: **Air/Gas & Liquid**Certified Medium: **Liquid (Krl)**Set Pressure Definition: **Burst Pressure**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
1.5 NPS		1.5 sq in			10 - 300 psi		VIII Div. 1
3 NPS		5.29 sq in			10 - 175 psi		VIII Div. 1
4 NPS		9.78 sq in			10 - 150 psi		VIII Div. 1
6 NPS		22.5 sq in			10 - 75 psi		VIII Div. 1

BS & B Safety Systems, LLC (BSB)

NB#: 77633

Location: 7455 East 46th Street, Tulsa, OK 74145 United States

Acceptable Abbrev.: BSB

Certification Number: **77633** Design Series or catalog number: **A-6 with B Disk**

Type Classification: Rupture Disk Device

Capacity Tests: Sec. VIII Div. 1 at BS & B on April 25, 2001

Method of Establishing Relieving Capacity: Resistance Factor, 1 Size, Krg

Certified Value: 6.44 Unitless

Test Medium: Air/Gas

Certified Medium: Air or gases (Krg)

Special Service: None

Set Pressure Definition: Burst Pressure

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
0.5 NPS	.5 NPS	0.19 sq in			600 - 1500 psi		VIII Div. 1

Certification Number: **77644** Design Series or catalog number: **A19 with Scored B Disk**

Type Classification: Rupture Disk Device

Capacity Tests: Sec. VIII Div. 1 at BS & B on April 30, 2001

Method of Establishing Relieving Capacity: Resistance Factor, 1 Size, Krg

Certified Value: .503 Unitless

Test Medium: Air/Gas

Certified Medium: Air or gases (Krg)

Set Pressure Definition: Burst Pressure

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
0.75 NPS	.75 NPS	0.44 sq in			108 - 1000 psi		VIII Div. 1

Certification Number: **77666** Design Series or catalog number: **A4 .375 FRB Disk**

Holder Designation: A4 .375 FRB Disk

Type Classification: Rupture Disk Device

Capacity Tests: Sec. VIII Div. 1 at BS & B on January 16, 2002

Method of Establishing Relieving Capacity: Resistance Factor, 1 Size, Krg

Certified Value: 6.9 Unitless

Test Medium: Air/Gas

Certified Medium: Air or gases (Krg)

Special Service: None

Set Pressure Definition: Burst Pressure

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
0.375 NPS	.5 NPS	0.096 sq in			100 - 650 psi		VIII Div. 1

BS & B Safety Systems, LLC (BSB)

NB#: 77688

location: 7455 East 46th Street, Tulsa, OK 74145 United States

Acceptable Abbrev.: BSB

Certification
Number: **77688**Design Series
or catalog number **RLS DD (liquid)**Holder Designation: **SRB-7RS DD, SRB-7RS-TR DD, SRB-7FS DD**Type Classification: **Rupture Disk Device**Capacity Tests: **Sec. VIII Div. 1 at BS & B on October 24, 2002**Method of Establishing Relieving Capacity: **Resistance Factor, 3 Size, Krl**Certified Value: **5.83 Unitless**Test Medium: **Air/Gas & Liquid**Certified Medium: **Liquid (Krl)**Special Service: **None**Set Pressure Definition: **Burst Pressure**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
1 NPS		0.842 sq in			125 - 3900 psi		VIII Div. 1
1.5 NPS		1.77 sq in			85 - 1800 psi		VIII Div. 1
2 NPS		3.23 sq in			70 - 1800 psi		VIII Div. 1
3 NPS		6.44 sq in			55 - 1600 psi		VIII Div. 1
4 NPS		11.54 sq in			45 - 1050 psi		VIII Div. 1
6 NPS		26.44 sq in			35 - 650 psi		VIII Div. 1
8 NPS		47.07 sq in			35 - 400 psi		VIII Div. 1
10 NPS		73.94 sq in			35 - 250 psi		VIII Div. 1
12 NPS		99.06 sq in			35 - 150 psi		VIII Div. 1
14 NPS		131.5 sq in			35 - 130 psi		VIII Div. 1
16 NPS		172.1 sq in			25 - 110 psi		VIII Div. 1
18 NPS		219.5 sq in			25 - 90 psi		VIII Div. 1
20 NPS		270 sq in			20 - 90 psi		VIII Div. 1

Certification
Number: **77699**Design Series
or catalog number **RLS DD**Holder Designation: **SRB-7RS DD, SRB-7RS-TR DD, SRB-7FS DD**Type Classification: **Rupture Disk Device**Capacity Tests: **Sec. VIII Div. 1 at BS & B on October 16, 2002**Method of Establishing Relieving Capacity: **Resistance Factor, 3 Size, Krg**Certified Value: **1.9 Unitless**Test Medium: **Air/Gas**Certified Medium: **Air or gases (Krg)**Special Service: **None**Set Pressure Definition: **Burst Pressure**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
1 NPS		0.842 sq in			125 - 2000 psi		VIII Div. 1
1.5 NPS		1.77 sq in			85 - 1800 psi		VIII Div. 1
2 NPS		3.23 sq in			70 - 1800 psi		VIII Div. 1
3 NPS		6.44 sq in			70 - 1600 psi		VIII Div. 1
4 NPS		11.54 sq in			45 - 1050 psi		VIII Div. 1
6 NPS		26.44 sq in			35 - 650 psi		VIII Div. 1
8 NPS		47.07 sq in			35 - 400 psi		VIII Div. 1
10 NPS		73.94 sq in			35 - 250 psi		VIII Div. 1
12 NPS		99.06 sq in			35 - 150 psi		VIII Div. 1
14 NPS		131.5 sq in			35 - 130 psi		VIII Div. 1
16 NPS		172.1 sq in			25 - 110 psi		VIII Div. 1
18 NPS		219.5 sq in			25 - 90 psi		VIII Div. 1
20 NPS		270 sq in			20 - 90 psi		VIII Div. 1

BS & B Safety Systems, LLC (BSB)

NB#: 77701

Location: 7455 East 46th Street, Tulsa, OK 74145 United States

Acceptable Abbrev.: BSB

Certification
Number: **77701**Design Series
or catalog number **JRS DD**Holder Designation: **SRB-7RS DD, SRB-7RS-TR DD, SRB-7FS DD**Type Classification: **Rupture Disk Device**Capacity Tests: **Sec. VIII Div. 1 at BS & B on June 27, 2002**Method of Establishing Relieving Capacity: **Resistance Factor, 3 Size, Krg**Certified Value: **0.68 Unitless**Test Medium: **Air/Gas**Certified Medium: **Air or gases (Krg)**Special Service: **None**Set Pressure Definition: **Burst Pressure**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
1 NPS		0.86 sq in			22 - 180 psi		VIII Div. 1
1.5 NPS		1.89 sq in			20 - 150 psi		VIII Div. 1
2 NPS		3.35 sq in			18 - 120 psi		VIII Div. 1
3 NPS		6.53 sq in			16 - 80 psi		VIII Div. 1
4 NPS		11.8 sq in			14 - 70 psi		VIII Div. 1
6 NPS		25 sq in			12 - 50 psi		VIII Div. 1
8 NPS		42 sq in			12 - 42 psi		VIII Div. 1
10 NPS		68.6 sq in			12 - 36 psi		VIII Div. 1
12 NPS		102 sq in			12 - 33 psi		VIII Div. 1
14 NPS		121 sq in			9 - 30 psi		VIII Div. 1
16 NPS		156 sq in			7 - 28 psi		VIII Div. 1
18 NPS		198 sq in			6 - 26 psi		VIII Div. 1
20 NPS		246 sq in			5 - 24 psi		VIII Div. 1
24 NPS		357 sq in			5 - 22 psi		VIII Div. 1
30 NPS		592 sq in			5 - 14 psi		VIII Div. 1
36 NPS		868 sq in			5 - 14 psi		VIII Div. 1

BS & B Safety Systems, LLC (BSB)

NB#: 77712

location: 7455 East 46th Street, Tulsa, OK 74145 United States

Acceptable Abbrev.: BSB

Certification Number: **77712** Design Series or catalog number: **S90 DD**

Holder Designation: S90-7R DD, SRB-7RS DD, SRB-7RS-TR DD,SRB-7FS DD

Type Classification: Rupture Disk Device

Capacity Tests: Sec. VIII Div. 1 at BS & B on October 14, 2002

Method of Establishing Relieving Capacity: Resistance Factor, 3 Size, Krg

Certified Value: 1.13 Unitless

Test Medium: Air/Gas

Certified Medium: Air or gases (Krg)

Special Service: None

Set Pressure Definition: Burst Pressure

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
1 NPS		0.86 sq in			75 - 1000 psi		VIII Div. 1
1.5 NPS		2.03 sq in			54 - 1000 psi		VIII Div. 1
2 NPS		3.35 sq in			45 - 1000 psi		VIII Div. 1
3 NPS		7.39 sq in			36 - 1000 psi		VIII Div. 1
4 NPS		12.7 sq in			30 - 800 psi		VIII Div. 1
6 NPS		28.8 sq in			24 - 800 psi		VIII Div. 1
8 NPS		50 sq in			35 - 700 psi		VIII Div. 1
10 NPS		79.8 sq in			30 - 700 psi		VIII Div. 1
12 NPS		111 sq in			27 - 600 psi		VIII Div. 1
14 NPS		135 sq in			25 - 500 psi		VIII Div. 1
16 NPS		176 sq in			23 - 200 psi		VIII Div. 1
18 NPS		223 sq in			22 - 160 psi		VIII Div. 1
20 NPS		277 sq in			20 - 142 psi		VIII Div. 1
24 NPS		402 sq in			20 - 118 psi		VIII Div. 1
30 NPS		672 sq in			20 - 80 psi		VIII Div. 1

Certification Number: **77723** Design Series or catalog number: **SVI Assembly**

Holder Designation: SVI Assembly

Type Classification: Rupture Disk Device

Capacity Tests: Sec. VIII Div. 1 at BS & B on June 10, 2002

Method of Establishing Relieving Capacity: Resistance Factor, 3 Size, Krg

Certified Value: 11.35 Unitless

Test Medium: Air/Gas

Certified Medium: Air or gases (Krg)

Special Service: None

Set Pressure Definition: Burst Pressure

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
1.5 NPS		1.37 sq in			125 - 1000 psi		VIII Div. 1
2 NPS		2.26 sq in			90 - 1000 psi		VIII Div. 1
3 NPS		5.11 sq in			75 - 1000 psi		VIII Div. 1
4 NPS		8.66 sq in			60 - 800 psi		VIII Div. 1
6 NPS		20.92 sq in			50 - 700 psi		VIII Div. 1
8 NPS		37 sq in			40 - 700 psi		VIII Div. 1
10 NPS		61 sq in			35 - 700 psi		VIII Div. 1

BS & B Safety Systems, LLC (BSB)

NB#: 77734

location: 7455 East 46th Street, Tulsa, OK 74145 United States

Acceptable Abbrev.: BSB

Certification Number: **77734** Design Series or catalog number **DV, DRV, DSV, DRSV (liquids)**

Holder Designation: FA-7R,FA-1F - FA-9F, UA-2,3,5,6, FF-*

Type Classification: Rupture Disk Device

Capacity Tests: Sec. VIII Div. 1 at BS & B on June 11, 2002

Method of Establishing Relieving Capacity: Resistance Factor, 3 Size, Krl

Certified Value: 2.6 Unitless

Test Medium: Air/Gas & Liquid

Certified Medium: Liquid (Krl)

Special Service: None

Set Pressure Definition: Burst Pressure

Scope of Nominal Size and Set Pressure Ranges:

Inlet Size	Outlet Size	Flow Area	Orifice [designator] diameter	Lift	Set Pressure Range	Media	Code Section
1 NPS		0.57 sq in			44 - 2000 psi		VIII Div. 1
1.5 NPS		1.44 sq in			31 - 1400 psi		VIII Div. 1
2 NPS		2.24 sq in			15 - 1100 psi		VIII Div. 1
3 NPS		5.41 sq in			11 - 900 psi		VIII Div. 1
4 NPS		9.62 sq in			8 - 830 psi		VIII Div. 1
6 NPS		23.76 sq in			6 - 640 psi		VIII Div. 1
8 NPS		44.18 sq in			5 - 590 psi		VIII Div. 1
10 NPS		70.88 sq in			4 - 480 psi		VIII Div. 1
12 NPS		101.5 sq in			3 - 1000 psi		VIII Div. 1
14 NPS		130.3 sq in			3 - 350 psi		VIII Div. 1
16 NPS		176.7 sq in			3 - 300 psi		VIII Div. 1
18 NPS		202.3 sq in			3 - 270 psi		VIII Div. 1
20 NPS		280 sq in			3 - 240 psi		VIII Div. 1
24 NPS		380.1 sq in			3 - 200 psi		VIII Div. 1
28 NPS		584 sq in			3 - 170 psi	Air	VIII Div. 1
30 NPS		615.7 sq in			3 - 170 psi		VIII Div. 1
32 NPS		728 sq in			3 - 170 psi		VIII Div. 1
36 NPS		927 sq in			3 - 170 psi		VIII Div. 1
40 NPS		1149 sq in			3 - 170 psi		VIII Div. 1
42 NPS		1269 sq in			3 - 170 psi		VIII Div. 1
44 NPS		1395 sq in			3 - 170 psi		VIII Div. 1

Certification Number: **77778** Design Series or catalog number **Welded 1" FRB, w. 1/2" VCR connections**

Type Classification: Rupture Disk Device

Capacity Tests: Sec. VIII Div. 1 at BS & B on September 04, 2002

Method of Establishing Relieving Capacity: Resistance Factor, 1 Size, Krg

Certified Value: 16.95 Unitless

Test Medium: Air/Gas

Certified Medium: Air or gases (Krg)

Set Pressure Definition: Burst Pressure

Scope of Nominal Size and Set Pressure Ranges:

Inlet Size	Outlet Size	Flow Area	Orifice [designator] diameter	Lift	Set Pressure Range	Media	Code Section
0.5 NPS	.5 NPS	0.126 sq in			15 - 150 psi		VIII Div. 1

BS & B Safety Systems, LLC (BSB)

NB#: 77789

Location: 7455 East 46th Street, Tulsa, OK 74145 United States

Acceptable Abbrev.: BSB

Certification Number: **77789** Design Series or catalog number: **1/2" Welded FRB w. 3/4" Sanitary Connection (air/gas)**

Type Classification: Rupture Disk Device

Capacity Tests: Sec. VIII Div. 1 at BS & B on January 13, 2003

Method of Establishing Relieving Capacity: Resistance Factor, 1 Size, Krg

Certified Value: 5.9 Unitless

Test Medium: Air or gases (Krg)

Certified Medium: Air or gases (Krg)

Special Service: None

Set Pressure Definition: Burst Pressure

Scope of Nominal Size and Set Pressure Ranges:

Inlet Size	Outlet Size	Flow Area	Orifice [designator] diameter	Lift	Set Pressure Range	Media	Code Section
0.75 NPS		0.22 sq in			40 - 500 psi		VIII Div. 1

Certification Number: **77824** Design Series or catalog number: **MRB**

Type Classification: Rupture Disk Device

Capacity Tests: Sec. VIII Div. 1 at BS & B on May 05, 2004

Method of Establishing Relieving Capacity: Resistance Factor, 3 Size, Krg

Certified Value: 5.3 Unitless

Test Medium: Air/Gas

Certified Medium: Air or gases (Krg)

Set Pressure Definition: Burst Pressure

Scope of Nominal Size and Set Pressure Ranges:

Inlet Size	Outlet Size	Flow Area	Orifice [designator] diameter	Lift	Set Pressure Range	Media	Code Section
0.29 NPS		0.046 sq in			4300 - 55000 psi		VIII Div. 1
0.3 NPS		0.05 sq in			4300 - 55000 psi		VIII Div. 1
0.375 NPS		0.08 sq in			4300 - 55000 psi		VIII Div. 1
0.5 NPS		0.14 sq in			3800 - 54000 psi		VIII Div. 1
0.625 NPS		0.22 sq in			3500 - 52000 psi		VIII Div. 1
0.75 NPS		0.31 sq in			2900 - 49000 psi		VIII Div. 1
1 NPS		0.55 sq in			2500 - 43000 psi		VIII Div. 1
1.125 NPS		0.69 sq in			2500 - 43000 psi		VIII Div. 1
1.25 NPS		0.86 sq in			2500 - 43000 psi		VIII Div. 1
1.5 NPS		1.24 sq in			1900 - 35000 psi		VIII Div. 1
2 NPS		2.2 sq in			1800 - 29000 psi		VIII Div. 1
3 NPS		4.5 sq in			1500 - 21000 psi		VIII Div. 1
3.25 in		5.2 sq in			1500 - 21000 psi		VIII Div. 1
4 NPS		8.8 sq in			1500 - 16000 psi		VIII Div. 1
6 NPS		19.8 sq in			1000 - 14000 psi		VIII Div. 1
8 NPS		35.2 sq in			600 - 14000 psi		VIII Div. 1
10 NPS		55 sq in			400 - 12000 psi		VIII Div. 1

Certification Number: **77835** Design Series or catalog number: **FRB (welded cassette)**

Type Classification: Rupture Disk Device

Capacity Tests: Sec. VIII Div. 1 at BS & B on February 26, 2004

Method of Establishing Relieving Capacity: Resistance Factor, 1 Size, Krg

Certified Value: 6.8 Unitless

Test Medium: Air/Gas

Certified Medium: Air or gases (Krg)

Set Pressure Definition: Burst Pressure

Scope of Nominal Size and Set Pressure Ranges:

Inlet Size	Outlet Size	Flow Area	Orifice [designator] diameter	Lift	Set Pressure Range	Media	Code Section
0.375 NPS		0.09 sq in			60 - 400 psi		VIII Div. 1

BS & B Safety Systems, LLC (BSB)

NB#: 77846

Location: 7455 East 46th Street, Tulsa, OK 74145 United States

Acceptable Abbrev.: BSB

Certification
Number: **77846**Design Series
or catalog number **SKA**Holder Designation: **Integral one piece design**Type Classification: **Rupture Disk Device**Capacity Tests: **Sec. VIII Div. 1 at BS & B on October 13, 2004**Method of Establishing Relieving Capacity: **Flow Capacity, K**Certified Value: **0.878 Unitless**Test Medium: **Air/Gas**Certified Medium: **Air/Gas**Set Pressure Definition: **Burst Pressure**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
0.25 NPS		0.046 sq in	0.25 in		50 - 750 psi	Air	VIII Div. 1
0.375 NPS		0.085 sq in	0.375 in		50 - 750 psi		VIII Div. 1
0.5 NPS		0.182 sq in	0.5 in		35 - 700 psi		VIII Div. 1

Certification
Number: **77868**Design Series
or catalog number **X 90 Welded**Holder Designation: **Integral**Type Classification: **Rupture Disk Device**Capacity Tests: **Sec. VIII Div. 1 at BS & B on June 09, 2005**Method of Establishing Relieving Capacity: **Resistance Factor, 1 Size, Krg**Certified Value: **6.0 Unitless**Test Medium: **Air**Certified Medium: **Air or gases (Krg)**Set Pressure Definition: **Burst Pressure**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
0.75 NPS	.75 NPS	0.34 sq in			500 - 4000 psi		VIII Div. 1

BS & B Safety Systems, LLC (BSB)

NB#: 77879

Location: 7455 East 46th Street, Tulsa, OK 74145 United States

Acceptable Abbrev.: BSB

Certification
Number: **77879**Design Series
or catalog number **B, BR, BRR-LTF**Holder Designation: **Lo-to-Flo**Type Classification: **Rupture Disk Device**Capacity Tests: **Sec. VIII Div. 1 at BS & B on September 14, 2005**Method of Establishing Relieving Capacity: **Resistance Factor, 3 Size, Krgl**Certified Value: **8.0 Unitless**Test Medium: **Air/Gas & Liquid**Certified Medium: **Air or gases, and liquid (Krgl)**Set Pressure Definition: **Burst Pressure**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
0.5 NPS		0.189 sq in			80 - 30000 psi		VIII Div. 1
1 NPS		0.801 sq in			40 - 12000 psi		VIII Div. 1
1.5 NPS		1.76 sq in			26 - 6000 psi		VIII Div. 1
2 NPS		3.33 sq in			16 - 6000 psi		VIII Div. 1
3 NPS		6.514 sq in			12 - 6000 psi		VIII Div. 1
4 NPS		11.82 sq in			9 - 6000 psi		VIII Div. 1
6 NPS		28.84 sq in			7 - 3600 psi		VIII Div. 1
8 NPS		49.89 sq in			5 - 3600 psi		VIII Div. 1
10 NPS		78.85 sq in			4 - 1400 psi		VIII Div. 1
12 NPS		112.5 sq in			4 - 1000 psi		VIII Div. 1
14 NPS		137.9 sq in			3 - 750 psi		VIII Div. 1
16 NPS		182.7 sq in			3 - 500 psi		VIII Div. 1
18 NPS		233.7 sq in			3 - 475 psi		VIII Div. 1
20 NPS		291 sq in			2 - 450 psi		VIII Div. 1
24 NPS		424.6 sq in			2 - 230 psi		VIII Div. 1
30 NPS		672 sq in			2 - 184 psi		VIII Div. 1
32 NPS		767 sq in			2 - 181 psi		VIII Div. 1
36 NPS		975.9 sq in			6 - 160 psi		VIII Div. 1
40 NPS		1210 sq in			6 - 145 psi		VIII Div. 1
42 NPS		1336 sq in			6 - 138 psi		VIII Div. 1
44 NPS		1469 sq in			6 - 132 psi		VIII Div. 1

BS & B Safety Systems, LLC (BSB)

NB#: 77880

location: 7455 East 46th Street, Tulsa, OK 74145 United States

Acceptable Abbrev.: BSB

Certification
Number: **77880**Design Series
or catalog number **BV, BRV, BSV, BRSV-LTF**Holder Designation: **Lo-to-Flo**Type Classification: **Rupture Disk Device**Capacity Tests: **Sec. VIII Div. 1 at BS & B on September 14, 2005**Method of Establishing Relieving Capacity: **Resistance Factor, 1 Size, Krgl**Certified Value: **2.47 Unitless**Test Medium: **Air/Gas & Liquid**Certified Medium: **Air or gases, and liquid (Krgl)**Set Pressure Definition: **Burst Pressure**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
1 NPS		0.57 sq in			40 - 12000 psi		VIII Div. 1
1.5 NPS		1.44 sq in			26 - 6000 psi		VIII Div. 1
2 NPS		2.24 sq in			16 - 6000 psi		VIII Div. 1
3 NPS		5.41 sq in			12 - 6000 psi		VIII Div. 1
4 NPS		9.62 sq in			9 - 6000 psi		VIII Div. 1
6 NPS		23.76 sq in			7 - 3600 psi		VIII Div. 1
8 NPS		44.18 sq in			5 - 3600 psi		VIII Div. 1
10 NPS		70.88 sq in			4 - 1400 psi		VIII Div. 1
12 NPS		101.5 sq in			4 - 1000 psi		VIII Div. 1
14 NPS		130.3 sq in			3 - 750 psi		VIII Div. 1
16 NPS		176.7 sq in			3 - 500 psi		VIII Div. 1
18 NPS		202.4 sq in			3 - 475 psi		VIII Div. 1
20 NPS		280 sq in			2 - 450 psi		VIII Div. 1
24 NPS		380.1 sq in			2 - 230 psi		VIII Div. 1
30 NPS		615.8 sq in			2 - 184 psi		VIII Div. 1
32 NPS		728 sq in			6 - 181 psi		VIII Div. 1
36 NPS		927 sq in			6 - 160 psi		VIII Div. 1
40 NPS		1149 sq in			6 - 145 psi		VIII Div. 1
42 NPS		1269 sq in			6 - 138 psi		VIII Div. 1
44 NPS		1395 sq in			6 - 132 psi		VIII Div. 1

BS & B Safety Systems, LLC (BSB)

NB#: 77891

location: 7455 East 46th Street, Tulsa, OK 74145 United States

Acceptable Abbrev.: BSB

Certification Number: **77891** Design Series or catalog number **D, DR, DRR-LTF**

Holder Designation: **Lo-to-Flo**Type Classification: **Rupture Disk Device**Capacity Tests: **Sec. VIII Div. 1 at BS & B on September 13, 2005**Method of Establishing Relieving Capacity: **Resistance Factor, 1 Size, Krgl**Certified Value: **2.3 Unitless**Test Medium: **Air/Gas & Liquid**Certified Medium: **Air or gases, and liquid (Krgl)**Set Pressure Definition: **Burst Pressure**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
1 NPS		0.801 sq in			44 - 2000 psi		VIII Div. 1
1.5 NPS		1.76 sq in			31 - 1400 psi		VIII Div. 1
2 NPS		3.33 sq in			15 - 1100 psi		VIII Div. 1
3 NPS		6.514 sq in			11 - 900 psi		VIII Div. 1
4 NPS		11.82 sq in			8 - 830 psi		VIII Div. 1
6 NPS		28.84 sq in			6 - 640 psi		VIII Div. 1
8 NPS		48.89 sq in			5 - 590 psi		VIII Div. 1
10 NPS		78.85 sq in			4 - 480 psi		VIII Div. 1
12 NPS		112.5 sq in			3 - 400 psi		VIII Div. 1
14 NPS		137.9 sq in			3 - 350 psi		VIII Div. 1
16 NPS		182.7 sq in			3 - 300 psi		VIII Div. 1
18 NPS		233.7 sq in			3 - 270 psi		VIII Div. 1
20 NPS		291 sq in			3 - 240 psi		VIII
24 NPS		424.6 sq in			3 - 200 psi		VIII Div. 1
30 NPS		672 sq in			3 - 170 psi		VIII Div. 1
32 NPS		767 sq in			3 - 170 psi		VIII Div. 1
36 NPS		975.9 sq in			3 - 170 psi		VIII Div. 1
40 NPS		1210 sq in			3 - 170 psi		VIII Div. 1
42 NPS		1336 sq in			3 - 170 psi		VIII Div. 1

Certification Number: **77925** Design Series or catalog number **FVA**

Holder Designation: **FVA**Type Classification: **Rupture Disk Device**Capacity Tests: **Sec. VIII Div. 1 at BS & B on October 07, 2008**Method of Establishing Relieving Capacity: **Flow Capacity, K**Certified Value: **.840 Unitless**Certification Provisions: **Code Case 2395**Test Medium: **Air/Gas**Certified Medium: **Air/Gas**Set Pressure Definition: **Burst Pressure**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
0.25 NPS		0.049 sq in			115 - 1800 psi	Air	VIII Div. 1
0.375 NPS		0.11 sq in			115 - 1800 psi	Air	VIII Div. 1
0.5 NPS		0.196 sq in			115 - 1800 psi	Air	VIII Div. 1
0.75 NPS		0.442 sq in			100 - 1000 psi	Air	VIII Div. 1
1 NPS		0.785 sq in			90 - 1000 psi	Air	VIII Div. 1
1.5 NPS		1.77 sq in			85 - 1000 psi	Air	VIII Div. 1

BS & B Safety Systems, LLC (BSB)

NB#: 77936

Location: 7455 East 46th Street, Tulsa, OK 74145 United States

Acceptable Abbrev.: BSB

Certification Number: **77936** Design Series or catalog number: **Welded FRB w/ 3/4" VCR Connections**

Type Classification: Rupture Disk Device

Capacity Tests: Sec. VIII Div. 1 at BS & B on March 16, 2011

Method of Establishing Relieving Capacity: Resistance Factor, 1 Size, Krg

Certified Value: 5.0 Unitless

Test Medium: Air or gases (Krg)

Certified Medium: Air or gases (Krg)

Set Pressure Definition: Burst Pressure

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
0.75 NPS		0.2 sq in			15 - 150 psi		VIII Div. 1

Certification Number: **78151** Design Series or catalog number: **Scored B -LTF, Scd B-LTF, XB-LTF**

Holder Designation: Lo-To-Flo

Type Classification: Rupture Disk Device

Capacity Tests: Sec. VIII Div. 1 at BS & B on October 18, 2014

Method of Establishing Relieving Capacity: Resistance Factor, 3 Size, Krgl

Certified Value: 4.77 Unitless

Test Medium: Air/Gas & Liquid

Certified Medium: Air or gases, and liquid (Krgl)

Special Service: None

Set Pressure Definition: Burst Pressure

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
1 NPS		0.8 sq in			250 - 6000 psi		VIII Div. 1
1.5 NPS		1.76 sq in			200 - 4000 psi		VIII Div. 1
2 NPS		3.33 sq in			175 - 3500 psi		VIII Div. 1
3 NPS		6.51 sq in			150 - 3000 psi		VIII Div. 1
4 NPS		11.82 sq in			135 - 2500 psi		VIII Div. 1
6 NPS		28.8 sq in			125 - 2000 psi		VIII Div. 1
8 NPS		49.9 sq in			110 - 1750 psi		VIII Div. 1
10 NPS		78.9 sq in			100 - 1500 psi		VIII Div. 1
12 NPS		112.5 sq in			90 - 1250 psi		VIII Div. 1
14 NPS		137.9 sq in			80 - 1000 psi		VIII Div. 1
16 NPS		182.7 sq in			75 - 800 psi		VIII Div. 1
18 NPS		233.7 sq in			70 - 600 psi		VIII Div. 1
20 NPS		291 sq in			65 - 500 psi		VIII Div. 1
24 NPS		424.6 sq in			60 - 250 psi		VIII Div. 1

BS & B Safety Systems, LLC (BSB)

NB#: 78162

Location: 7455 East 46th Street, Tulsa, OK 74145 United States

Acceptable Abbrev.: BSB

Certification
Number: **78162**Design Series
or catalog number **CSI (liquid)**Holder Designation: **CSR-7RS, CSR-7FS**Type Classification: **Rupture Disk Device**Capacity Tests: **Sec. VIII Div. 1 at BS & B on June 23, 2015**Method of Establishing Relieving Capacity: **Resistance Factor, 3 Size, Krl**Certified Value: **3.09 Unitless**Test Medium: **Air/Gas & Liquid**Certified Medium: **Liquid (Krl)**Set Pressure Definition: **Burst Pressure**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
1 NPS	1 NPS	0.86 sq in			70 - 800 psi		VIII Div. 1
1.5 NPS	1.5 NPS	1.89 sq in			50 - 800 psi		VIII Div. 1
2 NPS	2 NPS	3.36 sq in			50 - 800 psi		VIII Div. 1
3 NPS	3 NPS	7.29 sq in			45 - 800 psi		VIII Div. 1
4 NPS	4 NPS	11.2 sq in			45 - 800 psi		VIII Div. 1
6 NPS	6 NPS	22.65 sq in			30 - 800 psi		VIII Div. 1
8 NPS	8 NPS	42.72 sq in			30 - 800 psi		VIII Div. 1

Certification
Number: **78173**Design Series
or catalog number **PLD**Holder Designation: **FA-*, FF-*, UA-2, 3, 4, 5, 6**Type Classification: **Rupture Disk Device**Capacity Tests: **Sec. VIII Div. 1 at BS & B on August 20, 2015**Method of Establishing Relieving Capacity: **Resistance Factor, 3 Size, Krgl**Certified Value: **4.2 Unitless**Test Medium: **Air/Gas**Certified Medium: **Air or gases, and liquid (Krgl)**Set Pressure Definition: **Burst Pressure**Blowdown: **(none)**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
1 NPS		0.69			44 - 2000 psi		VIII Div. 1
1.5 NPS		1.62			31 - 1400 psi		VIII Div. 1
2 NPS		2.95			15 - 1100 psi		VIII Div. 1
3 NPS		6.49			11 - 900 psi		VIII Div. 1
4 NPS		11			8 - 830 psi		VIII Div. 1
6 NPS		25.9			6 - 640 psi		VIII Div. 1
8 NPS		47.1			5 - 590 psi		VIII Div. 1
10 NPS		74.6			4 - 480 psi		VIII Div. 1
12 NPS		106			3 - 400 psi		VIII Div. 1
14 NPS		135			3 - 350 psi		VIII Div. 1
16 NPS		176			3 - 300 psi		VIII Div. 1
18 NPS		223			3 - 270 psi		VIII Div. 1
20 NPS		277			3 - 240 psi		VIII Div. 1
24 NPS		397			3 - 200 psi		VIII Div. 1
28 NPS		584			3 - 180 psi		VIII Div. 1
30 NPS		661			3 - 170 psi		VIII Div. 1
36 NPS		907			3 - 170 psi		VIII Div. 1
40 NPS		1120			3 - 170 psi		VIII Div. 1
42 NPS		1234			3 - 170 psi		VIII Div. 1
44 NPS		1355			3 - 170 psi		VIII Div. 1

BS & B Safety Systems, LLC (BSB)

NB#: 78184

Location: 7455 East 46th Street, Tulsa, OK 74145 United States

Acceptable Abbrev.: BSB

Certification
Number: **78184**Design Series
or catalog number **PLDV**

Holder Designation: FA-*, FF-*, UA-2, -3, -5, -6

Type Classification: Rupture Disk Device

Capacity Tests: Sec. VIII Div. 1 at BS & B on August 20, 2015

Method of Establishing Relieving Capacity: Resistance Factor, 3 Size, Krgl

Certified Value: 6.0 Unitless

Test Medium: Air/Gas

Certified Medium: Air or gases, and liquid (Krgl)

Set Pressure Definition: Burst Pressure

Blowdown: (none)

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
1 NPS		0.57 sq in			230 - 1000 psi		VIII Div. 1
1.5 NPS		1.44 sq in			105 - 700 psi		VIII Div. 1
2 NPS		2.24 sq in			75 - 555 psi		VIII Div. 1
3 NPS		5.41 sq in			45 - 450 psi		VIII Div. 1
4 NPS		9.62 sq in			35 - 415 psi		VIII Div. 1
6 NPS		23.76 sq in			45 - 320 psi		VIII Div. 1
8 NPS		44.18 sq in			55 - 295 psi		VIII Div. 1
10 NPS		70.88 sq in			35 - 240 psi		VIII Div. 1
12 NPS		101.5 sq in			30 - 200 psi		VIII Div. 1
14 NPS		130.3 sq in			30 - 170 psi		VIII Div. 1
16 NPS		176.7 sq in			25 - 150 psi		VIII Div. 1
18 NPS		202.3 sq in			25 - 150 psi		VIII Div. 1
20 NPS		270 sq in			25 - 150 psi		VIII Div. 1
24 NPS		375 sq in			25 - 150 psi		VIII Div. 1
28 NPS		575 sq in			15 - 150 psi		VIII Div. 1
30 NPS		650 sq in			15 - 150 psi		VIII Div. 1
36 NPS		900 sq in			15 - 150 psi		VIII Div. 1
40 NPS		1100 sq in			15 - 150 psi		VIII Div. 1
42 NPS		1200 sq in			15 - 150 psi		VIII Div. 1
44 NPS		1300 sq in			15 - 150 psi		VIII Div. 1

Certification
Number: **78195**Design Series
or catalog number **GCR-S, SE, SM, SS, SES, SMS, SW, N, NS (liquids)**

Holder Designation: GR-C, FM-C (not req'd for SM)

Type Classification: Rupture Disk Device

Capacity Tests: Sec. VIII Div. 1 at BS & B on October 05, 2015

Method of Establishing Relieving Capacity: Resistance Factor, 3 Size, Krl

Certified Value: 2.75 Unitless

Test Medium: Air/Gas & Liquid

Certified Medium: Liquid (Krl)

Set Pressure Definition: Burst Pressure

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
1.5 NPS		1.5 sq in			10 - 300 psi		VIII Div. 1
3 NPS		5.29 sq in			10 - 175 psi		VIII Div. 1
4 NPS		9.78 sq in			10 - 150 psi		VIII Div. 1
6 NPS		22.5 sq in			10 - 75 psi		VIII Div. 1

BS & B Safety Systems, LLC (BSB)

NB#: 78207

location: 7455 East 46th Street, Tulsa, OK 74145 United States

Acceptable Abbrev.: BSB

Certification Number: **78207** Design Series or catalog number: **GCR-S,SE,SM,SS,SES,SMS, SW, N, NS (2" liquids)**

Holder Designation: GR-C, FM-C, not req'd for -SM

Type Classification: Rupture Disk Device

Capacity Tests: Sec. VIII Div. 1 at BS & B on June 25, 2015

Method of Establishing Relieving Capacity: Resistance Factor, 1 Size, Krl

Certified Value: 1.42 Unitless

Test Medium: Air or gases, and liquid (Krgl)

Certified Medium: Liquid (Krl)

Special Service: None

Set Pressure Definition: Burst Pressure

Scope of Nominal Size and Set Pressure Ranges:

Inlet Size	Outlet Size	Flow Area	Orifice [designator] diameter	Lift	Set Pressure Range	Media	Code Section
2 NPS		2.7 sq in			10 - 300 psi	Water	VIII Div. 1

Certification Number: **78285** Design Series or catalog number: **AV-E, AV-EL**

Holder Designation: AV7R, AV-1, -2, -3, -4, -5, -6, -7, -8, -9

Type Classification: Rupture Disk Device

Capacity Tests: Sec. VIII Div. 1 at BS & B on December 02, 2016

Method of Establishing Relieving Capacity: Resistance Factor, 3 Size, Krgl

Certified Value: 1.2 Unitless

Test Medium: Air/Gas & Liquid

Certified Medium: Air or gases, and liquid (Krgl)

Set Pressure Definition: Burst Pressure

Scope of Nominal Size and Set Pressure Ranges:

Inlet Size	Outlet Size	Flow Area	Orifice [designator] diameter	Lift	Set Pressure Range	Media	Code Section
1 NPS		0.864 sq in			18 - 150 psi		VIII Div. 1
1.25 NPS		1.4 sq in			15 - 150 psi		VIII Div. 1
1.5 NPS		2.036 sq in			15 - 150 psi		VIII Div. 1
2 NPS		3.356 sq in			12 - 150 psi		VIII Div. 1
2.5 NPS		4.787 sq in			10 - 150 psi		VIII Div. 1
3 NPS		7.392 sq in			8 - 150 psi		VIII Div. 1
4 NPS		12.73 sq in			4 - 150 psi		VIII Div. 1
5 NPS		20 sq in			3 - 100 psi		VIII Div. 1
6 NPS		28.89 sq in			2 - 100 psi		VIII Div. 1
8 NPS		50.02 sq in			2 - 100 psi		VIII Div. 1
10 NPS		78.85 sq in			1 - 60 psi		VIII Div. 1
12 NPS		113.1 sq in			1 - 60 psi		VIII Div. 1
14 NPS		137.9 sq in			1 - 60 psi		VIII Div. 1
16 NPS		182.7 sq in			1 - 60 psi		VIII Div. 1
18 NPS		233.7 sq in			.8 - 60 psi		VIII Div. 1
20 NPS		291 sq in			.6 - 60 psi		VIII Div. 1
22 NPS		354.7 sq in			.5 - 60 psi		VIII Div. 1
24 NPS		424.6 sq in			.5 - 60 psi		VIII Div. 1
26 NPS		500.7 sq in			.5 - 40 psi		VIII Div. 1
28 NPS		583.2 sq in			.5 - 40 psi		VIII Div. 1
30 NPS		672 sq in			.5 - 40 psi		VIII Div. 1
32 NPS		767 sq in			.35 - 40 psi		VIII Div. 1
34 NPS		868.3 sq in			.35 - 40 psi		VIII Div. 1
36 NPS		975.9 sq in			.25 - 40 psi		VIII Div. 1
38 NPS		1090 sq in			.25 - 40 psi		VIII Div. 1
40 NPS		1210 sq in			.25 - 40 psi		VIII Div. 1
42 NPS		1336 sq in			.25 - 40 psi		VIII Div. 1
44 NPS		1469 sq in			.25 - 40 psi		VIII Div. 1
46 NPS		1608 sq in			.25 - 40 psi		VIII Div. 1
48 NPS		1753 sq in			.25 - 40 psi		VIII Div. 1

BS & B Safety Systems, LLC (BSB)

NB#: 78364

Location: 7455 East 46th Street, Tulsa, OK 74145 United States

Acceptable Abbrev.: BSB

Certification
Number: **78364**Design Series
or catalog number **AVV**Holder Designation: **AV-75 (optional)**Type Classification: **Rupture Disk Device**Capacity Tests: **Sec. VIII Div. 1 at BS & B on March 17, 2017**Method of Establishing Relieving Capacity: **Resistance Factor, 3 Size, Krgl**Certified Value: **10.5 Unitless**Test Medium: **Steam, Air/Gas & Liquid**Certified Medium: **Steam, Air/Gas & Liquid**Special Service: **None**Set Pressure Definition: **Burst Pressure**Blowdown: **(none)**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
1 in		0.4 sq in			10 - 150 psi		VIII Div. 1
1.5 in		0.95 sq in			7 - 150 psi		VIII Div. 1
2 in		1.6 sq in			5 - 150 psi		VIII Div. 1
3 in		4 sq in			4 - 150 psi		VIII Div. 1
4 in		8 sq in			2 - 150 psi		VIII Div. 1
6 in		16.5 sq in			1 - 100 psi		VIII Div. 1
8 in		35.75 sq in			1 - 100 psi		VIII Div. 1
10 in		45.5 sq in			0.6 - 60 psi		VIII Div. 1
12 in		62.75 sq in			0.6 - 60 psi		VIII Div. 1
14 in		74.5 sq in			0.6 - 60 psi		VIII Div. 1
16 in		111 sq in			0.6 - 60 psi		VIII Div. 1
18 in		158 sq in			0.5 - 60 psi		VIII Div. 1
20 in		195 sq in			0.5 - 60 psi		VIII Div. 1
24 in		280 sq in			0.5 - 60 psi		VIII Div. 1
28 in		382 sq in			0.5 - 60 psi		VIII Div. 1
30 in		425 sq in			0.5 - 60 psi		VIII Div. 1
32 in		500 sq in			0.35 - 40 psi		VIII Div. 1
36 in		630 sq in			0.25 - 40 psi		VIII Div. 1
40 in		780 sq in			0.25 - 40 psi		VIII Div. 1
44 in		945 sq in			0.25 - 40 psi		VIII Div. 1
48 in		1125 sq in			0.25 - 40 psi		VIII Div. 1

Certification
Number: **78375**Design Series
or catalog number **Welded QRB**Holder Designation: **Integral**Type Classification: **Rupture Disk Device**Capacity Tests: **Control Script failed for control txtCoc , Source=**Method of Establishing Relieving Capacity: **Flow Capacity, K**Certified Value: **0.85 Unitless**Test Medium: **Air**Certified Medium: **Air/Gas**Set Pressure Definition: **Burst Pressure**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
0.25 NPS		0.049 sq in			800 - 16000 psi		VIII Div. 1
0.375 NPS		0.11 sq in			800 - 14000 psi		VIII Div. 1
0.5 NPS		0.19 sq in			500 - 10500 psi		VIII Div. 1
0.75 NPS		0.44 sq in			350 - 3000 psi		VIII Div. 1

BS & B Safety Systems, LLC (BSB)

NB#: 84046

location: 7455 East 46th Street, Tulsa, OK 74145 United States

Acceptable Abbrev.: BSB

Certification
Number: **84046**Design Series
or catalog number **Scored B, SCD B, XB**Holder Designation: **NF-7R, NF-7RS, NF-7FS, FF-*, FA-***Type Classification: **Rupture Disk Device**Capacity Tests: **Sec. VIII Div. 1 at BS & B on February 13, 2013**Method of Establishing Relieving Capacity: **Resistance Factor, 3 Size, Krgl**Certified Value: **0.40 Unitless**Test Medium: **Air or gases, and liquid (Krgl)**Certified Medium: **Air or gases, and liquid (Krgl)**Set Pressure Definition: **Burst Pressure**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
1 NPS	1 NPS	0.86 sq in			250 - 6000 psi	Air	VIII Div. 1
1.5 NPS	1.5 NPS	2.04 sq in			200 - 6000 psi	Air	VIII Div. 1
2 NPS	2 NPS	3.35 sq in			175 - 6000 psi	Air	VIII Div. 1
3 NPS	3 NPS	7.4 sq in			150 - 6000 psi	Air	VIII Div. 1
4 NPS	4 NPS	12.73 sq in			135 - 6000 psi	Air	VIII Div. 1
6 NPS	6 NPS	28.99 sq in			125 - 6000 psi	Air	VIII Div. 1
8 NPS	8 NPS	50 sq in			110 - 1750 psi	Air	VIII Div. 1
10 NPS	10 NPS	78.9 sq in			100 - 1500 psi	Air	VIII Div. 1
12 NPS	12 NPS	113.1 sq in			90 - 1250 psi	Air	VIII Div. 1
14 NPS	14 NPS	137.9 sq in			80 - 1000 psi	Air	VIII Div. 1
16 NPS	16 NPS	182.6 sq in			75 - 800 psi	Air	VIII Div. 1
18 NPS	18 NPS	233.7 sq in			70 - 600 psi	Air	VIII Div. 1
20 NPS	20 NPS	291.1 sq in			65 - 500 psi	Air	VIII Div. 1
24 NPS	24 NPS	424.6 sq in			60 - 250 psi	Air	VIII Div. 1

location: Raheen Business Park, Limerick Ireland

BS & B Safety Systems, Ltd. (BSI)

location: Raheen Business Park, Limerick Ireland

Certification
Number: **77149**Design Series
or catalog number **XT**Holder Designation: **NX-7R, NF-7R, NF-7RS, TL-7R, TLP-7R**Type Classification: **Rupture Disk Device**Capacity Tests: **Sec. VIII Div. 1 at BS & B on August 01, 2006**Method of Establishing Relieving Capacity: **Resistance Factor, 3 Size, Krg**Certified Value: **0.5 Unitless**Test Medium: **Air**Certified Medium: **Air or gases (Krg)**Special Service: **None**Set Pressure Definition: **Burst Pressure**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
1 in	in	0.86 sq in			80 - 1450 psi		VIII Div. 1
1.5 in	in	2.03 sq in			55 - 1450 psi		VIII Div. 1
2 in	in	3.36 sq in			45 - 1450 psi		VIII Div. 1
3 in	in	7.39 sq in			45 - 1300 psi		VIII Div. 1
4 in	in	12.7 sq in			40 - 1150 psi		VIII Div. 1
6 in	in	28.8 sq in			40 - 1040 psi		VIII Div. 1
8 in	in	50 sq in			40 - 960 psi		VIII Div. 1
10 in	in	78.8 sq in			60 - 840 psi		VIII Div. 1
12 in	in	111 sq in			60 - 720 psi		VIII Div. 1

Certification
Number: **77161**Design Series
or catalog number **SKR, SKR Welded Assembly**Holder Designation: **SRB-7RS, SRB-7RS-TR, S90-7R, SRB-7FS, SRI-7RS**Type Classification: **Rupture Disk Device**Capacity Tests: **Sec. VIII Div. 1 at National Board T L (Worthington) on April 24, 1999**Method of Establishing Relieving Capacity: **Resistance Factor, 3 Size, Krg**Certified Value: **.37 Unitless**Test Medium: **Air/Gas**Certified Medium: **Air or gases (Krg)**Set Pressure Definition: **Burst Pressure**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
0.75 NPS		0.59 sq in			55 - 500 psi	Air	VIII Div. 1
1 NPS		0.86 sq in			55 - 500 psi		VIII Div. 1
1.5 NPS		2.04 sq in			40 - 500 psi		VIII Div. 1
2 NPS		3.36 sq in			25 - 500 psi		VIII Div. 1
3 NPS		7.39 sq in			20 - 500 psi		VIII Div. 1
4 NPS		12.74 sq in			16 - 500 psi		VIII Div. 1
6 NPS		28.89 sq in			15 - 261 psi		VIII Div. 1
8 NPS		50 sq in			15 - 200 psi		VIII Div. 1
10 NPS		78.86 sq in			15 - 150 psi		VIII Div. 1
12 NPS		111.87 sq in			9 - 110 psi		VIII Div. 1

Location: Raheen Business Park, Limerick Ireland

Certification
Number: **77183**Design Series
or catalog number **CL**Holder Designation: **NX7R, NXV7R**Type Classification: **Rupture Disk Device**Capacity Tests: **Sec. VIII Div. 1 at BS & B on July 21, 2006**Method of Establishing Relieving Capacity: **Resistance Factor, 3 Size, Krg**Certified Value: **0.75 Unitless**Test Medium: **Air/Gas & Liquid**Certified Medium: **Liquid (Krl)**Special Service: **None**Set Pressure Definition: **Burst Pressure**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
1 in	in	0.86 sq in			14 - 188 psi	Water	VIII Div. 1
1.5 in	in	2.03 sq in			12 - 135 psi		VIII Div. 1
2 in	in	3.35 sq in			7 - 113 psi		VIII Div. 1
3 in	in	7.39 sq in			5 - 90 psi		VIII Div. 1
4 in	in	12.7 sq in			5 - 75 psi		VIII Div. 1
6 in	in	28.8 sq in			3 - 60 psi		VIII Div. 1
8 in	in	50 sq in			3 - 53 psi		VIII Div. 1

Certification
Number: **77329**Design Series
or catalog number **SKR, SKR Welded Assembly (Liquids)**Holder Designation: **S90-7R, SRB-7RS, SRB-7RS-TR, SRB-7FS, SRI-7RS**Type Classification: **Rupture Disk Device**Capacity Tests: **Sec. VIII Div. 1 at National Board T L (Worthington) on April 30, 1999**Method of Establishing Relieving Capacity: **Resistance Factor, 3 Size, Krl**Certified Value: **1.9 Unitless**Test Medium: **Air/Gas**Certified Medium: **Liquid (Krl)**Set Pressure Definition: **Burst Pressure**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
0.75 NPS		0.59 sq in			55 - 500 psi	Water	VIII Div. 1
1 NPS		0.86 sq in			55 - 500 psi		VIII Div. 1
1.5 NPS		2.04 sq in			40 - 500 psi		VIII Div. 1
2 NPS		3.36 sq in			25 - 500 psi		VIII Div. 1
3 NPS		7.39 sq in			20 - 500 psi		VIII Div. 1
4 NPS		12.74 sq in			16 - 500 psi		VIII Div. 1
6 NPS		28.89 sq in			15 - 261 psi		VIII Div. 1
8 NPS		50 sq in			15 - 200 psi		VIII Div. 1
10 NPS		78.86 sq in			15 - 150 psi		VIII Div. 1
12 NPS		111.87 sq in			9 - 110 psi		VIII Div. 1

Location: Raheen Business Park, Limerick Ireland

Certification
Number: **77464**Design Series
or catalog number **SIGMA, SIGMA EXL, UBR**Holder Designation: **SRB-7RS, SRB-7RS-TR, SRB-7FS, SR-7R, SRI-7RS**Type Classification: **Rupture Disk Device**Capacity Tests: **Sec. VIII Div. 1 at BS & B on July 28, 2000**Method of Establishing Relieving Capacity: **Resistance Factor, 3 Size, Krg**Certified Value: **0.38 Unitless**Test Medium: **Air/Gas**Certified Medium: **Air or gases (Krg)**Set Pressure Definition: **Burst Pressure**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
1 NPS	1 NPS	0.86 sq in			30 - 500 psi		VIII Div. 1
1.5 NPS	1.5 NPS	1.93 sq in			25 - 450 psi	Air	VIII
2 NPS	2 NPS	3.36 sq in			25 - 400 psi	Air	VIII
3 NPS	3 NPS	7.39 sq in			20 - 400 psi	Air	VIII
4 NPS	4 NPS	12.74 sq in			16 - 400 psi	Air	VIII
6 NPS	6 NPS	28.89 sq in			15 - 225 psi	Air	VIII
8 NPS	8 NPS	50 sq in			15 - 125 psi	Air	VIII
10	10 NPS	78.86 sq in			15 - 100 psi	Air	VIII Div. 1

Certification
Number: **77475**Design Series
or catalog number **SIGMA, SIGMA EXL, UBR (liquid)**Holder Designation: **SRB-7RS, SRB-7RS-TR, SRB-7FS, SRB-7R, SRI-7RS**Type Classification: **Rupture Disk Device**Capacity Tests: **Sec. VIII Div. 1 at BS & B on July 28, 2000**Method of Establishing Relieving Capacity: **Resistance Factor, 3 Size, Krl**Certified Value: **1.25 Unitless**Test Medium: **Air/Gas & Liquid**Certified Medium: **Liquid (Krl)**Set Pressure Definition: **Burst Pressure**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
1 NPS	1 NPS	0.86 sq in			30 - 500 psi		VIII Div. 1
1.5 NPS	1.5 NPS	1.76 sq in			25 - 750 psi	Water	VIII
2 NPS	2 NPS	3.36 sq in			25 - 400 psi	Water	VIII
3 NPS	3 NPS	6.33 sq in			20 - 400 psi	Water	VIII
4 NPS	4 NPS	10.81 sq in			16 - 400 psi	Water	VIII
6 NPS	6 NPS	20.89 sq in			15 - 225 psi	Water	VIII
8 NPS	8 NPS	50 sq in			15 - 125 psi	Water	VIII
10 NPS	10 NPS	78.86 sq in			15 - 100 psi	Water	VIII Div. 1

Certification
Number: **77509**Design Series
or catalog number **Skr-U 1/2"**Holder Designation: **UR-2, UR-6**Type Classification: **Rupture Disk Device**Capacity Tests: **Sec. VIII Div. 1 at BS & B on September 15, 2000**Method of Establishing Relieving Capacity: **Resistance Factor, 1 Size, Krg**Certified Value: **0.85 Unitless**Test Medium: **Air/Gas**Certified Medium: **Air or gases (Krg)**Set Pressure Definition: **Burst Pressure**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
0.5 NPS	.5 NPS	0.304 sq in			55 - 500 psi		VIII Div. 1

Location: Raheen Business Park, Limerick Ireland

Certification
Number: **77510**Design Series
or catalog number **SKr-U 3/4"**Holder Designation: **UR-2, UR-6**Type Classification: **Rupture Disk Device**Capacity Tests: **Sec. VIII Div. 1 at BS & B on July 26, 2000**Method of Establishing Relieving Capacity: **Resistance Factor, 1 Size, Krg**Certified Value: **0.73 Unitless**Test Medium: **Air/Gas**Certified Medium: **Air or gases (Krg)**Set Pressure Definition: **Burst Pressure**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
0.75 NPS	.75 NPS	0.533 sq in			55 - 500 psi		VIII Div. 1

Certification
Number: **77521**Design Series
or catalog number **SKr-U 1"**Holder Designation: **UR-2, UR-6**Type Classification: **Rupture Disk Device**Capacity Tests: **Sec. VIII Div. 1 at BS & B on July 24, 2000**Method of Establishing Relieving Capacity: **Resistance Factor, 1 Size, Krg**Certified Value: **1.25 Unitless**Test Medium: **Air/Gas**Certified Medium: **Air or gases (Krg)**Set Pressure Definition: **Burst Pressure**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
1 NPS		0.608 sq in			55 - 500 psi		VIII Div. 1

Certification
Number: **77543**Design Series
or catalog number **SKr-U 3/4" Liquid**Holder Designation: **UR-2, UR-6**Type Classification: **Rupture Disk Device**Capacity Tests: **Sec. VIII Div. 1 at BS & B on July 26, 2000**Method of Establishing Relieving Capacity: **Resistance Factor, 1 Size, Krl**Certified Value: **1.10 Unitless**Test Medium: **Air/Gas & Liquid**Certified Medium: **Liquid (Krl)**Set Pressure Definition: **Burst Pressure**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
0.75 NPS	.75 NPS	0.533 sq in			55 - 500 psi		VIII Div. 1

Certification
Number: **77554**Design Series
or catalog number **SKr-U 1" Liquid**Holder Designation: **UR-2, UR-6**Type Classification: **Rupture Disk Device**Capacity Tests: **Sec. VIII Div. 1 at BS & B on July 24, 2000**Method of Establishing Relieving Capacity: **Resistance Factor, 1 Size, Krl**Certified Value: **2.20 Unitless**Test Medium: **Air/Gas & Liquid**Certified Medium: **Liquid (Krl)**Set Pressure Definition: **Burst Pressure**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
1 NPS		0.608 sq in			55 - 500 psi		VIII Div. 1

Location: Raheen Business Park, Limerick Ireland

Certification Number: **77655** Design Series or catalog number: **MVB Cassette**

Type Classification: **Rupture Disk Device**Capacity Tests: **Sec. VIII Div. 1 at BS & B on July 11, 2001**Method of Establishing Relieving Capacity: **Resistance Factor, 1 Size, Krg**Certified Value: **.232 Unitless**Test Medium: **Air/Gas**Certified Medium: **Air or gases (Krg)**Set Pressure Definition: **Burst Pressure**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
3 NPS		7.39 sq in			80 - 400 psi	Air	VIII Div. 1

Certification Number: **77745** Design Series or catalog number: **LPS, LPS Welded Assembly**

Holder Designation: **SRB-7RS, SRB-7FS, SR-7R, SMR-7R, SRI-7RS**Type Classification: **Rupture Disk Device**Capacity Tests: **Sec. VIII Div. 1 at BS & B on August 20, 2002**Method of Establishing Relieving Capacity: **Resistance Factor, 3 Size, Krg**Certified Value: **0.79 Unitless**Test Medium: **Air or gases (Krg)**Certified Medium: **Air or gases (Krg)**Set Pressure Definition: **Burst Pressure**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
0.75 NPS		0.59 sq in			15 - 70 psi		VIII Div. 1
1 NPS		0.86 sq in			15 - 70 psi		VIII Div. 1
1.5 NPS		1.93 sq in			6 - 55 psi		VIII Div. 1
2 NPS		3.36 sq in			5 - 40 psi		VIII Div. 1
3 NPS		7.39 sq in			5 - 50 psi		VIII Div. 1
4 NPS		12.74 sq in			5 - 30 psi		VIII Div. 1
6 NPS		28.89 sq in			5 - 25 psi		VIII Div. 1
8 NPS		50 sq in			5 - 25 psi		VIII Div. 1
10 NPS		78.86 sq in			5 - 25 psi		VIII Div. 1
12 NPS		111.87 sq in			5 - 25 psi	Air	VIII Div. 1

Location: Raheen Business Park, Limerick Ireland

Certification Number: **77756** Design Series or catalog number: **LPS, LPS Welded Assembly (liquid)**

Holder Designation: **SRB-7RS, SRB-7FS, SR-7R, SMR-7R, SRI-7RS**Type Classification: **Rupture Disk Device**Capacity Tests: **Sec. VIII Div. 1 at BS & B on August 20, 2002**Method of Establishing Relieving Capacity: **Resistance Factor, 3 Size, Krl**Certified Value: **0.86 Unitless**Test Medium: **Liquid (Krl)**Certified Medium: **Liquid (Krl)**Set Pressure Definition: **Burst Pressure**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
0.75 NPS	0.75 NPS	0.59 sq in			15 - 70 psi	Water	VIII Div. 1
1 NPS		0.86 sq in			15 - 70 psi		VIII Div. 1
1.5 NPS		1.93 sq in			6 - 55 psi		VIII Div. 1
2 NPS		3.36 sq in			5 - 40 psi		VIII Div. 1
3 NPS		7.39 sq in			5 - 50 psi		VIII Div. 1
4 NPS		12.74 sq in			5 - 30 psi		VIII Div. 1
6 NPS		28.89 sq in			5 - 25 psi		VIII Div. 1
8 NPS		50 sq in			5 - 25 psi		VIII Div. 1
10 NPS		78.86 sq in			5 - 25 psi		VIII Div. 1
12 NPS		111.87 sq in			5 - 25 psi	Water	VIII Div. 1

Certification Number: **77767** Design Series or catalog number: **SRC**

Holder Designation: **None**Type Classification: **Rupture Disk Device**Capacity Tests: **Sec. VIII Div. 1 at BS & B on August 26, 2002**Method of Establishing Relieving Capacity: **Resistance Factor, 3 Size, Krg**Certified Value: **1.1 Unitless**Test Medium: **Air/Gas**Certified Medium: **Air or gases (Krg)**Set Pressure Definition: **Burst Pressure**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
2 NPS		3.35 sq in			75 - 400 psi		VIII Div. 1
3 NPS		7.39 sq in			60 - 400 psi		VIII Div. 1
4 NPS		12.7 sq in			50 - 400 psi		VIII Div. 1
5 NPS		20 sq in			50 - 350 psi		VIII Div. 1
6 N/A		22.85 sq in	[SPL] 141.5 mm		92 - 350 psi		VIII Div. 1
6 NPS		28.8 sq in			50 - 350 psi		VIII Div. 1
8 NPS		50 sq in			50 - 350 psi		VIII Div. 1

Location: Raheen Business Park, Limerick Ireland

Certification Number: **77790** Design Series or catalog number: **GLP-S**

Holder Designation: **LP-C**Type Classification: **Rupture Disk Device**Capacity Tests: **Sec. VIII Div. 1 at BS & B on July 30, 2003**Method of Establishing Relieving Capacity: **Resistance Factor, 3 Size, Krg**Certified Value: **10. Unitless**Test Medium: **Air/Gas**Certified Medium: **Air or gases (Krg)**Special Service: **None**Set Pressure Definition: **Burst Pressure**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
1.5 NPS		0.86 sq in			15 - 70 psi		VIII Div. 1
2 NPS		1.93 sq in			6 - 55 psi		VIII Div. 1
3 NPS		3.36 sq in			5 - 40 psi		VIII Div. 1
4 NPS		7.39 sq in			5 - 35 psi		VIII Div. 1

Certification Number: **77958** Design Series or catalog number: **SSR (liquid)**

Holder Designation: **SRB-7RS, SRB-7RS-TR, SMR-7R, SPR-7R, S90-7R, SRB-7FS, SR-7R, SRI-7RS**Type Classification: **Rupture Disk Device**Capacity Tests: **Sec. VIII Div. 1 at BS & B on March 28, 2006**Method of Establishing Relieving Capacity: **Resistance Factor, 3 Size, Krl**Certified Value: **0.52 Unitless**Test Medium: **Air/Gas & Liquid**Certified Medium: **Liquid (Krl)**Set Pressure Definition: **Burst Pressure**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
1 NPS		0.86 sq in			55 - 350 psi		VIII Div. 1
1.5 NPS		1.93 sq in			40 - 350 psi		VIII Div. 1
2 NPS		3.36 sq in			25 - 300 psi		VIII Div. 1
3 NPS		7.39 sq in			20 - 250 psi		VIII Div. 1
4 NPS		12.74 sq in			16 - 250 psi		VIII Div. 1
6 NPS		28.89 sq in			15 - 250 psi		VIII Div. 1
8 NPS		50 sq in			15 - 200 psi		VIII Div. 1
10 NPS		78.8 sq in			15 - 150 psi		VIII Div. 1

location: Raheen Business Park, Limerick Ireland

Certification
Number: **77969**Design Series
or catalog number: **SSR**Holder Designation: **SRB-7RS, SRB-7RS-TR, SPR-7R, SMR-7R, S90-7R, SRB-7FS, SR-7R, SRI-7RS**Type Classification: **Rupture Disk Device**Capacity Tests: **Sec. VIII Div. 1 at BS & B on March 28, 2006**Method of Establishing Relieving Capacity: **Resistance Factor, 3 Size, Krg**Certified Value: **0.52 Unitless**Test Medium: **Air/Gas**Certified Medium: **Air or gases (Krg)**Set Pressure Definition: **Burst Pressure**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
1 NPS		0.86 sq in			55 - 350 psi		VIII Div. 1
1.5 NPS		1.93 sq in			40 - 350 psi		VIII Div. 1
2 NPS		3.36 sq in			25 - 300 psi		VIII Div. 1
3 NPS		7.39 sq in			20 - 250 psi		VIII Div. 1
4 NPS		12.74 sq in			16 - 250 psi		VIII Div. 1
6 NPS		28.89 sq in			15 - 250 psi		VIII Div. 1
8 NPS		50 sq in			15 - 200 psi		VIII Div. 1
10 NPS		78.8 sq in			15 - 150 psi		VIII Div. 1

Certification
Number: **78094**Design Series
or catalog number: **XT (Liquid)**Type Classification: **Rupture Disk Device**Capacity Tests: **Sec. VIII Div. 1 at BS & B on February 13, 2013**Method of Establishing Relieving Capacity: **Resistance Factor, 3 Size, Krl**Certified Value: **0.5 Unitless**Test Medium: **Liquid (Krl)**Certified Medium: **Liquid (Krl)**Special Service: **None**Set Pressure Definition: **Burst Pressure**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
1 NPS	1	0.88 sq in			250 - 1450 psi	Water	VIII Div. 1
1.5 NPS	1.5	2.03 sq in			150 - 1450 psi	Water	VIII Div. 1
2 NPS	2	3.36 sq in			150 - 1450 psi	Water	VIII Div. 1
3 NPS	3	7.39 sq in			150 - 1300 psi	Water	VIII Div. 1
4 NPS	4	12.7 sq in			80 - 1150 psi	Water	VIII Div. 1
6 NPS	6	28.8 sq in			70 - 1040 psi	Water	VIII Div. 1
8 NPS	8	50 sq in			60 - 960 psi	Water	VIII Div. 1
10 NPS	10	78.8 sq in			60 - 840 psi	Water	VIII Div. 1
12 NPS	12	111 sq in			60 - 720 psi	Water	VIII Div. 1

Location: Raheen Business Park, Limerick Ireland

Certification
Number: **78106**Design Series
or catalog number **SKr DD**Holder Designation: **S90-7R DD, SRB-7RS DD, SRB-7RS-TR DD, SRB-7FS DD**Type Classification: **Rupture Disk Device**Capacity Tests: **Sec. VIII Div. 1 at BS & B on September 26, 2013**Method of Establishing Relieving Capacity: **Resistance Factor, 3 Size, Krg**Certified Value: **.63 Unitless**Test Medium: **Air**Certified Medium: **Air/Gas**Special Service: **None**Set Pressure Definition: **Burst Pressure**Blowdown: **(none)**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
0.75 NPS		0.59 sq in			55 - 500 psi	Air	VIII Div. 1
1 NPS		0.86 sq in			55 - 500 psi	Air	VIII Div. 1
1.5 NPS		2.04 sq in			40 - 500 psi	Air	VIII Div. 1
2 NPS		3.36 sq in			25 - 500 psi	Air	VIII Div. 1
3 NPS		7.39 sq in			20 - 500 psi	Air	VIII Div. 1
4 NPS		12.74 sq in			16 - 500 psi	Air	VIII Div. 1
6 NPS		28.89 sq in			15 - 261 psi	Air	VIII Div. 1
8 NPS		50 sq in			15 - 200 psi	Air	VIII Div. 1
10 NPS		78.86 sq in			15 - 150 psi	Air	VIII Div. 1

Certification
Number: **78117**Design Series
or catalog number **SKr DD (Liquid)**Holder Designation: **S90-7R DD, SRB-7RS DD, SRB-7RS-TR DD, SRB-7FS DD**Type Classification: **Rupture Disk Device**Capacity Tests: **Sec. VIII Div. 1 at BS & B on September 26, 2013**Method of Establishing Relieving Capacity: **Resistance Factor, 3 Size, Krl**Certified Value: **1.6 Unitless**Test Medium: **Liquid**Certified Medium: **Liquid**Set Pressure Definition: **Burst Pressure**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
0.75 NPS		0.59 sq in			55 - 500 psi	Water	VIII Div. 1
1 NPS		0.86 sq in			55 - 500 psi	Water	VIII Div. 1
1.5 NPS		2.04 sq in			40 - 500 psi	Water	VIII Div. 1
2 NPS		3.36 sq in			25 - 500 psi	Water	VIII Div. 1
3 NPS		7.39 sq in			20 - 500 psi	Water	VIII Div. 1
4 NPS		12.74 sq in			16 - 500 psi	Water	VIII Div. 1
6 NPS		28.89 sq in			15 - 261 psi	Water	VIII Div. 1
8 NPS		50 sq in			15 - 200 psi	Water	VIII Div. 1
10 NPS		78.86 sq in			15 - 150 psi	Water	VIII Div. 1

Location: Raheen Business Park, Limerick Ireland

Certification Number: **78128** Design Series or catalog number: **1.5" SLP-S, SLP-SE, SLP-SM, SLP-N, SLP-SS, SLP-SES, SLP-SMS, SLP-NS**

Type Classification: **Rupture Disk Device**Capacity Tests: **Sec. VIII Div. 1 at BS & B on September 12, 2014**Method of Establishing Relieving Capacity: **Resistance Factor, 1 Size, Krgl**Certified Value: **6.7 Unitless**Test Medium: **Air or gases, and liquid (Krgl)**Certified Medium: **Air or gases, and liquid (Krgl)**Special Service: **None**Set Pressure Definition: **Burst Pressure**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
1.5 NPS		1.08 sq in			15 - 70 psi		VIII Div. 1

Certification Number: **78139** Design Series or catalog number: **2" SLP-S, SLP-SE, SLP-SM, SLP-N, SLP-SS, SLP-SES, SLP-SMS, SLP-NS**

Type Classification: **Rupture Disk Device**Capacity Tests: **Sec. VIII Div. 1 at BS & B on September 12, 2014**Method of Establishing Relieving Capacity: **Resistance Factor, 1 Size, Krgl**Certified Value: **4.9 Unitless**Test Medium: **Air or gases, and liquid (Krgl)**Certified Medium: **Air or gases, and liquid (Krgl)**Special Service: **None**Set Pressure Definition: **Burst Pressure**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
2 NPS		2.04 sq in			6 - 55 psi		VIII Div. 1

Certification Number: **78140** Design Series or catalog number: **3" SLP-S, SLP-SE, SLP-SM, SLP-N, SLP-SS, SLP-SES, SLP-SMS, SLP-NS**

Type Classification: **Rupture Disk Device**Capacity Tests: **Sec. VIII Div. 1 at BS & B on September 12, 2014**Method of Establishing Relieving Capacity: **Resistance Factor, 1 Size, Krgl**Certified Value: **9.9 Unitless**Test Medium: **Air or gases, and liquid (Krgl)**Certified Medium: **Air or gases, and liquid (Krgl)**Special Service: **None**Set Pressure Definition: **Burst Pressure**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
3 NPS		3.55 sq in			5 - 40 psi		VIII Div. 1

Location: Raheen Business Park, Limerick Ireland

Certification Number: **78229** Design Series or catalog number: **SRD & CCS**

Holder Designation: **SRB-7RS, SRB-7RS-TR, SRB-7FS, SMR-7R, SR-7R, SPR-7R, S90-7R, SRI-7RS**Type Classification: **Rupture Disk Device**Capacity Tests: **Sec. VIII Div. 1 at BS & B on May 19, 2016**Method of Establishing Relieving Capacity: **Resistance Factor, 3 Size, Krg**Certified Value: **.59 Unitless**Test Medium: **Air**Certified Medium: **Air or gases (Krg)**Special Service: **None**Set Pressure Definition: **Burst Pressure**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
1 NPS		0.84 sq in			481 - 750 psi		VIII Div. 1
1.5 NPS		1.77 sq in			421 - 600 psi		VIII Div. 1
2 NPS		3.23 sq in			421 - 500 psi		VIII Div. 1
3 NPS		6.44 sq in			281 - 500 psi		VIII Div. 1
4 NPS		11.54 sq in			271 - 500 psi		VIII Div. 1
6 NPS		26.44 sq in			101 - 200 psi		VIII Div. 1
8 NPS		47.07 sq in			76 - 150 psi		VIII Div. 1

Certification Number: **78230** Design Series or catalog number: **SRD & CCS (Liquid)**

Holder Designation: **SRB-7RS, SRB-7RS-TR, SRB-7FS, SMR-7R, SR-7R, SPR-7R, S90-7R, SRI-7RS**Type Classification: **Rupture Disk Device**Capacity Tests: **Sec. VIII Div. 1 at BS & B on May 19, 2016**Method of Establishing Relieving Capacity: **Resistance Factor, 1 Size, Krl**Certified Value: **4.0 Unitless**Test Medium: **Air**Certified Medium: **Liquid (Krl)**Special Service: **None**Set Pressure Definition: **Burst Pressure**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
1 NPS		0.84 sq in			481 - 750 psi		VIII Div. 1
1.5 NPS		1.77 sq in			421 - 600 psi		VIII Div. 1
2 NPS		3.23 sq in			421 - 500 psi		VIII Div. 1
3 NPS		6.44 sq in			281 - 500 psi		VIII Div. 1
4 NPS		11.54 sq in			271 - 500 psi		VIII Div. 1
6 NPS		26.44 sq in			101 - 200 psi		VIII Div. 1
8 NPS		47.07 sq in			76 - 150 psi		VIII Div. 1

Location: Raheen Business Park, Limerick Ireland

Certification
Number: **78241**Design Series
or catalog number **SRD-L & CCS-L**Holder Designation: **SRB-7RS, SRB-7RS-TR, SRB-7FS, SMR-7R, SR-7R, SPR-7R, S90-7R, SRI-7RS**Type Classification: **Rupture Disk Device**Capacity Tests: **Sec. VIII Div. 1 at BS & B on May 19, 2016**Method of Establishing Relieving Capacity: **Resistance Factor, 3 Size, Krg**Certified Value: **3.4 Unitless**Test Medium: **Air**Certified Medium: **Air or gases (Krg)**Special Service: **None**Set Pressure Definition: **Burst Pressure**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
1 NPS		0.84 sq in			75 - 480 psi		VIII Div. 1
1.5 NPS		1.77 sq in			75 - 420 psi		VIII Div. 1
2 NPS		3.23 sq in			75 - 420 psi		VIII Div. 1
3 NPS		6.44 sq in			45 - 280 psi		VIII Div. 1
4 NPS		11.54 sq in			20 - 270 psi		VIII Div. 1
6 NPS		26.44 sq in			20 - 100 psi		VIII Div. 1
8 NPS		47.07 sq in			15 - 75 psi		VIII Div. 1

Certification
Number: **78252**Design Series
or catalog number **SRD-L & CCS-L (Liquid)**Holder Designation: **SRB-7RS, SRB-7RS-TR, SRB-7FS, SMR-7R, SR-7R, SPR-7R, S90-7R, SRI-7RS**Type Classification: **Rupture Disk Device**Capacity Tests: **Sec. VIII Div. 1 at BS & B on May 19, 2016**Method of Establishing Relieving Capacity: **Resistance Factor, 3 Size, Krl**Certified Value: **4.5 Unitless**Test Medium: **Air**Certified Medium: **Liquid (Krl)**Special Service: **None**Set Pressure Definition: **Burst Pressure**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
1 NPS		0.84 sq in			75 - 480 psi		VIII Div. 1
1.5 NPS		1.77 sq in			75 - 420 psi		VIII Div. 1
2 NPS		3.23 sq in			75 - 420 psi		VIII Div. 1
3 NPS		6.44 sq in			45 - 280 psi		VIII Div. 1
4 NPS		11.54 sq in			20 - 270 psi		VIII Div. 1
6 NPS		26.44 sq in			20 - 100 psi		VIII Div. 1
8 NPS		47.07 sq in			15 - 75 psi		VIII Div. 1

Certification
Number: **78308**Design Series
or catalog number **LPS-U 0.5"**Holder Designation: **UR-2, UR-6**Type Classification: **Rupture Disk Device**Capacity Tests: **Sec. VIII Div. 1 at BS & B on February 27, 2017**Method of Establishing Relieving Capacity: **Resistance Factor, 1 Size, Krg**Certified Value: **1.06 Unitless**Test Medium: **Air**Certified Medium: **Air/Gas**Special Service: **None**Set Pressure Definition: **Burst Pressure**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
0.5 in	0.500 in	0.304 sq in			15 - 70 psi	Air	VIII Div. 1

Location: Raheen Business Park, Limerick Ireland

Certification Number: **78319** Design Series or catalog number: **LPS-U 0.5" (Liquid)**

Holder Designation: **UR-2, UR-6**Type Classification: **Rupture Disk Device**Capacity Tests: **Sec. VIII Div. 1 at BS & B on February 27, 2017**Method of Establishing Relieving Capacity: **Resistance Factor, 1 Size, Krl**Certified Value: **1.22 Unitless**Test Medium: **Air**Certified Medium: **Liquid**Special Service: **None**Set Pressure Definition: **Burst Pressure**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
0.5 in	0.500 in	0.304 sq in			15 - 70 psi	Water	VIII Div. 1

Certification Number: **78320** Design Series or catalog number: **LPS-U 0.75"**

Holder Designation: **UR-2, UR-6**Type Classification: **Rupture Disk Device**Capacity Tests: **Sec. VIII Div. 1 at BS & B on February 27, 2017**Method of Establishing Relieving Capacity: **Resistance Factor, 1 Size, Krg**Certified Value: **0.89 Unitless**Test Medium: **Air**Certified Medium: **Air**Special Service: **None**Set Pressure Definition: **Burst Pressure**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
0.5 in	0.500 in	0.533 sq in			15 - 70 psi	Air	VIII Div. 1

Certification Number: **78331** Design Series or catalog number: **LPS-U 0.75"**

Holder Designation: **UR-2, UR-6**Type Classification: **Rupture Disk Device**Capacity Tests: **Sec. VIII Div. 1 at BS & B on February 27, 2017**Method of Establishing Relieving Capacity: **Resistance Factor, 1 Size, Krl**Certified Value: **0.93 Unitless**Test Medium: **Air**Certified Medium: **Liquid**Special Service: **None**Set Pressure Definition: **Burst Pressure**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
0.75 in	0.750 in	0.533 sq in			15 - 70 psi	Water	VIII Div. 1

location: Raheen Business Park, Limerick Ireland

Certification Number: **78342** Design Series or catalog number: **LPS-U 1.0"**

Holder Designation: **UR-2, UR-6**Type Classification: **Rupture Disk Device**Capacity Tests: **Sec. VIII Div. 1 at BS & B on February 27, 2017**Method of Establishing Relieving Capacity: **Resistance Factor, 1 Size, Krgl**Certified Value: **1.70**Test Medium: **Air**Certified Medium: **Air or gases, and liquid (Krgl)**Special Service: **None**Set Pressure Definition: **Burst Pressure**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
1 in	1.0 in	0.608 sq in			15 - 70 psi	Air	VIII Div. 1

Burns Pressure Systems Enterprises, Incorporated (BPS)

NB#: 05005

location: 304 North Walnut Ave., Broken Arrow, OK 74012 United States

Acceptable Abbrev.: BPS, INC.

Burns Pressure Systems Enterprises, Incorporated (BPS)

location: 304 North Walnut Ave., Broken Arrow, OK 74012 United States

Acceptable Abbrev.: BPS, INC.

Certification Number: **05005** Design Series or catalog number **2MBF**

Type Classification: **Safety Relief Valve**Capacity Tests: **Sec. VIII Div. 1 at Kunkle (Fort Wayne, IN) on November 14, 1990**Method of Establishing Relieving Capacity: **Flow Capacity, Slope**Certified Value: **11.46 SCFM/PSIA**Test Medium: **Air/Gas**Certified Medium: **Gas**Special Service: **Non-refrigerated liquified compressed gases**Set Pressure Definition: **Pop**Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
2 NPS	Top		1.1 in		50 - 500 psi	Air	VIII Div. 1

Certification Number: **05016** Design Series or catalog number **3MBF/ MBP-2**

Type Classification: **Safety Relief Valve**Capacity Tests: **Sec. VIII Div. 1 at Kunkle (Fort Wayne, IN) on November 14, 1990**Method of Establishing Relieving Capacity: **Flow Capacity, Slope**Certified Value: **29.7 SCFM/PSIA**Test Medium: **Air/Gas**Certified Medium: **Gas**Set Pressure Definition: **Pop**Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
2 NPS	Top		1.85 in		100 - 500 psi	Air	VIII Div. 1
3 NPS	Top		1.85 in		15 - 500 psi	Air	VIII Div. 1

Certification Number: **05027** Design Series or catalog number **4 MBF/4 MRB/ 4 MBF-A**

Type Classification: **Safety Relief Valve**Capacity Tests: **Sec. VIII Div. 1 at National Board T L (Worthington) on June 12, 1992**Method of Establishing Relieving Capacity: **Flow Capacity, Slope**Certified Value: **49.1 SCFM/PSIA**Test Medium: **Air/Gas**Certified Medium: **Gas**Special Service: **None**Set Pressure Definition: **Pop**Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
4 NPS	Top		2.7 in		15 - 500 psi	Air	VIII Div. 1

Burns Pressure Systems Enterprises, Incorporated (BPS)

NB#: 05050

Location: 304 North Walnut Ave., Broken Arrow, OK 74012 United States

Acceptable Abbrev.: BPS, INC.

Certification
Number: **05050**Design Series
or catalog number **1 1/4" MBP**Type Classification: **Safety Relief Valve**Capacity Tests: **Sec. VIII Div. 1 at National Board T L (Worthington) on February 11, 2000**Method of Establishing Relieving Capacity: **Flow Capacity, Slope**Certified Value: **13.508 SCFM/PSIA**Test Medium: **Air/Gas**Certified Medium: **Gas**Special Service: **Non-refrigerated liquified compressed gases**Set Pressure Definition: **Pop**Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
1.25 NPS	Top		1.25 in		100 - 325 psi	Air	VIII Div. 1

Certification
Number: **05061**Design Series
or catalog number **MBP-1 (revised)**Type Classification: **NLG (20% OP) PRV**Capacity Tests: **Sec. VIII Div. 1 at National Board T L (Worthington) on June 29, 2000**Method of Establishing Relieving Capacity: **Flow Capacity, Slope**Certified Value: **9.99 SCFM/PSIA**Test Medium: **Air/Gas**Certified Medium: **Gas**Special Service: **Non-refrigerated liquified compressed gases**Set Pressure Definition: **Pop**Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
1 NPS	Top		1 in		75 - 375 psi	Air	VIII Div. 1

Carraro s.r.l. (CAO)

NB#: 95408

location: Via Enrico Fermi 22, Segrate (MI) 20090 Italy

Carraro s.r.l. (CAO)

location: Via Enrico Fermi 22, Segrate (MI) 20090 Italy

Certification Number: **95408** Design Series or catalog number: **CS 35 / G**

Type Classification: **Safety Relief Valve**Capacity Tests: **Sec. VIII Div. 1 at National Board T L (Worthington) on April 10, 2014**Method of Establishing Relieving Capacity: **Flow Capacity, Flow Factor**Certified Value: **22.25 GPM/SQ.RT. PSID**Test Medium: **Water**Certified Medium: **Liquid**Set Pressure Definition: **First Steady Stream**Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
1.5 NPS	2 NPS	706.5 sq mm	[G] 30 mm	10 mm	1 - 25 bar	Water	VIII Div. 1

Certification Number: **95419** Design Series or catalog number: **CS 35 / J**

Type Classification: **Safety Relief Valve**Capacity Tests: **Sec. VIII Div. 1 at National Board T L (Worthington) on April 10, 2014**Method of Establishing Relieving Capacity: **Flow Capacity, Flow Factor**Certified Value: **42.03 GPM/SQ.RT. PSID**Test Medium: **Water**Certified Medium: **Liquid**Set Pressure Definition: **First Steady Stream**Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
2 NPS	3 NPS	1256 sq mm	[J] 40 mm	15 mm	1 - 25 bar	Water	VIII Div. 1

Cash Acme (Part of Reliance Worldwide Corporation) (CSH)

NB#: 09009

location: 2400 7th Avenue S.W., Cullman, AL 35055 United States

Cash Acme (Part of Reliance Worldwide Corporation) (CSH)

location: 2400 7th Avenue S.W., Cullman, AL 35055 United States

Certification Number: **09009** Design Series or catalog number: **F-30 (3/4")**

Type Classification: **Safety Relief Valve**Capacity Tests: **Sec. IV at National Board T L (Picaway) on July 18, 1983**Method of Establishing Relieving Capacity: **Flow Capacity, 3 valve average**Certified Value: **510 PPH**Test Medium: **Steam**Certified Medium: **Saturated Water**Special Service: **None**Set Pressure Definition: **Pop**Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
0.75 NPS	.75 NPS	0.307 sq in	0.625 in	0.156 in	30 - 30 psi	Steam	IV

Certification Number: **09010** Design Series or catalog number: **F-82, P3000BR (3/4")**

Type Classification: **Safety Relief Valve**Capacity Tests: **Sec. IV at Ohio State University (Robinson Laboratory) on August 06, 1972**Method of Establishing Relieving Capacity: **Flow Capacity, Slope**Certified Value: **15.05 PPH/PSIA**Test Medium: **Steam**Certified Medium: **Saturated Water**Special Service: **None**Set Pressure Definition: **Pop**Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
0.75 NPS	.75 NPS	0.442 sq in	0.75 in	0.3 in	30 - 150 psi	Steam	IV

Certification Number: **09021** Design Series or catalog number: **F-82, P3000BR (1")**

Type Classification: **Safety Relief Valve**Capacity Tests: **Sec. IV at National Board T L (Picaway) on May 16, 1980**Method of Establishing Relieving Capacity: **Flow Capacity, Slope**Certified Value: **21.49 PPH/PSIA**Test Medium: **Steam**Certified Medium: **Saturated Water**Set Pressure Definition: **Pop**Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
1 NPS	1 NPS	0.785 sq in	1 in	0.3 in	30 - 150 psi	Steam	IV

Cash Acme (Part of Reliance Worldwide Corporation) (CSH)

NB#: 09032

Location: 2400 7th Avenue S.W., Cullman, AL 35055 United States

Certification Number: **09032** Design Series or catalog number **F-82, P3000BR (1-1/4")**

Type Classification: **Safety Relief Valve**Capacity Tests: **Sec. IV at National Board T L (Picaway) on November 19, 1981**Method of Establishing Relieving Capacity: **Flow Capacity, Slope**Certified Value: **35.72 PPH/PSIA**Test Medium: **Steam**Certified Medium: **Saturated Water**Set Pressure Definition: **Pop**Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
1.25 NPS	1.25 NPS	1.23 sq in	1.25 in	0.4 in	30 - 150 psi	Steam	IV

Certification Number: **09043** Design Series or catalog number **F-82, P3000BR (1-1/2")**

Type Classification: **Safety Relief Valve**Capacity Tests: **Sec. IV at National Board T L (Picaway) on November 11, 1981**Method of Establishing Relieving Capacity: **Flow Capacity, Slope**Certified Value: **43.74 PPH/PSIA**Test Medium: **Steam**Certified Medium: **Saturated Water**Set Pressure Definition: **Pop**Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
1.5 NPS	1.5 NPS	1.77 sq in	1.5 in	0.421 in	30 - 150 psi	Steam	IV

Certification Number: **09054** Design Series or catalog number **F-82, P3000BR (2")**

Type Classification: **Safety Relief Valve**Capacity Tests: **Sec. IV at National Board T L (Picaway) on November 19, 1981**Method of Establishing Relieving Capacity: **Flow Capacity, Slope**Certified Value: **81.8 PPH/PSIA**Test Medium: **Steam**Certified Medium: **Saturated Water**Special Service: **None**Set Pressure Definition: **Pop**Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
2 NPS	2 NPS	3.142 sq in	2 in	0.562 in	30 - 150 psi	Steam	IV

Cash Acme (Part of Reliance Worldwide Corporation) (CSH)

NB#: 09098

Location: 2400 7th Avenue S.W., Cullman, AL 35055 United States

Certification Number: **09098** Design Series or catalog number: **(1-1/2")FVX-4 (2") FVMX-3 (T&P)**

Type Classification: Temperature Actuated Pressure Relief Valve

Capacity Tests: Sec. IV at National Board T L (Picaway) on November 19, 1981

Method of Establishing Relieving Capacity: Flow Capacity, Slope

Certified Value: 33.69 PPH/PSIA

Test Medium: Steam

Certified Medium: Saturated Water

Set Pressure Definition: 40 CC Method

Blowdown: Fixed

Scope of Nominal Size and Set Pressure Ranges:

Inlet Size	Outlet Size	Flow Area	Orifice [designator] diameter	Lift	Set Pressure Range	Media	Code Section
1.5 - 2 NPS	1.5 NPS	1.23 sq in	1.25 in	0.4 in	75 - 150 psi	Steam	IV

Certification Number: **09100** Design Series or catalog number: **1 FVX-5L/Series 15, 1-1/4 FVMX4L, FVX-8L**

Type Classification: Temperature Actuated Pressure Relief Valve

Capacity Tests: Sec. IV at National Board T L (Picaway) on April 04, 1979

Method of Establishing Relieving Capacity: Flow Capacity, Slope

Certified Value: 20.17 PPH/PSIA

Test Medium: Steam

Certified Medium: Saturated Water

Set Pressure Definition: 40 CC Method

Blowdown: Fixed

Scope of Nominal Size and Set Pressure Ranges:

Inlet Size	Outlet Size	Flow Area	Orifice [designator] diameter	Lift	Set Pressure Range	Media	Code Section
1 - 1.25 NPS	1 NPS	0.785 sq in	1 in	0.3 in	75 - 150 psi	Steam	IV

Certification Number: **09111** Design Series or catalog number: **FVX, FVMX-1-3-5-8, FVMX-5LS-SST Ser. 4 (3/4")**

Type Classification: Temperature Actuated Pressure Relief Valve

Capacity Tests: Sec. IV at National Board T L (Picaway) on June 20, 1984

Method of Establishing Relieving Capacity: Flow Capacity, Slope

Certified Value: 10.64 PPH/PSIA

Test Medium: Steam

Certified Medium: Saturated Water

Set Pressure Definition: 40 CC Method

Blowdown: Fixed

Scope of Nominal Size and Set Pressure Ranges:

Inlet Size	Outlet Size	Flow Area	Orifice [designator] diameter	Lift	Set Pressure Range	Media	Code Section
0.75 NPS	.75 NPS	0.442 sq in	0.75 in	0.17 in	75 - 150 psi	Steam	IV

Certification Number: **09122** Design Series or catalog number: **1 FVX, FVMX3-5C, 3LS-6LS Ser. 4 (T&P)**

Type Classification: Temperature Actuated Pressure Relief Valve

Capacity Tests: Sec. IV at National Board T L (Picaway) on May 29, 1980

Method of Establishing Relieving Capacity: Flow Capacity, Slope

Certified Value: 11.99 PPH/PSIA

Test Medium: Steam

Certified Medium: Saturated Water

Set Pressure Definition: 40 CC Method

Blowdown: Fixed

Scope of Nominal Size and Set Pressure Ranges:

Inlet Size	Outlet Size	Flow Area	Orifice [designator] diameter	Lift	Set Pressure Range	Media	Code Section
1 NPS	1 NPS	0.558 sq in	0.843 in	0.148 in	75 - 150 psi	Steam	IV

Cash Acme (Part of Reliance Worldwide Corporation) (CSH)

NB#: 09155

Location: 2400 7th Avenue S.W., Cullman, AL 35055 United States

Certification
Number: **09155**Design Series
or catalog number **NCLX-1, -5, -8; NCLX-5L, -5LX, -5S, -LS, -A;S-14 and FWL-2, -6,A4,4,A2**Type Classification: **Temperature Actuated Pressure Relief Valve**Capacity Tests: **Sec. IV at National Board T L (Worthington) on November 01, 1994**Method of Establishing Relieving Capacity: **Flow Capacity, Slope**Certified Value: **3.6 PPH/PSIA**Test Medium: **Steam**Certified Medium: **Saturated Water**Set Pressure Definition: **40 CC Method**Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
0.75 NPS	.75 NPS	0.173 sq in	0.469 in	0.08 in	75 - 150 psi	Steam	IV

Certification
Number: **09199**Design Series
or catalog number **F-95, P3000CI**Type Classification: **Safety Relief Valve**Capacity Tests: **Sec. IV at National Board T L (Worthington) on November 08, 1995**Method of Establishing Relieving Capacity: **Flow Capacity, K**Certified Value: **.694 Unitless**Test Medium: **Steam**Certified Medium: **Saturated Water**Special Service: **None**Set Pressure Definition: **Pop**Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
0.75 NPS	1 NPS	0.559 sq in	0.844 in	0.323 in	30 - 75 psi	Steam	IV
1 NPS	1.25 NPS	0.785 sq in	1 in	0.294 in	30 - 75 psi	Steam	IV
1.25 NPS	1.5 NPS	1.227 sq in	1.25 in	0.383 in	30 - 75 psi	Steam	IV
1.5 NPS	2 NPS	1.767 sq in	1.5 in	0.437 in	30 - 75 psi	Steam	IV
2 NPS	2.5 NPS	3.142 sq in	2 in	0.59 in	30 - 75 psi	Steam	IV

Cavagna Group S.p.A. - OMECA Division (CAV)

NB#: 69083

location: Via Statale, 11/13, Ponte San Marco, Brescia 25011 Italy

Acceptable Abbrev.: OMECA

Cavagna Group S.p.A. - OMECA Division (CAV)

location: Via Statale, 11/13, Ponte San Marco, Brescia 25011 Italy

Acceptable Abbrev.: OMECA

Certification Number: **69083** Design Series or catalog number: **700073**

Type Classification: **Safety Relief Valve**Capacity Tests: **Sec. VIII Div. 1 at National Board T L (Worthington) on July 12, 2001**Method of Establishing Relieving Capacity: **Flow Capacity, 3 valve average**Certified Value: **1808 SCFM**Certification Provisions: **Cert. @ 20% OP**Test Medium: **Air/Gas**Certified Medium: **Gas**Special Service: **Non-refrigerated liquified compressed gases**Set Pressure Definition: **Start-to-Leak**Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
0.75 NPS	Top	283.4 sq mm	19 mm	9 mm	250 - psi	Air	VIII Div. 1

Certification Number: **69117** Design Series or catalog number: **1139**

Type Classification: **Safety Relief Valve**Capacity Tests: **Sec. VIII Div. 1 at National Board T L (Worthington) on May 01, 2002**Method of Establishing Relieving Capacity: **Flow Capacity, 3 valve average**Certified Value: **262 SCFM**Certification Provisions: **Cert. @ 20% OP**Test Medium: **Air/Gas**Certified Medium: **Gas**Set Pressure Definition: **Start-to-Leak**Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
0.25 NPS	Top	43 sq mm	7.4 mm	5 mm	250 - psi	Air	VIII Div. 1

Certification Number: **69128** Design Series or catalog number: **1128**

Type Classification: **Safety Relief Valve**Capacity Tests: **Sec. VIII Div. 1 at National Board T L (Worthington) on July 12, 2002**Method of Establishing Relieving Capacity: **Flow Capacity, 3 valve average**Certified Value: **1790 SCFM**Certification Provisions: **Cert. @ 20% OP**Test Medium: **Air/Gas**Certified Medium: **Gas**Special Service: **Non-refrigerated liquified compressed gases**Set Pressure Definition: **Start-to-Leak**Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
0.75 NPS	Top	268.2 sq mm	0.787 in	10 mm	250 - psi	Air	VIII Div. 1

Location: Via Statale, 11/13, Ponte San Marco, Brescia 25011 Italy

Acceptable Abbrev.: OMECA

Certification Number: **69139** Design Series or catalog number: **1129**

Type Classification: **Safety Relief Valve**Capacity Tests: **Sec. VIII Div. 1 at National Board T L (Worthington) on June 25, 2002**Method of Establishing Relieving Capacity: **Flow Capacity, 3 valve average**Certified Value: **2396 SCFM**Certification Provisions: **Cert. @ 20% OP**Test Medium: **Air/Gas**Certified Medium: **Gas**Set Pressure Definition: **Start-to-Leak**Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
1 NPS	Top	483.6 sq mm	1 in	12 mm	250 - psi	Air	VIII Div. 1

Certification Number: **69140** Design Series or catalog number: **1130**

Type Classification: **Safety Relief Valve**Capacity Tests: **Sec. VIII Div. 1 at National Board T L (Worthington) on June 25, 2002**Method of Establishing Relieving Capacity: **Flow Capacity, 3 valve average**Certified Value: **3934 SCFM**Certification Provisions: **Cert. @ 20% OP**Test Medium: **Air/Gas**Certified Medium: **Gas**Set Pressure Definition: **Start-to-Leak**Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
1.25 NPS	Top	716.3 sq mm	1.224 in	10 mm	250 - psi	Air	VIII Div. 1

Certification Number: **69151** Design Series or catalog number: **1135**

Type Classification: **Safety Relief Valve**Capacity Tests: **Sec. VIII Div. 1 at National Board T L (Worthington) on June 25, 2002**Method of Establishing Relieving Capacity: **Flow Capacity, 3 valve average**Certified Value: **967 SCFM**Certification Provisions: **Cert. @ 20% OP**Test Medium: **Air/Gas**Certified Medium: **Gas**Set Pressure Definition: **Start-to-Leak**Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
1 NPS	Top	157 sq mm	14.7 mm	10 mm	250 - psi	Air	VIII Div. 1

Location: Via Statale, 11/13, Ponte San Marco, Brescia 25011 Italy

Acceptable Abbrev.: OMECA

Certification Number: **69173** Design Series or catalog number: **1335**

Type Classification: **Safety Relief Valve**Capacity Tests: **Sec. VIII Div. 1 at National Board T L (Worthington) on March 19, 2015**Method of Establishing Relieving Capacity: **Flow Capacity, 3 valve average**Certified Value: **1278 SCFM**Certification Provisions: **Cert. @ 20% OP**Test Medium: **Gas**Certified Medium: **Gas**Special Service: **Non-refrigerated liquified compressed gases**Set Pressure Definition: **Bubble**Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
1 in	Top	126.3 sq mm	13.3 mm	7 mm	375 psi	Air	VIII Div. 1

Certification Number: **69184** Design Series or catalog number: **1361**

Type Classification: **Safety Relief Valve**Capacity Tests: **Sec. VIII Div. 1 at National Board T L (Worthington) on November 03, 2015**Method of Establishing Relieving Capacity: **Flow Capacity, 3 valve average**Certified Value: **954 SCFM**Certification Provisions: **Cert. @ 20% OP**Test Medium: **Air/Gas**Certified Medium: **Gas**Special Service: **Non-refrigerated liquified compressed gases**Set Pressure Definition: **Bubble**Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
1 NPS	Top	157.1 sq mm	14.7 mm	8 mm	250 - 250 psi	Air	VIII Div. 1

Certification Number: **69195** Design Series or catalog number: **PV60**

Type Classification: **Safety Relief Valve**Capacity Tests: **Sec. VIII Div. 1 at National Board T L (Worthington) on September 28, 2016**Method of Establishing Relieving Capacity: **Flow Capacity, 3 valve average**Certified Value: **11433 SCFM**Certification Provisions: **Cert. @ 20% OP**Test Medium: **Air/Gas**Certified Medium: **Gas**Special Service: **Non-refrigerated liquified compressed gases**Set Pressure Definition: **Bubble**Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
2 NPS	Top	1590.4 sq mm	45 mm	20 mm	250 psi	Air	VIII Div. 1

Location: Via Statale, 11/13, Ponte San Marco, Brescia 25011 Italy

Acceptable Abbrev.: OMECA

Certification Number: **69207** Design Series or catalog number: **1242**

Type Classification: **Safety Relief Valve**Capacity Tests: **Sec. VIII Div. 1 at National Board T L (Worthington) on July 19, 2006**Method of Establishing Relieving Capacity: **Flow Capacity, 3 valve average**Certified Value: **979 SCFM**Certification Provisions: **Cert. @ 20% OP**Test Medium: **Air**Certified Medium: **Gas**Special Service: **Non-refrigerated liquified compressed gases**Set Pressure Definition: **Start-to-Leak**Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
1 NPS	Top	0.196 sq in	13.3 mm	8.5 mm	312 psi	Air	VIII Div. 1

Certification Number: **69218** Design Series or catalog number: **1162A**

Type Classification: **Safety Relief Valve**Capacity Tests: **Sec. VIII Div. 1 at National Board T L (Worthington) on June 13, 2007**Method of Establishing Relieving Capacity: **Flow Capacity, 3 valve average**Certified Value: **657 SCFM**Test Medium: **Air**Certified Medium: **Gas**Special Service: **Non-refrigerated liquified compressed gases**Set Pressure Definition: **Start-to-Leak**Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
0.75 NPS	Top				312 - 312 psi	Air	VIII Div. 1

Certification Number: **69229** Design Series or catalog number: **PV29 (700217)**

Type Classification: **Safety Relief Valve**Capacity Tests: **Sec. VIII Div. 1 at National Board T L (Worthington) on June 01, 2012**Method of Establishing Relieving Capacity: **Flow Capacity, 3 valve average**Certified Value: **4656 SCFM**Certification Provisions: **Cert. @ 20% OP**Test Medium: **Air**Certified Medium: **Gas**Special Service: **Non-refrigerated liquified compressed gases**Set Pressure Definition: **Start-to-Leak**Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
1.25 NPS	Top	683.5 sq mm	1.16 in	12 mm	250 psi	Air	VIII Div. 1

Certification Number: **69230** Design Series or catalog number **PV19 (700214)**

Type Classification: **Safety Relief Valve**

Capacity Tests: **Sec. VIII Div. 1 at National Board T L (Worthington) on September 29, 2011**

Method of Establishing Relieving Capacity: **Flow Capacity, 3 valve average**

Certified Value: **2051 SCFM**

Certification Provisions: **Cert. @ 20% OP**

Test Medium: **Air**

Certified Medium: **Gas**

Special Service: **Non-refrigerated liquified compressed gases**

Set Pressure Definition: **Start-to-Leak**

Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
0.75 NPS	Top	283.4 sq mm	0.748 in	10 mm	250 psi	Air	VIII Div. 1

Certification Number: **69241** Design Series or catalog number **PV24 (700216)**

Type Classification: **Safety Relief Valve**

Capacity Tests: **Sec. VIII Div. 1 at National Board T L (Worthington) on September 29, 2011**

Method of Establishing Relieving Capacity: **Flow Capacity, 3 valve average**

Certified Value: **3158 SCFM**

Certification Provisions: **Cert. @ 20% OP**

Test Medium: **Air**

Certified Medium: **Gas**

Special Service: **Non-refrigerated liquified compressed gases**

Set Pressure Definition: **Start-to-Leak**

Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
1 NPS	Top	471.2 sq mm	0.965 in	10 mm	250 psi	Air	VIII Div. 1

Circor Aerospace, Inc. (CSC)

NB#: 10001

Location: 2301 Wardlow Circle, Corona, CA 92880 United States

Acceptable Abbrev.: Circle Seal

Circor Aerospace, Inc. (CSC)

Location: 2301 Wardlow Circle, Corona, CA 92880 United States

Acceptable Abbrev.: Circle Seal

Certification Number: **10001** Design Series or catalog number: **D-500-2M**

Type Classification: **Safety Relief Valve**Capacity Tests: **Sec. VIII Div. 1 at Phillips Petroleum on November 16, 1966**Method of Establishing Relieving Capacity: **Flow Capacity, Slope**Certified Value: **.359 SCFM/PSIA**Test Medium: **Gas**Certified Medium: **Air/Gas**Set Pressure Definition: **Pop**Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
0.25 NPS		0.059 sq in	0.275 in	0.069 in	15 - 150 psi	Air	VIII

Certification Number: **10012** Design Series or catalog number: **M5100-1M**

Type Classification: **Safety Relief Valve**Capacity Tests: **Sec. VIII Div. 1 at Phillips Petroleum on November 06, 1966**Method of Establishing Relieving Capacity: **Flow Capacity, Slope**Certified Value: **.286 SCFM/PSIA**Test Medium: **Gas**Certified Medium: **Air/Gas**Set Pressure Definition: **Pop**Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
0.125 NPS		0.049 sq in	0.25 in	0.06 in	100 - 1200 psi	Air	VIII

Certification Number: **10023** Design Series or catalog number: **M5100-2M & 3M**

Type Classification: **Safety Relief Valve**Capacity Tests: **Sec. VIII Div. 1 at Phillips Petroleum on November 16, 1966**Method of Establishing Relieving Capacity: **Flow Capacity, Slope**Certified Value: **.667 SCFM/PSIA**Test Medium: **Gas**Certified Medium: **Air/Gas**Set Pressure Definition: **Pop**Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
0.25 - 0.375 NPS		0.1 sq in	0.358 in	0.08 in	15 - 1200 psi	Air	VIII

Circor Aerospace, Inc. (CSC)

NB#: 10034

Location: 2301 Wardlow Circle, Corona, CA 92880 United States

Acceptable Abbrev.: Circle Seal

Certification Number: **10034** Design Series or catalog number: **M5100-4M**

Type Classification: **Safety Relief Valve**Capacity Tests: **Sec. VIII Div. 1 at Phillips Petroleum on November 16, 1966**Method of Establishing Relieving Capacity: **Flow Capacity, Slope**Certified Value: **1.310 SCFM/PSIA**Test Medium: **Gas**Certified Medium: **Air/Gas**Set Pressure Definition: **Pop**Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
0.5 NPS		0.209 sq in	0.516 in	0.1 in	15 - 1200 psi	Air	VIII

Certification Number: **10056** Design Series or catalog number: **M5100-6M & 8M 100 - 1200**

Type Classification: **Safety Relief Valve**Capacity Tests: **Sec. VIII Div. 1 at Phillips Petroleum on November 16, 1966**Method of Establishing Relieving Capacity: **Flow Capacity, Slope**Certified Value: **3.453 SCFM/PSIA**Test Medium: **Gas**Certified Medium: **Air/Gas**Set Pressure Definition: **Pop**Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
0.75 - 1 NPS		0.428 sq in	0.738 in	0.25 in	100 - 1200 psi	Air	VIII

Circor Energy Products (HDS)

NB#: 30003

Location: 1500 SE 89th St, Oklahoma City, OK 73149 United States

Acceptable Abbrev.: Hydroseal

Circor Energy Products (HDS)

Location: 1500 SE 89th St, Oklahoma City, OK 73149 United States

Acceptable Abbrev.: Hydroseal

Certification Number: **30003** Design Series or catalog number: **1-BV thru 3-BV, 1EV thru 4EV, FL**

Type Classification: Safety Relief Valve

Capacity Tests: Sec. VIII Div. 1 at Louisiana State University on April 08, 1972

Method of Establishing Relieving Capacity: Flow Capacity, Slope

Certified Value: .68 SCFM/PSIA

Test Medium: Air/Gas

Certified Medium: Air/Gas

Set Pressure Definition: Pop

Blowdown: Fixed

Scope of Nominal Size and Set Pressure Ranges:

Inlet Size	Outlet Size	Flow Area	Orifice [designator] diameter	Lift	Set Pressure Range	Media	Code Section
0.5 - 0.75 NPS	.75, 1 NPS		0.375 in	0.094 in	15 - 6000 psi	Air	VIII Div. 1

Certification Number: **30014** Design Series or catalog number: **5-BV thru 7-BV, FL-5-FV thru FL**

Type Classification: Safety Relief Valve

Capacity Tests: Sec. VIII Div. 1 at Louisiana State University on September 30, 1972

Method of Establishing Relieving Capacity: Flow Capacity, Slope

Certified Value: 3.22 SCFM/PSIA

Test Medium: Air/Gas

Certified Medium: Air/Gas

Set Pressure Definition: Pop

Blowdown: Fixed

Scope of Nominal Size and Set Pressure Ranges:

Inlet Size	Outlet Size	Flow Area	Orifice [designator] diameter	Lift	Set Pressure Range	Media	Code Section
1.25 - 3 NPS	2, 2.5, 3, 4 NPS		0.75 in	0.218 in	15 - 3000 psi	Air	VIII Div. 1

Certification Number: **30025** Design Series or catalog number: **1-CRV thru 3-CRV, 1-FRV thru 4-F**

Type Classification: Safety Relief Valve

Capacity Tests: Sec. VIII Div. 1 at National Board T L (Picaway) on January 17, 1983

Method of Establishing Relieving Capacity: Flow Capacity, Slope

Certified Value: 1.11 SCFM/PSIA

Test Medium: Air/Gas

Certified Medium: Air/Gas

Set Pressure Definition: Pop

Blowdown: Fixed

Scope of Nominal Size and Set Pressure Ranges:

Inlet Size	Outlet Size	Flow Area	Orifice [designator] diameter	Lift	Set Pressure Range	Media	Code Section
0.5 - 2 NPS	.75, 1, 2 NPS	0.196 sq in	0.5 in		21 - 3500 psi	Air	VIII Div. 1

Circor Energy Products (HDS)

NB#: 30036

Location: 1500 SE 89th St, Oklahoma City, OK 73149 United States

Acceptable Abbrev.: Hydroseal

Certification Number: **30036** Design Series or catalog number: **5-CRV, thru 8-CRV, FL-5-CRV**

Type Classification: **Safety Relief Valve**Capacity Tests: **Sec. VIII Div. 1 at National Board T L (Picaway) on January 17, 1983**Method of Establishing Relieving Capacity: **Flow Capacity, Slope**Certified Value: **3.09 SCFM/PSIA**Test Medium: **Air/Gas**Certified Medium: **Air/Gas**Set Pressure Definition: **Pop**Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
1 - 2 NPS	2 NPS		0.939 in		18 - 2000 psi	Air	VIII Div. 1

Certification Number: **30047** Design Series or catalog number: **5, 6, 7, 8 CV, FL**

Type Classification: **Safety Relief Valve**Capacity Tests: **Sec. VIII Div. 1 at National Board T L (Picaway) on September 30, 1976**Method of Establishing Relieving Capacity: **Flow Capacity, Slope**Certified Value: **3.13 SCFM/PSIA**Test Medium: **Air/Gas**Certified Medium: **Air/Gas**Set Pressure Definition: **Pop**Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
1 - 3 NPS	1.5, - 4 NPS		1 in	0.188 in	15 - 2000 psi	Air	VIII Div. 1

Certification Number: **30058** Design Series or catalog number: **CXV, FXV, AXV, FL-XV**

Type Classification: **Safety Relief Valve**Capacity Tests: **Sec. VIII Div. 1 at National Board T L (Picaway) on August 22, 1977**Method of Establishing Relieving Capacity: **Flow Capacity, Slope**Certified Value: **1.15 SCFM/PSIA**Test Medium: **Air/Gas**Certified Medium: **Air/Gas**Set Pressure Definition: **Pop**Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
0.5 - 2 NPS	.75, 1, 2 NPS		0.5625 in	0.07 in	15 - 3500 psi	Air	VIII Div. 1

Certification Number: **30069** Design Series or catalog number: **3FT, 4FT, 5FT, FT flanged series**

Type Classification: **Safety Relief Valve**Capacity Tests: **Sec. VIII Div. 1 at National Board T L (Picaway) on July 25, 1988**Method of Establishing Relieving Capacity: **Flow Capacity, Slope**Certified Value: **4.88 SCFM/PSIA**Test Medium: **Air/Gas**Certified Medium: **Air/Gas**Set Pressure Definition: **Pop**Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
0.75 - 2 NPS	1.5 - 3 NPS		0.625 in		20 - 4000 psi	Air	VIII Div. 1

Circor Energy Products (HDS)

NB#: 30081

Location: 1500 SE 89th St, Oklahoma City, OK 73149 United States

Acceptable Abbrev.: Hydroseal

Certification
Number: **30081**Design Series
or catalog number **5HC, 6HC & 7HC**Type Classification: **Safety Relief Valve**Capacity Tests: **Sec. VIII Div. 1 at National Board T L (Picaway) on July 21, 1986**Method of Establishing Relieving Capacity: **Flow Capacity, Slope**Certified Value: **12.62 SCFM/PSIA**Test Medium: **Air/Gas**Certified Medium: **Air/Gas**Set Pressure Definition: **Pop**Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
1.25 - 4 NPS	2 - 4 NPS	0.785 sq in	1 in		15 - 2500 psi	Air	VIII Div. 1

Certification
Number: **30115**Design Series
or catalog number **2500 (Liquids)**Type Classification: **Relief Valve**Capacity Tests: **Sec. VIII Div. 1 at National Board T L (Worthington) on February 08, 1994**Method of Establishing Relieving Capacity: **Flow Capacity, K**Certified Value: **.673 Unitless**Test Medium: **Water**Certified Medium: **Liquid**Set Pressure Definition: **First Steady Stream**Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
0.75 - 1.5 NPS	2, 2.5 NPS	0.1213 sq in	[D] 0.393 in	0.121 in	15 - 7200 psi	Water	VIII Div. 1
1 - 1.5 NPS	2 - 3 NPS	0.214 sq in	[E] 0.522 in	0.161 in	15 - 7200 psi	Water	VIII Div. 1
1.5 - 2 NPS	2 - 3 NPS	0.3167 sq in	[F] 0.635 in	0.195 in	15 - 5000 psi	Water	VIII Div. 1
	2.5, 3 NPS	0.5675 sq in	[G] 0.85 in	0.262 in	15 - 3705 psi	Water	VIII Div. 1
	3 NPS	0.911 sq in	[H] 1.077 in	0.331 in	15 - 2750 psi	Water	VIII Div. 1
2 - 3 NPS	3, 4 NPS	1.4569 sq in	[J] 1.362 in	0.419 in	15 - 2700 psi	Water	VIII Div. 1
3 NPS	4, 6 NPS	2.1253 sq in	[K] 1.645 in	0.506 in	15 - 2220 psi	Water	VIII Div. 1
3 - 4 NPS	4, 6 NPS	3.2813 sq in	[L] 2.044 in	0.629 in	15 - 1500 psi	Water	VIII Div. 1
4 NPS	6 NPS	4.0471 sq in	[M] 2.27 in	0.698 in	15 - 1100 psi	Water	VIII Div. 1
		4.988 sq in	[N] 2.52 in	0.775 in	15 - 1000 psi	Water	VIII Div. 1
		7.33 sq in	[P] 3.055 in	0.939 in	15 - 1000 psi	Water	VIII Div. 1
6 NPS	8 NPS	12.7 sq in	[Q] 4.021 in	1.236 in	15 - 600 psi	Water	VIII Div. 1
	8, 10 NPS	18.38 sq in	[R] 4.838 in	1.488 in	15 - 300 psi	Water	VIII Div. 1
8 NPS	10, 12 NPS	28.27 sq in	[T] 6 in	1.845 in	15 - 300 psi	Water	VIII Div. 1

Circor Energy Products (HDS)

NB#: 30126

Location: 1500 SE 89th St, Oklahoma City, OK 73149 United States

Acceptable Abbrev.: Hydroseal

Certification Number: **30126** Design Series or catalog number: **Series 1500, 1400**

Type Classification: **Safety Relief Valve**Capacity Tests: **Sec. VIII Div. 1 at National Board T L (Worthington) on October 02, 1998**Method of Establishing Relieving Capacity: **Flow Capacity, K**Certified Value: **.870 Unitless**Test Medium: **Steam & Air/Gas**Certified Medium: **Steam & Air/Gas**Set Pressure Definition: **Pop**Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
0.375 - 1 NPS	.75 - 1.5 NPS	0.058 sq in	[C] 0.272 in	0.091 in	15 - 2000 psi	Steam	VIII Div. 1
					15 - 8000 psi	Air	VIII Div. 1
0.5 - 1 NPS	1, 1.5 NPS	0.129 sq in	[D] 0.405 in	0.135 in	15 - 2000 psi	Steam	VIII Div. 1
					15 - 8000 psi	Air	VIII Div. 1
0.75 - 2 NPS	1.5, 2 NPS	0.23 sq in	[E] 0.541 in	0.18 in	15 - 2000 psi	Steam	VIII Div. 1
					15 - 8000 psi	Air	VIII Div. 1
1 - 2 NPS	1.5, 2 NPS	0.366 sq in	[F] 0.683 in	0.228 in	15 - 2000 psi	Steam	VIII Div. 1
					15 - 6400 psi	Air	VIII Div. 1
1.5 - 2 NPS	2 - 3 NPS	0.59 sq in	[G] 0.867 in	0.289 in	15 - 1500 psi	Air	VIII Div. 1
						Steam	VIII Div. 1
		0.83 sq in	[H] 1.028 in	0.343 in	15 - 1500 psi	Air	VIII Div. 1
						Steam	VIII Div. 1

Certification Number: **30137** Design Series or catalog number: **Series 1500, 1400 (Liquids)**

Type Classification: **Relief Valve**Capacity Tests: **Sec. VIII Div. 1 at National Board T L (Worthington) on October 01, 1999**Method of Establishing Relieving Capacity: **Flow Capacity, K**Certified Value: **.672 Unitless**Test Medium: **Water**Certified Medium: **Liquid**Set Pressure Definition: **First Steady Stream**Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
0.5 - 1 NPS	.75 - 1.5 NPS	0.058 sq in	[C] 0.272 in	0.091 in	15 - 8000 psi	Water	VIII Div. 1
	1, 1.5 NPS	0.129 sq in	[D] 0.405 in	0.135 in	15 - 8000 psi	Water	VIII Div. 1
0.75 - 2 NPS	1.5, 2 NPS	0.23 sq in	[E] 0.541 in	0.18 in	15 - 8000 psi	Water	VIII Div. 1
1 - 2 NPS	1.5, 2 NPS	0.366 sq in	[F] 0.683 in	0.228 in	15 - 6400 psi	Water	VIII Div. 1
1.5 - 2 NPS	2 - 3 NPS	0.59 sq in	[G] 0.867 in	0.289 in	15 - 1500 psi	Water	VIII Div. 1
		0.83 sq in	[H] 1.028 in	0.343 in	15 - 1500 psi	Water	VIII Div. 1

Circor Energy Products (HDS)

NB#: 30182

Location: 1500 SE 89th St, Oklahoma City, OK 73149 United States

Acceptable Abbrev.: Hydroseal

Certification Number: **30182** Design Series or catalog number: **2500 Series ER (25MR, 25SER, B25ER)**

Type Classification: **Safety Relief Valve**Capacity Tests: **Sec. VIII Div. 1 at National Board T L (Worthington) on March 28, 2001**Method of Establishing Relieving Capacity: **Flow Capacity, Slope**Certified Value: **3.645 SCFM/PSIA**Certified Value (alternate medium): **10.256 PPH/PSIA**Test Medium: **Steam & Air/Gas**Certified Medium: **Steam & Air/Gas**Set Pressure Definition: **Pop**Blowdown: **Adjustable**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
1 - 1.5 NPS	1.5 - 3 NPS	0.23 sq in	[E] 0.635 in	0.11 in	15 - 2500 psi	Steam	VIII Div. 1
					15 - 6200 psi	Air	VIII Div. 1

Certification Number: **30205** Design Series or catalog number: **5HD thru 7HD, HD Flanged Series**

Type Classification: **Relief Valve**Capacity Tests: **Sec. VIII Div. 1 at National Board T L (Worthington) on February 21, 2002**Method of Establishing Relieving Capacity: **Flow Capacity, Flow Factor**Certified Value: **17.62 GPM/SQ.RT. PSID**Test Medium: **Water**Certified Medium: **Liquid**Set Pressure Definition: **First Steady Stream**Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
0.75 - 2 NPS	1.5 - 3 NPS	0.785 sq in	1 in	0.25 in	15 - 2500 psi	Water	VIII Div. 1

Certification Number: **30250** Design Series or catalog number: **1200B**

Type Classification: **Relief Valve**Capacity Tests: **Sec. VIII Div. 1 at National Board T L (Worthington) on July 15, 2008**Method of Establishing Relieving Capacity: **Flow Capacity, Slope**Certified Value: **7.74 SCFM/PSIA**Test Medium: **Air/Gas**Certified Medium: **Air/Gas**Special Service: **None**Set Pressure Definition: **Pop**Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
1.5 - 2 NPS	2 NPS	0.478 sq in	[G] 0.78 in		15 - 2000 psi	Air	VIII Div. 1

Circor Energy Products (HDS)

NB#: 30261

Location: 1500 SE 89th St, Oklahoma City, OK 73149 United States

Acceptable Abbrev.: Hydroseal

Certification Number: **30261** Design Series or catalog number: **1200B (liquid)**

Type Classification: Relief Valve

Capacity Tests: Sec. VIII Div. 1 at National Board T L (Worthington) on July 15, 2008

Method of Establishing Relieving Capacity: Flow Capacity, Flow Factor

Certified Value: 14.19 GPM/SQ.RT. PSID

Test Medium: Water

Certified Medium: Liquid

Special Service: None

Set Pressure Definition: First Steady Stream

Blowdown: Fixed

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
1.5 - 2 NPS	2 NPS	0.478 sq in	[G] 0.78 in		15 - 2000 psi	Water	VIII Div. 1

Certification Number: **30272** Design Series or catalog number: **1400B**

Type Classification: Safety Relief Valve

Capacity Tests: Sec. VIII Div. 1 at National Board T L (Worthington) on February 25, 2009

Method of Establishing Relieving Capacity: Flow Capacity, Slope

Certified Value: 3.46 SCFM/PSIA

Test Medium: Air/Gas

Certified Medium: Air/Gas

Special Service: None

Set Pressure Definition: Pop

Blowdown: Fixed

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
0.5 - 1 NPS	1 NPS	0.211 sq in	[E] 0.52 in	0.23 in	15 - 2300 psi	Air	VIII Div. 1

Certification Number: **30283** Design Series or catalog number: **1400B (Liquid)**

Type Classification: Safety Relief Valve

Capacity Tests: Sec. VIII Div. 1 at National Board T L (Worthington) on February 25, 2009

Method of Establishing Relieving Capacity: Flow Capacity, Flow Factor

Certified Value: 6.29 GPM/SQ.RT. PSID

Test Medium: Liquid

Certified Medium: Liquid

Special Service: None

Set Pressure Definition: First Steady Stream

Blowdown: Fixed

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
0.5 - 1 NPS	1 NPS	0.211 sq in	[E] 0.52 in	0.23 in	15 - 2300 psi	Water	VIII Div. 1

Location: 1500 SE 89th St, Oklahoma City, OK 73149 United States

Acceptable Abbrev.: Hydroseal

Certification Number: **30294** Design Series or catalog number **3500 w/ Modulating & Snap Pilots**

Type Classification: Pilot Operated Pressure Relief Valve

Capacity Tests: Sec. VIII Div. 1 at National Board T L (Worthington) on June 16, 2009

Method of Establishing Relieving Capacity: Flow Capacity, K

Certified Value: .878 Unitless

Test Medium: Air/Gas

Certified Medium: Air/Gas

Set Pressure Definition: 1.Pop 2.Initial Audible Discharge

Blowdown: Adjustable and Fixed for Mod. Pilot

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
1 - 1.5 NPS	2 NPS	0.15 sq in	[D] 0.437 in	0.35 in	15 - 6170 psi	Air	VIII Div. 1
		0.246 sq in	[E] 0.56 in	0.35 in	15 - 6170 psi	Air	VIII Div. 1
		0.372 sq in	[F] 0.688 in	0.35 in	15 - 6170 psi	Air	VIII Div. 1
1.5 - 2 NPS	3 NPS	0.596 sq in	[G] 0.871 in	0.57 in	15 - 6170 psi	Air	VIII Div. 1
		0.994 sq in	[H] 1.125 in	0.57 in	15 - 6170 psi	Air	VIII Div. 1
2 - 3 NPS	3, 4 NPS	1.5 sq in	[J] 1.382 in	0.57 in	15 - 6170 psi	Air	VIII Div. 1
3 NPS	4 NPS	2.146 sq in	[K] 1.653 in	1.05 in	15 - 3705 psi	Air	VIII Div. 1
3 - 4 NPS	4, 6 NPS	3.343 sq in	[L] 2.063 in	1.05 in	15 - 3705 psi	Air	VIII Div. 1
4 NPS	6 NPS	4.206 sq in	[M] 4.13 in	1.59 in	15 - 3705 psi	Air	VIII Div. 1
		5.054 sq in	[N] 2.537 in	1.59 in	15 - 3705 psi	Air	VIII Div. 1
		7.67 sq in	[P] 3.125 in	1.59 in	15 - 3705 psi	Air	VIII Div. 1
6 NPS	8 NPS	12.946 sq in	[Q] 4.06 in	2.48 in	15 - 1480 psi	Air	VIII Div. 1
		18.719 sq in	[R] 4.882 in	2.48 in	15 - 1480 psi	Air	VIII Div. 1
8 NPS	10 NPS	30.748 sq in	[T] 6.257 in	3.18 in	15 - 900 psi	Air	VIII Div. 1

Conbraco Industries, Incorporated (CNB)

NB#: 11002

location: 1418 S. Pearl St, Pageland, SC 29728 United States

Acceptable Abbrev.: Conbraco

Conbraco Industries, Incorporated (CNB)

location: 1418 S. Pearl St, Pageland, SC 29728 United States

Acceptable Abbrev.: Conbraco

Certification Number: **11002** Design Series or catalog number: **10-102/104 (RVW10)**

Type Classification: **Safety Relief Valve**Capacity Tests: **Sec. IV at Ohio State University (Robinson Laboratory) on February 28, 1970**Method of Establishing Relieving Capacity: **Flow Capacity, Slope**Certified Value: **14.85 PPH/PSIA**Test Medium: **Steam**Certified Medium: **Saturated Water**Set Pressure Definition: **Pop**Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
0.75 NPS	1 NPS	0.442 sq in	0.75 in	0.3 in	20 - 60 psi	Steam	IV

Certification Number: **11024** Design Series or catalog number: **10-301/303 (RVW30)**

Type Classification: **Safety Relief Valve**Capacity Tests: **Sec. IV at Ohio State University (Robinson Laboratory) on October 12, 1962**Method of Establishing Relieving Capacity: **Flow Capacity, Slope**Certified Value: **11.5 PPH/PSIA**Test Medium: **Steam**Certified Medium: **Saturated Water**Set Pressure Definition: **Pop**Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
0.75 NPS	.75 NPS	0.442 sq in	0.75 in	0.19 in	20 - 60 psi	Steam	IV

Certification Number: **11035** Design Series or catalog number: **10-321 (RVW32)**

Type Classification: **Safety Relief Valve**Capacity Tests: **Sec. IV at Ohio State University (Robinson Laboratory) on May 08, 1975**Method of Establishing Relieving Capacity: **Flow Capacity, Slope**Certified Value: **8.90 PPH/PSIA**Test Medium: **Steam**Certified Medium: **Saturated Water**Set Pressure Definition: **Pop**Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
0.75 NPS	.75 NPS	0.442 sq in	0.75 in	0.14 in	20 - 60 psi	Steam	IV

Conbraco Industries, Incorporated (CNB)

NB#: 11046

Location: 1418 S. Pearl St, Pageland, SC 29728 United States

Acceptable Abbrev.: Conbraco

Certification Number: **11046** Design Series or catalog number: **10-322 (RVS32)**

Type Classification: **Safety Relief Valve**Capacity Tests: **Sec. VIII Div. 1 at National Board T L (Picaway) on May 08, 1975**Method of Establishing Relieving Capacity: **Flow Capacity, Slope**Certified Value: **9.0 PPH/PSIA**Test Medium: **Steam**Certified Medium: **Steam**Set Pressure Definition: **Pop**Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
0.75 NPS	.75 NPS	0.442 sq in	0.75 in	0.14 in	20 - 60 psi	Steam	VIII Div. 1

Certification Number: **11057** Design Series or catalog number: **10-407 & 10-408 (30 psig)**

Type Classification: **Safety Relief Valve**Capacity Tests: **Sec. IV at National Board T L (Picaway) on September 28, 1983**Method of Establishing Relieving Capacity: **Flow Capacity, 3 valve average**Certified Value: **535 PPH**Test Medium: **Steam**Certified Medium: **Saturated Water**Set Pressure Definition: **Pop**Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
0.75 NPS	.75 NPS	0.307 sq in	0.625 in	0.26 in	30 - 30 psi	Steam	IV

Certification Number: **11080** Design Series or catalog number: **10-512 (RVS52)**

Type Classification: **Safety Relief Valve**Capacity Tests: **Sec. VIII Div. 1 at National Board T L (Picaway) on March 23, 1981**Method of Establishing Relieving Capacity: **Flow Capacity, Slope**Certified Value: **4.867 PPH/PSIA**Test Medium: **Steam**Certified Medium: **Steam**Set Pressure Definition: **Pop**Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
0.5 NPS	.5 NPS	0.15 sq in	0.437 in	0.1 in	15 - 60 psi	Steam	VIII Div. 1

Conbraco Industries, Incorporated (CNB)

NB#: 11091

Location: 1418 S. Pearl St, Pageland, SC 29728 United States

Acceptable Abbrev.: Conbraco

Certification Number: **11091** Design Series or catalog number: **10-600 (RVW60)**

Type Classification: **Safety Relief Valve**Capacity Tests: **Sec. IV at National Board T L (Picaway) on June 18, 1987**Method of Establishing Relieving Capacity: **Flow Capacity, K**Certified Value: **.63 Unitless**Test Medium: **Steam**Certified Medium: **Saturated Water**Special Service: **None**Set Pressure Definition: **Pop**Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
0.75 NPS	.75 NPS	0.535 sq in	0.825 in	0.336 in	15 - 160 psi	Steam	IV
1 NPS	1 NPS	0.866 sq in	1.05 in	0.429 in	15 - 160 psi	Steam	IV
1.25 NPS	1.25 NPS	1.498 sq in	1.381 in	0.554 in	15 - 160 psi	Steam	IV
1.5 NPS	1.5 NPS	2.038 sq in	1.611 in	0.659 in	15 - 160 psi	Steam	IV
2 NPS	2 NPS	3.359 sq in	2.068 in	0.89 in	15 - 160 psi	Steam	IV

Certification Number: **11103** Design Series or catalog number: **10-610 (RVW61)**

Type Classification: **Safety Relief Valve**Capacity Tests: **Sec. IV at National Board T L (Picaway) on June 03, 1987**Method of Establishing Relieving Capacity: **Flow Capacity, K**Certified Value: **.739 Unitless**Test Medium: **Steam**Certified Medium: **Saturated Water**Special Service: **None**Set Pressure Definition: **Pop**Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
0.75 NPS	1 NPS	0.535 sq in	0.825 in	0.336 in	15 - 160 psi	Steam	IV
1 NPS	1.25 NPS	0.866 sq in	1.05 in	0.429 in	15 - 160 psi	Steam	IV
1.25 NPS	1.5 NPS	1.498 sq in	1.381 in	0.554 in	15 - 160 psi	Steam	IV
1.5 NPS	2 NPS	2.038 sq in	1.611 in	0.659 in	15 - 160 psi	Steam	IV
2 NPS	2.5 NPS	3.359 sq in	2.068 in	0.89 in	15 - 160 psi	Steam	IV

Certification Number: **11114** Design Series or catalog number: **12-205 (RVS12)**

Type Classification: **Safety Valve**Capacity Tests: **Sec. IV at Ohio State University (Robinson Laboratory) on April 26, 1964**Method of Establishing Relieving Capacity: **Flow Capacity, 3 valve average**Certified Value: **2500 PPH**Test Medium: **Steam**Certified Medium: **Steam**Set Pressure Definition: **Pop**Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
2 NPS	2 NPS	2.761 sq in	1.875 in	0.64 in	15 - 15 psi	Steam	IV

Conbraco Industries, Incorporated (CNB)

NB#: 11125

Location: 1418 S. Pearl St, Pageland, SC 29728 United States

Acceptable Abbrev.: Conbraco

Certification Number: **11125** Design Series or catalog number: **12-206 (RVS12)**

Type Classification: **Safety Valve**Capacity Tests: **Sec. IV at Ohio State University (Robinson Laboratory) on September 08, 1963**Method of Establishing Relieving Capacity: **Flow Capacity, 3 valve average**Certified Value: **3529 PPH**Test Medium: **Steam**Certified Medium: **Steam**Set Pressure Definition: **Pop**Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
2.5 NPS	2.5 NPS	3.976 sq in	2.25 in	0.56 in	15 - 15 psi	Steam	IV

Certification Number: **11136** Design Series or catalog number: **12-208 (RVS12)**

Type Classification: **Safety Valve**Capacity Tests: **Sec. IV at National Board T L (Picaway) on September 05, 1979**Method of Establishing Relieving Capacity: **Flow Capacity, 3 valve average**Certified Value: **4100 PPH**Test Medium: **Steam**Certified Medium: **Steam**Set Pressure Definition: **Pop**Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
3 NPS	3 NPS	6.56 sq in	2.89 in	0.42 in	15 - 15 psi	Steam	IV

Certification Number: **11147** Design Series or catalog number: **13-101 (RVS13T)**

Type Classification: **Safety Valve**Capacity Tests: **Sec. IV at Ohio State University (Robinson Laboratory) on August 27, 1961**Method of Establishing Relieving Capacity: **Flow Capacity, 3 valve average**Certified Value: **410 PPH**Test Medium: **Steam**Certified Medium: **Steam**Set Pressure Definition: **Pop**Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
0.75 NPS	open	0.442 sq in	0.75 in	0.21 in	15 - 15 psi	Steam	IV

Certification Number: **11169** Design Series or catalog number: **13-202 (RVS13)**

Type Classification: **Safety Valve**Capacity Tests: **Sec. IV at Ohio State University (Robinson Laboratory) on June 19, 1962**Method of Establishing Relieving Capacity: **Flow Capacity, 3 valve average**Certified Value: **643 PPH**Test Medium: **Steam**Certified Medium: **Steam**Set Pressure Definition: **Pop**Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
1 NPS	1 NPS	0.442 sq in	0.75 in	0.37 in	15 - 15 psi	Steam	IV

Conbraco Industries, Incorporated (CNB)

NB#: 11170

Location: 1418 S. Pearl St, Pageland, SC 29728 United States

Acceptable Abbrev.: Conbraco

Certification Number: **11170** Design Series or catalog number: **13-211 (RVS13)**

Type Classification: **Safety Valve**Capacity Tests: **Sec. IV at National Board T L (Picaway) on June 13, 1984**Method of Establishing Relieving Capacity: **Flow Capacity, 3 valve average**Certified Value: **475 PPH**Test Medium: **Steam**Certified Medium: **Steam**Set Pressure Definition: **Pop**Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
0.75 NPS	0.75 NPS	0.442 sq in	0.75 in	0.244 in	15 - psi	Steam	IV

Certification Number: **11181** Design Series or catalog number: **13-213 (RVS13)**

Type Classification: **Safety Valve**Capacity Tests: **Sec. IV at National Board T L (Picaway) on May 13, 1973**Method of Establishing Relieving Capacity: **Flow Capacity, 3 valve average**Certified Value: **1200 PPH**Test Medium: **Steam**Certified Medium: **Steam**Special Service: **None**Set Pressure Definition: **Pop**Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
1.25 NPS	1.5 NPS	0.785 sq in	1 in	0.57 in	15 - 15 psi	Steam	IV

Certification Number: **11192** Design Series or catalog number: **13-214 (RVS13)**

Type Classification: **Safety Valve**Capacity Tests: **Sec. IV at National Board T L (Picaway) on May 13, 1973**Method of Establishing Relieving Capacity: **Flow Capacity, 3 valve average**Certified Value: **1900 PPH**Test Medium: **Steam**Certified Medium: **Steam**Set Pressure Definition: **Pop**Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
1.5 NPS	2 NPS	1.227 sq in	1.25 in	0.79 in	15 - 15 psi	Steam	IV

Conbraco Industries, Incorporated (CNB)

NB#: 11215

Location: 1418 S. Pearl St, Pageland, SC 29728 United States

Acceptable Abbrev.: Conbraco

Certification Number: **11215** Design Series or catalog number: **14-205 (RVS14)**

Type Classification: **Safety Valve**Capacity Tests: **Sec. IV at Ohio State University (Robinson Laboratory) on January 29, 1965**Method of Establishing Relieving Capacity: **Flow Capacity, 3 valve average**Certified Value: **3150 PPH**Test Medium: **Steam**Certified Medium: **Steam**Set Pressure Definition: **Pop**Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
2 NPS	2 NPS	2.238 sq in	1.688 in	0.83 in	15 - 15 psi	Steam	IV

Certification Number: **11226** Design Series or catalog number: **14-206 (RVS14)**

Type Classification: **Safety Valve**Capacity Tests: **Sec. IV at Ohio State University (Robinson Laboratory) on January 02, 1965**Method of Establishing Relieving Capacity: **Flow Capacity, 3 valve average**Certified Value: **4676 PPH**Test Medium: **Steam**Certified Medium: **Steam**Set Pressure Definition: **Pop**Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
2.5 NPS	2.5 NPS	3.339 sq in	2.062 in	0.52 in	15 - 15 psi	Steam	IV

Certification Number: **11237** Design Series or catalog number: **14-207 (RVS14)**

Type Classification: **Safety Valve**Capacity Tests: **Sec. IV at Ohio State University (Robinson Laboratory) on January 29, 1965**Method of Establishing Relieving Capacity: **Flow Capacity, 3 valve average**Certified Value: **6843 PPH**Test Medium: **Steam**Certified Medium: **Steam**Set Pressure Definition: **Pop**Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
3 NPS	3 NPS	5.155 sq in	2.562 in	0.64 in	15 - 15 psi	Steam	IV

Conbraco Industries, Incorporated (CNB)

NB#: 11248

Location: 1418 S. Pearl St, Pageland, SC 29728 United States

Acceptable Abbrev.: Conbraco

Certification Number: **11248** Design Series or catalog number: **15-112 (RVA15)**

Type Classification: **Safety Relief Valve**Capacity Tests: **Sec. VIII Div. 1 at National Board T L (Picaway) on April 17, 1975**Method of Establishing Relieving Capacity: **Flow Capacity, Slope**Certified Value: **.738 SCFM/PSIA**Test Medium: **Air/Gas**Certified Medium: **Air/Gas**Special Service: **None**Set Pressure Definition: **Pop**Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

Inlet Size	Outlet Size	Flow Area	Orifice [designator] diameter	Lift	Set Pressure Range	Media	Code Section
0.25 NPS	Side		0.265 in		15 - 250 psi	Air	VIII Div. 1

Certification Number: **11259** Design Series or catalog number: **15-115/117 (RVA15)**

Type Classification: **Safety Relief Valve**Capacity Tests: **Sec. VIII Div. 1 at National Board T L (Picaway) on September 06, 1979**Method of Establishing Relieving Capacity: **Flow Capacity, Slope**Certified Value: **1.849 SCFM/PSIA**Test Medium: **Air/Gas**Certified Medium: **Air/Gas**Special Service: **None**Set Pressure Definition: **Pop**Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

Inlet Size	Outlet Size	Flow Area	Orifice [designator] diameter	Lift	Set Pressure Range	Media	Code Section
0.375 - 0.5 NPS	.5 (Side 2)	0.145 sq in	0.43 in		15 - 250 psi	Air	VIII Div. 1

Certification Number: **11282** Design Series or catalog number: **19 Series**

Type Classification: **Safety Valve**Capacity Tests: **Sec. I at National Board T L (Picaway) on March 27, 1980**Method of Establishing Relieving Capacity: **Flow Capacity, K**Certified Value: **.826 Unitless**Test Medium: **Steam**Certified Medium: **Steam & Air/Gas**Set Pressure Definition: **Pop**Blowdown: **Adjustable by Dual Ring**

Scope of Nominal Size and Set Pressure Ranges:

Inlet Size	Outlet Size	Flow Area	Orifice [designator] diameter	Lift	Set Pressure Range	Media	Code Section
0.5 - 0.75 NPS	.75 NPS	0.129 sq in	[D] 0.406 in	0.101 in	15 - 300 psi	Air	VIII Div. 1
						Steam	I & VIII Div. 1
0.75 - 1 NPS	1 NPS	0.23 sq in	[E] 0.541 in	0.135 in	15 - 300 psi	Air	VIII Div. 1
						Steam	I & VIII Div. 1
1 - 1.25 NPS	1.25 NPS	0.359 sq in	[F] 0.676 in	0.169 in	15 - 300 psi	Air	VIII Div. 1
						Steam	I & VIII Div. 1
1.25 - 1.5 NPS	1.5 NPS	0.589 sq in	[G] 0.866 in	0.217 in	15 - 300 psi	Air	VIII Div. 1
						Steam	I & VIII Div. 1
1.5 - 2 NPS	2 NPS	0.919 sq in	[H] 1.082 in	0.271 in	15 - 300 psi	Air	VIII
						Steam	I & VIII Div. 1
1.5 - 2.5 NPS	2.5 NPS	1.509 sq in	[J] 1.386 in	0.347 in	15 - 300 psi	Air	VIII Div. 1
						Steam	I & VIII Div. 1

Conbraco Industries, Incorporated (CNB)

NB#: 11293

Location: 1418 S. Pearl St, Pageland, SC 29728 United States

Acceptable Abbrev.: Conbraco

Certification Number: **11293** Design Series or catalog number: **29-102, 29-202, 29-302**

Type Classification: **Safety Valve**Capacity Tests: **Sec. I at National Board T L (Picaway) on November 30, 1982**Method of Establishing Relieving Capacity: **Flow Capacity, Slope**Certified Value: **3.596 PPH/PSIA**Certified Value (alternate medium): **1.280 SCFM/PSIA**Test Medium: **Steam**Certified Medium: **Steam & Air/Gas**Set Pressure Definition: **Pop**Blowdown: **Adjustable**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
0.375 - 0.75 NPS	1 NPS	0.196 sq in	0.5 in	0.058 in	30 - 205 psi	Air	VIII
						Steam	I
							VIII

Certification Number: **11305** Design Series or catalog number: **29-303, 29-402, 29-501**

Type Classification: **Safety Valve**Capacity Tests: **Sec. I at National Board T L (Picaway) on February 14, 1983**Method of Establishing Relieving Capacity: **Flow Capacity, Slope**Certified Value: **7.23 PPH/PSIA**Certified Value (alternate medium): **2.57 SCFM/PSIA**Test Medium: **Steam**Certified Medium: **Steam & Air/Gas**Set Pressure Definition: **Pop**Blowdown: **Adjustable**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
0.75 - 1.25 NPS	1.25 NPS	0.203 sq in	0.737 in	0.08 in	30 - 210 psi	Air	VIII
						Steam	I
							VIII

Certification Number: **11350** Design Series or catalog number: **13-511/512 (RVS13L)**

Type Classification: **Safety Relief Valve**Capacity Tests: **Sec. IV at National Board T L (Picaway) on October 02, 1990**Method of Establishing Relieving Capacity: **Flow Capacity, 3 valve average**Certified Value: **407 PPH**Test Medium: **Steam**Certified Medium: **Steam**Special Service: **Low Pressure Steam Heating Boilers**Set Pressure Definition: **Pop**Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
0.75 NPS	.75 NPS	0.272 sq in	0.588 in	0.147 in	15 - 15 psi	Steam	IV

Conbraco Industries, Incorporated (CNB)

NB#: 11361

Location: 1418 S. Pearl St, Pageland, SC 29728 United States

Acceptable Abbrev.: Conbraco

Certification
Number: **11361**Design Series
or catalog number **119 Series**Type Classification: **Safety Valve**Capacity Tests: **Sec. I at National Board T L (Worthington) on March 05, 1997**Method of Establishing Relieving Capacity: **Flow Capacity, K**Certified Value: **.878 Unitless**Test Medium: **Steam**Certified Medium: **Steam & Air/Gas**Special Service: **None**Set Pressure Definition: **Pop**Blowdown: **Adjustable**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
1.5 NPS	2.5 NPS	1.358 in	[J] 1.315 in	0.329 in	15 - 250 psi	Air	VIII
						Steam	I VIII
2 - 3 NPS	3 NPS	1.926 sq in	[K] 1.566 in	0.392 in	15 - 250 psi	Air	VIII
						Steam	I VIII
2.5 - 4 NPS	4 NPS	2.99 sq in	[L] 1.951 in	0.488 in	15 - 250 psi	Air	VIII
						Steam	I III
3 - 4 NPS	4 NPS	3.774 in	[M] 2.192 in	0.548 in	15 - 250 psi	Air	VIII
						Steam	I VIII
4 NPS	6 NPS	4.55 sq in	[N] 2.407 in	0.602 in	15 - 250 psi	Air	VIII
						Steam	I VIII
		6.692 in	[P] 2.919 in	0.73 in	15 - 250 psi	Air	VIII
						Steam	I VIII
6 NPS	8 NPS	11.593 in	[Q] 3.842 in	0.961 in	15 - 250 psi	Air	VIII
						Steam	I VIII
		16.786 in	[R] 4.623 in	1.156 in	15 - 250 psi	Air	VIII
						Steam	I VIII

Certification
Number: **11372**Design Series
or catalog number **15-118 (RVA15)**Type Classification: **Safety Relief Valve**Capacity Tests: **Sec. VIII Div. 1 at National Board T L (Worthington) on November 05, 1997**Method of Establishing Relieving Capacity: **Flow Capacity, Slope**Certified Value: **3.28 SCFM/PSIA**Test Medium: **Air/Gas**Certified Medium: **Air/Gas**Set Pressure Definition: **Pop**Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
0.75 NPS	Side	0.219 sq in	0.528 in	0.132 in	15 - 250 psi	Air	VIII

Conbraco Industries, Incorporated (CNB)

NB#: 11383

Location: 1418 S. Pearl St, Pageland, SC 29728 United States

Acceptable Abbrev.: Conbraco

Certification Number: **11383** Design Series or catalog number: **15-119 (RVA15)**

Type Classification: **Safety Relief Valve**Capacity Tests: **Sec. VIII Div. 1 at National Board T L (Worthington) on November 05, 1997**Method of Establishing Relieving Capacity: **Flow Capacity, Slope**Certified Value: **6.78 SCFM/PSIA**Test Medium: **Air/Gas**Certified Medium: **Air/Gas**Set Pressure Definition: **Pop**Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
1 NPS	Side	0.458 sq in	0.764 in	0.191 in	15 - 250 psi	Air	VIII

Certification Number: **11440** Design Series or catalog number: **17-402 (RVW17)**

Type Classification: **Safety Relief Valve**Capacity Tests: **Sec. IV at National Board T L (Worthington) on March 02, 1999**Method of Establishing Relieving Capacity: **Flow Capacity, Slope**Certified Value: **5.2 PPH/PSIA**Test Medium: **Steam**Certified Medium: **Saturated Water**Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
0.75 NPS	0.75 NPS	0.173 sq in	0.47 in	0.117 in	75 - 150 psi	Steam	IV

Certification Number: **11451** Design Series or catalog number: **10-417/418 (RVW40)**

Type Classification: **Safety Relief Valve**Capacity Tests: **Sec. IV at National Board T L (Worthington) on March 02, 1999**Method of Establishing Relieving Capacity: **Flow Capacity, Slope**Certified Value: **10.0 PPH/PSIA**Test Medium: **Steam**Certified Medium: **Saturated Water**Set Pressure Definition: **Pop**Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
0.75 NPS	.75 NPS	0.306 sq in	0.624 in	0.156 in	20 - 80 psi	Steam	IV

Conbraco Industries, Incorporated (CNB)

NB#: 11462

Location: 1418 S. Pearl St, Pageland, SC 29728 United States

Acceptable Abbrev.: Conbraco

Certification
Number: **11462**Design Series
or catalog number **500 Series**Type Classification: **Safety Valve**Capacity Tests: **Sec. VIII Div. 1 at National Board T L (Worthington) on June 12, 2000**Method of Establishing Relieving Capacity: **Flow Capacity, K**Certified Value: **.861 Unitless**Test Medium: **Steam & Air/Gas**Certified Medium: **Steam & Air/Gas**Special Service: **None**Set Pressure Definition: **Pop**Blowdown: **Adjustable by Single Ring**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
0.5 - 0.75 NPS	.75, 1 NPS	0.129 sq in	[D] 0.406 in	0.102 in	15 - 2000 psi	Air	VIII Div. 1
						Steam	VIII Div. 1
0.75 - 1 NPS	1.25 NPS	0.229 sq in	[E] 0.539 in	0.135 in	15 - 2000 psi	Air	VIII Div. 1
						Steam	VIII Div. 1
1 - 1.25 NPS	1.5 NPS	0.359 sq in	[F] 0.676 in	0.169 in	15 - 2000 psi	Air	VIII Div. 1
						Steam	VIII Div. 1
1.25 - 1.5 NPS	2 NPS	0.589 sq in	[G] 0.866 in	0.217 in	15 - 2000 psi	Air	VIII Div. 1
						Steam	VIII Div. 1
1.5 - 2 NPS	2.5 NPS	0.919 sq in	[H] 1.082 in	0.271 in	15 - 2000 psi	Air	VIII Div. 1
						Steam	VIII Div. 1
2 NPS	3 NPS	1.504 sq in	[J] 1.384 in	0.346 in	15 - 2000 psi	Air	VIII Div. 1
						Steam	VIII Div. 1

Certification
Number: **11473**Design Series
or catalog number **500 Series (Liquids)**Type Classification: **Safety Relief Valve**Capacity Tests: **Sec. VIII Div. 1 at National Board T L (Worthington) on February 25, 2000**Method of Establishing Relieving Capacity: **Flow Capacity, K**Certified Value: **.689 Unitless**Test Medium: **Water**Certified Medium: **Liquid**Special Service: **None**Set Pressure Definition: **First Steady Stream**Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
0.5 - 0.75 NPS	.75, 1 NPS	0.129 sq in	[D] 0.406 in	0.102 in	15 - 1000 psi	Water	VIII Div. 1
0.75 - 1 NPS	1.25 NPS	0.229 sq in	[E] 0.539 in	0.135 in	15 - 1000 psi	Water	VIII Div. 1
1 - 1.25 NPS	1.5 NPS	0.359 sq in	[F] 0.676 in	0.169 in	15 - 1000 psi	Water	VIII Div. 1
1.25 - 1.5 NPS	2 NPS	0.589 sq in	[G] 0.866 in	0.217 in	15 - 1000 psi	Water	VIII Div. 1
1.5 - 2 NPS	2.5 NPS	0.919 sq in	[H] 1.082 in	0.271 in	15 - 1000 psi	Water	VIII Div. 1
2 NPS	3 NPS	1.504 sq in	[J] 1.384 in	0.346 in	15 - 1000 psi	Water	VIII Div. 1

Conbraco Industries, Incorporated (CNB)

NB#: 11518

location: 1418 S. Pearl St, Pageland, SC 29728 United States

Acceptable Abbrev.: Conbraco

Certification Number: **11518** Design Series or catalog number: **10-624/634 (RVW62)**

Type Classification: **Safety Relief Valve**Capacity Tests: **Sec. IV at National Board T L (Worthington) on March 13, 2001**Method of Establishing Relieving Capacity: **Flow Capacity, Slope**Certified Value: **14.45 PPH/PSIA**Test Medium: **Steam**Certified Medium: **Saturated Water**Special Service: **None**Set Pressure Definition: **Pop**Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
0.75 NPS	.75 NPS	0.463 sq in	0.768 in	0.19 in	30 - 150 psi	Steam	IV

Continental Disc Corporation (CDC)

NB#: 75002

location: 3160 West Heartland Drive, Liberty, MO 64068 United States

Continental Disc Corporation (CDC)

location: 3160 West Heartland Drive, Liberty, MO 64068 United States

Certification Number: **75002** Design Series or catalog number: **CDC (FS)**

Holder Designation: **RHI, UNISERT, FLAT SEAT**Type Classification: **Rupture Disk Device**Capacity Tests: **Sec. VIII Div. 1 at Continental Disc. Corp. on February 13, 1998**Method of Establishing Relieving Capacity: **Resistance Factor, 3 Size, Krgl**Certified Value: **.34 Unitless**Test Medium: **Air or gases, and liquid (Krgl)**Certified Medium: **Air or gases, and liquid (Krgl)**Special Service: **None**Set Pressure Definition: **Burst Pressure**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
1 NPS		0.86 sq in			25 - 2160 psi		N/A
1.5 NPS		2.04 sq in			22 - 2160 psi		N/A
2 NPS		3.36 sq in			7 - 2160 psi		N/A
3 NPS		7.39 sq in			6 - 1440 psi		N/A
4 NPS		12.73 sq in			5 - 1440 psi		N/A
6 NPS		28.89 sq in			3 - 1440 psi		N/A
8 NPS		50.03 sq in			2 - 720 psi		N/A
10 NPS		78.85 sq in			2 - 720 psi		N/A
12 NPS		113.1 sq in			2 - 720 psi		N/A
14 NPS		137.89 sq in			2 - 720 psi		N/A
16 NPS		182.65 sq in			2 - 720 psi		N/A
18 NPS		233.71 sq in			2 - 720 psi		N/A
20 NPS		291.04 sq in			2 - 275 psi		N/A
24 NPS		424.56 sq in			2 - 275 psi		N/A
30 NPS		671.96 sq in			2 - 275 psi		N/A
32 NPS		766.99 sq in			2 - 275 psi		N/A
36 NPS		975.91 sq in			2 - 275 psi		N/A

Location: 3160 West Heartland Drive, Liberty, MO 64068 United States

Certification Number: **75013** Design Series or catalog number **ENVIRO-SEAL, Isolation Seal**

Type Classification: Rupture Disk Device

Capacity Tests: Sec. VIII Div. 1 at Continental Disc. Corp. on February 13, 1998

Method of Establishing Relieving Capacity: Resistance Factor, 3 Size, Krgl

Certified Value: 2.00 Unitless

Test Medium: Air or gases, and liquid (Krgl)

Certified Medium: Air or gases, and liquid (Krgl)

Special Service: None

Set Pressure Definition: Burst Pressure

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
1 NPS		0.86 sq in			15 - 275 psi		N/A
1.5 NPS		2.04 sq in			10 - 275 psi		N/A
2 NPS		3.36 sq in			6 - 275 psi		N/A
3 NPS		7.39 sq in			4 - 275 psi		N/A
4 NPS		12.73 sq in			3 - 275 psi		N/A
6 NPS		28.89 sq in			2 - 275 psi		N/A
8 NPS		50.03 sq in			1.6 - 275 psi		N/A
10 NPS		78.85 sq in			1.2 - 275 psi		N/A
12 NPS		113.1 sq in			1 - 275 psi		N/A
14 NPS		137.89 sq in			1 - 275 psi		N/A
16 NPS		182.65 sq in			1 - 275 psi		N/A
18 NPS		233.71 sq in			1 - 275 psi		N/A
20 NPS		291.04 sq in			1 - 275 psi		N/A
24 NPS		424.56 sq in			1 - 275 psi		N/A
30 NPS		671.96 sq in			1 - 275 psi		N/A
32 NPS		766.99 sq in			1 - 275 psi		N/A
36 NPS		975.91 sq in			1 - 275 psi		N/A

Certification Number: **75024** Design Series or catalog number **ZAP**

Type Classification: Rupture Disk Device

Capacity Tests: Sec. VIII Div. 1 at Continental Disc. Corp. on February 13, 1998

Method of Establishing Relieving Capacity: Resistance Factor, 3 Size, Krg

Certified Value: 5.88 Unitless

Test Medium: Air or gases (Krg)

Certified Medium: Air or gases (Krg)

Special Service: None

Set Pressure Definition: Burst Pressure

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
1 NPS		0.56 sq in			50 - 1440 psi		N/A
1.5 NPS		1.45 sq in			45 - 1440 psi		N/A
2 NPS		2.36 sq in			35 - 1440 psi		N/A
3 NPS		4.85 sq in			30 - 1440 psi		N/A
4 NPS		7.99 sq in			25 - 1440 psi		N/A
6 NPS		17.27 sq in			20 - 1440 psi		N/A
8 NPS		30.1 sq in			15 - 720 psi		N/A

Location: 3160 West Heartland Drive, Liberty, MO 64068 United States

Certification
Number: **75035**Design Series
or catalog number **KBA**Type Classification: **Rupture Disk Device**Capacity Tests: **Sec. VIII Div. 1 at Continental Disc. Corp. on February 12, 1998**Method of Establishing Relieving Capacity: **Resistance Factor, 3 Size, Krg**Certified Value: **3.62 Unitless**Test Medium: **Air/Gas**Certified Medium: **Air or gases (Krg)**Set Pressure Definition: **Burst Pressure**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
1 NPS		0.72 sq in			35 - 2160 psi		VIII Div. 1
1.5 NPS		1.77 sq in			30 - 2160 psi		VIII Div. 1
2 NPS		2.95 sq in			26 - 2160 psi		VIII Div. 1
3 NPS		6.61 sq in			24 - 1440 psi		VIII Div. 1
4 NPS		11.5 sq in			23 - 1440 psi		VIII Div. 1
6 NPS		26.07 sq in			20 - 1440 psi		VIII Div. 1
8 NPS		45.66 sq in			15 - 720 psi		VIII Div. 1
10 NPS		71.81 sq in			18 - 720 psi		VIII Div. 1
12 NPS		101.6 sq in			18 - 275 psi		VIII Div. 1
14 NPS		122.7 sq in			17 - 275 psi		VIII Div. 1
16 NPS		160.9 sq in			16 - 275 psi		VIII Div. 1
18 NPS		204.2 sq in			15 - 275 psi		VIII Div. 1
20 NPS		252.7 sq in			12 - 275 psi		VIII Div. 1
24 NPS		365.2 sq in			12 - 275 psi		VIII Div. 1
28 NPS		498.2 sq in			11 - 275 psi		VIII Div. 1
30 NPS		572.5 sq in			10 - 275 psi		VIII Div. 1
32 NPS		651.9 sq in			9 - 275 psi		VIII Div. 1

Location: 3160 West Heartland Drive, Liberty, MO 64068 United States

Certification
Number: **75046**Design Series
or catalog number **CDCV (FS)**Holder Designation: **RHI, UNISERT, Flat Seat**Type Classification: **Rupture Disk Device**Capacity Tests: **Sec. VIII Div. 1 at Continental Disc. Corp. on February 13, 1998**Method of Establishing Relieving Capacity: **Resistance Factor, 3 Size, Krgl**Certified Value: **1.04 Unitless**Test Medium: **Air or gases, and liquid (Krgl)**Certified Medium: **Air or gases, and liquid (Krgl)**Special Service: **None**Set Pressure Definition: **Burst Pressure**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
1 NPS		0.86 sq in			30 - 2160 psi		VIII Div. 1
1.5 NPS		2.04 sq in			18 - 2160 psi		VIII Div. 1
2 NPS		3.36 sq in			10 - 2160 psi		VIII Div. 1
3 NPS		7.39 sq in			6.5 - 1440 psi		VIII Div. 1
4 NPS		12.73 sq in			7 - 1440 psi		VIII Div. 1
6 NPS		28.89 sq in			5 - 1440 psi		VIII Div. 1
8 NPS		50.03 sq in			5 - 720 psi		VIII Div. 1
10 NPS		78.85 sq in			5 - 720 psi		VIII Div. 1
12 NPS		113.1 sq in			4 - 720 psi		VIII Div. 1
14 NPS		137.9 sq in			4 - 720 psi		VIII Div. 1
16 NPS		182.7 sq in			4 - 720 psi		VIII Div. 1
18 NPS		233.7 sq in			4 - 720 psi		VIII Div. 1
20 NPS		291 sq in			4 - 275 psi		VIII Div. 1
24 NPS		424.6 sq in			4 - 275 psi		VIII Div. 1
28 NPS		583.2 sq in			4 - 275 psi		VIII Div. 1
30 NPS		672 sq in			4 - 275 psi		VIII Div. 1
32 NPS		767 sq in			4 - 275 psi		VIII Div. 1
36 NPS		975.9 sq in			4 - 275 psi		VIII Div. 1
38 NPS		1090 sq in			4 - 275 psi		VIII Div. 1
40 NPS		1210 sq in			4 - 275 psi		VIII Div. 1
42 NPS		1336 sq in			4 - 275 psi		VIII Div. 1
44 NPS		1469 sq in			4 - 275 psi		VIII Div. 1
46 NPS		1608 sq in			4 - 275 psi		VIII Div. 1
48 NPS		1753 sq in			4 - 275 psi		VIII Div. 1

Location: 3160 West Heartland Drive, Liberty, MO 64068 United States

Certification Number: **75057** Design Series or catalog number: **CDC/LD/ (LL)**

Holder Designation: Insert, Full Bolted #1 thru #9, Union 2U, 3U, 5U, 6U

Type Classification: Rupture Disk Device

Capacity Tests: Sec. VIII Div. 1 at Continental Disc. Corp. on February 13, 1998

Method of Establishing Relieving Capacity: Resistance Factor, 3 Size, Krgl

Certified Value: 1.81 Unitless

Test Medium: Air or gases (Krg)

Certified Medium: Air or gases, and liquid (Krgl)

Special Service: None

Set Pressure Definition: Burst Pressure

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
1 NPS		0.72 sq in			25 - 2160 psi		N/A
1.5 NPS		1.77 sq in			22 - 2160 psi		N/A
2 NPS		3.36 sq in			7 - 2160 psi		N/A
3 NPS		7.39 sq in			6 - 1440 psi		N/A
4 NPS		12.73 sq in			5 - 1440 psi		N/A
6 NPS		28.89 sq in			3 - 1440 psi		N/A
8 NPS		50.03 sq in			2 - 1440 psi		N/A
10 NPS		78.85 sq in			2 - 720 psi		N/A
12 NPS		113.1 sq in			2 - 720 psi		N/A
14 NPS		137.89 sq in			2 - 720 psi		N/A
16 NPS		182.65 sq in			2 - 720 psi		N/A
18 NPS		233.71 sq in			2 - 720 psi		N/A
20 NPS		291.04 sq in			2 - 720 psi		N/A
24 NPS		424.56 sq in			2 - 275 psi		N/A
30 NPS		671.96 sq in			2 - 275 psi		N/A

Location: 3160 West Heartland Drive, Liberty, MO 64068 United States

Certification Number: **75079** Design Series or catalog number: **MICRO X, MX-9T & SCORED FLAT SEAT**

Holder Designation: RHI, UNISERT, FLAT SEAT, MX-9T, MX-9T-RH

Type Classification: Rupture Disk Device

Capacity Tests: Sec. VIII Div. 1 at Continental Disc. Corp. on February 12, 1998

Method of Establishing Relieving Capacity: Resistance Factor, 3 Size, Krgl

Certified Value: .29 Unitless

Test Medium: Air/Gas & Liquid

Certified Medium: Air or gases, and liquid (Krgl)

Special Service: None

Set Pressure Definition: Burst Pressure

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
1 NPS		0.86 sq in			140 - 6000 psi		N/A
1.5 NPS		2.04 sq in			120 - 6000 psi		N/A
2 NPS		3.36 sq in			55 - 6000 psi		N/A
3 NPS		7.39 sq in			50 - 6000 psi		N/A
4 NPS		12.73 sq in			50 - 6000 psi		N/A
6 NPS		28.89 sq in			45 - 6000 psi		N/A
8 NPS		50.03 sq in			40 - 6000 psi		N/A
10 NPS		78.85 sq in			40 - 720 psi		N/A
12 NPS		113.1 sq in			35 - 720 psi		N/A
14 NPS		137.89 sq in			21 - 720 psi		N/A
16 NPS		182.65 sq in			18 - 720 psi		N/A
18 NPS		233.71 sq in			16 - 720 psi		N/A
20 NPS		291.04 sq in			15 - 720 psi		N/A
24 NPS		424.56 sq in			15 - 720 psi		N/A
28 NPS		583.21 sq in			15 - 720 psi		N/A
30 NPS		671.96 sq in			15 - 720 psi		N/A
32 NPS		766.99 sq in			15 - 720 psi		N/A
36 NPS		975.91 sq in			15 - 275 psi		N/A

Location: 3160 West Heartland Drive, Liberty, MO 64068 United States

Certification
Number: **75080**Design Series
or catalog number **MICRO X-V, MX-9T-V & SCORED FLAT SEAT**Holder Designation: **RHI, UNISERT, FLAT SEAT, MX-9T, MX-9T-RH**Type Classification: **Rupture Disk Device**Capacity Tests: **Sec. VIII Div. 1 at Continental Disc. Corp. on February 13, 1998**Method of Establishing Relieving Capacity: **Resistance Factor, 3 Size, Krg**Certified Value: **.29 Unitless**Test Medium: **Air/Gas**Certified Medium: **Air or gases (Krg)**Special Service: **None**Set Pressure Definition: **Burst Pressure**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
1 NPS		0.86 sq in			140 - 6000 psi		N/A
1.5 NPS		2.04 sq in			120 - 6000 psi		N/A
2 NPS		3.36 sq in			55 - 3600 psi		N/A
3 NPS		7.39 sq in			50 - 3600 psi		N/A
4 NPS		12.73 sq in			50 - 3600 psi		N/A
6 NPS		28.89 sq in			45 - 1440 psi		N/A
8 NPS		50.03 sq in			40 - 1440 psi		N/A
10 NPS		78.85 sq in			40 - 720 psi		N/A
12 NPS		113.1 sq in			35 - 720 psi		N/A
14 NPS		137.89 sq in			21 - 720 psi		N/A
16 NPS		182.65 sq in			18 - 720 psi		N/A
18 NPS		233.71 sq in			16 - 720 psi		N/A
20 NPS		291.04 sq in			15 - 720 psi		N/A
24 NPS		424.56 sq in			15 - 720 psi		N/A
28 NPS		583.21 sq in			15 - 720 psi		N/A
30 NPS		671.96 sq in			15 - 720 psi		N/A
32 NPS		766.99 sq in			15 - 720 psi		N/A
36 NPS		975.91 sq in			15 - 275 psi		N/A

Location: 3160 West Heartland Drive, Liberty, MO 64068 United States

Certification
Number: **75091**Design Series
or catalog number **STANDARD**

Holder Designation: Insert, Full Bolted #1 thru #9, Union 2U, 3U, 5U, 6U

Type Classification: Rupture Disk Device

Capacity Tests: Sec. VIII Div. 1 at Continental Disc. Corp. on February 13, 1998

Method of Establishing Relieving Capacity: Resistance Factor, 3 Size, Krg

Certified Value: 1.13 Unitless

Test Medium: Air or gases (Krg)

Certified Medium: Air or gases (Krg)

Special Service: None

Set Pressure Definition: Burst Pressure

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
0.5 NPS		0.23 sq in			65 - 6000 psi		N/A
0.75 NPS		0.43 sq in			50 - 6000 psi		N/A
1 NPS		0.72 sq in			29 - 6000 psi		N/A
1.5 NPS		1.77 sq in			22 - 6000 psi		N/A
2 NPS		3.36 sq in			10 - 6000 psi		N/A
3 NPS		7.39 sq in			9 - 6000 psi		N/A
4 NPS		12.73 sq in			7 - 6000 psi		N/A
6 NPS		28.89 sq in			5 - 6000 psi		N/A
8 NPS		50.03 sq in			4 - 3600 psi		N/A
10 NPS		78.85 sq in			4 - 3600 psi		N/A
12 NPS		113.1 sq in			3 - 3600 psi		N/A
14 NPS		137.89 sq in			3 - 2160 psi		N/A
16 NPS		182.65 sq in			3 - 2160 psi		N/A
18 NPS		233.71 sq in			3 - 1440 psi		N/A
20 NPS		291.04 sq in			3 - 1400 psi		N/A
24 NPS		424.56 sq in			3 - 1400 psi		N/A
30 NPS		671.96 sq in			3 - 1440 psi		N/A

Certification
Number: **75125**Design Series
or catalog number **ULTRX, ULTRX HP**

Holder Designation: ULTRX, ULTRX-T

Type Classification: Rupture Disk Device

Capacity Tests: Sec. VIII Div. 1 at Continental Disc. Corp. on February 13, 1998

Method of Establishing Relieving Capacity: Resistance Factor, 3 Size, Krgl

Certified Value: .62 Unitless

Test Medium: Air or gases, and liquid (Krgl)

Certified Medium: Air or gases, and liquid (Krgl)

Special Service: None

Set Pressure Definition: Burst Pressure

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
1 NPS		0.86 sq in			100 - 2160 psi		VIII Div. 1
1.5 NPS		2.04 sq in			85 - 2160 psi		N/A
2 NPS		3.36 sq in			65 - 1440 psi		N/A
3 NPS		7.39 sq in			50 - 1440 psi		N/A
4 NPS		12.73 sq in			45 - 1440 psi		N/A
6 NPS		28.89 sq in			40 - 720 psi		N/A
8 NPS		50.03 sq in			35 - 720 psi		N/A
10 NPS		78.85 sq in			15 - 720 psi		N/A
12 NPS		113.1 sq in			10 - 720 psi		N/A

Location: 3160 West Heartland Drive, Liberty, MO 64068 United States

Certification
Number: **75147**Design Series
or catalog number: **RCS**Type Classification: **Rupture Disk Device**Capacity Tests: **Sec. VIII Div. 1 at Continental Disc. Corp. on February 13, 1998**Method of Establishing Relieving Capacity: **Resistance Factor, 3 Size, Krg**Certified Value: **.59 Unitless**Test Medium: **Air/Gas**Certified Medium: **Air or gases (Krg)**Special Service: **None**Set Pressure Definition: **Burst Pressure**

Scope of Nominal Size and Set Pressure Ranges:

Inlet Size	Outlet Size	Flow Area	Orifice [designator] diameter	Lift	Set Pressure Range	Media	Code Section
1 NPS		0.86 sq in			115 - 2160 psi		N/A
1.5 NPS		2.04 sq in			83 - 2160 psi		N/A
2 NPS		3.36 sq in			70 - 1440 psi		N/A
3 NPS		7.39 sq in			65 - 1440 psi		N/A
4 NPS		12.73 sq in			55 - 1440 psi		N/A
6 NPS		28.89 sq in			40 - 1440 psi		N/A
8 NPS		50.03 sq in			35 - 1440 psi		N/A

Certification
Number: **75169**Design Series
or catalog number: **PL, PLV, LPL, LPLV (Flat Seat)**Holder Designation: **RHI, Unisert, Flat Seat**Type Classification: **Rupture Disk Device**Capacity Tests: **Control Script failed for control txtCoc , Source=**Method of Establishing Relieving Capacity: **Resistance Factor, 3 Size, Krgl**Certified Value: **1.60 Unitless**Test Medium: **Air/Gas & Liquid**Certified Medium: **Air or gases, and liquid (Krgl)**Special Service: **None**Set Pressure Definition: **Burst Pressure**

Scope of Nominal Size and Set Pressure Ranges:

Inlet Size	Outlet Size	Flow Area	Orifice [designator] diameter	Lift	Set Pressure Range	Media	Code Section
1 NPS		0.86 sq in			35 - 2160 psi		VIII Div. 1
1.5 NPS		2.04 sq in			32 - 2160 psi		VIII Div. 1
2 NPS		3.36 sq in			15 - 2160 psi		VIII Div. 1
3 NPS		7.39 sq in			8 - 1440 psi		VIII Div. 1
4 NPS		12.73 sq in			6 - 1440 psi		VIII Div. 1
6 NPS		28.89 sq in			5 - 1440 psi		VIII Div. 1
8 NPS		50.03 sq in			4 - 720 psi		VIII Div. 1
10 NPS		78.85 sq in			5 - 720 psi		VIII Div. 1
12 NPS		113.1 sq in			5 - 720 psi		VIII Div. 1
14 NPS		137.9 sq in			5 - 720 psi		VIII Div. 1
16 NPS		182.7 sq in			5 - 720 psi		VIII Div. 1
18 NPS		233.7 sq in			5 - 720 psi		VIII Div. 1
20 NPS		291 sq in			5 - 275 psi		VIII Div. 1
24 NPS		424.6 sq in			5 - 275 psi		VIII Div. 1
28 NPS		583.2 sq in			5 - 275 psi		VIII Div. 1
30 NPS		672 sq in			5 - 275 psi		VIII Div. 1
32 NPS		767 sq in			5 - 275 psi		VIII Div. 1
36 NPS		975.9 sq in			5 - 275 psi		VIII Div. 1

Location: 3160 West Heartland Drive, Liberty, MO 64068 United States

Certification Number: **75170** Design Series or catalog number **PL, PLV, LPL, LPLV (Angular seat)**

Holder Designation: Insert, Full bolted #1 thru #9, Union 2U, 3U, 5U, 6U, Union

Type Classification: Rupture Disk Device

Capacity Tests: Sec. VIII Div. 1 at Continental Disc. Corp. on May 14, 1998

Method of Establishing Relieving Capacity: Resistance Factor, 3 Size, Krgl

Certified Value: 5.00 Unitless

Test Medium: Air/Gas & Liquid

Certified Medium: Air or gases, and liquid (Krgl)

Special Service: None

Set Pressure Definition: Burst Pressure

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
1 NPS		0.52 sq in			35 - 2160 psi		VIII Div. 1
1.5 NPS		1.4 sq in			32 - 2160 psi		VIII Div. 1
2 NPS		3.36 sq in			15 - 2160 psi		VIII Div. 1
3 NPS		7.39 sq in			11 - 1440 psi		VIII Div. 1
4 NPS		12.73 sq in			6 - 1440 psi		VIII Div. 1
6 NPS		28.89 sq in			5 - 1440 psi		VIII Div. 1
8 NPS		50.03 sq in			4 - 1440 psi		VIII Div. 1
10 NPS		78.85 sq in			5 - 720 psi		VIII Div. 1
12 NPS		113.1 sq in			5 - 720 psi		VIII Div. 1
14 NPS		137.9 sq in			5 - 720 psi		VIII Div. 1
16 NPS		182.7 sq in			5 - 720 psi		VIII Div. 1
18 NPS		233.7 sq in			5 - 720 psi		VIII Div. 1
20 NPS		291 sq in			5 - 720 psi		VIII Div. 1
24 NPS		424.6 sq in			5 - 275 psi		VIII Div. 1
30 NPS		672 sq in			5 - 275 psi		VIII Div. 1

Location: 3160 West Heartland Drive, Liberty, MO 64068 United States

Certification Number: **75181** Design Series or catalog number: **MICRO-X-V, MX-9T-V Flat Seat (liquid)**

Holder Designation: RHI, Unisert and Flat Seat, MX-9T, MX-9T-RH

Type Classification: Rupture Disk Device

Capacity Tests: Sec. VIII Div. 1 at Continental Disc. Corp. on May 13, 1998

Method of Establishing Relieving Capacity: Resistance Factor, 3 Size, Krl

Certified Value: 1.10 Unitless

Test Medium: Air/Gas & Liquid

Certified Medium: Liquid (Krl)

Special Service: None

Set Pressure Definition: Burst Pressure

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
1 NPS		0.86 sq in			140 - 6000 psi		VIII Div. 1
1.5 NPS		2.04 sq in			120 - 6000 psi		VIII Div. 1
2 NPS		3.36 sq in			55 - 3600 psi		VIII Div. 1
3 NPS		7.39 sq in			50 - 3600 psi		VIII Div. 1
4 NPS		12.73 sq in			50 - 3600 psi		VIII Div. 1
6 NPS		28.89 sq in			45 - 1440 psi		VIII Div. 1
8 NPS		50.03 sq in			40 - 1440 psi		VIII Div. 1
10 NPS		78.85 sq in			40 - 720 psi		VIII Div. 1
12 NPS		113.1 sq in			35 - 720 psi		VIII Div. 1
14 NPS		137.9 sq in			21 - 720 psi		VIII Div. 1
16 NPS		182.7 sq in			18 - 720 psi		VIII Div. 1
18 NPS		233.7 sq in			15 - 720 psi		VIII Div. 1
20 NPS		291 sq in			15 - 720 psi		VIII Div. 1
24 NPS		424.6 sq in			75 - 720 psi		VIII Div. 1
28 NPS		583.2 sq in			64 - 720 psi		VIII Div. 1
30 NPS		672 sq in			60 - 720 psi		VIII Div. 1
32 NPS		767 sq in			56 - 720 psi		VIII Div. 1
36 NPS		975.9 sq in			50 - 275 psi		VIII Div. 1

Location: 3160 West Heartland Drive, Liberty, MO 64068 United States

Certification Number: **75215** Design Series or catalog number **CDCV (FS) (No Options)**

Holder Designation: **RHI, UNISERT**Type Classification: **Rupture Disk Device**Capacity Tests: **Sec. VIII Div. 1 at Continental Disc. Corp. on October 27, 1998**Method of Establishing Relieving Capacity: **Resistance Factor, 3 Size, Krgl**Certified Value: **.53 Unitless**Test Medium: **Air/Gas & Liquid**Certified Medium: **Air or gases, and liquid (Krgl)**Special Service: **None**Set Pressure Definition: **Burst Pressure**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
1 NPS		0.86 sq in			30 - 2160 psi		VIII Div. 1
1.5 NPS		2.04 sq in			18 - 2160 psi		VIII Div. 1
2 NPS		3.36 sq in			10 - 2160 psi		VIII Div. 1
3 NPS		7.39 sq in			6.5 - 1440 psi		VIII Div. 1
4 NPS		12.73 sq in			7 - 1440 psi		VIII Div. 1
6 NPS		28.89 sq in			5 - 1440 psi		VIII Div. 1
8 NPS		50.03 sq in			5 - 720 psi		VIII Div. 1
10 NPS		78.85 sq in			5 - 720 psi		VIII Div. 1
12 NPS		113.1 sq in			4 - 720 psi		VIII Div. 1
14 NPS		137.89 sq in			4 - 720 psi		VIII Div. 1
16 NPS		182.65 sq in			4 - 720 psi		VIII Div. 1
18 NPS		233.71 sq in			4 - 720 psi		VIII Div. 1
20 NPS		291.04 sq in			4 - 275 psi		VIII Div. 1
24 NPS		424.56 sq in			4 - 275 psi		VIII Div. 1
28 NPS		583.21 sq in			4 - 40 psi		VIII Div. 1
30 NPS		671.96 sq in			4 - 40 psi		VIII Div. 1
32 NPS		766.99 sq in			4 - 40 psi		VIII Div. 1
36 NPS		975.91 sq in			4 - 275 psi		VIII Div. 1
38 NPS		1090 sq in			4 - 275 psi		VIII Div. 1
40 NPS		1210 sq in			4 - 275 psi		VIII Div. 1
42 NPS		1336 sq in			4 - 275 psi		VIII Div. 1
44 NPS		1469 sq in			4 - 275 psi		VIII Div. 1
46 NPS		1608 sq in			4 - 275 psi		VIII Div. 1
48 NPS		1753 sq in			4 - 275 psi		VIII Div. 1

Location: 3160 West Heartland Drive, Liberty, MO 64068 United States

Certification Number: **75226** Design Series or catalog number **RCS (No Options)**

Holder Designation: **RCS**Type Classification: **Rupture Disk Device**Capacity Tests: **Sec. VIII Div. 1 at Continental Disc. Corp. on May 14, 1998**Method of Establishing Relieving Capacity: **Resistance Factor, 3 Size, Krg**Certified Value: **.35 Unitless**Test Medium: **Air/Gas**Certified Medium: **Air or gases (Krg)**Special Service: **None**Set Pressure Definition: **Burst Pressure**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
1 NPS		0.86 sq in			115 - 2160 psi		VIII Div. 1
1.5 NPS		2.04 sq in			83 - 2160 psi		VIII Div. 1
2 NPS		3.36 sq in			70 - 1440 psi		VIII Div. 1
3 NPS		7.39 sq in			65 - 1440 psi		VIII Div. 1
4 NPS		12.73 sq in			55 - 1440 psi		VIII Div. 1
6 NPS		28.89 sq in			40 - 1440 psi		VIII Div. 1
8 NPS		50.03 sq in			35 - 1440 psi		VIII Div. 1
10 NPS		78.85 sq in			30 - 1440 psi		VIII Div. 1
12 NPS		113.1 sq in			25 - 1440 psi		VIII Div. 1
14 NPS		137.9 sq in			20 - 720 psi		VIII Div. 1
16 NPS		182.7 sq in			20 - 720 psi		VIII Div. 1
18 NPS		233.7 sq in			20 - 720 psi		VIII Div. 1
20 NPS		291 sq in			20 - 720 psi		VIII Div. 1
24 NPS		424.6 sq in			20 - 275 psi		VIII Div. 1
30 NPS		672 sq in			20 - 275 psi		VIII Div. 1
32 NPS		767 sq in			20 - 275 psi		VIII Div. 1

Certification Number: **75237** Design Series or catalog number **MINTRX (No Options)**

Holder Designation: **MINTRX**Type Classification: **Rupture Disk Device**Capacity Tests: **Sec. VIII Div. 1 at Continental Disc. Corp. on May 13, 1998**Method of Establishing Relieving Capacity: **Resistance Factor, 3 Size, KrgI**Certified Value: **.46 Unitless**Test Medium: **Air or gases, and liquid (KrgI)**Certified Medium: **Air or gases, and liquid (KrgI)**Special Service: **None**Set Pressure Definition: **Burst Pressure**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
1 NPS		0.86 sq in			50 - 275 psi		VIII Div. 1
1.5 NPS		2.04 sq in			45 - 275 psi		VIII Div. 1
2 NPS		3.36 sq in			35 - 275 psi		VIII Div. 1
3 NPS		7.39 sq in			25 - 275 psi		VIII Div. 1
4 NPS		12.73 sq in			20 - 275 psi		VIII Div. 1
6 NPS		28.89 sq in			15 - 275 psi		VIII Div. 1
8 NPS		50.03 sq in			15 - 275 psi		VIII Div. 1

Location: 3160 West Heartland Drive, Liberty, MO 64068 United States

Certification Number: **75248** Design Series or catalog number: **ULTRX, ULTRX HP (No Options)**

Holder Designation: **ULTRX, ULTRX-T**Type Classification: **Rupture Disk Device**Capacity Tests: **Sec. VIII Div. 1 at Continental Disc. Corp. on May 14, 1998**Method of Establishing Relieving Capacity: **Resistance Factor, 3 Size, Krg**Certified Value: **.36 Unitless**Test Medium: **Air/Gas**Certified Medium: **Air or gases (Krg)**Special Service: **None**Set Pressure Definition: **Burst Pressure**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
1 NPS		0.86 sq in			100 - 2160 psi		VIII Div. 1
1.5 NPS		2.04 sq in			85 - 2160 psi		VIII Div. 1
2 NPS		3.36 sq in			65 - 1440 psi		VIII Div. 1
3 NPS		7.39 sq in			50 - 1440 psi		VIII Div. 1
4 NPS		12.73 sq in			45 - 1440 psi		VIII Div. 1
6 NPS		28.89 sq in			40 - 720 psi		VIII Div. 1
8 NPS		50.03 sq in			35 - 720 psi		VIII Div. 1
10 NPS		78.85 sq in			15 - 720 psi		VIII Div. 1
12 NPS		113.1 sq in			10 - 720 psi		VIII Div. 1

Certification Number: **75259** Design Series or catalog number: **CD30935**

Type Classification: **Rupture Disk Device**Capacity Tests: **Sec. VIII Div. 1 at Continental Disc. Corp. on January 09, 1999**Method of Establishing Relieving Capacity: **Resistance Factor, 1 Size, Krgl**Certified Value: **1.0 Unitless**Test Medium: **Air/Gas**Certified Medium: **Air or gases, and liquid (Krgl)**Special Service: **None**Set Pressure Definition: **Burst Pressure**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
0.5 NPS	.5 NPS	0.26 sq in	0.58 in		140 - 1000 psi		VIII Div. 1

Certification Number: **75260** Design Series or catalog number: **CD30936**

Type Classification: **Rupture Disk Device**Capacity Tests: **Sec. VIII Div. 1 at Continental Disc. Corp. on January 14, 1999**Method of Establishing Relieving Capacity: **Resistance Factor, 1 Size, Krgl**Certified Value: **1.0 Unitless**Test Medium: **Air/Gas & Liquid**Certified Medium: **Air or gases, and liquid (Krgl)**Set Pressure Definition: **Burst Pressure**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
0.75 NPS	.75 NPS	0.44 sq in	0.75 in		140 - 1000 psi		VIII Div. 1

Location: 3160 West Heartland Drive, Liberty, MO 64068 United States

Certification
Number: **75271**Design Series
or catalog number **ULTRX (DD)**Holder Designation: **ULTRX Double Disk**Type Classification: **Rupture Disk Device**Capacity Tests: **Sec. VIII Div. 1 at Continental Disc. Corp. on October 17, 1998**Method of Establishing Relieving Capacity: **Resistance Factor, 3 Size, Krgl**Certified Value: **.97 Unitless**Test Medium: **Air/Gas & Liquid**Certified Medium: **Air or gases, and liquid (Krgl)**Set Pressure Definition: **Burst Pressure**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
1 NPS		0.86 sq in			100 - 2160 psi		VIII Div. 1
1.5 NPS		2.04 sq in			85 - 2160 psi		VIII Div. 1
2 NPS		3.36 sq in			65 - 1440 psi		VIII Div. 1
3 NPS		7.39 sq in			50 - 1440 psi		VIII Div. 1
4 NPS		12.73 sq in			45 - 1440 psi		VIII Div. 1
6 NPS		28.89 sq in			40 - 720 psi		VIII Div. 1
8 NPS		50.03 sq in			35 - 720 psi		VIII Div. 1
10 NPS		78.85 sq in			15 - 720 psi		VIII Div. 1
12 NPS		113.1 sq in			10 - 720 psi		VIII Div. 1

Certification
Number: **75282**Design Series
or catalog number **SRA (FS)**Holder Designation: **SRA Tite seal, SRA screw type, SRA Insert, WSRA, SRA Union**Type Classification: **Rupture Disk Device**Capacity Tests: **Sec. VIII Div. 1 at Continental Disc. Corp. on April 15, 1999**Method of Establishing Relieving Capacity: **Resistance Factor, 3 Size, Krgl**Certified Value: **3.59 Unitless**Test Medium: **Air/Gas & Liquid**Certified Medium: **Air or gases, and liquid (Krgl)**Set Pressure Definition: **Burst Pressure**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
0.125 NPS		0.04 sq in			35 - 3600 psi		VIII Div. 1
0.25 NPS		0.07 sq in			35 - 3600 psi		VIII Div. 1
0.375 NPS		0.14 sq in			35 - 3600 psi		VIII Div. 1
0.5 NPS		0.23 sq in			35 - 3600 psi		VIII Div. 1
0.75 NPS		0.43 sq in			15 - 2000 psi		VIII Div. 1
1 NPS		0.72 sq in			10 - 2000 psi		VIII Div. 1
1.25 NPS		1.28 sq in			10 - 1000 psi		VIII Div. 1

Location: 3160 West Heartland Drive, Liberty, MO 64068 United States

Certification Number: **75293** Design Series or catalog number: **Standard-V (flat seat threaded)**

Holder Designation: Tite-seal, screw type, throw-away

Type Classification: Rupture Disk Device

Capacity Tests: Sec. VIII Div. 1 at Continental Disc. Corp. on April 26, 1999

Method of Establishing Relieving Capacity: Resistance Factor, 3 Size, Krgl

Certified Value: 10.5 Unitless

Test Medium: Air/Gas & Liquid

Certified Medium: Air or gases, and liquid (Krgl)

Set Pressure Definition: Burst Pressure

Scope of Nominal Size and Set Pressure Ranges:

Inlet Size	Outlet Size	Flow Area	Orifice [designator] diameter	Lift	Set Pressure Range	Media	Code Section
0.125 NPS		0.01 sq in			85 - 15000 psi		VIII Div. 1
0.25 NPS		0.04 sq in			85 - 15000 psi		VIII Div. 1
0.375 NPS		0.1 sq in			85 - 15000 psi		VIII Div. 1
0.5 NPS		0.17 sq in			85 - 15000 psi		VIII Div. 1
0.75 NPS		0.29 sq in			29 - 5000 psi		VIII Div. 1
1 NPS		0.52 sq in			29 - 5000 psi		VIII Div. 1
1.25 NPS		1.05 sq in			29 - 5000 psi		VIII Div. 1

Certification Number: **75305** Design Series or catalog number: **Standard (angle seat threaded)**

Holder Designation: Screw type

Type Classification: Rupture Disk Device

Capacity Tests: Sec. VIII Div. 1 at Continental Disc. Corp. on April 14, 1999

Method of Establishing Relieving Capacity: Resistance Factor, 3 Size, Krgl

Certified Value: 6.09 Unitless

Test Medium: Air/Gas & Liquid

Certified Medium: Air or gases, and liquid (Krgl)

Set Pressure Definition: Burst Pressure

Scope of Nominal Size and Set Pressure Ranges:

Inlet Size	Outlet Size	Flow Area	Orifice [designator] diameter	Lift	Set Pressure Range	Media	Code Section
0.125 NPS		0.01 sq in			65 - 3000 psi		VIII Div. 1
0.25 NPS		0.04 sq in			65 - 3000 psi		VIII Div. 1
0.375 NPS		0.1 sq in			65 - 3000 psi		VIII Div. 1
0.5 NPS		0.17 sq in			65 - 3000 psi		VIII Div. 1
0.75 NPS		0.29 sq in			50 - 3000 psi		VIII Div. 1
1 NPS		0.52 sq in			29 - 3000 psi		VIII Div. 1
1.25 NPS		1.05 sq in			22 - 3000 psi		VIII Div. 1

Location: 3160 West Heartland Drive, Liberty, MO 64068 United States

Certification Number: **75316** Design Series or catalog number: **Standard-V (Angle seat threaded)**

Holder Designation: **Screw type**Type Classification: **Rupture Disk Device**Capacity Tests: **Sec. VIII Div. 1 at Continental Disc. Corp. on April 14, 1999**Method of Establishing Relieving Capacity: **Resistance Factor, 3 Size, Krgl**Certified Value: **13.3 Unitless**Test Medium: **Air/Gas & Liquid**Certified Medium: **Air or gases, and liquid (Krgl)**Set Pressure Definition: **Burst Pressure**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
0.125 NPS		0.01 sq in			85 - 3000 psi		VIII Div. 1
0.25 NPS		0.04 sq in			85 - 3000 psi		VIII Div. 1
0.375 NPS		0.1 sq in			85 - 3000 psi		VIII Div. 1
0.5 NPS		0.17 sq in			85 - 3000 psi		VIII Div. 1
0.75 NPS		0.29 sq in			50 - 3000 psi		VIII Div. 1
1 NPS		0.52 sq in			29 - 3000 psi		VIII Div. 1
1.25 NPS		1.05 sq in			29 - 3000 psi		VIII Div. 1

Certification Number: **75327** Design Series or catalog number: **Standard (flat seat threaded)**

Holder Designation: **Tite-seal, screw type, Throw-away**Type Classification: **Rupture Disk Device**Capacity Tests: **Sec. VIII Div. 1 at Continental Disc. Corp. on April 14, 1999**Method of Establishing Relieving Capacity: **Resistance Factor, 3 Size, Krgl**Certified Value: **9.59 Unitless**Test Medium: **Air/Gas**Certified Medium: **Air or gases, and liquid (Krgl)**Set Pressure Definition: **Burst Pressure**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
0.125 NPS		0.01 sq in			65 - 15000 psi		VIII Div. 1
0.25 NPS		0.04 sq in			65 - 15000 psi		VIII Div. 1
0.375 NPS		0.1 sq in			65 - 15000 psi		VIII Div. 1
0.5 NPS		0.17 sq in			65 - 15000 psi		VIII Div. 1
0.75 NPS		0.29 sq in			29 - 5000 psi		VIII Div. 1
1 NPS		0.52 sq in			29 - 5000 psi		VIII Div. 1
1.25 NPS		1.05 sq in			22 - 5000 psi		VIII Div. 1

Location: 3160 West Heartland Drive, Liberty, MO 64068 United States

Certification Number: **75338** Design Series or catalog number: **CDCV (FS threaded)**

Holder Designation: Tite-seal, screw type, throwaway

Type Classification: Rupture Disk Device

Capacity Tests: Sec. VIII Div. 1 at Continental Disc. Corp. on April 26, 1999

Method of Establishing Relieving Capacity: Resistance Factor, 3 Size, Krgl

Certified Value: 5.73 Unitless

Test Medium: Air/Gas & Liquid

Certified Medium: Air or gases, and liquid (Krgl)

Set Pressure Definition: Burst Pressure

Scope of Nominal Size and Set Pressure Ranges:

Inlet Size	Outlet Size	Flow Area	Orifice [designator] diameter	Lift	Set Pressure Range	Media	Code Section
0.125 NPS		0.01 sq in			30 - 3000 psi		VIII Div. 1
0.25 NPS		0.04 sq in			30 - 3000 psi		VIII Div. 1
0.375 NPS		0.1 sq in			30 - 3000 psi		VIII Div. 1
0.5 NPS		0.17 sq in			30 - 3000 psi		VIII Div. 1
0.75 NPS		0.29 sq in			30 - 3000 psi		VIII Div. 1
1 NPS		0.52 sq in			30 - 3000 psi		VIII Div. 1
1.25 NPS		1.05 sq in			25 - 3000 psi		VIII Div. 1

Certification Number: **75349** Design Series or catalog number: **PL (CF)**

Holder Designation: Clean Sweep CU8, CU9, CR8, CR9

Type Classification: Rupture Disk Device

Capacity Tests: Sec. VIII Div. 1 at Continental Disc. Corp. on July 19, 2000

Method of Establishing Relieving Capacity: Resistance Factor, 3 Size, Krgl

Certified Value: 1.57 Unitless

Test Medium: Air/Gas & Liquid

Certified Medium: Air or gases, and liquid (Krgl)

Set Pressure Definition: Burst Pressure

Scope of Nominal Size and Set Pressure Ranges:

Inlet Size	Outlet Size	Flow Area	Orifice [designator] diameter	Lift	Set Pressure Range	Media	Code Section
1 NPS		0.86 sq in			35 - 2160 psi		VIII Div. 1
1.5 NPS		2.04 sq in			32 - 2160 psi		VIII Div. 1
2 NPS		3.36 sq in			15 - 2160 psi		VIII Div. 1
3 NPS		7.39 sq in			11 - 1440 psi		VIII Div. 1
4 NPS		12.73 sq in			6 - 1440 psi		VIII Div. 1
6 NPS		28.89 sq in			5 - 1440 psi		VIII Div. 1
8 NPS		50.03 sq in			4 - 720 psi		VIII Div. 1
10 NPS		78.85 sq in			5 - 720 psi		VIII Div. 1
12 NPS		113.1 sq in			5 - 720 psi		VIII Div. 1
14 NPS		137.9 sq in			5 - 720 psi		VIII Div. 1
16 NPS		182.7 sq in			5 - 720 psi		VIII Div. 1
18 NPS		233.7 sq in			5 - 720 psi		VIII Div. 1
20 NPS		291 sq in			5 - 275 psi		VIII Div. 1
24 NPS		424.6 sq in			5 - 275 psi		VIII Div. 1
28 NPS		583.2 sq in			5 - 275 psi		VIII Div. 1
30 NPS		672 sq in			5 - 275 psi		VIII Div. 1
32 NPS		767 sq in			5 - 275 psi		VIII Div. 1
36 NPS		975.9 sq in			5 - 275 psi		VIII Div. 1

Location: 3160 West Heartland Drive, Liberty, MO 64068 United States

Certification
Number: **75350**Design Series
or catalog number **PLV (CF)**Holder Designation: **Clean Sweep CU8, CU9, CR8, CR9**Type Classification: **Rupture Disk Device**Capacity Tests: **Sec. VIII Div. 1 at Continental Disc. Corp. on July 18, 2000**Method of Establishing Relieving Capacity: **Resistance Factor, 3 Size, Krgl**Certified Value: **2.64 Unitless**Test Medium: **Air/Gas & Liquid**Certified Medium: **Air or gases, and liquid (Krgl)**Set Pressure Definition: **Burst Pressure**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
1 NPS		0.86 sq in			60 - 2160 psi		VIII Div. 1
1.5 NPS		2.04 sq in			60 - 2160 psi		VIII Div. 1
2 NPS		3.36 sq in			28 - 2160 psi		VIII Div. 1
3 NPS		7.39 sq in			8 - 1440 psi		VIII Div. 1
4 NPS		12.73 sq in			15 - 1440 psi		VIII Div. 1
6 NPS		28.89 sq in			12 - 1440 psi		VIII Div. 1
8 NPS		50.03 sq in			11 - 720 psi		VIII Div. 1
10 NPS		78.85 sq in			8 - 720 psi		VIII Div. 1
12 NPS		113.1 sq in			8 - 720 psi		VIII Div. 1
14 NPS		137.9 sq in			8 - 720 psi		VIII Div. 1
16 NPS		182.7 sq in			8 - 720 psi		VIII Div. 1
18 NPS		233.7 sq in			8 - 720 psi		VIII Div. 1
20 NPS		291 sq in			8 - 275 psi		VIII Div. 1
24 NPS		424.6 sq in			8 - 275 psi		VIII Div. 1
28 NPS		583.2 sq in			8 - 275 psi		VIII Div. 1
30 NPS		275 sq in			8 - 275 psi		VIII Div. 1
32 NPS		767 sq in			8 - 275 psi		VIII Div. 1
36 NPS		975.9 sq in			8 - 275 psi		VIII Div. 1

Location: 3160 West Heartland Drive, Liberty, MO 64068 United States

Certification
Number: **75361**Design Series
or catalog number **CDC (CF)**Holder Designation: **Clean-Sweep CU8, CU9. CR8, CR9**Type Classification: **Rupture Disk Device**Capacity Tests: **Sec. VIII Div. 1 at Continental Disc. Corp. on July 19, 2000**Method of Establishing Relieving Capacity: **Resistance Factor, 3 Size, Krgl**Certified Value: **1.57 Unitless**Test Medium: **Air/Gas & Liquid**Certified Medium: **Air or gases, and liquid (Krgl)**Set Pressure Definition: **Burst Pressure**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
1 NPS		0.86 sq in			25 - 2160 psi		VIII Div. 1
1.5 NPS		2.04 sq in			22 - 2160 psi		VIII Div. 1
2 NPS		3.36 sq in			7 - 2160 psi		VIII Div. 1
3 NPS		7.39 sq in			6 - 1440 psi		VIII Div. 1
4 NPS		12.73 sq in			5 - 1440 psi		VIII Div. 1
6 NPS		28.89 sq in			3 - 1440 psi		VIII Div. 1
8 NPS		50.03 sq in			2 - 720 psi		VIII Div. 1
10 NPS		78.85 sq in			2 - 720 psi		VIII Div. 1
12 NPS		113.1 sq in			2 - 720 psi		VIII Div. 1
14 NPS		137.9 sq in			2 - 720 psi		VIII Div. 1
16 NPS		182.7 sq in			2 - 720 psi		VIII Div. 1
18 NPS		233.7 sq in			2 - 720 psi		VIII Div. 1
20 NPS		291 sq in			2 - 275 psi		VIII Div. 1
24 NPS		424.6 sq in			2 - 275 psi		VIII Div. 1
30 NPS		672 sq in			2 - 275 psi		VIII Div. 1
32 NPS		767 sq in			2 - 275 psi		VIII Div. 1
36 NPS		975.9 sq in			2 - 275 psi		VIII Div. 1

Location: 3160 West Heartland Drive, Liberty, MO 64068 United States

Certification
Number: **75372**Design Series
or catalog number **CDCV (CF)**Holder Designation: **Clean-sweep CU8, CU9, CR8, CR9**Type Classification: **Rupture Disk Device**Capacity Tests: **Sec. VIII Div. 1 at Continental Disc. Corp. on July 14, 2000**Method of Establishing Relieving Capacity: **Resistance Factor, 3 Size, Krgl**Certified Value: **2.54 Unitless**Test Medium: **Air/Gas & Liquid**Certified Medium: **Air or gases, and liquid (Krgl)**Set Pressure Definition: **Burst Pressure**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
1 NPS		0.86 sq in			30 - 2160 psi		VIII Div. 1
1.5 NPS		2.04 sq in			18 - 2160 psi		VIII Div. 1
2 NPS		3.36 sq in			10 - 2160 psi		VIII Div. 1
3 NPS		7.39 sq in			6.5 - 1440 psi		VIII Div. 1
4 NPS		12.73 sq in			7 - 1440 psi		VIII Div. 1
6 NPS		28.89 sq in			5 - 1440 psi		VIII Div. 1
8 NPS		50.03 sq in			5 - 720 psi		VIII Div. 1
10 NPS		78.85 sq in			5 - 720 psi		VIII Div. 1
12 NPS		113.1 sq in			4 - 720 psi		VIII Div. 1
14 NPS		137.89 sq in			4 - 720 psi		VIII Div. 1
16 NPS		182.65 sq in			4 - 720 psi		VIII Div. 1
18 NPS		233.71 sq in			4 - 720 psi		VIII Div. 1
20 NPS		291.04 sq in			4 - 275 psi		VIII Div. 1
24 NPS		424.56 sq in			4 - 275 psi		VIII Div. 1
28 NPS		583.21 sq in			4 - 275 psi		VIII Div. 1
30 NPS		671.96 sq in			4 - 275 psi		VIII Div. 1
32 NPS		766.99 sq in			4 - 275 psi		VIII Div. 1
36 NPS		975.91 sq in			4 - 275 psi		VIII Div. 1

Location: 3160 West Heartland Drive, Liberty, MO 64068 United States

Certification Number: **75383** Design Series or catalog number: **MICRO X, MX-9T (CF)**

Holder Designation: CU8, CU9, CR8, CR9

Type Classification: Rupture Disk Device

Capacity Tests: Sec. VIII Div. 1 at Continental Disc. Corp. on July 12, 2000

Method of Establishing Relieving Capacity: Resistance Factor, 3 Size, Krgl

Certified Value: 1.52 Unitless

Test Medium: Air/Gas & Liquid

Certified Medium: Air or gases, and liquid (Krgl)

Special Service: None

Set Pressure Definition: Burst Pressure

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
1 NPS		0.86 sq in			140 - 6000 psi		VIII Div. 1
1.5 NPS		2.04 sq in			120 - 6000 psi		VIII Div. 1
2 NPS		3.36 sq in			55 - 6000 psi		VIII Div. 1
3 NPS		7.39 sq in			50 - 6000 psi		VIII Div. 1
4 NPS		12.73 sq in			50 - 6000 psi		VIII Div. 1
6 NPS		28.89 sq in			45 - 6000 psi		VIII Div. 1
8 NPS		50.03 sq in			40 - 6000 psi		VIII Div. 1
10 NPS		78.85 sq in			40 - 720 psi		VIII Div. 1
12 NPS		113.1 sq in			35 - 720 psi		VIII Div. 1
14 NPS		137.9 sq in			21 - 720 psi		VIII Div. 1
16 NPS		182.7 sq in			18 - 720 psi		VIII Div. 1
18 NPS		233.7 sq in			16 - 720 psi		VIII Div. 1
20 NPS		291 sq in			15 - 720 psi		VIII Div. 1
24 NPS		424.6 sq in			15 - 720 psi		VIII Div. 1
28 NPS		583.2 sq in			15 - 720 psi		VIII Div. 1
30 NPS		672 sq in			15 - 720 psi		VIII Div. 1
32 NPS		767 sq in			15 - 720 psi		VIII Div. 1
36 NPS		975.9 sq in			15 - 275 psi		VIII Div. 1

Location: 3160 West Heartland Drive, Liberty, MO 64068 United States

Certification Number: **75394** Design Series or catalog number **Micro-X-V, MX-9T-V (CF)**

Holder Designation: Clean-sweep, CU8, CU9, CR8, CR9

Type Classification: Rupture Disk Device

Capacity Tests: Sec. VIII Div. 1 at Continental Disc. Corp. on July 18, 2000

Method of Establishing Relieving Capacity: Resistance Factor, 3 Size, Krgl

Certified Value: 1.74 Unitless

Test Medium: Air/Gas & Liquid

Certified Medium: Air or gases, and liquid (Krgl)

Special Service: None

Set Pressure Definition: Burst Pressure

Scope of Nominal Size and Set Pressure Ranges:

Inlet Size	Outlet Size	Flow Area	Orifice [designator] diameter	Lift	Set Pressure Range	Media	Code Section
1 NPS		0.86 sq in			140 - 6000 psi		N/A
1.5 NPS		2.04 sq in			120 - 6000 psi		N/A
2 NPS		3.36 sq in			55 - 3600 psi		N/A
3 NPS		7.39 sq in			50 - 3600 psi		N/A
4 NPS		12.73 sq in			50 - 3600 psi		N/A
6 NPS		28.89 sq in			45 - 1440 psi		N/A
8 NPS		50.03 sq in			40 - 1440 psi		N/A
10 NPS		78.85 sq in			40 - 720 psi		N/A
12 NPS		113.1 sq in			35 - 720 psi		N/A
14 NPS		137.9 sq in			21 - 720 psi		N/A
16 NPS		182.7 sq in			18 - 720 psi		N/A
18 NPS		233.7 sq in			16 - 720 psi		N/A
20 NPS		291 sq in			15 - 720 psi		N/A
24 NPS		424.6 sq in			15 - 720 psi		N/A
28 NPS		583.2 sq in			15 - 720 psi		N/A
30 NPS		672 sq in			15 - 720 psi		N/A
32 NPS		767 sq in			15 - 720 psi		N/A
36 NPS		975.9 sq in			15 - 275 psi		N/A

Certification Number: **75406** Design Series or catalog number **SRA RVI (FS)**

Holder Designation: RVI, RVI Tite-Seal, RVI Screw Type

Type Classification: Rupture Disk Device

Capacity Tests: Sec. VIII Div. 1 at Continental Disc. Corp. on July 28, 2000

Method of Establishing Relieving Capacity: Resistance Factor, 3 Size, Krgl

Certified Value: 4.71 Unitless

Test Medium: Air/Gas & Liquid

Certified Medium: Air or gases, and liquid (Krgl)

Special Service: None

Set Pressure Definition: Burst Pressure

Scope of Nominal Size and Set Pressure Ranges:

Inlet Size	Outlet Size	Flow Area	Orifice [designator] diameter	Lift	Set Pressure Range	Media	Code Section
0.125 NPS	1/8 - 1-1/4 NPS	0.03 sq in			35 - 1000 psi		VIII Div. 1
0.25 NPS	1/4 - 1 1/4 NPS	0.05 sq in			35 - 2000 psi		VIII Div. 1
0.375 NPS	3/8 - 1 1/4 NPS	0.1 sq in			35 - 2000 psi		VIII Div. 1
0.5 NPS	1/2 - 1 1/4 NPS	0.17 sq in			20 - 2000 psi		VIII Div. 1
0.75 NPS	3/4 - 1 1/4 NPS	0.29 sq in			15 - 2000 psi		VIII Div. 1
1 NPS	1, 1 1/4 NPS	0.52 sq in			10 - 2000 psi		VIII Div. 1
1.25 NPS	1 1/4 NPS	1.06 sq in			10 - 1000 psi		N/A

Location: 3160 West Heartland Drive, Liberty, MO 64068 United States

Certification
Number: **75428**Design Series
or catalog number **VRD**Holder Designation: **VRD**Type Classification: **Rupture Disk Device**Capacity Tests: **Sec. VIII Div. 1 at Continental Disc. Corp. on July 02, 2002**Method of Establishing Relieving Capacity: **Resistance Factor, 3 Size, Krgl**Certified Value: **0.48 Unitless**Test Medium: **Air/Gas & Liquid**Certified Medium: **Air or gases, and liquid (Krgl)**Special Service: **None**Set Pressure Definition: **Burst Pressure**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
1 NPS		0.86 sq in			13 - 1000 psi		VIII Div. 1
1.5 NPS		2.04 sq in			10 - 1000 psi		VIII Div. 1
2 NPS		3.36 sq in			9 - 1000 psi		VIII Div. 1
3 NPS		7.39 sq in			9 - 1000 psi		VIII Div. 1
4 NPS		12.73 sq in			9 - 800 psi		VIII Div. 1
6 NPS		28.89 sq in			8 - 500 psi		VIII Div. 1
8 NPS		50.03 sq in			19 - 350 psi		VIII Div. 1

Certification
Number: **75439**Design Series
or catalog number **Sanitrx, Sanitrx LP-NA (liquid)**Type Classification: **Rupture Disk Device**Capacity Tests: **Sec. VIII Div. 1 at Continental Disc. Corp. on December 17, 2002**Method of Establishing Relieving Capacity: **Resistance Factor, 3 Size, Krl**Certified Value: **0.32 Unitless**Test Medium: **Air/Gas & Liquid**Certified Medium: **Liquid (Krl)**Special Service: **None**Set Pressure Definition: **Burst Pressure**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
1 NPS		0.493 sq in			25 - 250 psi		VIII Div. 1
1.5 NPS		1.18 sq in			10 - 60 psi		VIII Div. 1
2 NPS		2.25 sq in			10 - 60 psi		VIII Div. 1
3 NPS		5.49 sq in			10 - 60 psi		VIII Div. 1
4 NPS		9.77 sq in			10 - 60 psi		VIII Div. 1

Certification
Number: **75440**Design Series
or catalog number **Sanitrx LP, Sanitrx LP-NA**Type Classification: **Rupture Disk Device**Capacity Tests: **Sec. VIII Div. 1 at Continental Disc. Corp. on December 17, 2002**Method of Establishing Relieving Capacity: **Resistance Factor, 3 Size, Krg**Certified Value: **0.29 Unitless**Test Medium: **Air/Gas**Certified Medium: **Air or gases (Krg)**Special Service: **None**Set Pressure Definition: **Burst Pressure**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
1 NPS		0.493 sq in			25 - 250 psi		VIII Div. 1
1.5 NPS		1.18 sq in			10 - 60 psi		VIII Div. 1
2 NPS		2.25 sq in			10 - 60 psi		VIII Div. 1
3 NPS		5.49 sq in			10 - 60 psi		VIII Div. 1
4 NPS		9.77 sq in			10 - 60 psi		VIII Div. 1

Location: 3160 West Heartland Drive, Liberty, MO 64068 United States

Certification Number: **75451** Design Series or catalog number: **Sanitrx , Sanitrx NA (liquid)**

Type Classification: **Rupture Disk Device**Capacity Tests: **Sec. VIII Div. 1 at Continental Disc. Corp. on January 07, 2003**Method of Establishing Relieving Capacity: **Resistance Factor, 3 Size, Krl**Certified Value: **1.60 Unitless**Test Medium: **Air/Gas & Liquid**Certified Medium: **Liquid (Krl)**Special Service: **None**Set Pressure Definition: **Burst Pressure**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
1 NPS		0.493 sq in			25 - 1500 psi		VIII Div. 1
1.5 NPS		1.18 sq in			14 - 1500 psi		VIII Div. 1
2 NPS		2.25 sq in			11 - 1000 psi		VIII Div. 1
3 NPS		5.49 sq in			10 - 1000 psi		VIII Div. 1
4 NPS		9.77 sq in			10 - 1000 psi		VIII Div. 1

Certification Number: **75462** Design Series or catalog number: **Sanitrx , Sanitrx-NA(Air/Gas)**

Type Classification: **Rupture Disk Device**Capacity Tests: **Sec. VIII Div. 1 at Continental Disc. Corp. on January 07, 2003**Method of Establishing Relieving Capacity: **Resistance Factor, 3 Size, Krg**Certified Value: **1.13 Unitless**Test Medium: **Air/Gas**Certified Medium: **Air or gases (Krg)**Special Service: **None**Set Pressure Definition: **Burst Pressure**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
1 NPS		0.493 sq in			25 - 1500 psi		VIII Div. 1
1.5 NPS		1.18 sq in			14 - 1500 psi		VIII Div. 1
2 NPS		2.25 sq in			11 - 1000 psi		VIII Div. 1
3 NPS		5.49 sq in			10 - 1000 psi		VIII Div. 1
4 NPS		9.77 sq in			10 - 1000 psi		VIII Div. 1

Location: 3160 West Heartland Drive, Liberty, MO 64068 United States

Certification Number: **75473** Design Series or catalog number: **MICRO X-V(DD), MICRO X, MX-9T-V, MX-9T**

Holder Designation: **UNISERT (DD), MX-9T (DD)**Type Classification: **Rupture Disk Device**Capacity Tests: **Sec. VIII Div. 1 at Continental Disc. Corp. on January 02, 2003**Method of Establishing Relieving Capacity: **Resistance Factor, 3 Size, Krgl**Certified Value: **5.59 Unitless**Test Medium: **Air/Gas & Liquid**Certified Medium: **Air or gases, and liquid (Krgl)**Special Service: **None**Set Pressure Definition: **Burst Pressure**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
1 NPS		0.86 sq in			140 - 6000 psi		VIII Div. 1
1.5 NPS		2.04 sq in			120 - 6000 psi		VIII Div. 1
2 NPS		3.36 sq in			55 - 3600 psi		VIII Div. 1
3 NPS		7.39 sq in			50 - 3600 psi		VIII Div. 1
4 NPS		12.73 sq in			50 - 3600 psi		VIII Div. 1
6 NPS		28.89 sq in			45 - 1440 psi		VIII Div. 1
8 NPS		50.03 sq in			40 - 1440 psi		VIII Div. 1
10 NPS		78.85 sq in			40 - 720 psi		VIII Div. 1
12 NPS		113.1 sq in			35 - 720 psi		VIII Div. 1
14 NPS		137.9 sq in			21 - 720 psi		VIII Div. 1
16 NPS		182.6 sq in			18 - 720 psi		VIII Div. 1
18 NPS		233.7 sq in			16 - 720 psi		VIII Div. 1
20 NPS		291 sq in			15 - 720 psi		VIII Div. 1
24 NPS		424.6 sq in			15 - 720 psi		VIII Div. 1
28 NPS		583.2 sq in			15 - 720 psi		VIII Div. 1
30 NPS		672 sq in			15 - 720 psi		VIII Div. 1
32 NPS		767 sq in			15 - 720 psi		VIII Div. 1
36 NPS		975.9 sq in			15 - 275 psi		VIII Div. 1

Certification Number: **75484** Design Series or catalog number: **CD 31074**

Type Classification: **Rupture Disk Device**Capacity Tests: **Sec. VIII Div. 1 at Continental Disc. Corp. on January 14, 2003**Method of Establishing Relieving Capacity: **Resistance Factor, 3 Size, Krgl**Certified Value: **10.0 Unitless**Test Medium: **Air/Gas & Liquid**Certified Medium: **Air or gases, and liquid (Krgl)**Special Service: **None**Set Pressure Definition: **Burst Pressure**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
0.3125 NPS		0.037 sq in			250 - 1200 psi		VIII Div. 1
0.5 NPS		0.117 sq in			250 - 1200 psi		VIII Div. 1
0.75 NPS		0.29 sq in			150 - 1000 psi		VIII Div. 1
1 NPS		0.462 sq in			100 - 1000 psi		VIII Div. 1
1.25 NPS		0.688 sq in			50 - 1000 psi		VIII Div. 1

Location: 3160 West Heartland Drive, Liberty, MO 64068 United States

Certification Number: **75495** Design Series or catalog number **Standard V (LL)**

Holder Designation: Insert (LL, HL), Full bolted #1 through #9 (LL, HL), Union 2U, 3U, 5U, 6U(UL)

Type Classification: Rupture Disk Device

Capacity Tests: Sec. VIII Div. 1 at Continental Disc. Corp. on June 10, 2003

Method of Establishing Relieving Capacity: Resistance Factor, 3 Size, Krgl

Certified Value: 1.88 Unitless

Test Medium: Air/Gas & Liquid

Certified Medium: Air or gases, and liquid (Krgl)

Set Pressure Definition: Burst Pressure

Scope of Nominal Size and Set Pressure Ranges:

Inlet Size	Outlet Size	Flow Area	Orifice [designator] diameter	Lift	Set Pressure Range	Media	Code Section
1 NPS		0.72 sq in			30 - 6000 psi		VIII Div. 1
1.5 NPS		1.77 sq in			23 - 6000 psi		VIII Div. 1
2 NPS		2.95 sq in	[HL]		10 - 6000 psi		VIII Div. 1
		3.36 sq in			10 - 4000 psi		VIII Div. 1
3 NPS		7.39 sq in			9 - 6000 psi		VIII Div. 1
4 NPS		11.4 sq in	[HL]		7 - 6000 psi		VIII Div. 1
		12.7 sq in			7 - 1440 psi		VIII Div. 1
6 NPS		28.8 sq in			5 - 1440 psi		VIII Div. 1
8 NPS		50 sq in			5 - 1440 psi		VIII Div. 1
10 NPS		78.85 sq in			5 - 720 psi		VIII Div. 1
12 NPS		113 sq in			4 - 720 psi		VIII Div. 1
14 NPS		137 sq in			4 - 720 psi		VIII Div. 1
16 NPS		182 sq in			4 - 720 psi		VIII Div. 1
18 NPS		233 sq in			4 - 720 psi		VIII Div. 1
20 NPS		291 sq in			4 - 720 psi		VIII Div. 1
24 NPS		424 sq in			4 - 275 psi		VIII Div. 1
30 NPS		671 sq in			4 - 275 psi		VIII Div. 1

Certification Number: **75507** Design Series or catalog number **CDCV , LDV (LL)**

Holder Designation: Insert, Full bolted #1 - #9, Union 2U, 3U, 5U, 6U

Type Classification: Rupture Disk Device

Capacity Tests: Sec. VIII Div. 1 at Continental Disc. Corp. on June 10, 2003

Method of Establishing Relieving Capacity: Resistance Factor, 3 Size, Krgl

Certified Value: 2.80 Unitless

Test Medium: Air/Gas & Liquid

Certified Medium: Air or gases, and liquid (Krgl)

Set Pressure Definition: Burst Pressure

Scope of Nominal Size and Set Pressure Ranges:

Inlet Size	Outlet Size	Flow Area	Orifice [designator] diameter	Lift	Set Pressure Range	Media	Code Section
1 NPS		0.72 sq in			30 - 2160 psi		VIII Div. 1
1.5 NPS		1.77 sq in			25 - 2160 psi		VIII Div. 1
2 NPS		3.36 sq in			10 - 2160 psi		VIII Div. 1
3 NPS		7.39 sq in			7 - 1440 psi		VIII Div. 1
4 NPS		12.73 sq in			7 - 1440 psi		VIII Div. 1
6 NPS		28.89 sq in			5 - 1440 psi		VIII Div. 1
8 NPS		50.03 sq in			5 - 1440 psi		VIII Div. 1
10 NPS		78.85 sq in			5 - 720 psi		VIII Div. 1
12 NPS		113.1 sq in			4 - 720 psi		VIII Div. 1
14 NPS		137.9 sq in			4 - 720 psi		VIII Div. 1
16 NPS		182.7 sq in			4 - 720 psi		VIII Div. 1
18 NPS		233.7 sq in			4 - 720 psi		VIII Div. 1
20 NPS		291 sq in			4 - 720 psi		VIII Div. 1
24 NPS		425.6 sq in			4 - 275 psi		VIII Div. 1
30 NPS		672 sq in			4 - 275 psi		VIII Div. 1

Location: 3160 West Heartland Drive, Liberty, MO 64068 United States

Certification
Number: **75518**Design Series
or catalog number **RCS (DD)**Holder Designation: **RCS (DD)**Type Classification: **Rupture Disk Device**Capacity Tests: **Sec. VIII Div. 1 at Continental Disc. Corp. on September 23, 2003**Method of Establishing Relieving Capacity: **Resistance Factor, 3 Size, Krg**Certified Value: **0.60 Unitless**Test Medium: **Air/Gas**Certified Medium: **Air or gases (Krg)**Set Pressure Definition: **Burst Pressure**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
1 NPS		0.86 sq in			115 - 2160 psi		VIII Div. 1
1.5 NPS		2.04 sq in			83 - 2160 psi		VIII Div. 1
2 NPS		3.36 sq in			70 - 1440 psi		VIII Div. 1
3 NPS		7.39 sq in			65 - 1440 psi		VIII Div. 1
4 NPS		12.73 sq in			55 - 1440 psi		VIII Div. 1
6 NPS		28.89 sq in			40 - 1440 psi		VIII Div. 1
8 NPS		50.03 sq in			35 - 1440 psi		VIII Div. 1
10 NPS		78.85 sq in			30 - 1440 psi		VIII Div. 1
12 NPS		113.1 sq in			25 - 1440 psi		VIII Div. 1
14 NPS		137.9 sq in			20 - 720 psi		VIII Div. 1
16 NPS		182.7 sq in			20 - 720 psi		VIII Div. 1
18 NPS		233.7 sq in			20 - 720 psi		VIII Div. 1
20 NPS		291 sq in			20 - 720 psi		VIII Div. 1
24 NPS		424.6 sq in			20 - 275 psi		VIII Div. 1
30 NPS		672 sq in			20 - 275 psi		VIII Div. 1
32 NPS		767 sq in			20 - 275 psi		VIII Div. 1

Certification
Number: **75529**Design Series
or catalog number **STAR X, STAR X HP (gas)**Type Classification: **Rupture Disk Device**Capacity Tests: **Control Script failed for control txtCoc , Source=**Method of Establishing Relieving Capacity: **Resistance Factor, 3 Size, Krg**Certified Value: **0.29 Unitless**Test Medium: **Air/Gas**Certified Medium: **Air or gases (Krg)**Special Service: **None**Set Pressure Definition: **Burst Pressure**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
1 NPS		0.86 sq in			18 - 275 psi		VIII Div. 1
1.5 NPS		2.04 sq in			16 - 275 psi		VIII Div. 1
2 NPS		3.36 sq in			15 - 275 psi		VIII Div. 1
3 NPS		7.39 sq in			14 - 275 psi		VIII Div. 1
4 NPS		12.73 sq in			13 - 275 psi		VIII Div. 1
6 NPS		28.89 sq in			12 - 275 psi		VIII Div. 1

Location: 3160 West Heartland Drive, Liberty, MO 64068 United States

Certification Number: **75530** Design Series or catalog number: **STAR X, STAR X HP (liquid)**

Type Classification: **Rupture Disk Device**Capacity Tests: **Control Script failed for control txtCoc , Source=**Method of Establishing Relieving Capacity: **Resistance Factor, 3 Size, Krl**Certified Value: **0.38 Unitless**Test Medium: **Air/Gas & Liquid**Certified Medium: **Liquid (Krl)**Special Service: **None**Set Pressure Definition: **Burst Pressure**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
1 NPS		0.86 sq in			18 - 275 psi		VIII Div. 1
1.5 NPS		2.04 sq in			16 - 275 psi		VIII Div. 1
2 NPS		3.36 sq in			15 - 275 psi		VIII Div. 1
3 NPS		7.39 sq in			14 - 275 psi		VIII Div. 1
4 NPS		12.73 sq in			13 - 275 psi		VIII Div. 1
6 NPS		28.89 sq in			12 - 275 psi		VIII Div. 1

Certification Number: **75541** Design Series or catalog number: **MINTRX (liquid)**

Holder Designation: **MINTRX**Type Classification: **Rupture Disk Device**Capacity Tests: **Control Script failed for control txtCoc , Source=**Method of Establishing Relieving Capacity: **Resistance Factor, 3 Size, Krl**Certified Value: **0.50 Unitless**Test Medium: **Air/Gas & Liquid**Certified Medium: **Liquid (Krl)**Special Service: **None**Set Pressure Definition: **Burst Pressure**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
1 NPS		0.86 sq in			50 - 275 psi		VIII Div. 1
1.5 NPS		2.04 sq in			45 - 275 psi		VIII Div. 1
2 NPS		3.36 sq in			35 - 275 psi		VIII Div. 1
3 NPS		7.39 sq in			25 - 275 psi		VIII Div. 1
4 NPS		12.73 sq in			20 - 275 psi		VIII Div. 1
6 NPS		28.89 sq in			15 - 275 psi		VIII Div. 1
8 NPS		50.03 sq in			15 - 275 psi		VIII Div. 1

Location: 3160 West Heartland Drive, Liberty, MO 64068 United States

Certification Number: **75552** Design Series or catalog number: **MINTRX (gas)**

Holder Designation: **MINTRX**Type Classification: **Rupture Disk Device**Capacity Tests: **Control Script failed for control txtCoc , Source=**Method of Establishing Relieving Capacity: **Resistance Factor, 3 Size, Krg**Certified Value: **0.45 Unitless**Test Medium: **Air/Gas**Certified Medium: **Air or gases (Krg)**Special Service: **None**Set Pressure Definition: **Burst Pressure**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
1 NPS		0.86 sq in			50 - 275 psi		VIII Div. 1
1.5 NPS		2.04 sq in			45 - 275 psi		VIII Div. 1
2 NPS		3.36 sq in			35 - 275 psi		VIII Div. 1
3 NPS		7.39 sq in			25 - 275 psi		VIII Div. 1
4 NPS		12.73 sq in			20 - 275 psi		VIII Div. 1
6 NPS		28.89 sq in			15 - 275 psi		VIII Div. 1
8 NPS		50.03 sq in			15 - 275 psi		VIII Div. 1

Certification Number: **75563** Design Series or catalog number: **SANITRX MP (SF, NA, IS) (liquid)**

Type Classification: **Rupture Disk Device**Capacity Tests: **Sec. VIII Div. 1 at Continental Disc. Corp. on November 03, 2008**Method of Establishing Relieving Capacity: **Resistance Factor, 3 Size, Krl**Certified Value: **1.6 Unitless**Test Medium: **Air/Gas & Liquid**Certified Medium: **Liquid (Krl)**Special Service: **None**Set Pressure Definition: **Burst Pressure**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
1 NPS		0.493 sq in			35 - 100 psi		VIII Div. 1
1.5 NPS		1.18 sq in			15 - 100 psi		VIII Div. 1
2 NPS		2.25 sq in			15 - 100 psi		VIII Div. 1
3 NPS		5.49 sq in			10 - 60 psi		VIII Div. 1

Certification Number: **75574** Design Series or catalog number: **SANITRX MP (SF, NA, IS) (gas)**

Type Classification: **Rupture Disk Device**Capacity Tests: **Sec. VIII Div. 1 at Continental Disc. Corp. on November 20, 2008**Method of Establishing Relieving Capacity: **Resistance Factor, 3 Size, Krg**Certified Value: **1.13 Unitless**Test Medium: **Air/Gas**Certified Medium: **Air or gases (Krg)**Special Service: **None**Set Pressure Definition: **Burst Pressure**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
1 NPS		0.493 sq in			35 - 100 psi		VIII Div. 1
1.5 NPS		1.18 sq in			15 - 100 psi		VIII Div. 1
2 NPS		2.25 sq in			15 - 100 psi		VIII Div. 1
3 NPS		5.49 sq in			10 - 60 psi		VIII Div. 1

Location: 3160 West Heartland Drive, Liberty, MO 64068 United States

Certification Number: **75585** Design Series or catalog number **HPX (FS)(GAS)**

Holder Designation: Star-X, HPX, HPX-RH, HPX-PT, HPX-PT-RH, VRD, ULTRX

Type Classification: Rupture Disk Device

Capacity Tests: Sec. VIII Div. 1 at Continental Disc. Corp. on October 21, 2009

Method of Establishing Relieving Capacity: Resistance Factor, 3 Size, Krl

Certified Value: 0.29 Unitless

Test Medium: Air/Gas

Certified Medium: Air or gases (Krg)

Special Service: None

Set Pressure Definition: Burst Pressure

Scope of Nominal Size and Set Pressure Ranges:

Inlet Size	Outlet Size	Flow Area	Orifice [designator] diameter	Lift	Set Pressure Range	Media	Code Section
1 NPS		0.86 sq in			15 - 2160 psi		VIII Div. 1
1.5 NPS		2.04 sq in			10 - 2160 psi		VIII Div. 1
2 NPS		3.36 sq in			10 - 1440 psi		VIII Div. 1
3 NPS		7.39 sq in			9 - 1440 psi		VIII Div. 1
3.5 NPS		9.89 sq in			9 - 1440 psi		VIII Div. 1
4 NPS		12.73 sq in			9 - 1440 psi		VIII Div. 1
6 NPS		28.89 sq in			9 - 720 psi		VIII Div. 1
8 NPS		50.03 sq in			9 - 720 psi		VIII Div. 1
10 NPS		78.8 sq in			9 - 720 psi		VIII Div. 1
12 NPS		113.1 sq in			9 - 720 psi		VIII Div. 1

Certification Number: **75596** Design Series or catalog number **HPX (FS)(Liquid)**

Holder Designation: Star-X, HPX, HPX-RH, HPX-PT, HPX-PT-RH, VRD, ULTRX

Type Classification: Rupture Disk Device

Capacity Tests: Sec. VIII Div. 1 at Continental Disc. Corp. on October 21, 2009

Method of Establishing Relieving Capacity: Resistance Factor, 3 Size, Krl

Certified Value: 0.38 Unitless

Test Medium: Air/Gas & Liquid

Certified Medium: Liquid (Krl)

Special Service: None

Set Pressure Definition: Burst Pressure

Scope of Nominal Size and Set Pressure Ranges:

Inlet Size	Outlet Size	Flow Area	Orifice [designator] diameter	Lift	Set Pressure Range	Media	Code Section
1 NPS		0.86 sq in			15 - 2160 psi		VIII Div. 1
1.5 NPS		2.04 sq in			10 - 2160 psi		VIII Div. 1
2 NPS		3.36 sq in			10 - 1440 psi		VIII Div. 1
3 NPS		7.39 sq in			9 - 1440 psi		VIII Div. 1
3.5 NPS		9.89 sq in			9 - 1440 psi		VIII Div. 1
4 NPS		12.73 sq in			9 - 1440 psi		VIII Div. 1
6 NPS		28.89 sq in			9 - 720 psi		VIII Div. 1
8 NPS		50.03 sq in			9 - 720 psi		VIII Div. 1
10 NPS		78.8 sq in			9 - 720 psi		VIII Div. 1
12 NPS		113.1 sq in			9 - 720 psi		VIII Div. 1

Location: 3160 West Heartland Drive, Liberty, MO 64068 United States

Certification Number: **75608** Design Series or catalog number **HPX Sanitary, Sanitrx HPX, Sanitrx LPX (SF,NA,IS)(Gas)**

Type Classification: **Rupture Disk Device**Capacity Tests: **Sec. VIII Div. 1 at Continental Disc. Corp. on October 29, 2009**Method of Establishing Relieving Capacity: **Resistance Factor, 3 Size, Krg**Certified Value: **1.13 Unitless**Test Medium: **Air/Gas**Certified Medium: **Air or gases (Krg)**Special Service: **None**Set Pressure Definition: **Burst Pressure**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
0.75 NPS		0.265 sq in			40 - 400 psi		VIII Div. 1
1 NPS		0.493 sq in			25 - 300 psi		VIII Div. 1
1.5 NPS		1.18 sq in			4 - 200 psi		VIII Div. 1
2 NPS		2.25 sq in			4 - 150 psi		VIII Div. 1
3 NPS		5.49 sq in			4 - 100 psi		VIII Div. 1

Certification Number: **75619** Design Series or catalog number **HPX Sanitary, Sanitrx HPX, Sanitrx LPX (SF,NA,IS)(Liquid)**

Type Classification: **Rupture Disk Device**Capacity Tests: **Sec. VIII Div. 1 at Continental Disc. Corp. on October 29, 2009**Method of Establishing Relieving Capacity: **Resistance Factor, 3 Size, Krl**Certified Value: **1.6 Unitless**Test Medium: **Air/Gas & Liquid**Certified Medium: **Liquid (Krl)**Special Service: **None**Set Pressure Definition: **Burst Pressure**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
0.75 NPS		0.265 sq in			40 - 400 psi		VIII Div. 1
1 NPS		0.493 sq in			25 - 300 psi		VIII Div. 1
1.5 NPS		1.18 sq in			4 - 200 psi		VIII Div. 1
2 NPS		2.25 sq in			4 - 150 psi		VIII Div. 1
3 NPS		5.49 sq in			4 - 100 psi		VIII Div. 1

Certification Number: **75620** Design Series or catalog number **LOTRX (Gas)**

Holder Designation: **LOTRX**Type Classification: **Rupture Disk Device**Capacity Tests: **Sec. VIII Div. 1 at Continental Disc. Corp. on January 28, 2010**Method of Establishing Relieving Capacity: **Resistance Factor, 3 Size, Krg**Certified Value: **0.42 Unitless**Test Medium: **Air/Gas**Certified Medium: **Air or gases (Krg)**Special Service: **None**Set Pressure Definition: **Burst Pressure**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
1 NPS		0.86 sq in			2 - 40 psi		VIII Div. 1
1.5 NPS		2.04 sq in			2 - 30 psi		VIII Div. 1
2 NPS		3.36 sq in			2 - 25 psi		VIII Div. 1
3 NPS		7.39 sq in			1 - 22 psi		VIII Div. 1
4 NPS		12.73 sq in			1 - 22 psi		VIII Div. 1
6 NPS		28.89 sq in			1 - 20 psi		VIII Div. 1
8 NPS		50.03 sq in			1 - 35 psi		VIII Div. 1

Location: 3160 West Heartland Drive, Liberty, MO 64068 United States

Certification Number: **75631** Design Series or catalog number: **LOTRX (Liquid)**

Holder Designation: **LOTRX**Type Classification: **Rupture Disk Device**Capacity Tests: **Sec. VIII Div. 1 at Continental Disc. Corp. on February 11, 2010**Method of Establishing Relieving Capacity: **Resistance Factor, 3 Size, Krl**Certified Value: **0.42 Unitless**Test Medium: **Air/Gas & Liquid**Certified Medium: **Liquid (Krl)**Special Service: **None**Set Pressure Definition: **Burst Pressure**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
1 NPS		0.86 sq in			2 - 40 psi		VIII Div. 1
1.5 NPS		2.04 sq in			2 - 30 psi		VIII Div. 1
2 NPS		3.36 sq in			2 - 25 psi		VIII Div. 1
3 NPS		7.39 sq in			1 - 22 psi		VIII Div. 1
4 NPS		12.73 sq in			1 - 22 psi		VIII Div. 1
6 NPS		28.89 sq in			1 - 20 psi		VIII Div. 1
8 NPS		50.03 sq in			1 - 35 psi		VIII Div. 1

Certification Number: **75642** Design Series or catalog number: **CDC, CDCV (DD)**

Holder Designation: **Unisert double disk**Type Classification: **Rupture Disk Device**Capacity Tests: **Sec. VIII Div. 1 at Continental Disc. Corp. on August 13, 2010**Method of Establishing Relieving Capacity: **Resistance Factor, 3 Size, Krgl**Certified Value: **1.81 Unitless**Test Medium: **Air/Gas & Liquid**Certified Medium: **Air or gases, and liquid (Krgl)**Set Pressure Definition: **Burst Pressure**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
1 NPS		0.86 sq in			30 - 2160 psi		VIII Div. 1
1.5 NPS		2.04 sq in			27 - 2160 psi		VIII Div. 1
2 NPS		3.36 sq in			15 - 2160 psi		VIII Div. 1
3 NPS		7.39 sq in			6.5 - 1440 psi		VIII Div. 1
4 NPS		12.7 sq in			7 - 1440 psi		VIII Div. 1
6 NPS		28.8 sq in			5 - 1440 psi		VIII Div. 1
8 NPS		50 sq in			5 - 720 psi		VIII Div. 1
10 NPS		78.8 sq in			5 - 720 psi		VIII Div. 1
12 NPS		113 sq in			4 - 720 psi		VIII Div. 1
14 NPS		137 sq in			3 - 720 psi		VIII Div. 1
16 NPS		182 sq in			1.3 - 720 psi		VIII Div. 1
18 NPS		233 sq in			4 - 720 psi		VIII Div. 1
20 NPS		291 sq in			4 - 275 psi		VIII Div. 1
24 NPS		424 sq in			4 - 275 psi		VIII Div. 1
28 NPS		583 sq in			4 - 275 psi		VIII Div. 1
30 NPS		671 sq in			4 - 275 psi		VIII Div. 1
32 NPS		766 sq in			4 - 275 psi		VIII Div. 1
36 NPS		975 sq in			4 - 275 psi		VIII Div. 1
38 NPS		1089 sq in			4 - 275 psi		VIII Div. 1
40 NPS		1209 sq in			4 - 275 psi		VIII Div. 1
42 NPS		1336 sq in			4 - 275 psi		VIII Div. 1
44 NPS		1469 sq in			4 - 275 psi		VIII Div. 1
46 NPS		1608 sq in			4 - 275 psi		VIII Div. 1
48 NPS		1753 sq in			4 - 275 psi		VIII Div. 1

Continental Disc Corporation (CDC)

NB#: 75653

Location: 3160 West Heartland Drive, Liberty, MO 64068 United States

Certification
Number: **75653**Design Series
or catalog number **CD 31327**Holder Designation: **CD 31327**Type Classification: **Rupture Disk Device**Capacity Tests: **Sec. VIII Div. 1 at Continental Disc. Corp. on August 12, 2010**Method of Establishing Relieving Capacity: **Resistance Factor, 1 Size, Krgl**Certified Value: **18 Unitless**Test Medium: **Air/Gas & Liquid**Certified Medium: **Air or gases, and liquid (Krgl)**Set Pressure Definition: **Burst Pressure**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
0.5 NPS		0.13 sq in			22 - 175 psi		VIII Div. 1

Certification
Number: **75664**Design Series
or catalog number **HPX (DD)**Holder Designation: **HPX (DD), ULTRX**Type Classification: **Rupture Disk Device**Capacity Tests: **Sec. VIII Div. 1 at Continental Disc. Corp. on June 22, 2011**Method of Establishing Relieving Capacity: **Resistance Factor, 3 Size, Krgl**Certified Value: **0.97 Unitless**Test Medium: **Air/Gas & Liquid**Certified Medium: **Air or gases, and liquid (Krgl)**Set Pressure Definition: **Burst Pressure**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
1 NPS		0.86 sq in			15 - 2160 psi		VIII
1.5 NPS		2.04 sq in			10 - 2160 psi		VIII
2 NPS		3.36 sq in			10 - 1440 psi		VIII
3 NPS		7.39 sq in			9 - 1440 psi		VIII
3.5 NPS		9.89 sq in			9 - 1440 psi		VIII Div. 1
4 NPS		12.7 sq in			9 - 1440 psi		VIII
6 NPS		28.8 sq in			9 - 720 psi		VIII
8 NPS		50 sq in			9 - 720 psi		VIII
10 NPS		78.8 sq in			9 - 720 psi		VIII Div. 1
12 NPS		113.1 sq in			9 - 720 psi		VIII Div. 1

Certification
Number: **75675**Design Series
or catalog number **SANITRX HPX II (SF, NA, IS)(GAS)**Type Classification: **Rupture Disk Device**Capacity Tests: **Sec. VIII Div. 1 at Continental Disc. Corp. on June 17, 2011**Method of Establishing Relieving Capacity: **Resistance Factor, 3 Size, Krg**Certified Value: **1.60 Unitless**Test Medium: **Air**Certified Medium: **Air or gases (Krg)**Set Pressure Definition: **Burst Pressure**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
1 NPS		0.49 sq in			300 - 1500 psi		VIII
1.5 NPS		1.18 sq in			200 - 1500 psi		VIII
2 NPS		2.25 sq in			150 - 1000 psi		VIII
3 NPS		5.49 sq in			100 - 1000 psi		VIII
4 NPS		9.77 sq in			10 - 1000 psi		VIII

Location: 3160 West Heartland Drive, Liberty, MO 64068 United States

Certification Number: **75686** Design Series or catalog number: **SANITRX HPX II (SF, NA, IS)(Liquid)**

Type Classification: **Rupture Disk Device**Capacity Tests: **Sec. VIII Div. 1 at Continental Disc. Corp. on June 17, 2011**Method of Establishing Relieving Capacity: **Resistance Factor, 3 Size, Krl**Certified Value: **1.88 Unitless**Test Medium: **Air/Gas & Liquid**Certified Medium: **Liquid (Krl)**Set Pressure Definition: **Burst Pressure**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
1 NPS		0.49 sq in			300 - 1500 psi		VIII
1.5 NPS		1.18 sq in			200 - 1500 psi		VIII
2 NPS		2.25 sq in			150 - 1000 psi		VIII
3 NPS		5.49 sq in			100 - 1000 psi		VIII
4 NPS		9.77 sq in			10 - 1000 psi		VIII

Certification Number: **75697** Design Series or catalog number: **SRA (Gas)**

Holder Designation: **Screw Type Tite-Seal**Type Classification: **Rupture Disk Device**Capacity Tests: **Sec. VIII Div. 1 at Continental Disc. Corp. on October 13, 2012**Method of Establishing Relieving Capacity: **Flow Capacity, K**Certified Value: **.85 Unitless**Test Medium: **Air/Gas**Certified Medium: **Gas**Special Service: **None**Set Pressure Definition: **Burst Pressure**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
0.25 NPS	Top	0.049 sq in			35 - 1000 psi	Air	VIII Div. 1
0.375 NPS	Top	0.11 sq in			35 - 1000 psi	Air	VIII Div. 1
0.5 NPS	Top	0.169 sq in			35 - 1000 psi	Air	VIII Div. 1

Certification Number: **75709** Design Series or catalog number: **SRA (Liquid)**

Holder Designation: **Screw Type Tite-Seal**Type Classification: **Rupture Disk Device**Capacity Tests: **Sec. VIII Div. 1 at Continental Disc. Corp. on October 13, 2012**Method of Establishing Relieving Capacity: **Flow Capacity, K**Certified Value: **.65 Unitless**Test Medium: **Water**Certified Medium: **Liquid**Special Service: **None**Set Pressure Definition: **Burst Pressure**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
0.25 NPS	Top	0.049 sq in			35 - 1000 psi	Water	VIII Div. 1
0.375 NPS	Top	0.11 sq in			35 - 1000 psi	Water	VIII Div. 1
0.5 NPS	Top	0.169 sq in			35 - 1000 psi	Water	VIII Div. 1

Location: 3160 West Heartland Drive, Liberty, MO 64068 United States

Certification Number: **75710** Design Series or catalog number: **WMP (Gas)**

Type Classification: **Rupture Disk Device**Capacity Tests: **Sec. VIII Div. 1 at Continental Disc. Corp. on October 31, 2012**Method of Establishing Relieving Capacity: **Flow Capacity, K**Certified Value: **.80 Unitless**Test Medium: **Air/Gas**Certified Medium: **Air/Gas**Set Pressure Definition: **Burst Pressure**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
0.125 NPS	Top	0.006 sq in			1200 - 15000 psi	Air	VIII Div. 1
0.25 NPS	Top	0.026 sq in			800 - 15000 psi	Air	VIII Div. 1
0.375 NPS	Top	0.059 sq in			500 - 15000 psi	Air	VIII Div. 1
0.5 NPS	Top	0.082 sq in			450 - 15000 psi	Air	VIII Div. 1
0.75 NPS	Top	0.168 sq in			350 - 7500 psi	Air	VIII Div. 1
1 NPS	Top	0.332 sq in			300 - 6000 psi	Air	VIII Div. 1

Certification Number: **75721** Design Series or catalog number: **WMP (Liquid)**

Type Classification: **Rupture Disk Device**Capacity Tests: **Sec. VIII Div. 1 at Continental Disc. Corp. on October 31, 2012**Method of Establishing Relieving Capacity: **Flow Capacity, K**Certified Value: **.59 Unitless**Test Medium: **Water**Certified Medium: **Liquid**Special Service: **None**Set Pressure Definition: **Burst Pressure**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
0.125 NPS	Top	0.006 sq in			1200 - 15000 psi	Water	VIII Div. 1
0.25 NPS	Top	0.026 sq in			800 - 15000 psi	Water	VIII Div. 1
0.375 NPS	Top	0.059 sq in			500 - 15000 psi	Water	VIII Div. 1
0.5 NPS	Top	0.082 sq in			450 - 15000 psi	Water	VIII Div. 1
0.75 NPS	Top	0.168 sq in			350 - 7500 psi	Water	VIII Div. 1
1 NPS	Top	0.332 sq in			300 - 6000 psi	Water	VIII Div. 1

Certification Number: **75732** Design Series or catalog number: **CD31159**

Type Classification: **Rupture Disk Device**Capacity Tests: **Sec. VIII Div. 1 at Continental Disc. Corp. on May 09, 2017**Method of Establishing Relieving Capacity: **Resistance Factor, 1 Size, Krgl**Certified Value: **20.0 Unitless**Test Medium: **Air/Gas & Liquid**Certified Medium: **Air or gases, and liquid (Krgl)**Special Service: **None**Set Pressure Definition: **Burst Pressure**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
2 NPS		1.13 sq in			15 - 500 psi		VIII Div. 1

Continental NH3 Products Co., Inc. (CNT)

NB#: 12003

location: 130 Yorktown, Dallas, TX 75208 United States

Continental NH3 Products Co., Inc. (CNT)

location: 130 Yorktown, Dallas, TX 75208 United States

Certification Number: **12003** Design Series or catalog number: **AA-402VA**

Type Classification: **Safety Relief Valve**Capacity Tests: **Sec. VIII Div. 1 at National Board T L (Picaway) on March 02, 1987**Method of Establishing Relieving Capacity: **Flow Capacity, 3 valve average**Certified Value: **2057 SCFM**Test Medium: **Air/Gas**Certified Medium: **Gas**Set Pressure Definition: **Start-to-Leak**Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
0.75 NPS	Top	0.44 sq in	0.75 in		250 - 250 psi	Air	VIII

Certification Number: **12025** Design Series or catalog number: **AA-402VA (265 psig)**

Type Classification: **Safety Relief Valve**Capacity Tests: **Sec. VIII Div. 1 at National Board T L (Worthington) on May 20, 1996**Method of Establishing Relieving Capacity: **Flow Capacity, 3 valve average**Certified Value: **2130 SCFM**Test Medium: **Air/Gas**Certified Medium: **Gas**Set Pressure Definition: **Start-to-Leak**Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
0.75 NPS	Top	0.44 sq in	0.75 in		265 - 265 psi	Air	VIII

Certification Number: **12036** Design Series or catalog number: **AA-417-AB**

Type Classification: **Safety Relief Valve**Capacity Tests: **Sec. VIII Div. 1 at National Board T L (Worthington) on October 14, 1998**Method of Establishing Relieving Capacity: **Flow Capacity, 3 valve average**Certified Value: **5886 SCFM**Test Medium: **Air/Gas**Certified Medium: **Gas**Set Pressure Definition: **Start-to-Leak**Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
1.25 NPS	Top	1.22 sq in	1.25 in		250 - 250 psi	Air	VIII Div. 1

Control Devices, LLC (CDV)

NB#: 14016

Location: 1555 Larkin Williams Road, Fenton, MO 63026 United States

Acceptable Abbrev.: CD STL, MO

Control Devices, LLC (CDV)

Location: 1555 Larkin Williams Road, Fenton, MO 63026 United States

Acceptable Abbrev.: CD STL, MO

Certification Number: **14016** Design Series or catalog number: **ST**

Type Classification: **Safety Relief Valve**Capacity Tests: **Sec. VIII Div. 1 at National Board T L (Picaway) on May 12, 1988**Method of Establishing Relieving Capacity: **Flow Capacity, Slope**Certified Value: **.759 SCFM/PSIA**Test Medium: **Air/Gas**Certified Medium: **Air/Gas**Set Pressure Definition: **Pop**Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
0.125 - 0.375 NPS	Side	0.049 sq in	0.25 in	0.138 in	25 - 350 psi	Air	VIII Div. 1

Certification Number: **14038** Design Series or catalog number: **SA**

Type Classification: **Safety Relief Valve**Capacity Tests: **Sec. VIII Div. 1 at National Board T L (Worthington) on April 01, 1996**Method of Establishing Relieving Capacity: **Flow Capacity, Slope**Certified Value: **.716 SCFM/PSIA**Test Medium: **Air/Gas**Certified Medium: **Air/Gas**Special Service: **None**Set Pressure Definition: **Pop**Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
0.125 - 0.375 NPS	Side	0.049 sq in	0.25 in	0.088 in	50 - 350 psi	Air	VIII Div. 1

Certification Number: **14049** Design Series or catalog number: **SP**

Type Classification: **Safety Relief Valve**Capacity Tests: **Sec. VIII Div. 1 at National Board T L (Worthington) on February 12, 1992**Method of Establishing Relieving Capacity: **Flow Capacity, Slope**Certified Value: **.276 SCFM/PSIA**Test Medium: **Air/Gas**Certified Medium: **Air/Gas**Set Pressure Definition: **Pop**Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
0.125 - 0.25 NPS	Side	0.0191 sq in	0.156 in	0.11 in	75 - 250 psi	Air	VIII Div. 1

Control Devices, LLC (CDV)

NB#: 14050

Location: 1555 Larkin Williams Road, Fenton, MO 63026 United States

Acceptable Abbrev.: CD STL, MO

Certification
Number: **14050**Design Series
or catalog number **SF**Type Classification: **Safety Relief Valve**Capacity Tests: **Sec. VIII Div. 1 at National Board T L (Worthington) on January 27, 1993**Method of Establishing Relieving Capacity: **Flow Capacity, Slope**Certified Value: **1.526 SCFM/PSIA**Test Medium: **Air/Gas**Certified Medium: **Air/Gas**Special Service: **None**Set Pressure Definition: **Pop**Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
0.5 NPS	Side	0.11 sq in	0.375 in	0.17 in	50 - 250 psi	Air	VIII Div. 1

Certification
Number: **14061**Design Series
or catalog number **SB**Type Classification: **Safety Relief Valve**Capacity Tests: **Sec. VIII Div. 1 at National Board T L (Worthington) on July 26, 1996**Method of Establishing Relieving Capacity: **Flow Capacity, Slope**Certified Value: **3.31 SCFM/PSIA**Test Medium: **Air/Gas**Certified Medium: **Air/Gas**Set Pressure Definition: **Pop**Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
0.5 - 0.75 NPS	Side	0.221 sq in	0.531 in	0.267 in	25 - 300 psi	Air	VIII Div. 1

Certification
Number: **14072**Design Series
or catalog number **SW**Type Classification: **Safety Relief Valve**Capacity Tests: **Sec. VIII Div. 1 at National Board T L (Worthington) on September 16, 1996**Method of Establishing Relieving Capacity: **Flow Capacity, Slope**Certified Value: **6.92 SCFM/PSIA**Test Medium: **Air/Gas**Certified Medium: **Air/Gas**Set Pressure Definition: **Pop**Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
1 - 1.25 NPS	Side	0.46 sq in	0.765 in	0.314 in	25 - 300 psi	Air	VIII Div. 1

Control Devices, LLC (CDV)

NB#: 14083

location: 1555 Larkin Williams Road, Fenton, MO 63026 United States

Acceptable Abbrev.: CD STL, MO

Certification
Number: **14083**Design Series
or catalog number **SCB**Type Classification: **Safety Relief Valve**Capacity Tests: **Sec. VIII Div. 1 at National Board T L (Worthington) on April 14, 1997**Method of Establishing Relieving Capacity: **Flow Capacity, Slope**Certified Value: **3.26 SCFM/PSIA**Test Medium: **Air/Gas**Certified Medium: **Air/Gas**Set Pressure Definition: **Pop**Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
0.5 - 0.75 NPS	.75, 1 NPS	0.2206 sq in	0.53 in	0.254 in	25 - 300 psi	Air	VIII Div. 1

Certification
Number: **14094**Design Series
or catalog number **SN**Type Classification: **Safety Relief Valve**Capacity Tests: **Sec. VIII Div. 1 at National Board T L (Worthington) on February 06, 1998**Method of Establishing Relieving Capacity: **Flow Capacity, Slope**Certified Value: **1.75 SCFM/PSIA**Test Medium: **Air/Gas**Certified Medium: **Air/Gas**Set Pressure Definition: **Pop**Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
0.5 NPS	Side	0.11 sq in	0.375 in	0.15 in	50 - 350 psi	Air	VIII

COOPER Valves, LLC (CPV)

NB#: 00909

location: 4659 Wright Road, Stafford, TX 77477 United States

COOPER Valves, LLC (CPV)

location: 4659 Wright Road, Stafford, TX 77477 United States

Certification Number: **00909** Design Series or catalog number: **ARV Series 1**

Type Classification: **Power Actuated Relief Valve**Capacity Tests: **Sec. I at National Board T L (Worthington) on March 18, 2016**Method of Establishing Relieving Capacity: **Flow Capacity, Slope**Certified Value: **26.7 PPH/PSIA**Test Medium: **Steam**Certified Medium: **Steam**Set Pressure Definition: **Power Actuated**Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
1.5 NPS	3 NPS	0.601 sq in	0.875 in		500 - 5000 psi	Steam	I

Certification Number: **00921** Design Series or catalog number: **ARV Series 2**

Type Classification: **Power Actuated Relief Valve**Capacity Tests: **Sec. I at National Board T L (Worthington) on March 18, 2016**Method of Establishing Relieving Capacity: **Flow Capacity, K**Certified Value: **.866 Unitless**Test Medium: **Steam**Certified Medium: **Steam**Set Pressure Definition: **Power Actuated**Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
2 NPS	3 NPS	0.785 sq in	1 in		500 - 5000 psi	Steam	I
2.5 NPS	4 NPS	2.405 sq in	1.75 in		500 - 6000 psi	Steam	I
3 NPS	6 NPS	3.141 sq in	2 in		500 - 6000 psi	Steam	I
4 NPS	6 NPS	4.908 sq in	2.5 in		500 - 6000 psi	Steam	I
		7.069 sq in	3 in		500 - 5000 psi	Steam	I

Crosby Valve, LLC (CVM)

NB#: 15017

Location: 55 Cabot Blvd, Mansfield, MA 02048 United States

Acceptable Abbrev.: CVM

Crosby Valve, LLC (CVM)

Location: 55 Cabot Blvd, Mansfield, MA 02048 United States

Acceptable Abbrev.: CVM

Certification Number: **15017** Design Series or catalog number **HA-HAA (Class 1)**

Type Classification: **Safety Valve**Capacity Tests: **Sec. III at Crosby Valve & Gage on February 17, 1968**Method of Establishing Relieving Capacity: **Flow Capacity, K**Certified Value: **.878 Unitless**Test Medium: **Steam**Certified Medium: **Steam**Set Pressure Definition: **Pop**Blowdown: **Adjustable by Dual Ring**

Scope of Nominal Size and Set Pressure Ranges:

Inlet Size	Outlet Size	Flow Area	Orifice [designator] diameter	Lift	Set Pressure Range	Media	Code Section
6 NPS	10, Dual 8 NPS	16.5 sq in	[R4] 4.5835 in	1.146 in	15 - 3000 psi	Steam	III
6 - 8 NPS	8, 8 dual NPS	12.174 sq in	[Q] 3.937 in	0.984 in	15 - 3000 psi	Steam	III
	8,10,8 dual NPS	16 sq in	[R] 4.513 in	1.128 in	15 - 3000 psi	Steam	III
8 NPS	10 NPS	17.72 sq in	[R2] 4.75 in	1.188 in	15 - 3000 psi	Steam	III
	12,10 dual, 12 dual NPS	28.27 sq in	[T] 6 in	1.5 in	15 - 3000 psi	Steam	III

Certification Number: **15028** Design Series or catalog number **HB (Class 1)**

Type Classification: **Safety Valve**Capacity Tests: **Sec. III at Crosby Valve & Gage on November 25, 1968**Method of Establishing Relieving Capacity: **Flow Capacity, K**Certified Value: **.869 Unitless**Test Medium: **Steam**Certified Medium: **Steam**Set Pressure Definition: **Pop**Blowdown: **Adjustable by Dual Ring**

Scope of Nominal Size and Set Pressure Ranges:

Inlet Size	Outlet Size	Flow Area	Orifice [designator] diameter	Lift	Set Pressure Range	Media	Code Section
1.5 NPS	2, 2-1/2 NPS	0.196 sq in	[E] 0.5 in	0.125 in	15 - 3000 psi	Steam	III
		0.249 sq in	0.563 in	0.14 in	15 - 3000 psi	Steam	III
	2 - 3 NPS	0.307 sq in	[F] 0.625 in	0.156 in	15 - 3000 psi	Steam	III
	2-1/2 - 4 NPS	0.503 sq in	[G] 0.8 in	0.2 in	15 - 3000 psi	Steam	III
	2 1/2 - 4 NPS	0.65 sq in	0.909 in	0.227 in	15 - 3000 psi	Steam	III
1.5 - 3 NPS	3, 4 NPS	0.785 sq in	[H] 1 in	0.25 in	15 - 3000 psi	Steam	III
2 - 3 NPS	4, 6 NPS	1.288 sq in	[J] 1.281 in	0.32 in	15 - 3000 psi	Steam	III
2.5 - 4 NPS	4, 6 NPS	1.84 sq in	[K] 1.531 in	0.382 in	15 - 3000 psi	Steam	III
3 - 6 NPS	6 NPS	2.545 sq in	[K2] 1.8 in	0.45 in	15 - 3000 psi	Steam	III
		2.853 sq in	[L] 1.906 in	0.476 in	15 - 3000 psi	Steam	III
		2.993 sq in	[M1] 1.952 in	0.488 in	15 - 3000 psi	Steam	III
		3.644 sq in	[M] 2.154 in	0.538 in	15 - 3000 psi	Steam	III
4 - 6 NPS	6, 8 NPS	4.382 sq in	[N] 2.362 in	0.591 in	15 - 3000 psi	Steam	III
		6.38 sq in	[P] 2.85 in	0.712 in	15 - 3000 psi	Steam	III
6 NPS	8 NPS	7.917 sq in	[P3] 3.175 in	0.794 in	15 - 3000 psi	Steam	III
	10 NPS	16.12 sq in	[R] 4.531 in	1.133 in	15 - 1500 psi	Steam	III
8 NPS	10 NPS	16.474 sq in	[R] 4.58 in	1.145 in	15 - 1500 psi	Steam	III

Crosby Valve, LLC (CVM)

NB#: 15073

Location: 55 Cabot Blvd, Mansfield, MA 02048 United States

Acceptable Abbrev.: CVM

Certification
Number: **15073**Design Series
or catalog number **JB**Type Classification: **Safety Relief Valve**Capacity Tests: **Sec. VIII Div. 1 at Crosby Valve & Gage on August 08, 1957**Method of Establishing Relieving Capacity: **Flow Capacity, K**Certified Value: **.856 Unitless**Test Medium: **Steam**Certified Medium: **Steam & Air/Gas**Set Pressure Definition: **Pop**Blowdown: **Adjustable by Single Ring**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
1 NPS	2 NPS	0.1244 sq in	[D] 0.398 in	0.099 in	15 - 2900 psi	Steam	III VIII
					15 - 6000 psi	Air	VIII
		0.2223 sq in	[E] 0.532 in	0.133 in	15 - 2900 psi	Steam	III VIII
					15 - 6000 psi	Air	VIII
1.5 NPS	2 NPS	0.3484 sq in	[F] 0.666 in	0.167 in	15 - 2900 psi	Steam	III VIII
					15 - 5000 psi	Air	VIII
	2.5 NPS	0.57 sq in	[G] 0.852 in	0.213 in	15 - 2900 psi	Steam	III VIII
					15 - 3705 psi	Air	III VIII
	3 NPS	0.891 sq in	[H] 1.065 in	0.266 in	15 - 2900 psi	Air	VIII
						Steam	III VIII
2 NPS	3 NPS	1.459 sq in	[J] 1.363 in	0.34 in	15 - 2900 psi	Air	VIII
						Steam	III VIII
3 NPS	4 NPS	2.087 sq in	[K] 1.63 in	0.408 in	15 - 2900 psi	Air	VIII
						Steam	III VIII
		3.237 sq in	[L] 2.03 in	0.508 in	15 - 1500 psi	Air	VIII
						Steam	III VIII
4 NPS	6 NPS	4.083 sq in	[M] 2.28 in	0.57 in	15 - 1100 psi	Air	VIII
						Steam	III VIII
		4.924 sq in	[N] 2.504 in	0.626 in	15 - 1000 psi	Air	VIII
						Steam	III VIII
		7.234 sq in	[P] 3.035 in	0.759 in	15 - 1000 psi	Air	VIII
						Steam	III VIII
6 NPS	8 NPS	12.53 sq in	[Q] 3.994 in	0.999 in	15 - 600 psi	Air	VIII
						Steam	III VIII
		18.148 sq in	[R] 4.807 in	1.2 in	15 - 500 psi	Air	VIII
						Steam	III VIII
8 NPS	10 NPS	29.494 sq in	[T] 6.128 in	1.532 in	15 - 500 psi	Air	VIII
						Steam	III VIII
10 NPS	14 NPS	47.85 sq in	[V] 7.805 in	1.951 in	15 - 500 psi	Air	VIII
						Steam	III VIII

Crosby Valve, LLC (CVM)

NB#: 15073

location: 55 Cabot Blvd, Mansfield, MA 02048 United States

Acceptable Abbrev.: CVM

...Continued							
Inlet Size	Outlet Size	Flow Area	Orifice [designator] diameter	Lift	Set Pressure Range	Media	Code Section
10 - 12 NPS	14 NPS	38.485 sq in	7 in	1.75 in	15 - 600 psi	Air	VIII
						Steam	III VIII
12 NPS	16 NPS	68.9 sq in	[W] 9.366 in	2.341 in	15 - 500 psi	Air	VIII
						Steam	III VIII
	18 NPS	72 sq in	[W1] 9.575 in	2.394 in	15 - 400 psi	Air	III VIII Div. 1
						Steam	III VIII Div. 1
14 NPS	20 NPS	93.78 sq in	[Y] 10.927 in	2.732 in	15 - 400 psi	Air	VIII
						Steam	III VIII
16 NPS	18 NPS	103.15 sq in	[Z] 11.46 in	2.865 in	15 - 400 psi	Air	VIII
						Steam	III VIII
		110 sq in	11.835 in	2.959 in	15 - 400 psi	Air	III VIII Div. 1
						Steam	III VIII Div. 1
	20 NPS	123.47 sq in	[Z2] 12.538 in	3.135 in	15 - 400 psi	Air	VIII
						Steam	III VIII
18 - 20 NPS	24 NPS	108.434 sq in	11.75 in	2.938 in	15 - 600 psi	Air	VIII
						Steam	III VIII
	26 NPS	155.04 sq in	[AA] 14.05 in	3.513 in	15 - 400 psi	Air	VIII
						Steam	III VIII
20 NPS	24 NPS	191.38 sq in	[BB] 15.61 in	3.902 in	15 - 400 psi	Air	VIII
						Steam	III VIII
	26 NPS	213.82 sq in	[BB2] 16.5 in	4.125 in	15 - 300 psi	Air	VIII
						Steam	III VIII

Certification
Number: 15129Design Series
or catalog number JMBL (Liquids)

Type Classification: Relief Valve

Capacity Tests: Sec. VIII Div. 1 at Crosby Valve & Gage on October 05, 1984

Method of Establishing Relieving Capacity: Flow Capacity, K

Certified Value: .657 Unitless

Test Medium: Water

Certified Medium: Liquid

Set Pressure Definition: First Steady Stream

Blowdown: Fixed

Scope of Nominal Size and Set Pressure Ranges:

Inlet Size	Outlet Size	Flow Area	Orifice [designator] diameter	Lift	Set Pressure Range	Media	Code Section
0.5 - 1 NPS	1 NPS	0.0552 sq in	[2] 0.265 in	0.07 in	15 - 5000 psi	Water	III VIII Div. 1
		0.0845 sq in	[4] 0.328 in	0.095 in	15 - 5000 psi	Water	III VIII Div. 1
0.5 - 1.5 NPS	1, 1.5 NPS	0.1244 sq in	[6] 0.398 in	0.125 in	15 - 5000 psi	Water	III VIII Div. 1
0.75 - 1.5 NPS	1, 1.5 NPS	0.2214 sq in	[8] 0.531 in	0.2 in	15 - 5000 psi	Water	III VIII Div. 1

Crosby Valve, LLC (CVM)

NB#: 15174

location: 55 Cabot Blvd, Mansfield, MA 02048 United States

Acceptable Abbrev.: CVM

Certification Number: **15174** Design Series or catalog number: **JMB-WR**

Type Classification: **Safety Relief Valve**Capacity Tests: **Sec. III at Crosby Valve & Gage on February 10, 1981**Method of Establishing Relieving Capacity: **Flow Capacity, K**Certified Value: **.563 Unitless**Test Medium: **Water**Certified Medium: **Liquid**Set Pressure Definition: **First Steady Stream**Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
0.75 - 1.5 NPS	1, 1.5 NPS	0.012 sq in	0.124 in	0.012 in	5 - 2750 psi	Water	III VIII Div. 1
		0.0274 sq in	0.187 in	0.015 in	5 - 2750 psi	Water	III VIII Div. 1
		0.0486 sq in	0.249 in	0.021 in	5 - 2750 psi	Water	III VIII Div. 1
		0.1098 sq in	0.374 in	0.04 in	5 - 2750 psi	Water	VIII VIII

Crosby Valve, LLC (CVM)

NB#: 15196

Location: 55 Cabot Blvd, Mansfield, MA 02048 United States

Acceptable Abbrev.: CVM

Certification Number: **15196** Design Series or catalog number **JO/HSU (Class 2 and 3)**

Type Classification: **Safety Relief Valve**Capacity Tests: **Sec. III at Phillips Petroleum on October 19, 1955**Method of Establishing Relieving Capacity: **Flow Capacity, K**Certified Value: **.870 Unitless**Test Medium: **Gas**Certified Medium: **Steam & Air/Gas**Set Pressure Definition: **Pop**Blowdown: **Adjustable**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
1 - 1.5 NPS	2, 2.5 NPS	0.1244 sq in	[D] 0.398 in	0.099 in	15 - 10000 psi	Air	VIII
					15 - 2900 psi	Steam	III VIII
		0.2223 sq in	[E] 0.532 in	0.133 in	15 - 2900 psi	Steam	III VIII
					15 - 7500 psi	Air	VIII
1.5 NPS	2 NPS	0.3484 sq in	[F] 0.666 in	0.167 in	15 - 2900 psi	Steam	III VIII
					15 - 5000 psi	Air	VIII
	2.5 NPS	0.57 sq in	[G] 0.852 in	0.213 in	15 - 2900 psi	Steam	III VIII
					15 - 3705 psi	Air	VIII
	3 NPS	0.891 sq in	[H] 1.065 in	0.266 in	15 - 2900 psi	Air	VIII
						Steam	III VIII
2 NPS	3 NPS	1.459 sq in	[J] 1.363 in	0.34 in	15 - 2900 psi	Air	VIII
						Steam	III VIII
3 NPS	4 NPS	2.087 sq in	[K] 1.63 in	0.408 in	15 - 2900 psi	Air	VIII
						Steam	III VIII
		3.237 sq in	[L] 2.03 in	0.508 in	15 - 1500 psi	Air	VIII
						Steam	III VIII
4 NPS	6 NPS	4.083 sq in	[M] 2.28 in	0.57 in	15 - 1100 psi	Air	VIII
						Steam	III VIII
		4.924 sq in	[N] 2.504 in	0.626 in	15 - 1000 psi	Air	VIII
						Steam	III VIII
		7.234 sq in	[P] 3.035 in	0.759 in	15 - 1000 psi	Air	VIII
						Steam	III VIII
6 NPS	8 NPS	12.53 sq in	[Q] 3.994 in	0.999 in	15 - 600 psi	Air	VIII
						Steam	III VIII
		18.148 sq in	[R] 4.807 in	1.2 in	15 - 500 psi	Air	VIII
						Steam	III VIII
8 NPS	10 NPS	29.494 sq in	[T] 6.128 in	1.532 in	15 - 500 psi	Air	VIII
						Steam	III VIII
10 NPS	14 NPS	47.85 sq in	[V] 7.805 in	1.951 in	15 - 500 psi	Air	VIII
						Steam	III VIII
12 NPS	14 NPS	68.9 sq in	[W] 9.366 in	2.341 in	15 - 500 psi	Air	VIII
						Steam	III VIII

Crosby Valve, LLC (CVM)

NB#: 15196

Location: 55 Cabot Blvd, Mansfield, MA 02048 United States

Acceptable Abbrev.: CVM

...Continued							
Inlet Size	Outlet Size	Flow Area	Orifice [designator] diameter	Lift	Set Pressure Range	Media	Code Section
14 NPS	18 NPS	93.78 sq in	[Y] 10.927 in	2.732 in	15 - 400 psi	Air	VIII
						Steam	III VIII
16 NPS	18 NPS	103.15 sq in	[Z] 11.46 in	2.865 in	15 - 400 psi	Air	VIII
						Steam	III VIII
	20 NPS	123.47 sq in	[Z2] 12.538 in	3.135 in	15 - 400 psi	Air	VIII
						Steam	III VIII
18 NPS	24 NPS	155.04 sq in	[AA] 14.05 in	3.513 in	15 - 400 psi	Air	VIII
						Steam	III VIII
20 NPS	24 NPS	191.38 sq in	[BB] 15.61 in	3.902 in	15 - 400 psi	Air	VIII
						Steam	III VIII
	24 NPS	213.82 sq in	[BB2] 16.5 in	4.125 in	15 - 300 psi	Air	VIII
						Steam	III VIII

Certification
Number: 15231Design Series
or catalog number JPV-A

Type Classification: Safety Relief Valve

Capacity Tests: Sec. VIII Div. 1 at Crosby Valve & Gage on April 29, 1968

Method of Establishing Relieving Capacity: Flow Capacity, K

Certified Value: .878 Unitless

Test Medium: Steam

Certified Medium: Steam & Air/Gas

Set Pressure Definition: Pop

Blowdown: Adjustable

Scope of Nominal Size and Set Pressure Ranges:

Inlet Size	Outlet Size	Flow Area	Orifice [designator] diameter	Lift	Set Pressure Range	Media	Code Section
10 NPS	14 NPS	44.18 sq in	[V] 7.5 in	1.875 in	15 - 1500 psi	Steam	VIII Div. 1
12 NPS	16 NPS	63.62 sq in	[W] 9 in	2.25 in	15 - 1500 psi	Steam	VIII Div. 1
14 NPS	18 NPS	86.59 sq in	[Y] 10.5 in	2.625 in	15 - 1500 psi	Steam	VIII Div. 1
16 NPS	18 NPS	95.21 sq in	[Z] 11.01 in	2.753 in	15 - 1500 psi	Steam	VIII Div. 1
	20 NPS	114.04 sq in	[Z2] 12.05 in	3.012 in	15 - 1500 psi	Steam	VIII Div. 1
18 NPS	22, 24 NPS	143.14 sq in	[AA] 13.5 in	3.375 in	15 - 1500 psi	Steam	VIII Div. 1
20 NPS	24 NPS	176.71 sq in	[BB] 15 in	3.75 in	15 - 1500 psi	Steam	VIII Div. 1

Certification
Number: 15309Design Series
or catalog number JRAK-BS (Class 1, 2, 3 Liquids)

Type Classification: Relief Valve

Capacity Tests: Sec. III at Crosby Valve & Gage on February 19, 1981

Method of Establishing Relieving Capacity: Flow Capacity, K

Certified Value: .646 Unitless

Test Medium: Water

Certified Medium: Liquid

Set Pressure Definition: First Steady Stream

Blowdown: Adjustable by Single Ring

Scope of Nominal Size and Set Pressure Ranges:

Inlet Size	Outlet Size	Flow Area	Orifice [designator] diameter	Lift	Set Pressure Range	Media	Code Section
0.5 - 1 NPS	1 NPS	0.012 sq in	0.124 in	0.008 in	5 - 3600 psi	Water	III
		0.0274 sq in	0.187 in	0.019 in	5 - 3600 psi	Water	III
		0.0486 sq in	0.249 in	0.029 in	5 - 3600 psi	Water	III
		0.0674 sq in	0.293 in	0.04 in	5 - 3600 psi	Water	III
		0.1098 sq in	0.374 in	0.061 in	5 - 3600 psi	Water	III

Crosby Valve, LLC (CVM)

NB#: 15310

Location: 55 Cabot Blvd, Mansfield, MA 02048 United States

Acceptable Abbrev.: CVM

Certification Number: **15310** Design Series or catalog number **JRL (Liquids)**

Type Classification: Relief Valve

Capacity Tests: Sec. VIII Div. 1 at Crosby Valve & Gage on October 03, 1984

Method of Establishing Relieving Capacity: Flow Capacity, Flow Factor

Certified Value: 2.145 GPM/SQ.RT. PSID

Test Medium: Water

Certified Medium: Liquid

Set Pressure Definition: First Steady Stream

Blowdown: Fixed

Scope of Nominal Size and Set Pressure Ranges:

Inlet Size	Outlet Size	Flow Area	Orifice [designator] diameter	Lift	Set Pressure Range	Media	Code Section
0.5 - 1 NPS	1 NPS	0.084 sq in	0.328 in	0.125 in	15 - 2000 psi	Water	III VIII Div. 1

Certification Number: **15332** Design Series or catalog number **JRU**

Type Classification: Safety Relief Valve

Capacity Tests: Sec. VIII Div. 1 at Crosby Valve & Gage on December 23, 1968

Method of Establishing Relieving Capacity: Flow Capacity, Slope

Certified Value: 1.32 SCFM/PSIA

Test Medium: Air/Gas

Certified Medium: Air/Gas

Set Pressure Definition: Pop

Blowdown: Fixed

Scope of Nominal Size and Set Pressure Ranges:

Inlet Size	Outlet Size	Flow Area	Orifice [designator] diameter	Lift	Set Pressure Range	Media	Code Section
0.5 - 1 NPS	1 NPS	0.11 sq in	0.375 in	0.1 in	15 - 2000 psi	Air	III VIII Div. 1

Certification Number: **15343** Design Series or catalog number **JO/JB-WR (Class 1, 2, 3 Liquids)**

Type Classification: Relief Valve

Capacity Tests: Sec. III at Crosby Valve & Gage on October 03, 1980

Method of Establishing Relieving Capacity: Flow Capacity, K

Certified Value: .564 Unitless

Test Medium: Water

Certified Medium: Liquid

Set Pressure Definition: First Steady Stream

Blowdown: Fixed

Scope of Nominal Size and Set Pressure Ranges:

Inlet Size	Outlet Size	Flow Area	Orifice [designator] diameter	Lift	Set Pressure Range	Media	Code Section
0.75 - 1.5 NPS	2, 2-1/2 NPS	0.114 sq in	[D] 0.455 in	0.08 in	5 - 6000 psi	Water	III
		0.205 sq in	[E] 0.61 in	0.107 in	5 - 6000 psi	Water	III
1 - 1.5 NPS	2 - 3 NPS	0.316 sq in	[F] 0.751 in	0.134 in	5 - 5000 psi	Water	III
1.5 - 2 NPS	2-1/2, 3 NPS	0.5 sq in	[G] 0.93 in	0.171 in	5 - 3600 psi	Water	III
	3,4 NPS	0.778 sq in	[H] 1.163 in	0.213 in	5 - 2480 psi	Water	III
2 - 3 NPS	3 - 6 NPS	1.281 sq in	[J] 1.494 in	0.273 in	5 - 2440 psi	Water	III
3 NPS	4, 6 NPS	1.831 sq in	[K] 1.782 in	0.327 in	5 - 1950 psi	Water	III
3 - 4 NPS	4,6 NPS	2.827 sq in	[L] 2.211 in	0.407 in	5 - 1500 psi	Water	III
4 NPS	6 NPS	3.562 sq in	[M] 2.481 in	0.457 in	5 - 1100 psi	Water	III
	6,8 NPS	4.312 sq in	[N] 2.734 in	0.502 in	5 - 1000 psi	Water	III
		6.315 sq in	[P] 3.306 in	0.608 in	5 - 1000 psi	Water	III
6 NPS	8 NPS	10.998 sq in	[Q] 4.376 in	0.8 in	5 - 600 psi	Water	III

Crosby Valve, LLC (CVM)

NB#: 15387

Location: 55 Cabot Blvd, Mansfield, MA 02048 United States

Acceptable Abbrev.: CVM

Certification Number: **15387** Design Series or catalog number: **JB-TD**

Type Classification: Relief Valve

Capacity Tests: Sec. III at Anderson Greenwood Crosby (Wrentham MA) on February 19, 2008

Method of Establishing Relieving Capacity: Flow Capacity, Flow Factor

Certified Value: 0.678 GPM/SQ.RT. PSID

Test Medium: Water

Certified Medium: Liquid

Special Service: None

Set Pressure Definition: First Steady Stream

Blowdown: Fixed

Scope of Nominal Size and Set Pressure Ranges:

Inlet Size	Outlet Size	Flow Area	Orifice [designator] diameter	Lift	Set Pressure Range	Media	Code Section
0.75 NPS	1 NPS	0.013 sq in	0.398 in	0.007 in	125 - 1600 psi	Water	III NB, NC, ND

Certification Number: **15398** Design Series or catalog number: **CV1B**

Type Classification: Vacuum Relief Valve

Capacity Tests: Sec. III NC at Anderson Greenwood (El Campo TX) on December 11, 2013

Method of Establishing Relieving Capacity: Flow Capacity, 1 valve method

Certified Value: 1652 SCFM

Test Medium: Gas

Certified Medium: Air

Set Pressure Definition: Start-to-Leak

Scope of Nominal Size and Set Pressure Ranges:

Inlet Size	Outlet Size	Flow Area	Orifice [designator] diameter	Lift	Set Pressure Range	Media	Code Section
6 - 8 NPS	6, 8 NPS	16.98 sq in	4.65 in		-0.2 psi	Air	III

Certification Number: **15422** Design Series or catalog number: **JMAK (Liquid Service)**

Type Classification: Relief Valve

Capacity Tests: Sec. III at Crosby Valve & Gage on February 19, 1981

Method of Establishing Relieving Capacity: Flow Capacity, K

Certified Value: .617 Unitless

Test Medium: Water

Certified Medium: Liquid

Set Pressure Definition: First Steady Stream

Blowdown: Adjustable by Single Ring

Scope of Nominal Size and Set Pressure Ranges:

Inlet Size	Outlet Size	Flow Area	Orifice [designator] diameter	Lift	Set Pressure Range	Media	Code Section
0.5 - 0.75 NPS	.75 - 2 NPS	0.012 sq in	0.124 in	0.009 in	5 - 3000 psi	Water	III VIII
0.5 - 1 NPS	.75 - 2 NPS	0.0274 sq in	0.187 in	0.018 in	5 - 3000 psi	Water	III VIII
0.5 - 1.5 NPS	.75 - 2 NPS	0.0486 sq in	0.249 in	0.028 in	5 - 3000 psi	Water	III VIII
0.5 - 2 NPS	.75 - 2 NPS	0.1098 sq in	0.374 in	0.05 in	5 - 3000 psi	Water	III VIII

Crosby Valve, LLC (CVM)

NB#: 15488

Location: 55 Cabot Blvd, Mansfield, MA 02048 United States

Acceptable Abbrev.: CVM

Certification Number: **15488** Design Series or catalog number: **VR (1")**

Type Classification: Vacuum Relief Valve

Capacity Tests: Sec. III at Crosby Valve & Gage on December 20, 1991

Method of Establishing Relieving Capacity: Flow Capacity, Slope

Certified Value: 10.6 SCFM/F(P*(P-Po)^{.5}

Test Medium: Air/Gas

Certified Medium: Air/Gas

Set Pressure Definition: Pop

Blowdown: Fixed

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
1 NPS	1 NPS	0.442 sq in			.1 - 7.0 psi	Air	III

Certification Number: **15556** Design Series or catalog number: **VR (3")**

Type Classification: Vacuum Relief Valve

Capacity Tests: Sec. III at Crosby Valve & Gage on November 07, 1996

Method of Establishing Relieving Capacity: Flow Capacity, Slope

Certified Value: 87.11 SCFM/F(P*(P-Po)^{.5}

Test Medium: Air/Gas

Certified Medium: Air/Gas

Set Pressure Definition: Pop

Blowdown: Fixed

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
3 NPS	3 NPS	4.146 sq in			.1 - 7.0 psi	Air	III

Certification Number: **15578** Design Series or catalog number: **VR (2")**

Type Classification: Vacuum Relief Valve

Capacity Tests: Sec. III at Crosby Valve & Gage on January 23, 1992

Method of Establishing Relieving Capacity: Flow Capacity, Slope

Certified Value: 38.3 SCFM/F(P*(P-Po)^{.5}

Test Medium: Air/Gas

Certified Medium: Air/Gas

Set Pressure Definition: Pop

Blowdown: Fixed

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
2 NPS	2 NPS	1.841 sq in			.1 - 7.0 psi	Air	III

Cyrus Shank Company (SHK)

NB#: 51017

location: 4645 W. Roosevelt Road, Cicero, IL 60804 United States

Cyrus Shank Company (SHK)

location: 4645 W. Roosevelt Road, Cicero, IL 60804 United States

Certification Number: **51017** Design Series or catalog number: **804, 804QR Series**

Type Classification: **Safety Relief Valve**Capacity Tests: **Sec. VIII Div. 1 at National Board T L (Worthington) on April 05, 2000**Method of Establishing Relieving Capacity: **Flow Capacity, Slope**Certified Value: **3.04 SCFM/PSIA**Test Medium: **Air/Gas**Certified Medium: **Gas**Set Pressure Definition: **Pop**Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
0.75 NPS	1 NPS	0.2821 sq in	0.708 in	0.12 in	75 - 400 psi	Air	VIII Div. 1

Certification Number: **51028** Design Series or catalog number: **805-T, 805QR, 815, 815QR Series**

Type Classification: **Safety Relief Valve**Capacity Tests: **Sec. VIII Div. 1 at National Board T L (Picaway) on January 27, 1984**Method of Establishing Relieving Capacity: **Flow Capacity, Slope**Certified Value: **4.09 SCFM/PSIA**Test Medium: **Air/Gas**Certified Medium: **Gas**Set Pressure Definition: **Pop**Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
1 NPS	1.25, 1.5 NPS	0.866 sq in	1.05 in		75 - 400 psi	Air	VIII

Certification Number: **51039** Design Series or catalog number: **803 LQ 75 psig (liquids)**

Type Classification: **Relief Valve**Capacity Tests: **Sec. VIII Div. 1 at National Board T L (Worthington) on March 23, 1995**Method of Establishing Relieving Capacity: **Flow Capacity, 3 valve average**Certified Value: **20.7 GPM**Test Medium: **Water**Certified Medium: **Liquid**Set Pressure Definition: **Pop**Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
0.5 NPS	.75 NPS	0.1148 sq in	0.466 in	0.14 in	75 - 75 psi	Water	VIII Div. 1

Location: 4645 W. Roosevelt Road, Cicero, IL 60804 United States

Certification Number: **51040** Design Series or catalog number: **900, 901, 902, 903**

Type Classification: **Safety Relief Valve**Capacity Tests: **Sec. VIII Div. 1 at National Board T L (Worthington) on May 28, 1997**Method of Establishing Relieving Capacity: **Flow Capacity, Slope**Certified Value: **15.18 SCFM/PSIA**Test Medium: **Air/Gas**Certified Medium: **Gas**Special Service: **None**Set Pressure Definition: **Pop**Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
1.25 - 1.5 NPS	2, 3 NPS	1.2275 sq in	1.25 in		150 - 400 psi	Air	VIII

Certification Number: **51051** Design Series or catalog number: **850, 851**

Type Classification: **Safety Relief Valve**Capacity Tests: **Sec. VIII Div. 1 at National Board T L (Worthington) on July 15, 1998**Method of Establishing Relieving Capacity: **Flow Capacity, Slope**Certified Value: **6.17 SCFM/PSIA**Test Medium: **Air/Gas**Certified Medium: **Gas**Special Service: **None**Set Pressure Definition: **Pop**Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
0.75 - 1.25 NPS	1.5, 2 NPS	0.442 sq in	0.75 in	0.5 in	150 - 400 psi	Air	VIII

Certification Number: **51062** Design Series or catalog number: **805 LQ 100 psig**

Type Classification: **Relief Valve**Capacity Tests: **Sec. VIII Div. 1 at National Board T L (Worthington) on July 15, 1998**Method of Establishing Relieving Capacity: **Flow Capacity, 3 valve average**Certified Value: **36.5 GPM**Test Medium: **Water**Certified Medium: **Liquid**Special Service: **None**Set Pressure Definition: **Pop**Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
1 NPS	1.25 NPS	0.445 sq in	1.05 in	0.135 in	100 - 100 psi	Water	VIII

Location: 4645 W. Roosevelt Road, Cicero, IL 60804 United States

Certification Number: **51073** Design Series or catalog number: **803 LQ 100 psig liquid, 803 LQ QC 100 psig liquid**

Type Classification: **Relief Valve**Capacity Tests: **Sec. VIII Div. 1 at National Board T L (Worthington) on June 19, 1998**Method of Establishing Relieving Capacity: **Flow Capacity, 3 valve average**Certified Value: **25.9 GPM**Test Medium: **Water**Certified Medium: **Liquid**Special Service: **None**Set Pressure Definition: **Pop**Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
0.5 NPS	.75 NPS	0.1148 sq in	0.466 in		100 - 100 psi	Water	VIII

Certification Number: **51129** Design Series or catalog number: **803, 803QC**

Type Classification: **Safety Relief Valve**Capacity Tests: **Sec. VIII Div. 1 at National Board T L (Worthington) on November 30, 1999**Method of Establishing Relieving Capacity: **Flow Capacity, Slope**Certified Value: **1.978 SCFM/PSIA**Test Medium: **Air/Gas**Certified Medium: **Gas**Special Service: **None**Set Pressure Definition: **Pop**Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
0.5 NPS	.75 NPS	0.1312 sq in	0.466 in	0.14 in	50 - 400 psi	Air	VIII Div. 1

Certification Number: **51130** Design Series or catalog number: **814**

Type Classification: **Safety Relief Valve**Capacity Tests: **Sec. VIII Div. 1 at National Board T L (Worthington) on May 17, 2001**Method of Establishing Relieving Capacity: **Flow Capacity, Slope**Certified Value: **3.29 SCFM/PSIA**Test Medium: **Air/Gas**Certified Medium: **Gas**Special Service: **None**Set Pressure Definition: **Pop**Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
0.75 NPS	1.25 NPS	0.2821 sq in	0.708 in		75 - 400 psi	Air	VIII Div. 1

Location: 4645 W. Roosevelt Road, Cicero, IL 60804 United States

Certification Number: **51141** Design Series or catalog number: **813**

Type Classification: **Safety Relief Valve**Capacity Tests: **Sec. VIII Div. 1 at National Board T L (Worthington) on August 23, 2001**Method of Establishing Relieving Capacity: **Flow Capacity, Slope**Certified Value: **1.99 SCFM/PSIA**Test Medium: **Air/Gas**Certified Medium: **Gas**Special Service: **None**Set Pressure Definition: **Pop**Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
0.5 NPS	1 NPS	0.1312 sq in	0.466 in	0.14 in	75 - 400 psi	Air	VIII Div. 1

Certification Number: **51152** Design Series or catalog number: **801, 801D, 801QR, 801QRW**

Type Classification: **Safety Relief Valve**Capacity Tests: **Sec. VIII Div. 1 at National Board T L (Worthington) on February 28, 2002**Method of Establishing Relieving Capacity: **Flow Capacity, Slope**Certified Value: **0.73 SCFM/PSIA**Test Medium: **Air/Gas**Certified Medium: **Gas**Set Pressure Definition: **Pop**Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
0.5 NPS	.75 NPS	0.0487 sq in	0.466 in	0.125 in	75 - 400 psi	Air	VIII Div. 1

Certification Number: **51163** Design Series or catalog number: **800, 800D, 800QR, 800QRW**

Type Classification: **Safety Relief Valve**Capacity Tests: **Sec. VIII Div. 1 at National Board T L (Worthington) on June 03, 2002**Method of Establishing Relieving Capacity: **Flow Capacity, Slope**Certified Value: **0.42 SCFM/PSIA**Test Medium: **Gas**Certified Medium: **Gas**Special Service: **None**Set Pressure Definition: **Pop**Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
0.5 NPS	.75 NPS	0.02771 sq in	0.466 in	0.12 in	50 - 400 psi	Air	VIII Div. 1

Cyrus Shank Company (SHK)

NB#: 51174

Location: 4645 W. Roosevelt Road, Cicero, IL 60804 United States

Certification
Number: **51174**Design Series
or catalog number **812**Type Classification: **Safety Relief Valve**Capacity Tests: **Sec. VIII Div. 1 at National Board T L (Worthington) on January 27, 2005**Method of Establishing Relieving Capacity: **Flow Capacity, Slope**Certified Value: **1.339 SCFM/PSIA**Test Medium: **Air/Gas**Certified Medium: **Gas**Set Pressure Definition: **Pop**Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
0.5 NPS	1 NPS	0.1312 sq in	0.466 in	0.14 in	75 - 400 psi	Air	VIII Div. 1

Certification
Number: **51185**Design Series
or catalog number **CS 5602A, CS5602AQR**Type Classification: **Safety Relief Valve**Capacity Tests: **Sec. VIII Div. 1 at National Board T L (Worthington) on July 22, 2010**Method of Establishing Relieving Capacity: **Flow Capacity, Slope**Certified Value: **2.32 SCFM/PSIA**Test Medium: **Air/Gas**Certified Medium: **Gas**Set Pressure Definition: **Pop**Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
0.5 NPS	.75 NPS	0.282 sq in			75 - 400 psi	Air	VIII Div. 1

Certification
Number: **51196**Design Series
or catalog number **CS 5602B, CS 5602BQR, CS 5602C, CS 5602CQR**Type Classification: **Safety Relief Valve**Capacity Tests: **Sec. VIII Div. 1 at National Board T L (Worthington) on September 01, 2010**Method of Establishing Relieving Capacity: **Flow Capacity, Slope**Certified Value: **2.65 SCFM/PSIA**Test Medium: **Air/Gas**Certified Medium: **Gas**Special Service: **None**Set Pressure Definition: **Pop**Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
0.5 - 0.75 NPS	1 NPS	0.305 sq in	0.708 in	0.12 in	75 - 400 psi	Air	VIII Div. 1

Location: 4645 W. Roosevelt Road, Cicero, IL 60804 United States

Certification Number: **51208** Design Series or catalog number: **801DHC/801DHC QR**

Type Classification: **Safety Relief Valve**Capacity Tests: **Sec. VIII at National Board T L (Worthington) on April 08, 2011**Method of Establishing Relieving Capacity: **Flow Capacity, Slope**Certified Value: **.781 SCFM/PSIA**Test Medium: **Air/Gas**Certified Medium: **Gas**Special Service: **None**Set Pressure Definition: **Pop**Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
0.5 NPS	.75 NPS				75 - 400 psi	Air	VIII Div. 1

Certification Number: **51219** Design Series or catalog number: **804R, 804R-QR**

Type Classification: **Safety Relief Valve**Capacity Tests: **Sec. VIII Div. 1 at National Board T L (Worthington) on July 06, 2012**Method of Establishing Relieving Capacity: **Flow Capacity, Slope**Certified Value: **1.63 SCFM/PSIA**Test Medium: **Air**Certified Medium: **Gas**Set Pressure Definition: **Pop**Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
0.75 NPS	1 NPS				75 - 400 psi	Air	VIII Div. 1

Certification Number: **51220** Design Series or catalog number: **805R, 805R-QR**

Type Classification: **Safety Relief Valve**Capacity Tests: **Sec. VIII Div. 1 at National Board T L (Worthington) on September 21, 2012**Method of Establishing Relieving Capacity: **Flow Capacity, Slope**Certified Value: **2.1 SCFM/PSIA**Test Medium: **Gas**Certified Medium: **Gas**Set Pressure Definition: **Pop**Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
1 NPS	1.25 NPS	0.168 sq in	1.05 in		75 - 400 psi	Air	VIII Div. 1

Cyrus Shank Company (SHK)

NB#: 51231

Location: 4645 W. Roosevelt Road, Cicero, IL 60804 United States

Certification Number: **51231** Design Series or catalog number: **850DR, 851DR, 850AR, 851AR**

Type Classification: **Safety Relief Valve**Capacity Tests: **Sec. VIII Div. 1 at National Board T L (Worthington) on May 03, 2013**Method of Establishing Relieving Capacity: **Flow Capacity, Slope**Certified Value: **2.50 SCFM/PSIA**Test Medium: **Air**Certified Medium: **Gas**Set Pressure Definition: **Pop**Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
0.75 - 1.25 NPS	1.5, 2 NPS				75 - 350 psi	Air	VIII Div. 1

Certification Number: **51253** Design Series or catalog number: **800OP, 800OPQR**

Type Classification: **Safety Relief Valve**Capacity Tests: **Sec. VIII Div. 1 at National Board T L (Worthington) on March 24, 2017**Method of Establishing Relieving Capacity: **Flow Capacity, Slope**Certified Value: **0.216 SCFM/PSIA**Test Medium: **Gas**Certified Medium: **Gas**Set Pressure Definition: **Pop**Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
0.5 NPS	.75 NPS	0.162 sq in	0.466 in	0.12	250 - 300 psi	Air	VIII Div. 1

Certification Number: **51264** Design Series or catalog number: **CS 5602R**

Type Classification: **Safety Relief Valve**Capacity Tests: **Sec. VIII Div. 1 at National Board T L (Worthington) on May 11, 2017**Method of Establishing Relieving Capacity: **Flow Capacity, Slope**Certified Value: **0.781 SCFM/PSIA**Test Medium: **Gas**Certified Medium: **Gas**Set Pressure Definition: **Pop**Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
0.75 NPS	1 NPS	0.0574 sq in	0.708 sq in	0.12 in	75 - 400 psi	Air	VIII Div. 1

DonadonSDD Srl (DON)

NB#: 00516

location: Via Franceschelli, 7, Corbetta Milano 20011 Italy

Acceptable Abbrev.: DonadonSDD

DonadonSDD Srl (DON)

location: Via Franceschelli, 7, Corbetta Milano 20011 Italy

Acceptable Abbrev.: DonadonSDD

Certification
Number: **00516**Design Series
or catalog number **KRD**Holder Designation: **HRA, HRP, HRF**Type Classification: **Rupture Disk Device**Capacity Tests: **Sec. VIII Div. 1 at National Board T L (Worthington) on September 10, 2014**Method of Establishing Relieving Capacity: **Resistance Factor, 3 Size, Krl**Certified Value: **0.48 Unitless**Test Medium: **Gas**Certified Medium: **Liquid**Special Service: **None**Set Pressure Definition: **Burst Pressure**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
1 NPS		0.79 sq in			15 - 2000 psi	Water	VIII Div. 1
1.5 NPS		1.77 sq in			6 - 1500 psi	Water	VIII Div. 1
2 NPS		3.14 sq in			6 - 1500 psi	Water	VIII Div. 1
2.5 NPS		4.91 sq in			6 - 900 psi	Water	VIII Div. 1
3 NPS		7.07 sq in			6 - 900 psi	Water	VIII Div. 1
4 NPS		12.57 sq in			6 - 800 psi	Water	VIII Div. 1
5 NPS		19.63 sq in			6 - 800 psi	Water	VIII Div. 1
6 NPS		28.27 sq in			6 - 600 psi	Water	VIII Div. 1
8 NPS		50.27 sq in			6 - 600 psi	Water	VIII Div. 1
10 NPS		78.54 sq in			6 - 400 psi	Water	VIII Div. 1
12 NPS		113.1 sq in			6 - 300 psi	Water	VIII Div. 1
14 NPS		153.94 sq in			6 - 200 psi	Water	VIII Div. 1
16 NPS		201.06 sq in			6 - 150 psi	Water	VIII Div. 1
18 NPS		254.47 sq in			6 - 150 psi	Water	VIII Div. 1
20 NPS		314.16 sq in			6 - 150 psi	Water	VIII Div. 1
24 NPS		452.39 sq in			6 - 120 psi	Water	VIII Div. 1
28 NPS		615.75 sq in			6 - 45 psi	Water	VIII Div. 1
30 NPS		706.86 sq in			6 - 45 psi	Water	VIII Div. 1
32 NPS		804.25 sq in			6 - 30 psi	Water	VIII Div. 1
36 NPS		1017.88 sq in			6 - 30 psi	Water	VIII Div. 1

DonadonSDD Srl (DON)

NB#: 00527

Location: Via Franceschelli, 7, Corbetta Milano 20011 Italy

Acceptable Abbrev.: DonadonSDD

Certification
Number: 00527Design Series
or catalog number SCD

Holder Designation: HIA, HIP, HIF

Type Classification: Rupture Disk Device

Capacity Tests: Sec. VIII Div. 1 at National Board T L (Worthington) on March 25, 2015

Method of Establishing Relieving Capacity: Resistance Factor, 3 Size, Krgl

Certified Value: 1.33 Unitless

Test Medium: Gas

Certified Medium: Air/Gas & Liquid

Special Service: None

Set Pressure Definition: Burst Pressure

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
1 NPS		0.79 sq in			30 - 6000 psi	Air	VIII Div. 1
						Water	VIII Div. 1
1.5 NPS		1.77 sq in			30 - 2500 psi	Air	VIII Div. 1
						Water	VIII Div. 1
2 NPS		3.14 sq in			30 - 2500 psi	Air	VIII Div. 1
						Water	VIII Div. 1
2.5 NPS		4.91 sq in			30 - 2500 psi	Air	VIII Div. 1
						Water	VIII Div. 1
3 NPS		7.07 sq in			30 - 1500 psi	Air	VIII Div. 1
						Water	VIII Div. 1
4 NPS		12.57 sq in			30 - 1500 psi	Air	VIII Div. 1
						Water	VIII Div. 1
5 NPS		19.63 sq in			30 - 1500 psi	Air	VIII Div. 1
						Water	VIII Div. 1
6 NPS		28.27 sq in			30 - 900 psi	Air	VIII Div. 1
						Water	VIII Div. 1
8 NPS		50.27 sq in			30 - 900 psi	Air	VIII Div. 1
						Water	VIII Div. 1
10 NPS		78.54 sq in			30 - 900 psi	Air	VIII Div. 1
						Water	VIII Div. 1
12 NPS		113.1 sq in			30 - 300 psi	Air	VIII Div. 1
						Water	VIII Div. 1
14 NPS		153.94 sq in			30 - 300 psi	Air	VIII Div. 1
						Water	VIII Div. 1
16 NPS		201.06 sq in			30 - 300 psi	Air	VIII Div. 1
						Water	VIII Div. 1
18 NPS		254.47 sq in			30 - 300 psi	Air	VIII Div. 1
						Water	VIII Div. 1
20 NPS		314.16 sq in			30 - 300 psi	Air	VIII Div. 1
						Water	VIII Div. 1
24 NPS		452.39 sq in			30 - 300 psi	Air	VIII Div. 1
						Water	VIII Div. 1
28 NPS		615.75 sq in			30 - 300 psi	Air	VIII Div. 1
						Water	VIII Div. 1
30 NPS		706.86 sq in			30 - 300 psi	Air	VIII Div. 1
						Water	VIII Div. 1
32 NPS		804.25 sq in			30 - 300 psi	Air	VIII Div. 1
						Water	VIII Div. 1
36 NPS		1017.88 sq in			30 - 300 psi	Air	VIII Div. 1
						Water	VIII Div. 1

DonadonSDD Srl (DON)

NB#: 00538

location: Via Franceschelli, 7, Corbetta Milano 20011 Italy

Acceptable Abbrev.: DonadonSDD

Certification
Number: **00538**Design Series
or catalog number **SCR**Holder Designation: **HRA, HRP, HRF**Type Classification: **Rupture Disk Device**Capacity Tests: **Sec. VIII Div. 1 at National Board T L (Worthington) on December 05, 2014**Method of Establishing Relieving Capacity: **Resistance Factor, 3 Size, Krg**Certified Value: **0.48 Unitless**Test Medium: **Air/Gas**Certified Medium: **Air/Gas**Special Service: **None**Set Pressure Definition: **Burst Pressure**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
1 NPS		0.79 sq in			15 - 2000 psi	Air	VIII Div. 1
1.5 NPS		1.77 sq in			6 - 1500 psi	Air	VIII Div. 1
2 NPS		3.14 sq in			6 - 1500 psi	Air	VIII Div. 1
2.5 NPS		4.91 sq in			6 - 900 psi	Air	VIII Div. 1
3 NPS		7.07 sq in			6 - 900 psi	Air	VIII Div. 1
4 NPS		12.57 sq in			6 - 800 psi	Air	VIII Div. 1
5 NPS		19.63 sq in			6 - 800 psi	Air	VIII Div. 1
6 NPS		28.27 sq in			6 - 600 psi	Air	VIII Div. 1
8 NPS		50.27 sq in			6 - 600 psi	Air	VIII Div. 1
10 NPS		78.54 sq in			6 - 400 psi	Air	VIII Div. 1
12 NPS		113.1 sq in			6 - 300 psi	Air	VIII Div. 1
14 NPS		153.94 sq in			6 - 200 psi	Air	VIII Div. 1
16 NPS		201.06 sq in			6 - 150 psi	Air	VIII Div. 1
18 NPS		254.47 sq in			6 - 150 psi	Air	VIII Div. 1
20 NPS		314.16 sq in			6 - 150 psi	Air	VIII Div. 1
24 NPS		452.39 sq in			6 - 120 psi	Air	VIII Div. 1
28 NPS		615.75 sq in			6 - 45 psi	Air	VIII Div. 1
30 NPS		706.86 sq in			6 - 45 psi	Air	VIII Div. 1
32 NPS		804.25 sq in			6 - 30 psi	Air	VIII Div. 1
36 NPS		1017.88 sq in			6 - 30 psi	Air	VIII Div. 1

Dresser Machinery (Suzhou) Co., Ltd. (DMS)

NB#: 00864

location: 81 Suhong Zhong Road, Suzhou Industrial Park, Suzhou, Jiangsu 215021 Peoples Republic Of China

Acceptable Abbrev.: DMS

Dresser Machinery (Suzhou) Co., Ltd. (DMS)

location: 81 Suhong Zhong Road, Suzhou Industrial Park, Suzhou, Jiangsu 215021 Peoples Republic Of China

Acceptable Abbrev.: DMS

Certification Number: **00864** Design Series or catalog number: **11000 E Liquid**

Type Classification: **Safety Relief Valve**Capacity Tests: **Sec. VIII Div. 1 at Dresser Industries Inc. on March 23, 2016**Method of Establishing Relieving Capacity: **Flow Capacity, Flow Factor**Certified Value: **4.9748 GPM/SQ.RT. PSID**Test Medium: **Water**Certified Medium: **Liquid**Special Service: **None**Set Pressure Definition: **First Steady Stream**Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
0.75 - 1 NPS	1 NPS	0.246 sq in	[E] 0.56 in	0.25 in	75 - 1505 psi	Water	VIII Div. 1

Certification Number: **00875** Design Series or catalog number: **11000 E gas**

Type Classification: **Safety Relief Valve**Capacity Tests: **Sec. VIII Div. 1 at Dresser Industries Inc. on March 24, 2016**Method of Establishing Relieving Capacity: **Flow Capacity, Slope**Certified Value: **3.5733 SCFM/PSIA**Test Medium: **Air**Certified Medium: **Gas**Special Service: **None**Set Pressure Definition: **Pop**Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
0.75 - 1 NPS	1 NPS	0.246 sq in	[E] 0.56 in	0.184 in	75 - 2000 psi	Air	VIII Div. 1

Certification Number: **00886** Design Series or catalog number: **11000 D gas**

Type Classification: **Safety Relief Valve**Capacity Tests: **Sec. VIII Div. 1 at Dresser Industries Inc. on March 28, 2016**Method of Establishing Relieving Capacity: **Flow Capacity, Slope**Certified Value: **2.1078 SCFM/PSIA**Test Medium: **Air**Certified Medium: **Gas**Special Service: **None**Set Pressure Definition: **Pop**Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
0.5 - 1 NPS	1 NPS	0.132 sq in	[D] 0.41 in	0.136 in	75 - 2000 psi	Air	VIII Div. 1

Dresser, LLC (DRJ)

NB#: 18032

location: 12970 Normandy Blvd, Jacksonville, FL 32221 United States

Acceptable Abbrev.: JAX

Dresser, LLC (DRJ)

location: 12970 Normandy Blvd, Jacksonville, FL 32221 United States

Acceptable Abbrev.: JAX

Certification Number: **18032** Design Series or catalog number: **1541, 1543, 1541-3, 1543-3**

Type Classification: **Safety Valve**Capacity Tests: **Sec. I & VIII Div. 1 at Dresser Industries Inc. on March 11, 1975**Method of Establishing Relieving Capacity: **Flow Capacity, K**Certified Value: **.878 Unitless**Test Medium: **Steam**Certified Medium: **Steam & Air/Gas**Special Service: **None**Set Pressure Definition: **Pop**Blowdown: **Adjustable**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
0.5 - 0.75 NPS	.75 NPS	0.11 sq in	[D] 0.375 in	0.094 in	15 - 250 psi	Steam	I, III, & VIII Div. 1
					15 - 300 psi	Air	III & VIII Div.1
			[D3] 0.393 in	0.094 in	15 - 300 psi	Steam	I, III, & VIII Div. 1
					15 - 350 psi	Air	III & VIII Div.1
0.75 - 1 NPS	1 NPS	0.196 sq in	[E] 0.5 in	0.125 in	15 - 250 psi	Steam	I, III, & VIII Div. 1
					15 - 300 psi	Air	III & VIII Div.1
			[E3] 0.524 in	0.125 in	15 - 300 psi	Steam	I, III, & VIII Div. 1
					15 - 350 psi	Air	III & VIII Div.1
1 - 1.25 NPS	1.25 NPS	0.307 sq in	[F] 0.625 in	0.156 in	15 - 250 psi	Steam	I, III, & VIII Div. 1
					15 - 300 psi	Air	III & VIII Div.1
			[F3] 0.65 in	0.156 in	15 - 300 psi	Steam	I, III, & VIII Div. 1
					15 - 350 psi	Air	III & VIII Div.1
1.25 - 1.5 NPS	1.5 NPS	0.503 sq in	[G] 0.8 in	0.2 in	15 - 250 psi	Steam	I, III, & VIII Div. 1
					15 - 300 psi	Air	III & VIII Div.1
			[G3] 0.835 in	0.2 in	15 - 300 psi	Steam	I, III, & VIII Div. 1
					15 - 350 psi	Air	III & VIII Div.1
1.5 - 2 NPS	2 NPS	0.785 sq in	[H] 1 in	0.25 in	15 - 250 psi	Steam	I, III, & VIII Div. 1
					15 - 300 psi	Air	III & VIII Div.1
			[H3] 1.045 in	0.25 in	15 - 300 psi	Steam	I, III, & VIII Div. 1
					15 - 350 psi	Air	III & VIII Div.1
2 - 2.5 NPS	2.5 NPS	1.287 sq in	[J] 1.281 in	0.32 in	15 - 250 psi	Steam	I, III, & VIII Div. 1
					15 - 300 psi	Air	III & VIII Div.1
			[J3] 1.335 in	0.32 in	15 - 300 psi	Steam	I, III, & VIII Div. 1
					15 - 350 psi	Air	III & VIII Div.1

Dresser, LLC (DRJ)

NB#: 18087

Location: 12970 Normandy Blvd, Jacksonville, FL 32221 United States

Acceptable Abbrev.: JAX

Certification Number: **18087** Design Series or catalog number: **1700 & 2700 (4" #7 & Ovrstd Q)**

Type Classification: **Safety Valve**Capacity Tests: **Sec. I at Dresser Industries Inc. on January 09, 2004**Method of Establishing Relieving Capacity: **Flow Capacity, K**Certified Value: **.785 Unitless**Certification Provisions: **per CC 2397**Test Medium: **Steam**Certified Medium: **Steam & Air/Gas**Set Pressure Definition: **Pop**Blowdown: **Adjustable**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
4 NPS	8 NPS	11.05 sq in	[#7] 3.75 in	0.938 in	15 - 1800 psi	Steam	I VIII Div. 1
		12.25 sq in	[Q] 3.948 in	0.987 in	100 - 1000 psi	Steam	I VIII Div. 1

Certification Number: **18098** Design Series or catalog number: **1700 & 2700 (4" #7 & Ovrstd Q) (Restricted Lift version of Cert. #18087)**

Type Classification: **Safety Valve**Capacity Tests: **Sec. I at Dresser Industries Inc. on January 09, 2004**Method of Establishing Relieving Capacity: **Flow Capacity, K**Certified Value: **.785 Unitless**Certification Provisions: **per CC 1923 &/or 1945**Test Medium: **Steam**Certified Medium: **Steam**Set Pressure Definition: **Pop**Blowdown: **Adjustable**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
4 NPS	8 NPS	11.05 sq in	[7] 3.75 in	0.281 in	100 - 900 psi	Steam	I VIII Div. 1
		12.25 sq in	[Q] 3.948 in	0.296 in	100 - 1000 psi	Steam	I VIII Div. 1

Dresser, LLC (DRJ)

NB#: 18100

Location: 12970 Normandy Blvd, Jacksonville, FL 32221 United States

Acceptable Abbrev.: JAX

Certification Number: **18100** Design Series or catalog number: **1700 & 2700**

Type Classification: **Safety Valve**Capacity Tests: **Sec. I & VIII Div. 1 at Dresser Industries Inc. on August 01, 1957**Method of Establishing Relieving Capacity: **Flow Capacity, K**Certified Value: **.878 Unitless**Test Medium: **Steam**Certified Medium: **Steam**Set Pressure Definition: **Pop**Blowdown: **Adjustable**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
1 - 1.5 NPS	3 NPS	0.442 sq in	[#9] 0.75 in	0.188 in	15 - 3000 psi	Steam	VIII Div. 1
					50 - 3000 psi	Steam	I
1.25 - 2.5 NPS	3 NPS	0.994 sq in	[#1] 1.125 in	0.281 in	15 - 3100 psi	Steam	VIII Div. 1
					50 - 5020 psi	Steam	I
1.5 - 2.5 NPS	3 NPS	1.431 sq in	[#2] 1.35 in	0.338 in	15 - 3100 psi	Steam	VIII Div. 1
					50 - 5020 psi	Steam	I
2 - 3 NPS	6 NPS	2.545 sq in	[#3] 1.8 in	0.45 in	15 - 3100 psi	Steam	VIII Div. 1
					50 - 5800 psi	Steam	I
2.5 NPS	6 NPS	2.853 sq in	[L] 1.906 in	0.477 in	15 - 2575 psi	Steam	VIII Div. 1
					50 - 2575 psi	Steam	I
2.5 - 3 NPS	6, 8 NPS	3.341 sq in	[#5] 2.062 in	0.516 in	15 - 3100 psi	Steam	VIII Div. 1
					50 - 5020 psi	Steam	I
3 NPS	6, 8 NPS	3.976 sq in	[#4] 2.25 in	0.563 in	15 - 3100 psi	Steam	VIII Div. 1
					50 - 5020 psi	Steam	I
4 NPS	4 dual NPS	1.84 sq in	[K] 1.531 in	0.383 in	3100 - 6000 psi	Steam	I
4 - 6 NPS	6 NPS	7.07 sq in	[#6] 3 in	0.75 in	15 - 3100 psi	Steam	VIII Div. 1
					50 - 3100 psi	Steam	I
6 NPS	8 NPS	11.05 sq in	[Q] 3.75 in	0.938 in	15 - 1800 psi	Steam	VIII Div. 1
					50 - 1500 psi	Steam	I
		12.25 sq in	[Q] 3.948 in	0.987 in	15 - 1800 psi	Steam	I VIII Div. 1
6 - 8 NPS	8, 10 NPS	14.18 sq in	[#8] 4.25 in	1.063 in	15 - 1800 psi	Steam	VIII Div. 1
					50 - 2000 psi	Steam	I
		16 sq in	[R] 4.515 in	1.129 in	15 - 1800 psi	Steam	VIII Div. 1
					50 - 2000 psi	Steam	I
8 - 10 NPS	10,12 NPS	19.29 sq in	[RR] 4.956 in	1.24 in	50 - 1500 psi	Steam	I
					50 - 1500 psi	Steam	I & VIII Div. 1
8 - 10 NPS	10,12 NPS	28.3 sq in	[T] 6 in	1.5 in	50 - 1500 psi	Steam	I & VIII Div. 1

Dresser, LLC (DRJ)

NB#: 18111

location: 12970 Normandy Blvd, Jacksonville, FL 32221 United States

Acceptable Abbrev.: JAX

Certification Number: **18111** Design Series or catalog number **1700 & 2700 (Restricted Lift version of Cert. # 18100)**

Type Classification: **Safety Valve**Capacity Tests: **Sec. I & VIII Div. 1 at National Board T L (Picaway) on October 13, 1981**Method of Establishing Relieving Capacity: **Flow Capacity, K**Certified Value: **.878 Unitless**Certification Provisions: **per CC 1923 &/or 1945**Test Medium: **Steam**Certified Medium: **Steam**Special Service: **None**Set Pressure Definition: **Pop**Blowdown: **Adjustable**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
1 - 1.5 NPS	3 NPS	0.442 sq in	[9] 0.75 in	0.08 in	50 - 3000 psi	Steam	I
1.25 - 2.5 NPS	3, 4 NPS	0.994 sq in	[1] 1.125 in	0.084 in	50 - 3000 psi	Steam	I
1.5 - 2.5 NPS	3, 4 NPS	1.431 sq in	[2] 1.35 in	0.101 in	50 - 3000 psi	Steam	I
2 - 3 NPS	6 NPS	2.545 sq in	[3] 1.8 in	0.135 in	50 - 5800 psi	Steam	I
2.5 - 3 NPS	6 NPS	2.853 sq in	[L] 1.906 in	0.143 in	50 - 2575 psi	Steam	I
		3.341 sq in	[5] 2.062 in	0.155 in	50 - 3000 psi	Steam	I
3 - 4 NPS	6 NPS	3.976 sq in	[4] 2.25 in	0.169 in	50 - 3000 psi	Steam	I
4 - 6 NPS	6 NPS	7.07 sq in	[6] 3 in	0.225 in	50 - 3000 psi	Steam	I
6 NPS	8 NPS	11.05 sq in	[Q] 3.75 in	0.281 in	50 - 1500 psi	Steam	I
6 - 8 NPS	8, 10 NPS	14.18 sq in	[8] 4.25 in	0.319 in	50 - 2000 psi	Steam	I
		16 sq in	[R] 4.515 in	0.339 in	50 - 2000 psi	Steam	I
		19.29 sq in	[RR] 4.956 in	0.372 in	50 - 1500 psi	Steam	I

Dresser, LLC (DRJ)

NB#: 18122

Location: 12970 Normandy Blvd, Jacksonville, FL 32221 United States

Acceptable Abbrev.: JAX

Certification Number: **18122** Design Series or catalog number: **1811, 1511**

Type Classification: **Safety Valve**Capacity Tests: **Sec. I at Dresser Industries Inc. on March 11, 1975**Method of Establishing Relieving Capacity: **Flow Capacity, K**Certified Value: **.877 Unitless**Test Medium: **Steam & Air/Gas**Certified Medium: **Steam & Air/Gas**Set Pressure Definition: **Pop**Blowdown: **Adjustable**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
1.25 NPS	1.5 NPS	0.307 sq in	[F] 0.625 in	0.156 in	15 - 1500 psi	Steam	I VIII Div. 1
		0.503 sq in	[G] 0.8 in	0.2 in	15 - 1500 psi	Steam	I VIII Div. 1
1.5 NPS	2.5 NPS	0.785 sq in	[H] 1 in	0.25 in	15 - 1500 psi	Steam	I VIII Div. 1
		1.287 sq in	[J] 1.281 in	0.321 in	15 - 1500 psi	Steam	I VIII Div. 1
2 NPS	3 NPS	1.84 sq in	[K] 1.531 in	0.383 in	15 - 1500 psi	Steam	I VIII Div. 1
2.5 NPS	4 NPS	2.853 sq in	[L] 1.906 in	0.477 in	15 - 1500 psi	Steam	I VIII Div. 1
3 NPS	4 NPS	3.6 sq in	[M] 2.14 in	0.535 in	15 - 1500 psi	Steam	I VIII Div. 1
4 NPS	6 NPS	4.34 sq in	[N] 2.351 in	0.588 in	15 - 1500 psi	Steam	I VIII Div. 1
		6.38 sq in	[P] 2.85 in	0.713 in	15 - 1500 psi	Steam	I VIII Div. 1
6 NPS	8 NPS	11.05 sq in	[Q] 3.75 in	0.938 in	15 - 1500 psi	Steam	I VIII Div. 1

Certification Number: **18144** Design Series or catalog number: **1900D-2, 1900-30D-2**

Type Classification: **Safety Relief Valve**Capacity Tests: **Sec. VIII Div. 1 at Dresser Industries Inc. on August 16, 1977**Method of Establishing Relieving Capacity: **Flow Capacity, Slope**Certified Value: **5.63 PPH/PSIA**Certified Value (alternate medium): **2.004 SCFM/PSIA**Test Medium: **Steam & Air/Gas**Certified Medium: **Steam & Air/Gas**Special Service: **None**Set Pressure Definition: **Pop**Blowdown: **Adjustable by Single Ring**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
1 - 1.5 NPS	2, 3 NPS	0.1279 sq in	[D] 0.674 in	0.066 in	15 - 2000 psi	Steam	III VIII Div. 1
					15 - 6250 psi	Air	VIII Div. 1

Dresser, LLC (DRJ)

NB#: 18166

location: 12970 Normandy Blvd, Jacksonville, FL 32221 United States

Acceptable Abbrev.: JAX

Certification Number: **18166** Design Series or catalog number: **1900E-2, 1900-30E-2**

Type Classification: **Safety Relief Valve**Capacity Tests: **Sec. VIII Div. 1 at Dresser Industries Inc. on August 16, 1977**Method of Establishing Relieving Capacity: **Flow Capacity, Slope**Certified Value: **10.04 PPH/PSIA**Certified Value (alternate medium): **3.57 SCFM/PSIA**Test Medium: **Steam & Air/Gas**Certified Medium: **Steam & Air/Gas**Special Service: **None**Set Pressure Definition: **Pop**Blowdown: **Adjustable by Single Ring**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
1 - 1.5 NPS	2, 3 NPS	0.2279 sq in	[E] 0.674 in	0.119 in	15 - 2000 psi	Steam	III & VIII Div.1
					15 - 6250 psi	Air	III & VIII Div.1

Dresser, LLC (DRJ)

NB#: 18201

Location: 12970 Normandy Blvd, Jacksonville, FL 32221 United States

Acceptable Abbrev.: JAX

Certification Number: **18201** Design Series or catalog number: **1900, 1900-30, 1900-35**

Type Classification: **Safety Relief Valve**Capacity Tests: **Sec. VIII Div. 1 at Dresser Industries Inc. on October 11, 1954**Method of Establishing Relieving Capacity: **Flow Capacity, K**Certified Value: **.855 Unitless**Test Medium: **Steam & Air/Gas**Certified Medium: **Steam & Air/Gas**Special Service: **None**Set Pressure Definition: **Pop**Blowdown: **Adjustable by Single Ring**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
1 - 1.5 NPS	2, 3 NPS	0.1279 sq in	[D] 0.4035 in	0.11 in	15 - 2000 psi	Steam	III & VIII Div.1
					15 - 6250 psi	Air	III & VIII Div.1
		0.2279 sq in	[E] 0.5387 in	0.147 in	15 - 2000 psi	Steam	III & VIII Div.1
					15 - 6250 psi	Air	III & VIII Div.1
1.5 NPS	2, 3 NPS	0.3568 sq in	[F] 0.674 in	0.182 in	15 - 2000 psi	Steam	III & VIII Div.1
					15 - 7200 psi	Air	III & VIII Div.1
1.5 - 2 NPS	3 NPS	0.5849 sq in	[G] 0.863 in	0.234 in	15 - 2000 psi	Steam	III & VIII Div.1
					15 - 6000 psi	Air	III & VIII Div.1
		0.9127 sq in	[H] 1.078 in	0.292 in	15 - 2500 psi	Steam	III & VIII Div.1
					15 - 3300 psi	Air	III & VIII Div.1
2 - 3 NPS	3, 4 NPS	1.496 sq in	[J] 1.38 in	0.374 in	15 - 2500 psi	Steam	III & VIII Div.1
					15 - 3100 psi	Air	III & VIII Div.1
3 NPS	4, 6 NPS	2.138 sq in	[K] 1.65 in	0.446 in	15 - 2000 psi	Steam	III & VIII Div.1
					15 - 3400 psi	Air	III & VIII Div.1
3 - 4 NPS	4, 6 NPS	3.317 sq in	[L] 2.055 in	0.556 in	15 - 2900 psi	Air	III & VIII Div.1
						Steam	III & VIII Div.1
4 NPS	6 NPS	4.186 sq in	[M] 2.3086 in	0.625 in	15 - 1600 psi	Air	III & VIII Div.1
						Steam	III & VIII Div.1
		5.047 sq in	[N] 2.535 in	0.685 in	15 - 1600 psi	Air	III & VIII Div.1
						Steam	III & VIII Div.1
		7.417 sq in	[P] 3.073 in	0.83 in	15 - 1700 psi	Air	III & VIII Div.1
						Steam	III & VIII Div.1
6 NPS	8 NPS	12.85 sq in	[Q] 4.045 in	1.09 in	15 - 900 psi	Air	III & VIII Div.1
						Steam	III & VIII Div.1
	8, 10 NPS	18.6 sq in	[R] 4.867 in	1.29 in	15 - 300 psi	Air	III & VIII Div.1
						Steam	III & VIII Div.1
8 NPS	10 NPS	30.21 sq in	[T] 6.205 in	1.723 in	15 - 300 psi	Air	III & VIII Div.1
						Steam	III & VIII Div.1
		35 sq in	[U] 6.688 in	1.841 in	15 - 300 psi	Air	III & VIII Div.1
						Steam	III & VIII Div.1
10 NPS	14 NPS	50.26 sq in	[V] 8 in	2.162 in	15 - 300 psi	Air	III & VIII Div.1
						Steam	III & VIII Div.1
12 NPS	16 NPS	78.996 sq in	[W] 10.029 in	2.523 in	15 - 300 psi	Air	III & VIII Div.1
						Steam	III & VIII Div.1

Dresser, LLC (DRJ)

NB#: 18223

Location: 12970 Normandy Blvd, Jacksonville, FL 32221 United States

Acceptable Abbrev.: JAX

Certification Number: **18223** Design Series or catalog number: **1900, 1900-30, 1900-35 (R.L.)**

Type Classification: **Safety Relief Valve**Capacity Tests: **Sec. VIII Div. 1 at Dresser Industries Inc. on June 19, 1985**Method of Establishing Relieving Capacity: **Flow Capacity, K**Certified Value: **.855 Unitless**Certification Provisions: **per CC N-394 or 1945**Test Medium: **Steam & Air/Gas**Certified Medium: **Steam & Air/Gas**Special Service: **None**Set Pressure Definition: **Pop**Blowdown: **Adjustable by Single Ring**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
1 - 1.5 NPS	2, 3 NPS	0.1279 sq in	[D] 0.4036 in	0.08 in	15 - 6250 psi	Air	III & VIII Div.1
						Steam	III & VIII Div.1
		0.2279 sq in	[E] 0.5387 in	0.08 in	15 - 6250 psi	Air	III & VIII Div.1
						Steam	III & VIII Div.1
1.5 NPS	2, 3 NPS	0.3568 sq in	[F] 0.674 in	0.08 in	15 - 6250 psi	Air	III & VIII Div.1
						Steam	III & VIII Div.1
1.5 - 2 NPS	2.5, 3 NPS	0.5849 sq in	[G] 0.863 in	0.08 in	15 - 6000 psi	Air	III & VIII Div.1
						Steam	III & VIII Div.1
	3 NPS	0.9127 sq in	[H] 1.078 in	0.087 in	15 - 3300 psi	Air	III & VIII Div.1
						Steam	III & VIII Div.1
2 - 3 NPS	3, 4 NPS	1.496 sq in	[J] 1.38 in	0.112 in	15 - 3100 psi	Air	III & VIII Div.1
						Steam	III & VIII Div.1
3 NPS	4, 6 NPS	2.138 sq in	[K] 1.65 in	0.134 in	15 - 3400 psi	Air	III & VIII Div.1
						Steam	III & VIII Div.1
3 - 4 NPS	4, 6 NPS	3.317 sq in	[L] 2.055 in	0.167 in	15 - 2900 psi	Air	III & VIII Div.1
						Steam	III & VIII Div.1
4 NPS	6 NPS	4.186 sq in	[M] 2.3086 in	0.187 in	15 - 1600 psi	Air	III & VIII Div.1
						Steam	III & VIII Div.1
		5.047 sq in	[N] 2.535 in	0.205 in	15 - 1600 psi	Air	III & VIII Div.1
						Steam	III & VIII Div.1
		7.417 sq in	[P] 3.073 in	0.249 in	15 - 1700 psi	Air	III & VIII Div.1
						Steam	III & VIII Div.1
6 NPS	8 NPS	12.85 sq in	[Q] 4.045 in	0.327 in	15 - 900 psi	Air	III & VIII Div.1
						Steam	III & VIII Div.1
	8, 10 NPS	18.6 sq in	[R] 4.867 in	0.387 in	15 - 650 psi	Air	III & VIII Div.1
						Steam	III & VIII Div.1
8 NPS	10 NPS	28.624 sq in	[T] 6.04 in	0.504 in	15 - 360 psi	Air	III & VIII Div.1
						Steam	III & VIII Div.1
		30.21 sq in	[T4] 6.205 in	0.517 in	15 - 360 psi	Air	III & VIII Div.1
						Steam	III & VIII Div.1
		35 sq in	[U] 6.688 in	0.552 in	15 - 300 psi	Air	III & VIII Div.1
						Steam	III & VIII Div.1
10 NPS	14 NPS	50.26 sq in	[V] 8 in	0.648 in	15 - 300 psi	Air	III & VIII Div.1
						Steam	III & VIII Div.1

Dresser, LLC (DRJ)

NB#: 18256

Location: 12970 Normandy Blvd, Jacksonville, FL 32221 United States

Acceptable Abbrev.: JAX

Certification Number: **18256** Design Series or catalog number: **1900D/P, 1900-30D/P (Rest. Lift)**

Type Classification: **Safety Relief Valve**Capacity Tests: **Sec. I at Dresser Industries Inc. on August 16, 1977**Method of Establishing Relieving Capacity: **Flow Capacity, Slope**Certified Value: **5.61 PPH/PSIA**Certified Value (alternate medium): **1.997 SCFM/PSIA**Test Medium: **Steam**Certified Medium: **Steam & Air/Gas**Set Pressure Definition: **Pop**Blowdown: **Adjustable**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
1 - 1.5 NPS	2, 3 NPS	0.1279 sq in	[D] 0.674 in	0.066 in	15 - 4460 psi	Steam	I III VIII Div. 1
					15 - 5000 psi	Air	VIII Div. 1

Certification Number: **18278** Design Series or catalog number: **1900E/P, 1900-30E/P (Rest. Lift)**

Type Classification: **Safety Relief Valve**Capacity Tests: **Sec. I at Dresser Industries Inc. on August 16, 1977**Method of Establishing Relieving Capacity: **Flow Capacity, Slope**Certified Value: **9.98 PPH/PSIA**Certified Value (alternate medium): **3.552 SCFM/PSIA**Test Medium: **Steam**Certified Medium: **Steam & Air/Gas**Special Service: **None**Set Pressure Definition: **Pop**Blowdown: **Adjustable**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
1 - 1.5 NPS	2, 3 NPS	0.2279 sq in	[E] 0.674 in	0.119 in	15 - 4460 psi	Steam	I III VIII Div. 1
					15 - 5000 psi	Air	VIII Div. 1

Dresser, LLC (DRJ)

NB#: 18290

Location: 12970 Normandy Blvd, Jacksonville, FL 32221 United States

Acceptable Abbrev.: JAX

Certification Number: **18290** Design Series or catalog number **1900/P, 1900-30/P**

Type Classification: **Safety Relief Valve**Capacity Tests: **Sec. I at Dresser Industries Inc. on October 11, 1954**Method of Establishing Relieving Capacity: **Flow Capacity, K**Certified Value: **.851 Unitless**Test Medium: **Steam**Certified Medium: **Steam & Air/Gas**Set Pressure Definition: **Pop**Blowdown: **Adjustable**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
1.5 NPS	2, 3 NPS	0.3568 sq in	[F] 0.674 in	0.182 in	15 - 4460 psi	Steam	I III VIII
					15 - 5000 psi	Air	VIII
1.5 - 2 NPS	3 NPS	0.5849 sq in	[G] 0.863 in	0.234 in	15 - 3600 psi	Air	VIII
						Steam	I III VIII
		0.9127 sq in	[H] 1.078 in	0.292 in	15 - 2500 psi	Steam	III VIII
					15 - 3300 psi	Air	VIII
2 - 3 NPS	3, 4 NPS	1.496 sq in	[J] 1.38 in	0.374 in	15 - 2500 psi	Steam	III VIII
					15 - 3100 psi	Air	VIII
						Steam	I
3 NPS	4, 6 NPS	2.138 sq in	[K] 1.65 in	0.446 in	15 - 2000 psi	Steam	III VIII
					15 - 3000 psi	Air	VIII
						Steam	I
3 - 4 NPS	4, 6 NPS	3.317 sq in	[L] 2.055 in	0.556 in	15 - 2900 psi	Air	VIII
						Steam	I III VIII
4 NPS	6 NPS	4.186 sq in	[M] 2.086 in	0.625 in	15 - 1600 psi	Air	VIII
						Steam	I III VIII
		5.047 sq in	[N] 2.535 in	0.685 in	15 - 1600 psi	Air	VIII
						Steam	I III VIII
6 NPS	8 NPS	12.85 sq in	[Q] 4.045 in	1.09 in	15 - 900 psi	Air	VIII
						Steam	I III VIII
	8, 10 NPS	18.6 sq in	[R] 4.867 in	1.29 in	15 - 500 psi	Air	VIII
						Steam	I III VIII
8 NPS	10 NPS	30.21 sq in	[T] 6.205 in	1.723 in	15 - 300 psi	Air	VIII
						Steam	I III VIII

Dresser, LLC (DRJ)

NB#: 18379

Location: 12970 Normandy Blvd, Jacksonville, FL 32221 United States

Acceptable Abbrev.: JAX

Certification
Number: **18379**Design Series
or catalog number **1982**Type Classification: **Safety Relief Valve**Capacity Tests: **Sec. VIII Div. 1 at National Board T L (Picaway) on May 06, 1980**Method of Establishing Relieving Capacity: **Flow Capacity, K**Certified Value: **.855 Unitless**Test Medium: **Steam**Certified Medium: **Steam & Air/Gas**Special Service: **None**Set Pressure Definition: **Pop**Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
0.5 NPS	.75 NPS	0.121 sq in	0.393 in	0.092 in	15 - 500 psi	Air	III & VIII Div.1
						Steam	III & VIII Div.1
0.75 NPS	1 NPS	0.216 sq in	0.524 in	0.123 in	15 - 500 psi	Air	III & VIII Div.1
						Steam	III & VIII Div.1
1 NPS	1.5 NPS	0.332 sq in	0.65 in	0.15 in	15 - 500 psi	Air	III & VIII Div.1
						Steam	III & VIII Div.1
1.5 NPS	2 NPS	0.857 sq in	1.045 in	0.243 in	15 - 500 psi	Air	III & VIII Div.1
						Steam	III & VIII Div.1
2 NPS	2.5 NPS	1.399 sq in	1.335 in	0.31 in	15 - 100 psi	Steam	III & VIII Div.1
					15 - 500 psi	Air	III & VIII Div.1

Certification
Number: **18380**Design Series
or catalog number **1982 LS, 820000LS**Type Classification: **Relief Valve**Capacity Tests: **Sec. VIII Div. 1 at Dresser Industries Inc. on December 19, 1984**Method of Establishing Relieving Capacity: **Flow Capacity, K**Certified Value: **.758 Unitless**Test Medium: **Water**Certified Medium: **Liquid**Special Service: **None**Set Pressure Definition: **First Steady Stream**Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
0.5 - 0.75 NPS	.75 - 1 NPS	0.121 sq in	0.393 in	0.137 in	15 - 500 psi	Water	III VIII Div. 1
0.75 - 1 NPS	1 , 1.5 NPS	0.216 sq in	0.524 in	0.162 in	15 - 500 psi	Water	III VIII Div. 1
1 - 1.25 NPS	1.5 NPS	0.332 sq in	0.65 in	0.236 in	15 - 500 psi	Water	III VIII Div. 1
1.5 - 2 NPS	2, 2.5 NPS	0.857 sq in	1.045 in	0.343 in	15 - 500 psi	Water	III VIII Div. 1
2 NPS	2.5 NPS	1.399 sq in	1.335 in	0.43 in	15 - 500 psi	Water	III VIII Div. 1

Dresser, LLC (DRJ)

NB#: 18391

Location: 12970 Normandy Blvd, Jacksonville, FL 32221 United States

Acceptable Abbrev.: JAX

Certification
Number: **18391**Design Series
or catalog number **1990 - 3999**Type Classification: **Safety Relief Valve**Capacity Tests: **Sec. VIII Div. 1 at National Board T L (Picaway) on September 16, 1980**Method of Establishing Relieving Capacity: **Flow Capacity, K**Certified Value: **.825 Unitless**Test Medium: **Steam**Certified Medium: **Steam & Air/Gas**Special Service: **None**Set Pressure Definition: **Pop**Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
0.5 - 0.75 NPS	.5, .75 NPS	0.019 sq in	0.156 in	0.039 in	15 - 1000 psi	Steam	III & VIII Div.1
					15 - 8500 psi	Air	III & VIII Div.1
0.5 - 1 NPS	1 NPS	0.11 sq in	0.375 in	0.17 in	15 - 2000 psi	Steam	III & VIII Div.1
					15 - 6000 psi	Air	III & VIII Div.1
0.75 NPS	1 NPS	0.126 sq in	0.401 in	0.14 in	15 - 1000 psi	Steam	III & VIII Div.1
					15 - 8000 psi	Air	III & VIII Div.1
1 NPS	1.5 NPS	0.196 sq in	0.5 in	0.205 in	15 - 2000 psi	Steam	III & VIII Div.1
					15 - 3000 psi	Air	III & VIII Div.1
		0.226 sq in	0.537 in	0.2 in	15 - 1000 psi	Steam	III & VIII Div.1
					15 - 6400 psi	Air	III & VIII Div.1
		0.292 sq in	0.61 in	0.215 in	15 - 1500 psi	Air	III & VIII Div.1
					Steam	III & VIII Div.1	
1.5 - 2 NPS	2 NPS	0.442 sq in	0.75 in	0.24 in	15 - 1500 psi	Air	III & VIII Div.1
					Steam	III & VIII Div.1	
2 NPS	2 NPS	0.754 sq in	0.98 in	0.39 in	15 - 1000 psi	Air	III & VIII Div.1
					Steam	III & VIII Div.1	

Certification
Number: **18403**Design Series
or catalog number **1990 - 3999 LS & DL (Liquids)**Type Classification: **Relief Valve**Capacity Tests: **Sec. III & VIII Div.1 at Dresser Industries Inc. on November 02, 1984**Method of Establishing Relieving Capacity: **Flow Capacity, K**Certified Value: **0.669 Unitless**Test Medium: **Water**Certified Medium: **Liquid**Set Pressure Definition: **First Steady Stream**Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
0.5 - 0.75 NPS	.5 - 1 NPS	0.019 sq in	0.156 in	0.045 in	15 - 1000 psi	Water	III
					15 - 11000 psi	Water	VIII Div. 1
0.5 - 1 NPS	1 NPS	0.11 sq in	0.375 in	0.17 in	15 - 6000 psi	Water	III
							VIII Div. 1
0.75 NPS	1 NPS	0.126 sq in	0.401 in	0.104 in	15 - 8000 psi	Water	III
							VIII Div. 1
1 NPS	1.5 NPS	0.196 sq in	0.5 in	0.205 in	15 - 3000 psi	Water	III
		0.226 sq in	0.537 in	0.2 in	15 - 6400 psi	Water	III
							VIII Div. 1
1.5 - 2 NPS	2 NPS	0.292 sq in	0.61 in	0.215 in	15 - 1500 psi	Water	III
		0.442 sq in	0.75 in	0.24 in	15 - 1500 psi	Water	III
							VIII Div. 1
2 NPS	3 NPS	0.754 sq in	0.98 in	0.39 in	15 - 500 psi	Water	III
							VIII Div. 1

Dresser, LLC (DRJ)

NB#: 18414

Location: 12970 Normandy Blvd, Jacksonville, FL 32221 United States

Acceptable Abbrev.: JAX

Certification
Number: **18414**Design Series
or catalog number **3700-RT**Type Classification: **Safety Valve**Capacity Tests: **Sec. III NB at Dresser Industries Inc. on October 13, 1967**Method of Establishing Relieving Capacity: **Flow Capacity, K**Certified Value: **.8775 Unitless**Test Medium: **Steam**Certified Medium: **Steam**Set Pressure Definition: **Pop**Blowdown: **Adjustable**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
2.5 - 3 NPS	6 NPS	2.545 sq in	[#3] 1.8 in	0.45 in	50 - 1500 psi	Steam	III
3 - 4 NPS	6 NPS	3.341 sq in	[#5] 2.062 in	0.516 in	50 - 1500 psi	Steam	III
		3.976 sq in	[#4] 2.25 in	0.563 in	50 - 1500 psi	Steam	III
4 - 6 NPS	6 NPS	7.07 sq in	[#6] 3 in	0.75 in	50 - 1500 psi	Steam	III
		9.965 sq in	[#7] 3.562 in	0.89 in	50 - 1500 psi	Steam	III
6 NPS	8 NPS	11.04 sq in	[Q] 3.75 in	0.938 in	50 - 1500 psi	Steam	III
6 - 8 NPS	8, 10 NPS	14.18 sq in	[#8] 4.25 in	1.063 in	50 - 1500 psi	Steam	III
		16 sq in	[R] 4.515 in	1.129 in	50 - 1500 psi	Steam	III
		19.29 sq in	[RR] 4.956 in	1.239 in	50 - 1500 psi	Steam	III
8 NPS	10 Dual NPS	31.92 sq in	[S] 6.375 in	1.59 in	50 - 1500 psi	Steam	III
8 - 10 NPS	10, 12 NPS	28.3 sq in	[T] 6 in	1.5 in	50 - 1500 psi	Steam	III

Dresser, LLC (DRJ)

NB#: 18447

Location: 12970 Normandy Blvd, Jacksonville, FL 32221 United States

Acceptable Abbrev.: JAX

Certification Number: **18447** Design Series or catalog number **3900 (39PV, 39MV pilots)**

Type Classification: Pilot Operated Pressure Relief Valve

Capacity Tests: Sec. VIII Div. 1 at Dresser Industries Inc. on May 19, 1988

Method of Establishing Relieving Capacity: Flow Capacity, K

Certified Value: 0.878 Unitless

Test Medium: Air

Certified Medium: Steam & Air/Gas

Special Service: None

Set Pressure Definition: 1.Pop 2.Initial Audible Discharge

Blowdown: Adjustable and Fixed for Mod. Pilot

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
1 - 1.5 NPS	2 NPS	0.128 sq in	[D] 0.404 in	0.205 in	15 - 6250 psi	Air	VIII
					15 - 750 psi	Steam	III VIII
		0.228 sq in	[E] 0.539 in	0.25 in	15 - 6250 psi	Air	VIII
					15 - 750 psi	Steam	III VIII
		0.357 sq in	[F] 0.674 in	0.25 in	15 - 6250 psi	Air	VIII
					15 - 750 psi	Steam	III VIII
1.5 NPS		1.621 sq in	1.437 in	0.25 in	15 - 30 psi	Steam	VIII
					15 - 6250 psi	Air	VIII
1.5 - 2 NPS		0.585 sq in	[G] 0.863 in	0.5 in	15 - 6250 psi	Air	VIII
					15 - 750 psi	Steam	III VIII
		0.913 sq in	[H] 1.07 in	0.5 in	15 - 6250 psi	Air	VIII
					15 - 750 psi	Steam	III VIII
2 NPS		2.764 sq in	1.876 in	0.5 in	15 - 30 psi	Steam	VIII
					15 - 6250 psi	Air	VIII
2 - 3 NPS		1.496 sq in	[J] 1.38 in	0.5 in	15 - 6250 psi	Air	VIII
					15 - 750 psi	Steam	III VIII
3 NPS		2.138 sq in	[K] 1.65 in	0.68 in	15 - 6250 psi	Air	VIII
					15 - 750 psi	Steam	III VIII
		6.321 sq in	2.837 in	0.68 in	15 - 30 psi	Steam	VIII
					15 - 3750 psi	Air	VIII
3 - 4 NPS		3.317 sq in	[L] 2.055 in	0.68 in	15 - 6250 psi	Air	VIII
					15 - 750 psi	Steam	III VIII
4 NPS		4.186 sq in	[M] 2.309 in	1 in	15 - 3750 psi	Air	VIII
					15 - 750 psi	Steam	III VIII
		5.047 sq in	[N] 2.535 in	1 in	15 - 3750 psi	Air	VIII
					15 - 750 psi	Steam	III VIII
		7.417 sq in	[P] 3.073 in	1 in	15 - 3750 psi	Air	VIII
					15 - 750 psi	Steam	III VIII
		10.76 sq in	3.701 in	1 in	15 - 30 psi	Steam	VIII
					15 - 3750 psi	Air	VIII

Dresser, LLC (DRJ)

NB#: 18447

location: 12970 Normandy Blvd, Jacksonville, FL 32221 United States

Acceptable Abbrev.: JAX

...Continued							
Inlet Size	Outlet Size	Flow Area	Orifice [designator] diameter	Lift	Set Pressure Range	Media	Code Section
6 NPS		12.85 sq in	[Q] 4.045 in	1.31 in	15 - 1500 psi	Air	VIII
					15 - 750 psi	Steam	III VIII
		18.6 sq in	[R] 4.866 in	1.31 in	15 - 1500 psi	Air	VIII
					15 - 750 psi	Steam	III VIII
		24.95 sq in	5.636 in	1.31 in	15 - 1500 psi	Air	VIII
					15 - 700 psi	Steam	VIII
8 NPS		30.21 sq in	[T] 6.205 in	2 in	15 - 1500 psi	Air	VIII
						Steam	III VIII
		44.18 sq in	7.5 in	2 in	15 - 1500 psi	Air	VIII
					15 - 700 psi	Steam	VIII
10 NPS		63.62 sq in	[W] 9 in	3 in	15 - 1500 psi	Air	VIII
					15 - 750 psi	Steam	III VIII
		69.94 sq in	9.437 in	3 in	15 - 1500 psi	Air	VIII
					15 - 700 psi	Steam	VIII

Dresser, LLC (DRJ)

NB#: 18458

Location: 12970 Normandy Blvd, Jacksonville, FL 32221 United States

Acceptable Abbrev.: JAX

Certification Number: **18458** Design Series or catalog number: **3900 (39PV, 39MV pilots, liquid)**

Type Classification: Pilot Operated Pressure Relief Valve

Capacity Tests: Sec. VIII Div. 1 at Dresser Industries Inc. on June 01, 1988

Method of Establishing Relieving Capacity: Flow Capacity, K

Certified Value: 0.743 Unitless

Test Medium: Water

Certified Medium: Liquid

Set Pressure Definition: First Steady Stream

Blowdown: Fixed

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
1 - 1.5 NPS	2 NPS	0.128 sq in	[D] 0.404 in	0.25 in	15 - 6250 psi	Water	III VIII
		0.228 sq in	[E] 0.539 in	0.25 in	15 - 6250 psi	Water	III VIII
		0.357 sq in	[F] 0.674 in	0.25 in	15 - 6250 psi	Water	III VIII
1.5 NPS		1.621 sq in	1.437 in	0.25 in	15 - 6250 psi	Water	VIII
1.5 - 2 NPS		0.585 sq in	[G] 0.863 in	0.5 in	15 - 6250 psi	Water	III VIII
		0.913 sq in	[H] 1.078 in	0.5 in	15 - 6250 psi	Water	III VIII
2 NPS		2.764 sq in	1.876 in	0.5 in	15 - 6250 psi	Water	VIII
2 - 3 NPS		1.496 sq in	[J] 1.38 in	0.5 in	15 - 6250 psi	Water	III VIII
3 NPS		2.138 sq in	[K] 1.65 in	0.68 in	15 - 6250 psi	Water	III VIII
		6.321 sq in	2.837 in	0.68 in	15 - 3750 psi	Water	VIII
3 - 4 NPS		3.317 sq in	[L] 2.055 in	0.68 in	15 - 6250 psi	Water	III VIII
4 NPS		4.186 sq in	[M] 2.309 in	1 in	15 - 3750 psi	Water	III VIII
		5.047 sq in	[N] 2.535 in	1 in	15 - 3750 psi	Water	III VIII
		7.417 sq in	[P] 3.073 in	1 in	15 - 3750 psi	Water	III VIII
		10.76 sq in	3.701 in	1 in	15 - 3750 psi	Water	VIII
6 NPS		12.85 sq in	[Q] 4.045 in	1.31 in	15 - 1500 psi	Water	III VIII
		18.6 sq in	[R] 4.866 in	1.31 in	15 - 1500 psi	Water	III VIII
		24.95 sq in	5.636 in	1.31 in	15 - 1500 psi	Water	VIII
8 NPS		30.21 sq in	[T] 6.205 in	2 in	15 - 1500 psi	Water	III VIII
		44.18 sq in	7.5 in	2 in	15 - 1500 psi	Water	VIII
10 NPS		63.62 sq in	[W] 9 in	3 in	15 - 1500 psi	Water	III VIII
		69.94 sq in	9.437 in	3 in	15 - 1500 psi	Water	VIII

Dresser, LLC (DRJ)

NB#: 18706

Location: 12970 Normandy Blvd, Jacksonville, FL 32221 United States

Acceptable Abbrev.: JAX

Certification
Number: **18706**Design Series
or catalog number **19000 Series**Type Classification: **Safety Relief Valve**Capacity Tests: **Sec. VIII Div. 1 at Dresser Industries Inc. on August 26, 1994**Method of Establishing Relieving Capacity: **Flow Capacity, K**Certified Value: **.878 Unitless**Test Medium: **Air**Certified Medium: **Steam & Air/Gas**Special Service: **None**Set Pressure Definition: **Pop**Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
0.5 - 1 NPS	1 NPS	0.019 sq in	0.156 in	0.039 in	15 - 1500 psi	Air	VIII Div. 1
						Steam	III
		0.096 sq in	0.35 in	0.11 in	15 - 1500 psi	Air	VIII
						Steam	III
		15 - 5000 psi	Air	VIII			
			15 - 1500 psi	Steam	III		
15 - 5000 psi	Air	VIII					
	0.11 sq in	0.375 in	0.118 in	15 - 1500 psi	Steam	III	
15 - 5000 psi				Air	III		
0.75 - 1 NPS	1 NPS	0.126 sq in	0.401 in	0.126 in	15 - 2000 psi	Steam	III
					15 - 8000 psi	Air	III
1 NPS	1.5 NPS	0.226 sq in	0.537 in	0.169 in	15 - 2000 psi	Steam	III
					15 - 6400 psi	Air	III
1.5 NPS	2 NPS	0.357 sq in	0.675 in	0.212 in	15 - 1500 psi	Air	III
						Steam	III
2 NPS	2.5 NPS	0.567 sq in	0.85 in	0.266 in	15 - 1000 psi	Air	VIII
						Steam	III

Dresser, LLC (DRJ)

NB#: 18717

Location: 12970 Normandy Blvd, Jacksonville, FL 32221 United States

Acceptable Abbrev.: JAX

Certification Number: **18717** Design Series or catalog number: **19000 Series, Liquid**

Type Classification: Relief Valve

Capacity Tests: Sec. VIII Div. 1 at Dresser Industries Inc. on August 30, 1994

Method of Establishing Relieving Capacity: Flow Capacity, K

Certified Value: .673 Unitless

Test Medium: Water

Certified Medium: Liquid

Special Service: None

Set Pressure Definition: First Steady Stream

Blowdown: Fixed

Scope of Nominal Size and Set Pressure Ranges:

Inlet Size	Outlet Size	Flow Area	Orifice [designator] diameter	Lift	Set Pressure Range	Media	Code Section
0.5 - 1 NPS	1 NPS	0.019 sq in	0.156 in	0.045 in	15 - 5000 psi	Water	III & VIII Div.1
		0.096 sq in	0.35 in	0.11 in	15 - 5000 psi	Water	III & VIII Div.1
		0.11 sq in	0.375 in	0.118 in	15 - 290 psi	Water	III & VIII Div.1
0.75 - 1 NPS	1 NPS	0.126 sq in	0.401 in	0.126 in	15 - 8000 psi	Water	III & VIII Div.1
1 NPS	1.5 NPS	0.226 sq in	0.537 in	0.169 in	15 - 6400 psi	Water	III & VIII Div.1
1.5 NPS	2 NPS	0.357 sq in	0.675 in	0.212 in	15 - 1500 psi	Water	III & VIII Div.1
2 NPS	2.5 NPS	0.567 sq in	0.85 in	0.266 in	15 - 1000 psi	Water	III & VIII Div.1

Certification Number: **18751** Design Series or catalog number: **1900D-2, 1900-30D-2 LA & DALA (Liquids)**

Type Classification: Relief Valve

Capacity Tests: Sec. VIII Div. 1 at Dresser Industries Inc. on July 12, 1995

Method of Establishing Relieving Capacity: Flow Capacity, Flow Factor

Certified Value: 3.256 GPM/SQ.RT. PSID

Test Medium: Water

Certified Medium: Liquid

Special Service: None

Set Pressure Definition: First Steady Stream

Blowdown: Fixed

Scope of Nominal Size and Set Pressure Ranges:

Inlet Size	Outlet Size	Flow Area	Orifice [designator] diameter	Lift	Set Pressure Range	Media	Code Section
1 - 1.5 NPS	2 - 3 NPS	0.1279 sq in	[D] 0.674 in	0.056 in	15 - 6250 psi	Water	III & VIII Div.1

Certification Number: **18762** Design Series or catalog number: **1900E-2, 1900-30E-2 LA & DALA (Liquids)**

Type Classification: Relief Valve

Capacity Tests: Sec. VIII Div. 1 at Dresser Industries Inc. on July 12, 1995

Method of Establishing Relieving Capacity: Flow Capacity, Flow Factor

Certified Value: 5.798 GPM/SQ.RT. PSID

Test Medium: Water

Certified Medium: Liquid

Special Service: None

Set Pressure Definition: First Steady Stream

Blowdown: Fixed

Scope of Nominal Size and Set Pressure Ranges:

Inlet Size	Outlet Size	Flow Area	Orifice [designator] diameter	Lift	Set Pressure Range	Media	Code Section
1 - 1.5 NPS	2 - 3 NPS	0.2279 sq in	[E] 0.674 in	0.093 in	15 - 6250 psi	Water	III & VIII Div.1

Dresser, LLC (DRJ)

NB#: 18784

Location: 12970 Normandy Blvd, Jacksonville, FL 32221 United States

Acceptable Abbrev.: JAX

Certification Number: **18784** Design Series or catalog number **1900, 1900-30 1900-35 LA & DALA (Liquids)**

Type Classification: **Relief Valve**Capacity Tests: **Sec. VIII at Dresser Industries Inc. on July 12, 1995**Method of Establishing Relieving Capacity: **Flow Capacity, K**Certified Value: **.670 Unitless**Test Medium: **Water**Certified Medium: **Liquid**Special Service: **None**Set Pressure Definition: **First Steady Stream**Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
1 - 1.5 NPS	2 - 3 NPS	0.128 sq in	[D] 0.4036 in	0.095 in	15 - 6250 psi	Water	III & VIII Div.1
		0.228 sq in	[E] 0.5387 in	0.127 in	15 - 6250 psi	Water	III & VIII Div.1
1.5 NPS	2 - 3 NPS	0.357 sq in	[F] 0.674 in	0.16 in	15 - 6250 psi	Water	III & VIII Div.1
1.5 - 2 NPS	2.5, 3 NPS	0.585 sq in	[G] 0.863 in	0.205 in	15 - 6000 psi	Water	III & VIII Div.1
	3 NPS	0.913 sq in	[H] 1.078 in	0.395 in	15 - 3300 psi	Water	III & VIII Div.1
2 - 3 NPS	3, 4 NPS	1.496 sq in	[J] 1.38 in	0.506 in	15 - 3100 psi	Water	III & VIII Div.1
3 NPS	4, 6 NPS	2.138 sq in	[K] 1.65 in	0.605 in	15 - 3400 psi	Water	III & VIII Div.1
3 - 4 NPS	4, 6 NPS	3.317 sq in	[L] 2.055 in	0.753 in	15 - 2900 psi	Water	III & VIII Div.1
4 NPS	6 NPS	4.186 sq in	[M] 2.3086 in	0.846 in	15 - 1600 psi	Water	III & VIII Div.1
		5.047 sq in	[N] 2.535 in	0.929 in	15 - 1600 psi	Water	III & VIII Div.1
		7.417 sq in	[P] 3.073 in	1.126 in	15 - 1700 psi	Water	III & VIII Div.1
6 NPS	8 NPS	12.851 sq in	[Q] 4.045 in	1.482 in	15 - 900 psi	Water	III & VIII Div.1
	8, 10 NPS	18.604 sq in	[R] 4.867 in	1.782 in	15 - 300 psi	Water	III & VIII Div.1
8 NPS	10 NPS	28.624 sq in	[T] 6.04 in	2.212 in	15 - 360 psi	Water	III & VIII Div.1
		30.21 sq in	[T-4] 6.205 in	2.272 in	15 - 360 psi	Water	III & VIII Div.1
		35 sq in	[U] 6.688 in	2.272 in	15 - 300 psi	Water	III & VIII Div.1
10 NPS	12 NPS	50.26 sq in	[V] 8 in	2.93 in	15 - 300 psi	Water	III & VIII Div.1
12 NPS	16 NPS	78.996 sq in	[W] 10.029 in	3.675 in	15 - 300 psi	Water	III & VIII Div.1

Dresser, LLC (DRJ)

NB#: 18863

Location: 12970 Normandy Blvd, Jacksonville, FL 32221 United States

Acceptable Abbrev.: JAX

Certification
Number: **18863**Design Series
or catalog number **2900 (39PV & 39MV pilots)**

Type Classification: Pilot Operated Pressure Relief Valve

Capacity Tests: Sec. VIII Div. 1 at Dresser Industries Inc. on June 25, 1999

Method of Establishing Relieving Capacity: Flow Capacity, K

Certified Value: 0.855 Unitless

Test Medium: Steam & Air/Gas

Certified Medium: Steam & Air/Gas

Set Pressure Definition: 1.Pop 2.Initial Audible Discharge

Blowdown: Adjustable and Fixed for Mod. Pilot

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
1 - 1.5 NPS	2 - 2.5 NPS	0.1279 sq in	[D] 0.4036 in	0.11 in	15 - 2000 psi	Steam	VIII
					15 - 7200 psi	Air	VIII
		0.2279 sq in	[E] 0.5387 in	0.147 in	15 - 2000 psi	Steam	VIII
					15 - 6250 psi	Air	VIII
1.5 NPS	2 - 2.5 NPS	0.3568 sq in	[F] 0.674 in	0.182 in	15 - 2000 psi	Steam	VIII
					15 - 7200 psi	Air	VIII
1.5 - 2 NPS	2.5 - 3 NPS	0.5849 sq in	[G] 0.863 in	0.234 in	15 - 2000 psi	Steam	VIII
					15 - 6000 psi	Air	VIII
	3 NPS	0.9127 sq in	[H] 1.078 in	0.292 in	15 - 2500 psi	Steam	VIII
					15 - 3300 psi	Air	VIII
2 - 3 NPS	3 - 4 NPS	1.496 sq in	[J] 1.38 in	0.374 in	15 - 2500 psi	Steam	VIII
					15 - 3100 psi	Air	VIII
3 NPS	4 - 6 NPS	2.138 sq in	[K] 1.65 in	0.446 in	15 - 2000 psi	Steam	VIII
					15 - 3000 psi	Air	VIII
3 - 4 NPS	4 - 6 NPS	3.317 sq in	[L] 2.055 in	0.556 in	15 - 2900 psi	Air	VIII
						Steam	VIII
4 NPS	6 NPS	4.186 sq in	[M] 2.3086 in	0.625 in	15 - 1600 psi	Air	VIII
						Steam	VIII
		5.047 sq in	[N] 2.535 in	0.685 in	15 - 1600 psi	Air	VIII
						Steam	VIII
		7.417 sq in	[P] 3.073 in	0.83 in	15 - 1700 psi	Air	VIII
						Steam	VIII
6 NPS	8 NPS	12.85 sq in	[Q] 4.045 in	1.09 in	15 - 900 psi	Air	VIII
						Steam	VIII
	8 - 10 NPS	18.6 sq in	[R] 4.867 in	1.29 in	15 - 300 psi	Air	VIII
						Steam	VIII
8 NPS	10 NPS	30.21 sq in	[T] 6.205 in	1.723 in	15 - 300 psi	Air	VIII
						Steam	VIII
		35 sq in	[U] 6.688 in	1.841 in	15 - 905 psi	Air	VIII Div. 1
10 NPS	14 NPS	50.26 sq in	[V] 8.002 in	2.162 in	15 - 300 psi	Air	VIII
						Steam	VIII
12 NPS	16 NPS	78.996 sq in	[W] 10.029 in	2.523 in	15 - 300 psi	Air	VIII
						Steam	VIII

Dresser, LLC (DRJ)

NB#: 18874

Location: 12970 Normandy Blvd, Jacksonville, FL 32221 United States

Acceptable Abbrev.: JAX

Certification Number: **18874** Design Series or catalog number **2900 (39PV & 39MV pilots - Liquid)**

Type Classification: Pilot Operated Pressure Relief Valve

Capacity Tests: Sec. VIII Div. 1 at Dresser Industries Inc. on June 25, 1999

Method of Establishing Relieving Capacity: Flow Capacity, K

Certified Value: .670 Unitless

Test Medium: Water

Certified Medium: Liquid

Set Pressure Definition: First Steady Stream

Blowdown: Fixed

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
1 - 1.5 NPS	2 - 2.5 NPS	0.1279 sq in	[D] 0.4036 in	0.092 in	15 - 6250 psi	Water	VIII
		0.2279 sq in	[E] 0.5387 in	0.105 in	15 - 6250 psi	Water	VIII
1.5 NPS	2 - 2.5 NPS	0.3568 sq in	[F] 0.674 in	0.141 in	15 - 6250 psi	Water	VIII
1.5 - 2 NPS	2.5 - 3 NPS	0.5849 sq in	[G] 0.863 in	0.25 in	15 - 6000 psi	Water	VIII
	3 NPS	0.9127 sq in	[H] 1.078 in	0.395 in	15 - 3300 psi	Water	VIII
2 - 3 NPS	3 - 4 NPS	1.496 sq in	[J] 1.38 in	0.506 in	15 - 3100 psi	Water	VIII
3 NPS	4 - 6 NPS	2.138 sq in	[K] 1.65 in	0.605 in	15 - 3000 psi	Water	VIII
3 - 4 NPS	4 - 6 NPS	3.317 sq in	[L] 2.055 in	0.753 in	15 - 2900 psi	Water	VIII
4 NPS	6 NPS	4.186 sq in	[M] 2.3086 in	0.846 in	15 - 1600 psi	Water	VIII
		5.047 sq in	[N] 2.535 in	0.929 in	15 - 1600 psi	Water	VIII
		7.417 sq in	[P] 3.073 in	1.126 in	15 - 1700 psi	Water	VIII
6 NPS	8 NPS	12.85 sq in	[Q] 4.045 in	1.482 in	15 - 900 psi	Water	VIII
	8 - 10 NPS	18.6 sq in	[R] 4.867 in	1.738 in	15 - 500 psi	Water	VIII
8 NPS	10 NPS	30.21 sq in	[T] 6.205 in	2.272 in	15 - 300 psi	Water	VIII
		35 sq in	[U] 6.688 in	1.841 in	15 - 905 psi	Water	VIII Div. 1
10 NPS	14 NPS	50.26 sq in	[V] 8.002 in	2.93 in	15 - 300 psi	Water	VIII
12 NPS	16 NPS	78.996 sq in	[W] 10.029 in	3.675 in	15 - 300 psi	Water	VIII

Dresser, LLC (DRJ)

NB#: 18885

Location: 12970 Normandy Blvd, Jacksonville, FL 32221 United States

Acceptable Abbrev.: JAX

Certification Number: **18885** Design Series or catalog number **4900 (49PV & 49MV pilots)**

Type Classification: Pilot Operated Pressure Relief Valve

Capacity Tests: Sec. VIII Div. 1 at Dresser Industries Inc. on August 05, 1999

Method of Establishing Relieving Capacity: Flow Capacity, K

Certified Value: .878 Unitless

Test Medium: Steam & Air/Gas

Certified Medium: Steam & Air/Gas

Set Pressure Definition: Pop

Blowdown: Adjustable

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
1 - 1.5 NPS	2 NPS	0.1314 sq in	[D] 0.409 in	0.25 in	15 - 6250 psi	Air	VIII Div. 1
					15 - 750 psi	Steam	VIII Div. 1
		0.228 sq in	[E] 0.539 in	0.25 in	15 - 6250 psi	Air	VIII Div. 1
					15 - 750 psi	Steam	VIII Div. 1
		0.359 sq in	[F] 0.676 in	0.25 in	15 - 6250 psi	Air	VIII Div. 1
					15 - 750 psi	Steam	VIII Div. 1
1.5 - 2 NPS	3 NPS	0.594 sq in	[G] 0.869 in	0.7 in	15 - 6250 psi	Air	VIII Div. 1
					15 - 750 psi	Steam	VIII Div. 1
		0.93 sq in	[H] 1.088 in	0.7 in	15 - 6250 psi	Air	VIII Div. 1
					15 - 750 psi	Steam	VIII Div. 1
2 - 3 NPS	3 - 4 NPS	1.513 sq in	[J] 1.388 in	0.7 in	15 - 6250 psi	Air	VIII Div. 1
					15 - 750 psi	Steam	VIII Div. 1
3 NPS	4 NPS	2.16 sq in	[K] 1.658 in	0.68 in	15 - 3750 psi	Air	VIII Div. 1
					15 - 750 psi	Steam	VIII Div. 1
3 - 4 NPS	4 - 6 NPS	3.35 sq in	[L] 2.065 in	0.68 in	15 - 3750 psi	Air	VIII Div. 1
					15 - 750 psi	Steam	VIII Div. 1
4 NPS	6 NPS	4.229 sq in	[M] 2.321 in	1 in	15 - 3750 psi	Air	VIII Div. 1
					15 - 750 psi	Steam	VIII Div. 1
		5.098 sq in	[N] 2.548 in	1 in	15 - 3750 psi	Air	VIII Div. 1
					15 - 750 psi	Steam	VIII Div. 1
		7.491 sq in	[P] 3.088 in	1 in	15 - 3750 psi	Air	VIII Div. 1
					15 - 750 psi	Steam	VIII Div. 1
6 NPS	8 NPS	12.979 sq in	[Q] 4.065 in	1.31 in	15 - 1500 psi	Air	VIII Div. 1
					15 - 750 psi	Steam	VIII Div. 1
	8 - 10 NPS	18.783 sq in	[R] 4.89 in	1.31 in	15 - 150 psi	Steam	VIII Div. 1
					15 - 1500 psi	Air	VIII Div. 1
8 NPS	10 NPS	30.542 sq in	[T] 6.236 in	2 in	15 - 1500 psi	Air	VIII Div. 1
					15 - 750 psi	Steam	VIII Div. 1

Dresser, LLC (DRJ)

NB#: 18964

Location: 12970 Normandy Blvd, Jacksonville, FL 32221 United States

Acceptable Abbrev.: JAX

Certification Number: **18964** Design Series or catalog number **2900 POSRV (39 PV, 39 MV Pilots)**

Type Classification: Pilot Operated Pressure Relief Valve

Capacity Tests: Sec. I at Dresser Industries Inc. on November 02, 2005

Method of Establishing Relieving Capacity: Flow Capacity, K

Certified Value: 0.851 Unitless

Certified Value (alternate medium): 0.691 Water Unitless

Certification Provisions: per CC 2446

Test Medium: Steam

Certified Medium: Steam/Water

Set Pressure Definition: 1.Pop 2.Initial Audible Discharge 3.First Steady Stream

Blowdown: Adjustable and Fixed for Mod. Pilot

Scope of Nominal Size and Set Pressure Ranges:

Inlet Size	Outlet Size	Flow Area	Orifice [designator] diameter	Lift	Set Pressure Range	Media	Code Section
1 - 1.5 NPS	2, 3 NPS	0.1279 sq in	[D] 0.4036 in	0.11 in	40 - 5800 psi	Steam	I
						Water	I
		0.2279 sq in	[E] 0.5387 in	0.147 in	40 - 5800 psi	Steam	I
						Water	I
1.5 NPS	2, 3 NPS	0.3568 sq in	[F] 0.674 in	0.182 in	40 - 5800 psi	Steam	I
						Water	I
1.5 - 2 NPS	3 NPS	0.5849 sq in	[G] 0.863 in	0.234 in	40 - 5800 psi	Steam	I
						Water	I
		0.9127 sq in	[H] 1.078 in	0.292 in	40 - 3750 psi	Steam	I
						Water	I
2 - 3 NPS	3, 4 NPS	1.496 sq in	[J] 1.38 in	0.374 in	40 - 5800 psi	Steam	I
						Water	I
3 NPS	4, 6 NPS	2.136 sq in	[K] 1.649 in	0.446 in	40 - 5800 psi	Steam	I
						Water	I
3 - 4 NPS	4, 6 NPS	3.317 sq in	[L] 2.055 in	0.556 in	40 - 3750 psi	Steam	I
						Water	I
4 NPS	6 NPS	4.186 sq in	[M] 2.309 in	0.625 in	40 - 2250 psi	Steam	I
						Water	I
		5.047 sq in	[N] 2.535 in	0.685 in	40 - 2250 psi	Steam	I
						Water	I
		7.417 sq in	[P] 3.073 in	0.83 in	40 - 2250 psi	Steam	I
						Water	I
6 NPS	8 NPS	12.85 sq in	[Q] 4.045 in	1.09 in	40 - 1500 psi	Steam	I
						Water	I
	8, 10 NPS	18.6 sq in	[R] 4.867 in	1.29 in	40 - 1500 psi	Steam	I
						Water	I
8 NPS	10 NPS	30.21 sq in	[T] 6.205 in	1.723 in	40 - 905 psi	Steam	I
						Water	I
		35 sq in	[U] 6.688 in	1.841 in	40 - 905 psi	Steam	I
						Water	I
10 NPS	14 NPS	50.26 sq in	[V] 8.002 in	2.162 in	40 - 675 psi	Steam	I
						Water	I
12 NPS	16 NPS	78.996 sq in	[W] 10.029 in	2.523 in	40 - 535 psi	Steam	I
						Water	I

Dresser, LLC (DRJ)

NB#: 18997

Location: 12970 Normandy Blvd, Jacksonville, FL 32221 United States

Acceptable Abbrev.: JAX

Certification
Number: **18997**Design Series
or catalog number **1900-UM**Type Classification: **Safety Relief Valve**Capacity Tests: **Sec. VIII Div. 1 at Dresser Industries Inc. on March 15, 2010**Method of Establishing Relieving Capacity: **Flow Capacity, K**Certified Value: **.855 Unitless**Test Medium: **Air**Certified Medium: **Steam & Air/Gas**Set Pressure Definition: **Pop**Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
1.5 NPS	2 - 3 NPS	0.3568 sq in	[F] 0.674 in	0.182 in	15 - 2000 psi	Steam	VIII Div. 1
					15 - 7200 psi	Air	VIII Div. 1
1.5 - 2 NPS	3 NPS	0.5849 sq in	[G] 0.863 in	0.234 in	15 - 2000 psi	Steam	VIII Div. 1
					15 - 6000 psi	Air	VIII Div. 1
		0.9127 sq in	[H] 1.078 in	0.395 in	15 - 2500 psi	Steam	VIII Div. 1
					15 - 3300 psi	Air	VIII Div. 1
2 - 3 NPS	3, 4 NPS	1.496 sq in	[J] 1.38 in	0.506 in	15 - 2500 psi	Steam	VIII Div. 1
					15 - 3100 psi	Air	VIII Div. 1
3 NPS	4, 6 NPS	2.138 sq in	[K] 1.65 in	0.605 in	15 - 2000 psi	Steam	VIII Div. 1
					15 - 3000 psi	Air	VIII Div. 1
3 - 4 NPS	4, 6 NPS	3.317 sq in	[L] 2.055 in	0.753 in	15 - 2900 psi	Air	VIII Div. 1
						Steam	VIII Div. 1
4 NPS	6 NPS	4.186 sq in	[M] 2.309 in	0.846 in	15 - 1600 psi	Air	VIII Div. 1
						Steam	VIII Div. 1
		5.047 sq in	[N] 2.535 in	0.929 in	15 - 1600 psi	Air	VIII Div. 1
						Steam	VIII Div. 1
		7.417 sq in	[P] 3.073 in	1.126 in	15 - 1700 psi	Air	VIII Div. 1
						Steam	VIII Div. 1
6 NPS	8 NPS	12.85 sq in	[Q] 4.045 in	1.482 in	15 - 900 psi	Air	VIII Div. 1
						Steam	VIII Div. 1
	8, 10 NPS	18.6 sq in	[R] 4.867 in	1.782 in	15 - 300 psi	Air	VIII Div. 1
						Steam	VIII Div. 1
8 NPS	10 NPS	30.21 sq in	[T] 6.205 in	2.212 in	15 - 300 psi	Air	VIII Div. 1
						Steam	VIII Div. 1
		35 sq in	[U] 6.688 in	2.428 in	15 - 300 psi	Air	VIII Div. 1
						Steam	VIII Div. 1
10 NPS	14 NPS	50.26 sq in	[V] 8 in	2.93 in	15 - 300 psi	Air	VIII Div. 1
						Steam	VIII Div. 1
12 NPS	16 NPS	78.996 sq in	[W] 10.029 in	3.675 in	15 - 300 psi	Air	VIII Div. 1
						Steam	VIII Div. 1

Dresser, LLC (DRJ)

NB#: 19000

Location: 12970 Normandy Blvd, Jacksonville, FL 32221 United States

Acceptable Abbrev.: JAX

Certification Number: **19000** Design Series or catalog number **1900-UM (Liquids)**

Type Classification: **Safety Relief Valve**Capacity Tests: **Sec. VIII Div. 1 at Dresser Industries Inc. on March 10, 2010**Method of Establishing Relieving Capacity: **Flow Capacity, K**Certified Value: **.67 Unitless**Test Medium: **Water**Certified Medium: **Liquid**Set Pressure Definition: **First Steady Stream**Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
1.5 NPS	2, 3 NPS	0.3568 sq in	[F] 0.674 in	0.182 in	15 - 6250 psi	Water	VIII Div. 1
1.5 - 2 NPS	3 NPS	0.5849 sq in	[G] 0.863 in	0.234 in	15 - 6000 psi	Water	VIII Div. 1
		0.9127 sq in	[H] 1.078 in	0.395 in	15 - 3300 psi	Water	VIII Div. 1
2 - 3 NPS	3, 4 NPS	1.496 sq in	[J] 1.38 in	0.506 in	15 - 3100 psi	Water	VIII Div. 1
3 NPS	4, 6 NPS	2.138 sq in	[K] 1.65 in	0.605 in	15 - 3000 psi	Water	VIII Div. 1
3 - 4 NPS	4, 6 NPS	3.317 sq in	[L] 3.065 in	0.753 in	15 - 2900 psi	Water	VIII Div. 1
4 NPS	6 NPS	4.186 sq in	[M] 2.309 in	0.846 in	15 - 1600 psi	Water	VIII Div. 1
		5.047 sq in	[N] 2.535 in	0.929 in	15 - 1600 psi	Water	VIII Div. 1
		7.417 sq in	[P] 3.073 in	1.126 in	15 - 1700 psi	Water	VIII Div. 1
6 NPS	8 NPS	12.85 sq in	[Q] 4.045 in	1.482 in	15 - 900 psi	Water	VIII Div. 1
	8, 10 NPS	18.6 sq in	[R] 4.867 in	1.782 in	15 - 300 psi	Water	VIII Div. 1
8 NPS	10 NPS	30.21 sq in	[T] 6.205 in	2.212 in	15 - 300 psi	Water	VIII Div. 1
		35 sq in	[U] 6.688 in	2.428 in	15 - 300 psi	Water	VIII Div. 1
10 NPS	14 NPS	50.26 sq in	[V] 8 in	2.93 in	15 - 300 psi	Water	VIII Div. 1
12 NPS	16 NPS	78.996 sq in	[W] 10.029 in	3.675 in	15 - 300 psi	Water	VIII Div. 1

Certification Number: **19011** Design Series or catalog number **1900-UM-D**

Type Classification: **Safety Relief Valve**Capacity Tests: **Sec. VIII Div. 1 at Dresser Industries Inc. on March 18, 2010**Method of Establishing Relieving Capacity: **Flow Capacity, Slope**Certified Value: **1.991 SCFM/PSIA**Certified Value (alternate medium): **5.594 PPH/PSIA**Test Medium: **Air**Certified Medium: **Steam & Air/Gas**Set Pressure Definition: **Pop**Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
1 - 1.5 NPS	2 - 3 NPS	0.1279 sq in	[D] 0.674 in	0.067 in	15 - 2000 psi	Steam	VIII Div. 1
					15 - 6250 psi	Air	VIII Div. 1

Dresser, LLC (DRJ)

NB#: 19022

Location: 12970 Normandy Blvd, Jacksonville, FL 32221 United States

Acceptable Abbrev.: JAX

Certification Number: **19022** Design Series or catalog number: **1900 UM-D (Liquids)**

Type Classification: **Safety Relief Valve**Capacity Tests: **Sec. VIII Div. 1 at Dresser Industries Inc. on March 18, 2010**Method of Establishing Relieving Capacity: **Flow Capacity, Flow Factor**Certified Value: **3.256 GPM/SQ.RT. PSID**Test Medium: **Water**Certified Medium: **Liquid**Set Pressure Definition: **First Steady Stream**Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
1 - 1.5 NPS	2 - 3 NPS	0.1279 sq in	[D] 0.674 in	0.067 in	15 - 6250 psi	Water	VIII Div. 1

Certification Number: **19033** Design Series or catalog number: **1900-UM-E**

Type Classification: **Safety Relief Valve**Capacity Tests: **Sec. VIII Div. 1 at Dresser Industries Inc. on March 10, 2010**Method of Establishing Relieving Capacity: **Flow Capacity, Slope**Certified Value: **3.558 SCFM/PSIA**Certified Value (alternate medium): **9.996 PPH/PSIA**Test Medium: **Air**Certified Medium: **Steam & Air/Gas**Set Pressure Definition: **Pop**Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
1 - 1.5 NPS	2 - 3 NPS	0.2279 sq in	[E] 0.674 in	0.105 in	15 - 2000 psi	Steam	VIII Div. 1
					15 - 6250 psi	Air	VIII Div. 1

Certification Number: **19044** Design Series or catalog number: **1900-UM-E (Liquids)**

Type Classification: **Safety Relief Valve**Capacity Tests: **Sec. VIII Div. 1 at Dresser Industries Inc. on March 10, 2010**Method of Establishing Relieving Capacity: **Flow Capacity, Flow Factor**Certified Value: **5.798 GPM/SQ.RT. PSID**Test Medium: **Water**Certified Medium: **Liquid**Set Pressure Definition: **First Steady Stream**Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
1 - 1.5 NPS	2 - 3 NPS	0.2279 sq in	[E] 0.674 in	0.105 in	15 - 2000 psi	Steam	VIII Div. 1
					15 - 6250 psi	Water	VIII Div. 1

Dresser, LLC (DRJ)

NB#: 19077

location: 12970 Normandy Blvd, Jacksonville, FL 32221 United States

Acceptable Abbrev.: JAX

Certification Number: **19077** Design Series or catalog number **19110M & 19110H (Liquids)**

Type Classification: **Relief Valve**Capacity Tests: **Sec. VIII Div. 1 at Dresser Industries Inc. on July 29, 2010**Method of Establishing Relieving Capacity: **Flow Capacity, Slope**Certified Value: **2.264 GPM/SQ.RT. PSID**Test Medium: **Water**Certified Medium: **Liquid**Special Service: **None**Set Pressure Definition: **First Steady Stream**Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
0.5 - 1 NPS	1 NPS	0.11 sq in	0.375 in	0.118 in	290 - 5000 psi	Water	III VIII Div. 1

Elfab Limited (ELF)

NB#: 88062

location: Alder Road

Acceptable Abbrev.: ELFAB

Elfab Limited (ELF)

location: Alder Road

Acceptable Abbrev.: ELFAB

Certification
Number: **88062**Design Series
or catalog number **DSC-FCD**Holder Designation: **HLD-STD**Type Classification: **Rupture Disk Device**Capacity Tests: **Sec. VIII Div. 1 at National Board T L (Worthington) on January 07, 2002**Method of Establishing Relieving Capacity: **Resistance Factor, 3 Size, Krg**Certified Value: **2.2 Unitless**Test Medium: **Air/Gas**Certified Medium: **Air or gases (Krg)**Set Pressure Definition: **Burst Pressure**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
1 NPS		0.607 sq in			20 - 30 psi	Air	VIII Div. 1
1.5 NPS		1.655 sq in			14.5 - 20 psi		VIII Div. 1
2 NPS		2.774 sq in			7 - 20 psi		VIII Div. 1
2.5 NPS		4.678 sq in			2 - 20 psi		VIII Div. 1
3 NPS		7.216 sq in			2 - 20 psi		VIII Div. 1
4 NPS		11.81 sq in			2 - 20 psi		VIII Div. 1
6 NPS		26.246 sq in			1 - 10 psi		VIII Div. 1
8 NPS		47.19 sq in			1 - 10 psi		VIII Div. 1
10 NPS		74.22 sq in			1 - 10 psi		VIII Div. 1
12 NPS		107.4 sq in			1 - 10 psi		VIII Div. 1
14 NPS		146.5 sq in			1 - 9 psi		VIII Div. 1
16 NPS		191.9 sq in			1 - 7 psi		VIII Div. 1
18 NPS		243.2 sq in			1 - 209 psi		VIII Div. 1
20 NPS		292.3 sq in			1 - 209 psi		VIII Div. 1
24 NPS		422.6 sq in			1 - 209 psi		VIII Div. 1
28 NPS		578.9 sq in			1 - 209 psi		VIII Div. 1
30 NPS		669.9 sq in			1 - 209 psi		VIII Div. 1
32 NPS		764.77 sq in			1 - 197 psi		VIII Div. 1
34 NPS		865.92 sq in			1 - 184 psi		VIII Div. 1
36 NPS		973.34 sq in			1 - 171 psi		VIII Div. 1
38 NPS		1087.05 sq in			1 - 158 psi		VIII Div. 1
40 NPS		1207.04 sq in			1 - 145 psi		VIII Div. 1
42 NPS		1333.31 sq in			1 - 132 psi		VIII Div. 1
44 NPS		1465.85 sq in			1 - 119 psi		VIII Div. 1
46 NPS		1604.68 sq in			1 - 106 psi		VIII Div. 1
48 NPS		1749.79 sq in			1 - 93 psi		VIII Div. 1

Elfab Limited (ELF)

NB#: 88118

location: Alder Road

Acceptable Abbrev.: ELFAB

Certification
Number: **88118**Design Series
or catalog number **OPR**Holder Designation: **OPR**Type Classification: **Rupture Disk Device**Capacity Tests: **Sec. VIII Div. 1 at National Board T L (Worthington) on March 25, 2003**Method of Establishing Relieving Capacity: **Resistance Factor, 3 Size, Krgl**Certified Value: **1.19 Unitless**Test Medium: **Air/Gas & Liquid**Certified Medium: **Air or gases, and liquid (Krgl)**Set Pressure Definition: **Burst Pressure**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
1 NPS		0.775 sq in			50 - 1523 psi		VIII Div. 1
1.5 NPS		1.693 sq in			27 - 1523 psi		VIII Div. 1
2 NPS		2.843 sq in			14 - 1523 psi		VIII Div. 1
2.5 NPS		4.187 sq in			10 - 1305 psi		VIII Div. 1
3 NPS		6.809 sq in			7 - 1088 psi		VIII Div. 1
4 NPS		10.96 sq in			5 - 1440 psi		VIII Div. 1
6 NPS		23.38 sq in			5 - 870 psi		VIII Div. 1
8 NPS		44.18 sq in			5 - 720 psi		VIII Div. 1
10 NPS		65.05 sq in			5 - 720 psi		VIII Div. 1
12 NPS		94.86 sq in			5 - 720 psi		VIII Div. 1
14 NPS		126.1 sq in			4 - 261 psi		VIII Div. 1
16 NPS		169.9 sq in			4 - 150 psi		VIII Div. 1
18 NPS		208.5 sq in			4 - 135 psi		VIII Div. 1
20 NPS		257.8 sq in			4 - 131 psi		VIII Div. 1
24 NPS		369.8 sq in			4 - 131 psi		VIII Div. 1
26 NPS		424.74 sq in			4 - 131 psi		VIII Div. 1
28 NPS		492.6 sq in			4 - 131 psi		VIII Div. 1
30 NPS		565.49 sq in			4 - 131 psi		VIII Div. 1
32 NPS		642.4 sq in			4 - 131 psi		VIII Div. 1
34 NPS		726.34 sq in			4 - 131 psi		VIII Div. 1
36 NPS		814.3			4 - 131 psi		VIII Div. 1
40 NPS		1005.31			4 - 131 psi		VIII Div. 1

Elfab Limited (ELF)

NB#: 88129

Location: Alder Road

Acceptable Abbrev.: ELFAB

Certification
Number: **88129**Design Series
or catalog number **AGS**Type Classification: **Rupture Disk Device**Capacity Tests: **Sec. VIII Div. 1 at National Board T L (Worthington) on January 20, 2004**Method of Establishing Relieving Capacity: **Resistance Factor, 3 Size, Krgl**Certified Value: **0.69 Unitless**Test Medium: **Air/Gas & Liquid**Certified Medium: **Air or gases, and liquid (Krgl)**Special Service: **None**Set Pressure Definition: **Burst Pressure**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
1 NPS		0.79 sq in	1 in		10 - 800 psi		VIII Div. 1
1.5 NPS		1.77 sq in	1.5 in		10 - 595 psi		VIII Div. 1
2 NPS		3.14 sq in	2 in		10 - 400 psi		VIII Div. 1
2.5 NPS		4.79 sq in	2.5 in		3 - 400 psi		VIII Div. 1
3 NPS		7.07 sq in	3 in		3 - 350 psi		VIII Div. 1
4 NPS		12.57 sq in	4 in		2 - 245 psi		VIII Div. 1
6 NPS		28.27 sq in	6 in		1.5 - 145 psi		VIII Div. 1
8 NPS		50.03 sq in	8 in		1 - 80 psi		VIII Div. 1
10 NPS		78.54 sq in	10 in		1 - 70 psi		VIII Div. 1
12 NPS		113.1 sq in	12 in		1 - 60 psi		VIII Div. 1
14 NPS		137.9 sq in	14 in		1 - 50 psi		VIII Div. 1
16 NPS		182.7 sq in	16 in		1 - 50 psi		VIII Div. 1
18 NPS		233.7 sq in	18 in		1 - 40 psi		VIII Div. 1
20 NPS		291 sq in	20 in		1 - 30 psi		VIII Div. 1

Certification
Number: **88152**Design Series
or catalog number **CD**Holder Designation: **HC**Type Classification: **Rupture Disk Device**Capacity Tests: **Sec. VIII Div. 1 at National Board T L (Worthington) on July 06, 2006**Method of Establishing Relieving Capacity: **Resistance Factor, 3 Size, Krgl**Certified Value: **1.4 Unitless**Test Medium: **Air or gases, and liquid (Krgl)**Certified Medium: **Air or gases, and liquid (Krgl)**Set Pressure Definition: **Burst Pressure**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
1 NPS		0.78 sq in			369 - 9428 psi		VIII Div. 1
1.5 NPS		1.95 sq in			227 - 8702 psi		VIII Div. 1
2 NPS		3.14 sq in			188 - 2900 psi		VIII Div. 1
2.5 NPS		4.78 sq in			150 - 2900 psi		VIII Div. 1
3 NPS		7.39 sq in			150 - 2900 psi		VIII Div. 1
4 NPS		12.57 sq in			100 - 2900 psi		VIII Div. 1
6 NPS		27.39 sq in			87 - 2320 psi		VIII Div. 1
8 NPS		48.7 sq in			70 - 1740 psi		VIII Div. 1
10 NPS		76.09 sq in			60 - 1450 psi		VIII Div. 1
12 NPS		109.6 sq in			52 - 1160 psi		VIII Div. 1
14 NPS		135.2 sq in			42 - 1015 psi		VIII Div. 1
16 NPS		176.7 sq in			42 - 870 psi		VIII Div. 1
18 NPS		223.6 sq in			42 - 797 psi		VIII Div. 1
20 NPS		278 sq in			42 - 725 psi		VIII Div. 1

Elfab Limited (ELF)

NB#: 88185

location: Alder Road

Acceptable Abbrev.: ELFAB

Certification
Number: **88185**Design Series
or catalog number **DSC-OPR**Holder Designation: **HLD-REV**Type Classification: **Rupture Disk Device**Capacity Tests: **Sec. VIII Div. 1 at National Board T L (Worthington) on April 30, 2013**Method of Establishing Relieving Capacity: **Resistance Factor, 3 Size, Krgl**Certified Value: **1.74 Unitless**Test Medium: **Air/Gas & Liquid**Certified Medium: **Air or gases, and liquid (Krgl)**Special Service: **None**Set Pressure Definition: **Burst Pressure**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
1 NPS	1 NPS	0.77 sq in	1.12 in		50 - 1523 psi	Air	VIII Div. 1
1.5 NPS	1.5 NPS	1.69 sq in	1.63 in		27 - 1523 psi	Air	VIII Div. 1
2 NPS	2 NPS	2.84 sq in	2.13 in		14 - 1523 psi	Air	VIII Div. 1
2.5 NPS	2.5 NPS	4.18 sq in	2.61 in		10 - 1305 psi	Air	VIII
3 NPS	3 NPS	6.8 sq in	3.35 in		7 - 1088 psi	Air	VIII Div. 1
4 NPS	4 NPS	10.96 sq in	4.11 in		5 - 1440 psi	Air	VIII Div. 1
6 NPS	6 NPS	23.36 sq in	6.14 in		5 - 1217 psi	Air	VIII Div. 1
8 NPS	8 NPS	44.19 sq in	8.18 in		5 - 1104 psi	Air	VIII Div. 1
10 NPS	10 NPS	64.99 sq in	10.2 in		5 - 991 psi	Air	VIII Div. 1
12 NPS	12 NPS	94.66 sq in	12.2 in		5 - 878 psi	Air	VIII Div. 1
14 NPS	14 NPS	126.1 sq in	14.1 in		5 - 765 psi	Air	VIII Div. 1
16 NPS	16 NPS	169.9 sq in	16.5 in		4 - 652 psi	Air	VIII Div. 1
18 NPS	18 NPS	208.5 sq in	18 in		4 - 539 psi	Air	VIII Div. 1
20 NPS	20 NPS	257.8 sq in	20 in		4 - 426 psi	Air	VIII Div. 1
24 NPS	24 NPS	369.8 sq in	23.9 in		4 - 200 psi	Air	VIII Div. 1
26 NPS	26 NPS	424.74 sq in	26 in		4 - 191 psi	Air	VIII Div. 1
28 NPS	28 NPS	492.6 sq in	28 in		4 - 182 psi	Air	VIII Div. 1
30 NPS	30 NPS	565.49 sq in	30 in		4 - 173 psi	Air	VIII Div. 1
32 NPS	32 NPS	643.3 sq in	32 in		4 - 163 psi	Air	VIII Div. 1
34 NPS	34 NPS	726.34 sq in	34 in		4 - 154 psi	Air	VIII Div. 1
36 NPS	36 NPS	814.3 sq in	36 in		4 - 145 psi	Air	VIII Div. 1
40 NPS	40 NPS	1005.31 sq in	40 in		4 - 136 psi	Air	VIII Div. 1

Elfab Limited (ELF)

NB#: 88196

Location: Alder Road

Acceptable Abbrev.: ELFAB

Certification
Number: **88196**Design Series
or catalog number **DSC-SGD**Holder Designation: **HLD-REV**Type Classification: **Rupture Disk Device**Capacity Tests: **Sec. VIII Div. 1 at National Board T L (Worthington) on April 25, 2012**Method of Establishing Relieving Capacity: **Resistance Factor, 3 Size, Krgl**Certified Value: **0.68 Unitless**Test Medium: **Air/Gas & Liquid**Certified Medium: **Air or gases, and liquid (Krgl)**Special Service: **None**Set Pressure Definition: **Burst Pressure**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
1 NPS	1 NPS	0.5 sq in			100 - 2683 psi	Air	VIII Div. 1
						Water	VIII Div. 1
1.5 NPS	1.5 NPS	1.24 sq in			100 - 2031 psi	Air	VIII Div. 1
						Water	VIII Div. 1
2 NPS	2 NPS	2 sq in			100 - 1813 psi	Air	VIII Div. 1
						Water	VIII Div. 1
2.5 NPS	2.5 NPS	3.27 sq in			100 - 1523 psi	Air	VIII Div. 1
						Water	VIII Div. 1
3 NPS	3 NPS	4.96 sq in			75 - 1309 psi	Air	VIII Div. 1
						Water	VIII Div. 1
4 NPS	4 NPS	8 sq in			68 - 1088 psi	Air	VIII Div. 1
						Water	VIII Div. 1
6 NPS	6 NPS	17.43 sq in			75 - 1980 psi	Air	VIII Div. 1
						Water	VIII Div. 1
8 NPS	8 NPS	31 sq in			75 - 1650 psi	Air	VIII Div. 1
						Water	VIII Div. 1
10 NPS	10 NPS	48.44 sq in			50 - 1650 psi	Air	VIII Div. 1
						Water	VIII Div. 1
12 NPS	12 NPS	69.75 sq in			50 - 1430 psi	Air	VIII Div. 1
						Water	VIII Div. 1
14 NPS	14 NPS	94.94 sq in			50 - 1100 psi	Air	VIII Div. 1
						Water	VIII Div. 1
16 NPS	16 NPS	124 sq in			50 - 990 psi	Air	VIII Div. 1
						Water	VIII Div. 1
18 NPS	18 NPS	156.94 sq in			50 - 880 psi	Air	VIII Div. 1
						Water	VIII Div. 1
20 NPS	20 NPS	193.75 sq in			50 - 790 psi	Air	VIII Div. 1
						Water	VIII Div. 1
24 NPS	24 NPS	279 sq in			50 - 660 psi	Air	VIII Div. 1
						Water	VIII Div. 1
26 NPS	26 NPS	327.44 sq in			50 - 625 psi	Air	VIII Div. 1
						Water	VIII Div. 1
28 NPS	28 NPS	379.75 sq in			50 - 590 psi	Air	VIII Div. 1
						Water	VIII Div. 1
30 NPS	30 NPS	435.94 sq in			50 - 555 psi	Air	VIII Div. 1
						Water	VIII Div. 1
32 NPS	32 NPS	496 sq in			50 - 525 psi	Air	VIII Div. 1
						Water	VIII Div. 1
34 NPS	34 NPS	559.94 sq in			50 - 490 psi	Air	VIII Div. 1
						Water	VIII Div. 1
36 NPS	36 NPS	627.45 sq in			50 - 455 psi	Air	VIII Div. 1
						Water	VIII Div. 1
38 NPS	38 NPS	699.44 sq in			50 - 420 psi	Air	VIII Div. 1
						Water	VIII Div. 1
40 NPS	40 NPS	775 sq in			50 - 385 psi	Air	VIII Div. 1
						Water	VIII Div. 1

Elfab Limited (ELF)

NB#: 88196

location: Alder Road

Acceptable Abbrev.: ELFAB

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<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
42 NPS	42 NPS	854.44 sq in			50 - 350 psi	Air	VIII Div. 1
						Water	VIII Div. 1
44 NPS	44 NPS	937.75 sq in			50 - 315 psi	Air	VIII Div. 1
						Water	VIII Div. 1
46 NPS	46 NPS	1024.94 sq in			50 - 280 psi	Air	VIII Div. 1
						Water	VIII Div. 1
48 NPS	48 NPS	1116 sq in			50 - 245 psi	Air	VIII Div. 1
						Water	VIII Div. 1

Certification
Number: **88208**Design Series
or catalog number**FCD (Flat or Domed Composite Discs)**Holder Designation: **HLD-STD**Type Classification: **Rupture Disk Device**Capacity Tests: **Sec. VIII Div. 1 at National Board T L (Worthington) on January 28, 2014**Method of Establishing Relieving Capacity: **Resistance Factor, 3 Size, Krgl**Certified Value: **3.94 Unitless**Test Medium: **Air/Gas & Liquid**Certified Medium: **Air or gases, and liquid (Krgl)**Set Pressure Definition: **Burst Pressure**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
1 NPS		0.42 sq in			15 - 522 psi	Air	VIII Div. 1
1.5 NPS		1.12 sq in			10 - 522 psi	Air	VIII Div. 1
2 NPS		1.86 sq in			10 - 522 psi	Air	VIII Div. 1
2.5 NPS		2.96 sq in			10 - 522 psi	Air	VIII Div. 1
3 NPS		5.29 sq in			10 - 522 psi	Air	VIII Div. 1
4 NPS		7.34 sq in			10 - 522 psi	Air	VIII Div. 1
6 NPS		14.34 sq in			10 - 494 psi	Air	VIII Div. 1
8 NPS		26.63 sq in			5 - 378 psi	Air	VIII Div. 1
10 NPS		43.53 sq in			5 - 290 psi	Air	VIII Div. 1
12 NPS		73.3 sq in			5 - 248 psi	Air	VIII Div. 1
14 NPS		100.84 sq in			5 - 235 psi	Air	VIII Div. 1
16 NPS		132.21 sq in			5 - 222 psi	Air	VIII Div. 1
18 NPS		167.1 sq in			1 - 209 psi	Air	VIII Div. 1
20 NPS		206.81 sq in			1 - 197 psi	Air	VIII Div. 1
22 NPS		247.7 sq in			1 - 184 psi	Air	VIII Div. 1
24 NPS		294.4 sq in			1 - 171 psi	Air	VIII Div. 1
26 NPS		346.55 sq in			1 - 158 psi	Air	VIII Div. 1
28 NPS		408.06 sq in			1 - 145 psi	Air	VIII Div. 1
30 NPS		459.57 sq in			1 - 145 psi	Air	VIII Div. 1
32 NPS		527.47 sq in			1 - 145 psi	Air	VIII Div. 1
34 NPS		593.93 sq in			1 - 145 psi	Air	VIII Div. 1
36 NPS		655.72 sq in			1 - 145 psi	Air	VIII Div. 1
38 NPS		742.45 sq in			1 - 145 psi	Air	VIII Div. 1
40 NPS		811.36 sq in			1 - 145 psi	Air	VIII Div. 1
42 NPS		907.54 sq in			1 - 145 psi	Air	VIII Div. 1
44 NPS		983.56 sq in			1 - 145 psi	Air	VIII Div. 1
46 NPS		1089.18 sq in			1 - 145 psi	Air	VIII Div. 1
48 NPS		1172.32 sq in			1 - 145 psi	Air	VIII Div. 1

Emerson Automation Solutions Final Control UK, Ltd. (BRK)

NB#: 06006

location: Sharp Street, Worsley, Manchester, Lancashire M28 3NA United Kingdom

Emerson Automation Solutions Final Control UK, Ltd. (BRK)

location: Sharp Street, Worsley, Manchester, Lancashire M28 3NA United Kingdom

Certification Number: **06006** Design Series or catalog number **B Series**

Type Classification: **Safety Valve**Capacity Tests: **Sec. VIII Div. 1 at National Board T L (Picaway) on February 09, 1980**Method of Establishing Relieving Capacity: **Flow Capacity, K**Certified Value: **.857 Unitless**Test Medium: **Air/Gas**Certified Medium: **Air/Gas**Special Service: **None**Set Pressure Definition: **Initial Audible Discharge**Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
0.5 - 1 NPS	1 NPS	0.062 sq in	0.281 in	0.07 in	15 - 5000 psi	Air	VIII Div. 1
		0.11 sq in	0.375 in	0.094 in	15 - 3600 psi	Air	VIII Div. 1
1 NPS	1.5 NPS	0.196 sq in	0.5 in	0.125 in	15 - 5000 psi	Air	VIII Div. 1
1.5 NPS	2 NPS	0.442 sq in	0.75 in	0.187 in	15 - 2500 psi	Air	VIII Div. 1

Certification Number: **06017** Design Series or catalog number **C Series**

Type Classification: **Relief Valve**Capacity Tests: **Sec. VIII Div. 1 at National Board T L (Picaway) on December 08, 1987**Method of Establishing Relieving Capacity: **Flow Capacity, K**Certified Value: **.509 Unitless**Test Medium: **Water**Certified Medium: **Liquid**Special Service: **None**Set Pressure Definition: **First Steady Stream**Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
0.5 - 1 NPS	1 NPS	0.062 sq in	0.281 in	0.07 in	15 - 5000 psi	Water	VIII Div. 1
		0.11 sq in	0.375 in	0.093 in	15 - 3600 psi	Water	VIII Div. 1
1 NPS	1.5 NPS	0.196 sq in	0.5 in	0.125 in	15 - 5000 psi	Water	VIII Div. 1
1.5 NPS	2 NPS	0.442 sq in	0.75 in	0.187 in	15 - 2500 psi	Water	VIII Div. 1

location: Sharp Street, Worsley, Manchester, Lancashire M28 3NA United Kingdom

Certification Number: **06028** Design Series or catalog number: **WB 100/200 (Liquids)**

Type Classification: **Relief Valve**Capacity Tests: **Sec. VIII Div. 1 at National Board T L (Picaway) on November 07, 1985**Method of Establishing Relieving Capacity: **Flow Capacity, K**Certified Value: **.588 Unitless**Test Medium: **Water**Certified Medium: **Liquid**Special Service: **None**Set Pressure Definition: **First Steady Stream**Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
1 - 1.5 NPS	2, 3 NPS	0.121 sq in	[D] 0.393 in	0.098 in	15 - 6000 psi	Water	VIII Div. 1
		0.216 sq in	[E] 0.524 in	0.132 in	15 - 6000 psi	Water	VIII Div. 1
1.5 NPS	2, 3 NPS	0.338 sq in	[F] 0.656 in	0.164 in	15 - 5000 psi	Water	VIII Div. 1
1.5 - 2 NPS	3 NPS	0.558 sq in	[G] 0.843 in	0.211 in	15 - 3600 psi	Water	VIII Div. 1
		0.871 sq in	[H] 1.053 in	0.263 in	15 - 3000 psi	Water	VIII Div. 1
2 - 3 NPS	3, 4 NPS	1.429 sq in	[J] 1.349 in	0.337 in	15 - 3000 psi	Water	VIII Div. 1
3 NPS	4, 6 NPS	2.04 sq in	[K] 1.611 in	0.403 in	15 - 2500 psi	Water	VIII Div. 1
3 - 4 NPS	4, 6 NPS	3.167 sq in	[L] 2.008 in	0.502 in	15 - 1500 psi	Water	VIII Div. 1
4 NPS	6 NPS	3.986 sq in	[M] 2.255 in	0.564 in	15 - 1200 psi	Water	VIII Div. 1
		4.817 sq in	[N] 2.476 in	0.619 in	15 - 1000 psi	Water	VIII Div. 1
		7.082 sq in	[P] 3.003 in	0.751 in	15 - 1000 psi	Water	VIII Div. 1
6 NPS	8 NPS	12.266 sq in	[Q] 3.951 in	0.988 in	15 - 600 psi	Water	VIII Div. 1
	8, 10 NPS	17.76 sq in	[R] 4.755 in	1.189 in	15 - 300 psi	Water	VIII Div. 1
8 NPS	10 NPS	28.86 sq in	[T] 6.061 in	1.515 in	15 - 300 psi	Water	VIII Div. 1

location: Sharp Street, Worsley, Manchester, Lancashire M28 3NA United Kingdom

Certification
Number: **06039**Design Series
or catalog number **WB 300/400**Type Classification: **Safety Relief Valve**Capacity Tests: **Sec. VIII Div. 1 at National Board T L (Picaway) on February 09, 1980**Method of Establishing Relieving Capacity: **Flow Capacity, K**Certified Value: **.878 Unitless**Test Medium: **Steam**Certified Medium: **Steam & Air/Gas**Set Pressure Definition: **Initial Audible Discharge**Blowdown: **Adjustable**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
1 - 1.5 NPS	2, 3 NPS	0.122 sq in	[D] 0.393 in	0.098 in	15 - 2900 psi	Steam	VIII Div. 1
					15 - 6000 psi	Air	VIII Div. 1
		0.216 sq in	[E] 0.524 in	0.132 in	15 - 2900 psi	Steam	VIII Div. 1
					15 - 6000 psi	Air	VIII Div. 1
1.5 NPS	2, 3 NPS	0.338 sq in	[F] 0.656 in	0.164 in	15 - 2900 psi	Steam	VIII Div. 1
					15 - 5000 psi	Air	VIII Div. 1
1.5 - 2 NPS	3 NPS	0.558 sq in	[G] 0.843 in	0.26 in	15 - 2900 psi	Steam	VIII Div. 1
					15 - 3600 psi	Air	VIII Div. 1
		0.871 sq in	[H] 1.053 in	0.263 in	15 - 2900 psi	Steam	VIII Div. 1
					15 - 3000 psi	Air	VIII Div. 1
2 - 3 NPS	3, 4 NPS	1.429 sq in	[J] 1.349 in	0.337 in	15 - 2900 psi	Steam	VIII Div. 1
					15 - 3000 psi	Air	VIII Div. 1
3 NPS	4, 6 NPS	2.038 sq in	[K] 1.611 in	0.403 in	15 - 2500 psi	Air	VIII Div. 1
						Steam	VIII Div. 1
3 - 4 NPS	4, 6 NPS	3.167 sq in	[L] 2.008 in	0.502 in	15 - 1500 psi	Air	VIII Div. 1
						Steam	VIII Div. 1
4 NPS	6 NPS	3.994 sq in	[M] 2.255 in	0.563 in	15 - 1200 psi	Air	VIII Div. 1
						Steam	VIII Div. 1
		4.815 sq in	[N] 2.476 in	0.619 in	15 - 1000 psi	Air	VIII Div. 1
						Steam	VIII Div. 1
		7.082 sq in	[P] 3.003 in	0.751 in	15 - 1000 psi	Air	VIII Div. 1
						Steam	VIII Div. 1
6 NPS	8 NPS	12.26 sq in	[Q] 3.951 in	0.988 in	15 - 600 psi	Air	VIII Div. 1
						Steam	VIII Div. 1
	8, 10 NPS	17.76 sq in	[R] 4.755 in	1.188 in	15 - 300 psi	Air	VIII Div. 1
						Steam	VIII Div. 1
8 NPS	10 NPS	28.86 sq in	[T] 6.061 in	1.515 in	15 - 300 psi	Air	VIII Div. 1
						Steam	VIII Div. 1

Certification Number: **06062** Design Series or catalog number: **746-1, JCE/1**

Type Classification: **Safety Relief Valve**

Capacity Tests: **Sec. VIII Div. 1 at National Board T L (Picaway) on December 13, 1990**

Method of Establishing Relieving Capacity: **Flow Capacity, K**

Certified Value: **.738 Unitless**

Test Medium: **Steam & Air/Gas**

Certified Medium: **Steam & Air/Gas**

Special Service: **None**

Set Pressure Definition: **Initial Audible Discharge**

Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
1 NPS	1.5 NPS	0.644 sq in	0.906 in	0.227 in	15 - 580 psi	Air	VIII Div. 1
						Steam	VIII Div. 1
1.25 NPS	2 NPS	1.024 sq in	1.142 in	0.285 in	15 - 580 psi	Air	VIII Div. 1
						Steam	VIII Div. 1
1.5 NPS	2.5 NPS	1.667 sq in	1.457 in	0.364 in	15 - 580 psi	Air	VIII Div. 1
						Steam	VIII Div. 1
2 NPS	3 NPS	2.576 sq in	1.811 in	0.453 in	15 - 580 psi	Air	VIII Div. 1
						Steam	VIII Div. 1
2.5 NPS	4 NPS	4.382 sq in	2.362 in	0.59 in	15 - 507 psi	Air	VIII Div. 1
						Steam	VIII Div. 1
3 NPS	4 NPS	6.664 sq in	2.913 in	0.728 in	15 - 464 psi	Air	VIII Div. 1
						Steam	VIII Div. 1
4 NPS	6 NPS	10.303 sq in	3.622 in	0.905 in	15 - 362 psi	Air	VIII Div. 1
						Steam	VIII Div. 1

Certification Number: **06073** Design Series or catalog number: **746-3, JCE/3 (Liquids)**

Type Classification: **Relief Valve**

Capacity Tests: **Sec. VIII Div. 1 at National Board T L (Picaway) on December 13, 1990**

Method of Establishing Relieving Capacity: **Flow Capacity, K**

Certified Value: **.482 Unitless**

Test Medium: **Water**

Certified Medium: **Liquid**

Set Pressure Definition: **First Steady Stream**

Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
1 NPS	1.5 NPS	0.644 sq in	0.906 in	0.227 in	15 - 580 psi	Water	VIII Div. 1
1.25 NPS	2 NPS	1.024 sq in	1.142 in	0.285 in	15 - 580 psi	Water	VIII Div. 1
1.5 NPS	2.5 NPS	1.667 sq in	1.457 in	0.364 in	15 - 580 psi	Water	VIII Div. 1
2 NPS	3 NPS	2.576 sq in	1.811 in	0.453 in	15 - 580 psi	Water	VIII Div. 1
2.5 NPS	4 NPS	4.382 sq in	2.362 in	0.59 in	15 - 507 psi	Water	VIII Div. 1
3 NPS	4 NPS	6.664 sq in	2.913 in	0.728 in	15 - 464 psi	Water	VIII Div. 1
4 NPS	6 NPS	10.303 sq in	3.622 in	0.905 in	15 - 362 psi	Water	VIII Div. 1

location: Sharp Street, Worsley, Manchester, Lancashire M28 3NA United Kingdom

Certification
Number: **06084**Design Series
or catalog number **WB 300B**Type Classification: **Safety Relief Valve**Capacity Tests: **Sec. VIII Div. 1 at National Board T L (Worthington) on October 21, 1991**Method of Establishing Relieving Capacity: **Flow Capacity, K**Certified Value: **.833 Unitless**Test Medium: **Air/Gas**Certified Medium: **Air/Gas**Set Pressure Definition: **Initial Audible Discharge**Blowdown: **Adjustable**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
1.5 - 2 NPS	2, 2.5 NPS	0.338 sq in	[F] 0.656 in	0.164 in	15 - 5000 psi	Air	VIII
	2.5, 3 NPS	0.558 sq in	[G] 0.843 in	0.21 in	15 - 3600 psi	Air	VIII
	3 NPS	0.871 sq in	[H] 1.053 in	0.263 in	15 - 2750 psi	Air	VIII
2 - 3 NPS	3, 4 NPS	1.429 sq in	[J] 1.349 in	0.337 in	15 - 2700 psi	Air	VIII
3 NPS	4, 6 NPS	2.04 sq in	[K] 1.611 in	0.402 in	15 - 2160 psi	Air	VIII
3 - 4 NPS	4, 6 NPS	3.167 sq in	[L] 2.008 in	0.502 in	15 - 1500 psi	Air	VIII
4 NPS	6 NPS	3.986 sq in	[M] 2.255 in	0.563 in	15 - 1100 psi	Air	VIII
		4.817 sq in	[N] 2.476 in	0.619 in	15 - 1000 psi	Air	VIII
		7.081 sq in	[P] 3.003 in	0.751 in	15 - 1000 psi	Air	VIII
6 NPS	8 NPS	12.265 sq in	[Q] 3.951 in	0.987 in	15 - 600 psi	Air	VIII
	8, 10 NPS	17.76 sq in	[R] 4.755 in	1.188 in	15 - 300 psi	Air	VIII
8 NPS	10 NPS	28.85 sq in	[T] 6.061 in	1.515 in	15 - 300 psi	Air	VIII

Certification
Number: **06095**Design Series
or catalog number **20R (Liquid) (4, 5, 8, 9 pilots) 4FR3, 4FR9, 8FR3, 8FR9**Type Classification: **Pilot Operated Pressure Relief Valve**Capacity Tests: **Sec. VIII Div. 1 at National Board T L (Worthington) on October 15, 1996**Method of Establishing Relieving Capacity: **Flow Capacity, K**Certified Value: **.696 Unitless**Certification Provisions: **per CC 1945**Test Medium: **Water**Certified Medium: **Liquid**Set Pressure Definition: **First Steady Stream**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
1 - 1.5 NPS	2 NPS	0.164 sq in	[D] 0.656 in	0.102 in	29 - 6170 psi	Water	VIII Div. 1
		0.256 sq in	[E] 0.656 in	0.159 in	15 - 6170 psi	Water	VIII Div. 1
1.5 NPS	3 NPS	0.616 sq in	[G] 1.053 in	0.212 in	29 - 6170 psi	Water	VIII Div. 1
2 NPS	3 NPS	0.616 sq in	[G] 1.348 in	0.163 in	15 - 6170 psi	Water	VIII Div. 1
		0.871 sq in	[H] 1.348 in	0.232 in	15 - 6170 psi	Water	VIII Div. 1
3 NPS	4 NPS	1.427 sq in	[J] 2.008 in	0.301 in	29 - 3705 psi	Water	VIII Div. 1
		2.139 sq in	[K] 2.008 in	0.451 in	15 - 3705 psi	Water	VIII Div. 1
4 NPS	6 NPS	3.167 sq in	[L] 3 in	0.448 in	29 - 3705 psi	Water	VIII Div. 1
		4.307 sq in	[M] 3 in	0.609 in	29 - 1480 psi	Water	VIII Div. 1
		5.162 sq in	[N] 3 in	0.73 in	15 - 1480 psi	Water	VIII Div. 1
6 NPS	8 NPS	12.864 sq in	[Q] 4.755 in	1.147 in	29 - 1480 psi	Water	VIII Div. 1
8 NPS	10 NPS	22.118 sq in	[S] 6.062 in	1.548 in	15 - 1480 psi	Water	VIII Div. 1

location: Sharp Street, Worsley, Manchester, Lancashire M28 3NA United Kingdom

Certification Number: **06107** Design Series or catalog number: **20F (Liquid) (B, C, 4, 5, 8, 9 pilots) 4FF3, 4FF9, 8FF3, 8FF9**

Type Classification: Pilot Operated Pressure Relief Valve

Capacity Tests: Sec. VIII Div. 1 at National Board T L (Worthington) on October 15, 1996

Method of Establishing Relieving Capacity: Flow Capacity, K

Certified Value: .696 Unitless

Test Medium: Water

Certified Medium: Liquid

Set Pressure Definition: First Steady Stream

Blowdown: Fixed

Scope of Nominal Size and Set Pressure Ranges:

Inlet Size	Outlet Size	Flow Area	Orifice [designator] diameter	Lift	Set Pressure Range	Media	Code Section
1 - 1.5 NPS	2 NPS	0.338 sq in	[F] 0.656 in	0.21 in	29 - 6170 psi	Water	VIII Div. 1
1.5 NPS	3 NPS	0.871 sq in	[H] 1.053 in	0.3 in	29 - 6170 psi	Water	VIII Div. 1
2 NPS	3 NPS	1.427 sq in	[J] 1.348 in	0.38 in	29 - 6170 psi	Water	VIII Div. 1
3 NPS	4 NPS	3.167 sq in	[L] 2.008 in	0.668 in	29 - 3705 psi	Water	VIII Div. 1
4 NPS	6 NPS	7.068 sq in	[P] 3 in	1 in	29 - 3705 psi	Water	VIII Div. 1
6 NPS	8 NPS	17.758 sq in	[R] 4.755 in	1.584 in	29 - 1480 psi	Water	VIII Div. 1
8 NPS	10 NPS	28.86 sq in	[T] 6.062 in	2.021 in	29 - 1480 psi	Water	VIII Div. 1

Certification Number: **06118** Design Series or catalog number: **20F(2,4,5,8,9 pilots) 2FF3, 2FF9, 4FF3, 4FF9, 8FF3, 8FF9**

Type Classification: Pilot Operated Pressure Relief Valve

Capacity Tests: Sec. VIII Div. 1 at National Board T L (Worthington) on October 16, 1996

Method of Establishing Relieving Capacity: Flow Capacity, K

Certified Value: .849 Unitless

Test Medium: Air/Gas

Certified Medium: Air/Gas

Set Pressure Definition: 1.Pop 2.Initial Audible Discharge

Blowdown: Adjustable and Fixed for Mod. Pilot

Scope of Nominal Size and Set Pressure Ranges:

Inlet Size	Outlet Size	Flow Area	Orifice [designator] diameter	Lift	Set Pressure Range	Media	Code Section
1 - 1.5 NPS	2 NPS	0.338 sq in	[F] 0.656 in	0.164 in	26 - 6170 psi	Air	VIII
1.5 NPS	3 NPS	0.871 sq in	[H] 1.053 in	0.264 in	26 - 6170 psi	Air	VIII
2 NPS	3 NPS	1.427 sq in	[J] 1.348 in	0.337 in	26 - 6170 psi	Air	VIII
3 NPS	4 NPS	3.167 sq in	[L] 2.008 in	0.585 in	26 - 3705 psi	Air	VIII
4 NPS	6 NPS	7.068 sq in	[P] 3 in	0.875 in	26 - 3705 psi	Air	VIII
6 NPS	8 NPS	17.758 sq in	[R] 4.755 in	1.386 in	26 - 1480 psi	Air	VIII
8 NPS	10 NPS	28.86 sq in	[T] 6.062 in	1.768 in	26 - 1480 psi	Air	VIII

location: Sharp Street, Worsley, Manchester, Lancashire M28 3NA United Kingdom

Certification Number: **06129** Design Series or catalog number: **20R (2,4,5,8,9 pilots) 2FR3, 2FR9, 4FR3, 4FR9, 8FR3, 8FR9**

Type Classification: Pilot Operated Pressure Relief Valve

Capacity Tests: Sec. VIII Div. 1 at National Board T L (Worthington) on October 15, 1996

Method of Establishing Relieving Capacity: Flow Capacity, K

Certified Value: .849 Unitless

Certification Provisions: per CC 1945

Test Medium: Air/Gas

Certified Medium: Air/Gas

Set Pressure Definition: 1.Pop 2.Initial Audible Discharge

Blowdown: Adjustable and Fixed for Mod. Pilot

Scope of Nominal Size and Set Pressure Ranges:

Inlet Size	Outlet Size	Flow Area	Orifice [designator] diameter	Lift	Set Pressure Range	Media	Code Section
1 - 1.5 NPS	2 NPS	0.164 sq in	[D] 0.656 in	0.08 in	26 - 6170 psi	Air	VIII
		0.256 sq in	[E] 0.656 in	0.125 in	26 - 6170 psi	Air	VIII Div. 1
1.5 NPS	3 NPS	0.616 sq in	[G] 1.053 in	0.186 in	26 - 6170 psi	Air	VIII Div. 1
2 NPS	3 NPS	0.616 sq in	[G] 1.348 in	0.145 in	15 - 6170 psi	Air	VIII Div. 1
		0.871 sq in	[H] 1.348 in	0.205 in	15 - 6170 psi	Air	VIII Div. 1
3 NPS	4 NPS	1.427 sq in	[J] 2.008 in	0.264 in	26 - 3705 psi	Air	VIII Div. 1
		2.139 sq in	[K] 2.008 in	0.394 in	15 - 3705 psi	Air	VIII Div. 1
4 NPS	6 NPS	3.167 sq in	[L] 3 in	0.392 in	26 - 3705 psi	Air	VIII Div. 1
		4.307 sq in	[M] 3 in	0.532 in	15 - 3705 psi	Air	VIII Div. 1
		5.162 sq in	[N] 3 in	0.638 in	15 - 3705 psi	Air	VIII Div. 1
6 NPS	8 NPS	12.864 sq in	[Q] 4.755 in	1.003 in	26 - 1480 psi	Air	VIII Div. 1
8 NPS	10 NPS	22.118 sq in	[S] 6.062 in	0.531 in	26 - 1480 psi	Air	VIII Div. 1

Certification Number: **06130** Design Series or catalog number: **D Series, 716H7**

Type Classification: Safety Relief Valve

Capacity Tests: Sec. VIII Div. 1 at National Board T L (Worthington) on December 07, 1999

Method of Establishing Relieving Capacity: Flow Capacity, Slope

Certified Value: 2.55 SCFM/PSIA

Certified Value (alternate medium): 7.16 PPH/PSIA

Test Medium: Steam & Air/Gas

Certified Medium: Steam & Air/Gas

Set Pressure Definition: Initial Audible Discharge

Blowdown: Fixed

Scope of Nominal Size and Set Pressure Ranges:

Inlet Size	Outlet Size	Flow Area	Orifice [designator] diameter	Lift	Set Pressure Range	Media	Code Section
0.5 - 1 NPS	1 NPS	0.169 sq in	0.464 in	0.116 in	15 - 740 psi	Air	VIII Div. 1
						Steam	VIII Div. 1

Certification Number: **06141** Design Series or catalog number: **D Series (Liquids), 716H7**

Type Classification: Safety Relief Valve

Capacity Tests: Sec. VIII Div. 1 at National Board T L (Worthington) on December 07, 1999

Method of Establishing Relieving Capacity: Flow Capacity, Flow Factor

Certified Value: 3.25 GPM/SQ.RT. PSID

Test Medium: Water

Certified Medium: Liquid

Set Pressure Definition: First Steady Stream

Blowdown: Fixed

Scope of Nominal Size and Set Pressure Ranges:

Inlet Size	Outlet Size	Flow Area	Orifice [designator] diameter	Lift	Set Pressure Range	Media	Code Section
0.5 - 1 NPS	1 NPS	0.169 sq in	0.464 in	0.116 in	15 - 740 psi	Water	VIII Div. 1

location: Sharp Street, Worsley, Manchester, Lancashire M28 3NA United Kingdom

Certification
Number: **06185**Design Series
or catalog number **776**Type Classification: **Safety Relief Valve**Capacity Tests: **Sec. VIII Div. 1 at National Board T L (Worthington) on February 06, 2004**Method of Establishing Relieving Capacity: **Flow Capacity, K**Certified Value: **.737 Unitless**Test Medium: **Air/Gas**Certified Medium: **Air/Gas**Special Service: **Non-refrigerated liquified compressed gases**Set Pressure Definition: **Initial Audible Discharge**Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
0.5 - 1 NPS	.75, 1 NPS	0.169 sq in	0.464 in	0.116 in	15 - 600 psi	Air	VIII Div. 1
0.75 - 1 NPS	1.25 NPS	0.486 sq in	0.787 in	0.196 in	15 - 560 psi	Air	VIII Div. 1
1.25 NPS	1.5 NPS	0.644 sq in	0.906 in	0.226 in	15 - 500 psi	Air	VIII Div. 1
1.5 NPS	2 NPS	1.024 sq in	1.142 in	0.286 in	15 - 500 psi	Air	VIII Div. 1
2 NPS	2.5 NPS	1.666 sq in	1.456 in	0.364 in	15 - 450 psi	Air	VIII Div. 1

Certification
Number: **81010**Design Series
or catalog number **RBH**Holder Designation: **RBH, RBH-T**Type Classification: **Rupture Disk Device**Capacity Tests: **Sec. VIII Div. 1 at National Board T L (Worthington) on December 04, 1998**Method of Establishing Relieving Capacity: **Resistance Factor, 3 Size, Krg**Certified Value: **.5 Unitless**Test Medium: **Air/Gas**Certified Medium: **Air or gases (Krg)**Set Pressure Definition: **Burst Pressure**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
0.5 NPS		0.3 sq in			87 - 5500 psi		VIII Div. 1
0.75 NPS		0.53 sq in			87 - 5500 psi		VIII Div. 1
1 NPS		0.86 sq in			29 - 5500 psi		VIII Div. 1
1.5 NPS		2.04 sq in			26 - 5500 psi		VIII Div. 1
2 NPS		3.36 sq in			23 - 5500 psi		VIII Div. 1
2.5 NPS		4.79 sq in			20 - 3750 psi		VIII Div. 1
3 NPS		7.39 sq in			18 - 2625 psi		VIII Div. 1
4 NPS		12.73 sq in			14.5 - 1950 psi		VIII Div. 1
6 NPS		28.89 sq in			14.5 - 900 psi		VIII Div. 1
8 NPS		50.03 sq in			14.5 - 750 psi		VIII Div. 1
10 NPS		77.72 sq in			14.5 - 600 psi		VIII Div. 1
12 NPS		113.1 sq in			14.5 - 500 psi		VIII Div. 1
14 NPS		137.9 sq in			14.5 - 400 psi		VIII Div. 1
16 NPS		182.7 sq in			14.5 - 300 psi		VIII Div. 1
18 NPS		233.7 sq in			14.5 - 250 psi		VIII Div. 1
20 NPS		291 sq in			14.5 - 200 psi		VIII Div. 1

location: Sharp Street, Worsley, Manchester, Lancashire M28 3NA United Kingdom

Certification
Number: **81122**Design Series
or catalog number **SANIVENT**Type Classification: **Rupture Disk Device**Capacity Tests: **Sec. VIII Div. 1 at National Board T L (Worthington) on March 05, 2010**Method of Establishing Relieving Capacity: **Resistance Factor, 3 Size, Krg**Certified Value: **1.68 Unitless**Test Medium: **Air**Certified Medium: **Air or gases (Krg)**Special Service: **None**Set Pressure Definition: **Burst Pressure**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
1 NPS		0.39 sq in			130 - 145 psi		VIII Div. 1
1.5 NPS		1.08 sq in			22 - 145 psi		VIII Div. 1
2 NPS		2.16 sq in			22 - 125 psi		VIII Div. 1
2.5 NPS		3.49 sq in			22 - 110 psi		VIII Div. 1
3 NPS		5.13 sq in			18 - 90 psi		VIII Div. 1
4 NPS		9.12 sq in			18 - 75 psi		VIII Div. 1

Certification
Number: **81133**Design Series
or catalog number **LRF**Holder Designation: **RBH, RBH-T**Type Classification: **Rupture Disk Device**Capacity Tests: **Sec. VIII Div. 1 at National Board T L (Worthington) on March 04, 2010**Method of Establishing Relieving Capacity: **Resistance Factor, 3 Size, Krgl**Certified Value: **1.39 Unitless**Test Medium: **Air**Certified Medium: **Air or gases, and liquid (Krgl)**Set Pressure Definition: **Burst Pressure**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
1 NPS		0.85 sq in			130 - 5500 psi		VIII Div. 1
1.5 NPS		2 sq in			105 - 5500 psi		VIII Div. 1
2 NPS		3.28 sq in			75 - 5500 psi		VIII Div. 1
2.5 NPS		4.67 sq in			79 - 3750 psi		VIII Div. 1
3 NPS		7.25 sq in			65 - 2625 psi		VIII Div. 1
4 NPS		12.42 sq in			55 - 1950 psi		VIII Div. 1
6 NPS		28.28 sq in			45 - 900 psi		VIII Div. 1
8 NPS		48.93 sq in			45 - 750 psi		VIII Div. 1
10 NPS		76.97 sq in			45 - 600 psi		VIII Div. 1
12 NPS		110.5 sq in			45 - 500 psi		VIII Div. 1
14 NPS		135 sq in			45 - 400 psi		VIII Div. 1
16 NPS		178.9 sq in			45 - 300 psi		VIII Div. 1
18 NPS		228.9 sq in			45 - 250 psi		VIII Div. 1
20 NPS		285.1 sq in			45 - 200 psi		VIII Div. 1

Emerson Automation Solutions Final Control US LP (AGC)

NB#: 01045

location: 3950 Greenbriar Drive, Stafford, TX 77477 United States

Acceptable Abbrev.: EMRT

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location: 3950 Greenbriar Drive, Stafford, TX 77477 United States

Acceptable Abbrev.: EMRT

Certification
Number: **01045**Design Series
or catalog number**JOS-E-RL/JBS-E-RL (Restricted Lift version of cert 15208)**Type Classification: **Safety Relief Valve**Capacity Tests: **Sec. VIII Div. 1 at Anderson Greenwood & Co. (Stafford TX) on May 26, 2015**Method of Establishing Relieving Capacity: **Flow Capacity, K**Certified Value: **0.865 Unitless**Test Medium: **Steam & Air/Gas**Certified Medium: **Steam & Air/Gas**Special Service: **None**Set Pressure Definition: **Pop**Blowdown: **Adjustable by Single Ring**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
0.75 - 1.5 NPS	2 - 3 NPS	0.1244 sq in	[D] 0.398 in	0.08 in	15 - 15000 psi	Air	VIII Div. 1
					15 - 2000 psi	Steam	VIII Div. 1
1 - 1.5 NPS	2 - 3 NPS	0.187 sq in	0.488 in	0.08 in	15 - 2000 psi	Steam	VIII Div. 1
					15 - 8490 psi	Air	VIII Div. 1
		0.2214 sq in	[E] 0.531 in	0.08 in	15 - 15000 psi	Air	VIII Div. 1
					15 - 2000 psi	Steam	VIII Div. 1
		0.3473 sq in	[F] 0.665 in	0.08 in	15 - 15000 psi	Air	VIII Div. 1
					15 - 2000 psi	Steam	VIII Div. 1
1.5 - 2 NPS	2.5, 3 NPS	0.5674 sq in	[G] 0.85 in	0.08 in	15 - 15000 psi	Air	VIII Div. 1
					15 - 2000 psi	Steam	VIII Div. 1
	3 NPS	0.8874 sq in	[H] 1.063 in	0.099 in	15 - 15000 psi	Air	VIII Div. 1
					15 - 2000 psi	Steam	VIII Div. 1
2 - 3 NPS	3, 4 NPS	1.453 sq in	[J] 1.36 in	0.127 in	15 - 10000 psi	Air	VIII Div. 1
					15 - 2000 psi	Steam	VIII Div. 1
3 NPS	4, 6 NPS	2.076 sq in	[K] 1.626 in	0.152 in	15 - 10000 psi	Air	VIII Div. 1
					15 - 2000 psi	Steam	VIII Div. 1
3 - 4 NPS	4, 6 NPS	3.221 sq in	[L] 2.025 in	0.189 in	15 - 2000 psi	Steam	VIII Div. 1
					15 - 5000 psi	Air	VIII Div. 1
	6 NPS	4.065 sq in	[M] 2.275 in	0.213 in	15 - 2000 psi	Steam	VIII Div. 1
					15 - 5000 psi	Air	VIII Div. 1
4 NPS	6 NPS	2.714 sq in	1.859 in	0.18 in	15 - 1000 psi	Steam	VIII Div. 1
					15 - 3000 psi	Air	VIII Div. 1
		4.9 sq in	[N] 2.498 in	0.234 in	15 - 1480 psi	Steam	VIII Div. 1
					15 - 3000 psi	Air	VIII Div. 1
		5.444 sq in	2.633 in	0.255 in	15 - 2250 psi	Air	VIII Div. 1
					15 - 2250 psi	Steam	VIII Div. 1
		7.206 sq in	[P] 3.029 in	0.284 in	15 - 1480 psi	Steam	VIII Div. 1
					15 - 3000 psi	Air	VIII Div. 1
6 NPS	8 NPS	11.045 sq in	3.75 in	0.373 in	15 - 1000 psi	Steam	VIII Div. 1
					15 - 3750 psi	Air	VIII Div. 1
		12.174 sq in	3.937 in	0.373 in	15 - 2250 psi	Air	VIII Div. 1
					15 - 2250 psi	Steam	VIII Div. 1
	10 NPS	12.236 sq in	3.947 in	0.449 in	15 - 2250 psi	Air	VIII Div. 1
					15 - 2250 psi	Steam	VIII Div. 1
	8 NPS	12.472 sq in	[Q] 3.985 in	0.373 in	15 - 1480 psi	Steam	VIII Div. 1
					15 - 3000 psi	Air	VIII Div. 1
		15.288 sq in	4.412 in	0.424 in	15 - 2250 psi	Air	VIII Div. 1
					15 - 2250 psi	Steam	VIII Div. 1
	8, 10 NPS	18.065 sq in	[R] 4.796 in	0.449 in	15 - 1480 psi	Air	VIII Div. 1
					15 - 1480 psi	Steam	VIII Div. 1
8 NPS	10 NPS	18.254 sq in	4.821 in	0.572 in	15 - 2250 psi	Air	VIII Div. 1
					15 - 2250 psi	Steam	VIII Div. 1
		29.359 sq in	[T] 6.114 in	0.572 in	15 - 740 psi	Air	VIII Div. 1
					15 - 740 psi	Steam	VIII Div. 1
		31.47 sq in	[T2] 6.33 in	0.592 in	15 - 740 psi	Air	VIII Div. 1
					15 - 740 psi	Steam	VIII Div. 1

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Acceptable Abbrev.: EMRT

...Continued							
Inlet Size	Outlet Size	Flow Area	Orifice [designator] diameter	Lift	Set Pressure Range	Media	Code Section
10 - 12 NPS	14, 16 NPS	47.84 sq in	[V] 7.805 in	0.731 in	15 - 325 psi	Air	VIII Div. 1
						Steam	VIII Div. 1
12 - 14 NPS	16, 20 NPS	78.08 sq in	[W] 9.971 in	0.933 in	15 - 325 psi	Air	VIII Div. 1
						Steam	VIII Div. 1

Certification Number: **01056** Design Series or catalog number **63B (.312", #5 orifice)**

Type Classification: **Safety Relief Valve**Capacity Tests: **Sec. VIII Div. 1 at Anderson Greenwood & Co. on December 03, 1975**Method of Establishing Relieving Capacity: **Flow Capacity, Slope**Certified Value: **1.18 SCFM/PSIA**Test Medium: **Air/Gas**Certified Medium: **Gas**Set Pressure Definition: **Pop**Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

Inlet Size	Outlet Size	Flow Area	Orifice [designator] diameter	Lift	Set Pressure Range	Media	Code Section
0.5 - 0.75 NPS	1 NPS	0.077 sq in	[#5] 0.312 in	0.15 in	37 - 531 psi	Air	VIII Div. 1

Certification Number: **01067** Design Series or catalog number **63B (.437", #7 orifice)**

Type Classification: **Safety Relief Valve**Capacity Tests: **Sec. VIII Div. 1 at Anderson Greenwood & Co. on December 03, 1975**Method of Establishing Relieving Capacity: **Flow Capacity, Slope**Certified Value: **2.37 SCFM/PSIA**Test Medium: **Air/Gas**Certified Medium: **Gas**Set Pressure Definition: **Pop**Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

Inlet Size	Outlet Size	Flow Area	Orifice [designator] diameter	Lift	Set Pressure Range	Media	Code Section
0.75 NPS	1 NPS	0.15 sq in	[#7] 0.437 in	0.16 in	45 - 374 psi	Air	VIII Div. 1

Emerson Automation Solutions Final Control US LP (AGC)

NB#: 01089

Location: 3950 Greenbriar Drive, Stafford, TX 77477 United States

Acceptable Abbrev.: EMRT

Certification
Number: **01089**Design Series
or catalog number **81, 81P, 83, 86**Type Classification: **Safety Relief Valve**Capacity Tests: **Sec. VIII Div. 1 at Phillips Petroleum on July 08, 1965**Method of Establishing Relieving Capacity: **Flow Capacity, K**Certified Value: **.816 Unitless**Test Medium: **Steam & Air/Gas**Certified Medium: **Steam & Air/Gas**Special Service: **None**Set Pressure Definition: **Pop**Blowdown: **Adjustable**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
0.5 - 2 NPS	.75 - 2 NPS	0.012 sq in	[-2] 0.125 in	0.05 in	20 - 10000 psi	Air	VIII Div. 1
		0.028 sq in	[-3] 0.188 in	0.06 in	20 - 10000 psi	Air	VIII Div. 1
	.75 - 2.5 NPS	0.049 sq in	[-4] 0.25 in	0.09 in	20 - 10000 psi	Air	VIII Div. 1
					20 - 5000 psi	Air	III
					20 - 720 psi	Steam	VIII Div. 1
	1 - 2.5 NPS	0.11 sq in	[-6] 0.375 in	0.12 in	20 - 5000 psi	Air	III
					20 - 9600 psi	Air	VIII Div. 1
0.75 - 2 NPS	1 - 2.5 NPS	0.196 sq in	[-8] 0.5 in	0.16 in	20 - 5000 psi	Air	III
					20 - 6000 psi	Air	VIII Div. 1
					20 - 720 psi	Steam	VIII Div. 1
1.5 NPS	2 NPS	0.307 sq in	[F] 0.625 in	0.28 in	20 - 4040 psi	Air	VIII Div. 1
		0.503 sq in	[G] 0.8 in	0.34 in	20 - 2990 psi	Air	VIII Div. 1
					20 - 720 psi	Steam	VIII Div. 1
1.5 - 2 NPS	3 NPS	0.785 sq in	[H] 1 in	0.41 in	20 - 2580 psi	Air	VIII Div. 1
2 NPS	3 NPS	0.503 sq in	[G] 0.8 in	0.34 in	2511 - 6000 psi	Air	VIII Div. 1
		1.287 sq in	[J] 1.28 in	0.46 in	20 - 1620 psi	Air	VIII Div. 1
					20 - 720 psi	Steam	VIII Div. 1

Certification
Number: **01102**Design Series
or catalog number **81P (Liquids)**Type Classification: **Relief Valve**Capacity Tests: **Sec. VIII Div. 1 at Anderson Greenwood & Co. on November 26, 1985**Method of Establishing Relieving Capacity: **Flow Capacity, K**Certified Value: **.720 Unitless**Test Medium: **Water**Certified Medium: **Liquid**Special Service: **None**Set Pressure Definition: **93% of pop**Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
0.5 - 2 NPS	1 - 2 NPS	0.049 sq in	[-4] 0.25 in	0.09 in	50 - 5000 psi	Water	III
					50 - 6000 psi	Water	I & VIII Div. 1
0.75 - 2 NPS	1 - 2 NPS	0.11 sq in	[-6] 0.375 in	0.13 in	50 - 6000 psi	Water	I & VIII Div. 1
		0.196 sq in	[-8] 0.5 in	0.16 in	50 - 5000 psi	Water	III
					50 - 6000 psi	Water	I & VIII Div. 1
1.5 - 2 NPS	2-3 NPS	0.503 sq in	[G] 0.8 in	0.34 in	50 - 6000 psi	Water	I & VIII Div. 1
2 NPS	3 NPS	1.287 sq in	[J] 1.28 in	0.46 in	50 - 1620 psi	Water	I & VIII Div. 1

Location: 3950 Greenbriar Drive, Stafford, TX 77477 United States

Acceptable Abbrev.: EMRT

Certification
Number: **01113**Design Series
or catalog number **83F**Type Classification: **Safety Relief Valve**Capacity Tests: **Sec. VIII Div. 1 at Anderson Greenwood & Co. on April 14, 1987**Method of Establishing Relieving Capacity: **Flow Capacity, K**Certified Value: **.779 Unitless**Test Medium: **Gas**Certified Medium: **Air/Gas**Set Pressure Definition: **Pop**Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
0.75 NPS	1 NPS	0.26 sq in	[E] 0.576 in	0.178 in	15 - 500 psi	Air	VIII Div. 1
1.5 NPS	2 NPS	0.66 sq in	[G] 0.917 in	0.318 in	15 - 500 psi	Air	VIII Div. 1
2 NPS	3 NPS	1.697 sq in	[J] 1.47 in	0.548 in	15 - 500 psi	Air	VIII Div. 1

Certification
Number: **01124**Design Series
or catalog number **91/94**Type Classification: **Pilot Operated Pressure Relief Valve**Capacity Tests: **Sec. VIII Div. 1 at Anderson Greenwood & Co. on January 18, 1971**Method of Establishing Relieving Capacity: **Flow Capacity, K**Certified Value: **0.77 Unitless**Test Medium: **Gas**Certified Medium: **Air/Gas**Special Service: **None**Set Pressure Definition: **Pop**Blowdown: **Adjustable**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
2 NPS	3 NPS	2.924 sq in	1.93 in	0.83 in	15 - 50 psi	Air	VIII Div. 1
3 NPS	4 NPS	6.243 sq in	2.82 in	1.2 in	15 - 50 psi	Air	VIII Div. 1
4 NPS	6 NPS	10.326 sq in	3.627 in	1.46 in	15 - 50 psi	Air	VIII Div. 1
6 NPS	8 NPS	22.217 sq in	5.32 in	1.88 in	15 - 50 psi	Air	VIII Div. 1
8 NPS	10 NPS	39.571 sq in	7.1 in	2.52 in	15 - 50 psi	Air	VIII Div. 1
10 NPS	12 NPS	56.5 sq in	8.5 in	3.02 in	15 - 50 psi	Air	VIII Div. 1
12 NPS	16 NPS	89.874 sq in	10.7 in	3.8 in	15 - 50 psi	Air	VIII Div. 1

Certification
Number: **01135**Design Series
or catalog number **93**Type Classification: **Pilot Operated Pressure Relief Valve**Capacity Tests: **Sec. VIII Div. 1 at Phillips Petroleum on November 30, 1966**Method of Establishing Relieving Capacity: **Flow Capacity, K**Certified Value: **.845 Unitless**Test Medium: **Gas**Certified Medium: **Air/Gas**Set Pressure Definition: **Pop**Blowdown: **Adjustable**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
2 NPS	3 NPS	2.29 sq in	1.927 in	1.06 in	15 - 50 psi	Air	VIII Div. 1
3 NPS	4 NPS	5.16 sq in	2.81 in	1.24 in	15 - 50 psi	Air	VIII Div. 1
4 NPS	6 NPS	8.74 sq in	3.627 in	1.57 in	15 - 50 psi	Air	VIII Div. 1
6 NPS	8 NPS	19.56 sq in	5.31 in	2.26 in	15 - 50 psi	Air	VIII Div. 1
8 NPS	10 NPS	36.4 sq in	7.1 in	3.12 in	15 - 50 psi	Air	VIII Div. 1
10 NPS	12 NPS	51 sq in	8.5 in	3.02 in	15 - 30 psi	Air	VIII Div. 1
12 NPS	16 NPS	84 sq in	10.7 in	4.71 in	15 - 30 psi	Air	VIII Div. 1

location: 3950 Greenbriar Drive, Stafford, TX 77477 United States

Acceptable Abbrev.: EMRT

Certification
Number: **01146**Design Series
or catalog number **95**Type Classification: **Pilot Operated Pressure Relief Valve**Capacity Tests: **Sec. VIII Div. 1 at Anderson Greenwood & Co. on July 30, 1980**Method of Establishing Relieving Capacity: **Flow Capacity, K**Certified Value: **.852 Unitless**Test Medium: **Gas**Certified Medium: **Air/Gas**Special Service: **None**Set Pressure Definition: **Pop**Blowdown: **Adjustable**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
2 NPS	3 NPS	2.926 sq in	1.93 in	0.96 in	15 - 150 psi	Air	VIII Div. 1
3 NPS	4 NPS	6.246 sq in	2.82 in	1.23 in	15 - 150 psi	Air	VIII Div. 1
4 NPS	6 NPS	10.321 sq in	3.625 in	1.82 in	15 - 150 psi	Air	VIII Div. 1
6 NPS	8 NPS	22.145 sq in	5.31 in	2.2 in	15 - 150 psi	Air	VIII Div. 1

Location: 3950 Greenbriar Drive, Stafford, TX 77477 United States

Acceptable Abbrev.: EMRT

Certification
Number: **01247**Design Series
or catalog number **727**Type Classification: **Pilot Operated Pressure Relief Valve**Capacity Tests: **Sec. VIII Div. 1 at Anderson Greenwood & Co. on August 19, 1987**Method of Establishing Relieving Capacity: **Flow Capacity, K**Certified Value: **.788 Unitless**Test Medium: **Gas**Certified Medium: **Steam & Air/Gas**Set Pressure Definition: **Pop**Blowdown: **Adjustable**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
1.5 NPS	2 NPS	0.25 sq in	[E] 0.564 in	0.058 in	15 - 1480 psi	Air	VIII Div. 1
						Steam	VIII Div. 1
2 NPS	3 NPS	0.629 sq in	[G] 0.895 in	0.14 in	15 - 1480 psi	Air	VIII Div. 1
						Steam	VIII Div. 1
		0.981 sq in	[H] 1.118 in	0.224 in	15 - 1480 psi	Air	VIII Div. 1
						Steam	VIII Div. 1
		1.635 sq in	[J] 1.443 in	0.65 in	15 - 1480 psi	Air	VIII Div. 1
						Steam	VIII Div. 1
3 NPS	4 NPS	1.635 sq in	[J] 1.443 in	0.275 in	15 - 1480 psi	Air	VIII Div. 1
						Steam	VIII Div. 1
		2.298 sq in	[K] 1.711 in	0.41 in	15 - 1480 psi	Air	VIII Div. 1
						Steam	VIII Div. 1
		3.557 sq in	[L] 2.128 in	0.751 in	15 - 1480 psi	Air	VIII Div. 1
						Steam	VIII Div. 1
4 NPS	6 NPS	3.557 sq in	[L] 2.128 in	0.374 in	15 - 1480 psi	Air	VIII Div. 1
						Steam	VIII Div. 1
		4.505 sq in	[M] 2.395 in	0.659 in	15 - 1480 psi	Air	VIII Div. 1
						Steam	VIII Div. 1
		5.425 sq in	[N] 2.628 in	0.824 in	15 - 1480 psi	Air	VIII Div. 1
						Steam	VIII Div. 1
		7.911 sq in	[P] 3.174 in	1.536 in	15 - 1480 psi	Air	VIII Div. 1
						Steam	VIII Div. 1
6 NPS	8 NPS	13.813 sq in	[Q] 4.194 in	1.302 in	15 - 1480 psi	Air	VIII Div. 1
						Steam	VIII Div. 1
		20 sq in	[R] 5.046 in	2.304 in	15 - 1480 psi	Air	VIII Div. 1
						Steam	VIII Div. 1
		22.99 sq in	[RR] 5.41 in	2.304 in	15 - 1480 psi	Air	VIII Div. 1
						Steam	VIII Div. 1
8 NPS	10 NPS	32.5 sq in	[T] 6.433 in	2.943 in	15 - 1480 psi	Air	VIII Div. 1
						Steam	VIII Div. 1

Location: 3950 Greenbriar Drive, Stafford, TX 77477 United States

Acceptable Abbrev.: EMRT

Certification Number: **01258** Design Series or catalog number: **9340/9390**

Type Classification: **Pilot Operated Pressure Relief Valve**Capacity Tests: **Sec. VIII Div. 1 at Anderson Greenwood & Co. on September 08, 1989**Method of Establishing Relieving Capacity: **Flow Capacity, K**Certified Value: **0.629 Unitless**Test Medium: **Air/Gas**Certified Medium: **Air/Gas**Special Service: **None**Set Pressure Definition: **1.Pop 2.Initial Audible Discharge**Blowdown: **Adjustable and Fixed for Mod. Pilot**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
2 NPS	3 NPS	3.35 sq in	2.067 in	0.545 in	15 - 50 psi	Air	VIII Div. 1
3 NPS	4 NPS	7.39 sq in	3.068 in	0.8 in	15 - 50 psi	Air	VIII Div. 1
4 NPS	6 NPS	12.73 sq in	4.026 in	1.05 in	15 - 50 psi	Air	VIII Div. 1
6 NPS	8 NPS	28.89 sq in	6.065 in	1.619 in	15 - 50 psi	Air	VIII Div. 1
8 NPS	10 NPS	50 sq in	7.981 in	2.125 in	15 - 50 psi	Air	VIII Div. 1
10 NPS	12 NPS	78.85 sq in	10.02 in	2.675 in	15 - 50 psi	Air	VIII Div. 1
12 NPS	16 NPS	113 sq in	12 in	3.25 in	15 - 50 psi	Air	VIII Div. 1

Certification Number: **01269** Design Series or catalog number: **61**

Type Classification: **Safety Relief Valve**Capacity Tests: **Sec. VIII Div. 1 at Anderson Greenwood & Co. on December 22, 1992**Method of Establishing Relieving Capacity: **Flow Capacity, Slope**Certified Value: **1.77 SCFM/PSIA**Test Medium: **Air/Gas**Certified Medium: **Air/Gas**Special Service: **None**Set Pressure Definition: **Pop**Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
0.5 NPS	1 NPS	0.11 sq in	0.375 in	0.175 in	30 - 500 psi	Air	VIII

Location: 3950 Greenbriar Drive, Stafford, TX 77477 United States

Acceptable Abbrev.: EMRT

Certification Number: **01292** Design Series or catalog number **243/249/443/449/546/843/849/943/5046/5049/8043/8049**

Type Classification: Pilot Operated Pressure Relief Valve

Capacity Tests: Sec. VIII Div. 1 at Anderson Greenwood & Co. on August 08, 1997

Method of Establishing Relieving Capacity: Flow Capacity, K

Certified Value: .878 Unitless

Test Medium: Air/Gas

Certified Medium: Steam & Air/Gas

Special Service: None

Set Pressure Definition: 1.Pop 2.Initial Audible Discharge

Blowdown: Adjustable and Fixed for Mod. Pilot

Scope of Nominal Size and Set Pressure Ranges:

Inlet Size	Outlet Size	Flow Area	Orifice [designator] diameter	Lift	Set Pressure Range	Media	Code Section
1 - 1.5 NPS	2 NPS	0.357 sq in	[F] 0.674 in	0.25 in	15 - 15000 psi	Air	VIII
					15 - 720 psi	Steam	VIII Div. 1
1.5 NPS	2, 3 NPS	0.913 sq in	[H] 1.078 in	0.446 in	15 - 10600 psi	Air	VIII
					25 - 720 psi	Steam	VIII
2 NPS	3 NPS	1.496 sq in	[J] 1.38 in	0.637 in	15 - 15000 psi	Air	VIII
					15 - 720 psi	Steam	VIII
3 NPS	4 NPS	3.317 sq in	[L] 2.055 in	1.155 in	15 - 10600 psi	Air	VIII
					15 - 720 psi	Steam	VIII
4 NPS	6 NPS	7.645 sq in	[P] 3.12 in	1.62 in	15 - 10600 psi	Air	VIII
					15 - 720 psi	Steam	VIII
6 NPS	8, 10 NPS	18.597 sq in	[R] 4.866 in	2.435 in	15 - 10600 psi	Air	VIII
					15 - 720 psi	Steam	VIII
8 NPS	10 NPS	30.582 sq in	[T] 6.24 in	3.12 in	15 - 10600 psi	Air	VIII
					15 - 720 psi	Steam	VIII

Certification Number: **01304** Design Series or catalog number **253/259/453/459/853/859/953/959/5059/8053/8059**

Type Classification: Pilot Operated Pressure Relief Valve

Capacity Tests: Sec. VIII Div. 1 at Anderson Greenwood & Co. (Stafford TX) on July 31, 1997

Method of Establishing Relieving Capacity: Flow Capacity, K

Certified Value: .627 Unitless

Test Medium: Air/Gas

Certified Medium: Air/Gas

Special Service: None

Set Pressure Definition: 1.Pop 2.Initial Audible Discharge

Blowdown: Adjustable and Fixed for Mod. Pilot

Scope of Nominal Size and Set Pressure Ranges:

Inlet Size	Outlet Size	Flow Area	Orifice [designator] diameter	Lift	Set Pressure Range	Media	Code Section
1 - 1.5 NPS	2 NPS	0.205 sq in	[D] 0.674 in	0.079 in	15 - 15000 psi	Air	VIII Div. 1
		0.356 sq in	[E] 0.674 in	0.137 in	15 - 15000 psi	Air	VIII Div. 1
1.5 NPS	2, 3 NPS	0.831 sq in	[G] 1.078 in	0.241 in	15 - 10600 psi	Air	VIII Div. 1
2 NPS	3 NPS	0.85 sq in	[G] 1.38 in	0.191 in	15 - 15000 psi	Air	VIII Div. 1
		1.312 sq in	[H] 1.38 in	0.295 in	15 - 15000 psi	Air	VIII Div. 1
3 NPS	3 NPS	2.132 sq in	[J] 2.055 in	0.323 in	15 - 10600 psi	Air	VIII Div. 1
	4 NPS	3.043 sq in	[K] 2.055 in	0.461 in	15 - 10600 psi	Air	VIII Div. 1
4 NPS	6 NPS	4.729 sq in	[L] 3.12 in	0.477 in	15 - 10600 psi	Air	VIII Div. 1
		5.959 sq in	[M] 3.12 in	0.601 in	15 - 10600 psi	Air	VIII Div. 1
		7.188 sq in	[N] 3.12 in	0.725 in	15 - 10600 psi	Air	VIII Div. 1
6 NPS	8, 10 NPS	18.294 sq in	[Q] 4.866 in	1.185 in	15 - 10600 psi	Air	VIII Div. 1

Location: 3950 Greenbriar Drive, Stafford, TX 77477 United States

Acceptable Abbrev.: EMRT

Certification Number: **01315** Design Series or catalog number **263/269/463/469/566/863/869/963/969/5066/5069**

Type Classification: Pilot Operated Pressure Relief Valve

Capacity Tests: Sec. VIII Div. 1 at Anderson Greenwood & Co. on July 30, 1997

Method of Establishing Relieving Capacity: Flow Capacity, K

Certified Value: .860 Unitless

Test Medium: Air/Gas

Certified Medium: Steam & Air/Gas

Special Service: None

Set Pressure Definition: 1.Pop 2.Initial Audible Discharge

Blowdown: Adjustable and Fixed for Mod. Pilot

Scope of Nominal Size and Set Pressure Ranges:

Inlet Size	Outlet Size	Flow Area	Orifice [designator] diameter	Lift	Set Pressure Range	Media	Code Section
1 - 1.5 NPS	2 NPS	1.496 sq in	1.38 in	0.96 in	15 - 10600 psi	Air	VIII Div. 1
					15 - 720 psi	Steam	VIII Div. 1
2 NPS	3 NPS	2.895 sq in	1.92 in	1.155 in	15 - 10600 psi	Air	VIII Div. 1
					15 - 720 psi	Steam	VIII Div. 1
3 NPS	4 NPS	6.733 sq in	2.928 in	1.62 in	15 - 10600 psi	Air	VIII Div. 1
					15 - 720 psi	Steam	VIII Div. 1
4 NPS	6 NPS	10.758 sq in	3.701 in	2.035 in	15 - 10600 psi	Air	VIII Div. 1
					15 - 2220 psi	Steam	VIII Div. 1
6 NPS	8 NPS	23.328 sq in	5.45 in	3 in	15 - 10600 psi	Air	VIII Div. 1
					15 - 720 psi	Steam	VIII Div. 1
8 NPS	8 NPS	32.17 sq in	6.4 in	3.52 in	15 - 10600 psi	Air	VIII Div. 1
					15 - 720 psi	Steam	VIII Div. 1
	10 NPS	36.605 sq in	6.827 in	3.755 in	15 - 10600 psi	Air	VIII Div. 1
					15 - 720 psi	Steam	VIII Div. 1
		37.523 sq in	6.912 in	3.802 in	15 - 1480 psi	Air	VIII Div. 1
					15 - 720 psi	Steam	VIII Div. 1
		44.179 sq in	7.5 in	4.125 in	15 - 1480 psi	Air	VIII Div. 1
					15 - 720 psi	Steam	VIII Div. 1
10 NPS	14 NPS	72.006 sq in	9.575 in	5.35 in	15 - 10600 psi	Air	VIII Div. 1
					15 - 720 psi	Steam	VIII Div. 1

Certification Number: **01326** Design Series or catalog number **453/459/853/859/953/959/5059 (Liquids)**

Type Classification: Pilot Operated Pressure Relief Valve

Capacity Tests: Sec. VIII Div. 1 at Anderson Greenwood & Co. on August 05, 1997

Method of Establishing Relieving Capacity: Flow Capacity, K

Certified Value: .491 Unitless

Test Medium: Water

Certified Medium: Liquid

Special Service: None

Set Pressure Definition: First Steady Stream

Blowdown: Fixed

Scope of Nominal Size and Set Pressure Ranges:

Inlet Size	Outlet Size	Flow Area	Orifice [designator] diameter	Lift	Set Pressure Range	Media	Code Section
1 - 1.5 NPS	2 NPS	0.221 sq in	[D] 0.674 in	0.085 in	15 - 7600 psi	Water	VIII
		0.356 sq in	[E] 0.674 in	0.137 in	15 - 7600 psi	Water	VIII
1.5 NPS	2, 3 NPS	0.911 sq in	[G] 1.078 in	0.264 in	15 - 7600 psi	Water	VIII
		1.005 sq in	[G] 1.38 in	0.226 in	15 - 7600 psi	Water	VIII
2 NPS	3 NPS	1.495 sq in	[H] 1.38 in	0.336 in	15 - 7600 psi	Water	VIII
		2.574 sq in	[J] 2.055 in	0.39 in	15 - 7600 psi	Water	VIII
3 NPS	4 NPS	3.313 sq in	[K] 2.055 in	0.502 in	15 - 7600 psi	Water	VIII
		5.711 sq in	[L] 3 in	0.576 in	15 - 7600 psi	Water	VIII
4 NPS	6 NPS	6.385 sq in	[M] 3 in	0.644 in	15 - 7600 psi	Water	VIII
		7.059 sq in	[N] 3 in	0.712 in	15 - 7600 psi	Water	VIII
6 NPS	8, 10 NPS	15.885 sq in	[Q] 4.5 in	1.029 in	15 - 7600 psi	Water	VIII

Certification Number: **01337** Design Series or catalog number **443/449/546/843/849/943/949/5046/5049(Liquids)**

Type Classification: **Pilot Operated Pressure Relief Valve**

Capacity Tests: **Sec. VIII Div. 1 at Anderson Greenwood & Co. on August 05, 1997**

Method of Establishing Relieving Capacity: **Flow Capacity, K**

Certified Value: **.767 Unitless**

Test Medium: **Water**

Certified Medium: **Liquid**

Special Service: **None**

Set Pressure Definition: **First Steady Stream**

Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
1 - 1.5 NPS	2 NPS	0.357 sq in	[F] 0.674 in	0.21 in	15 - 7600 psi	Water	VIII Div. 1
1.5 NPS	2, 3 NPS	0.913 sq in	[H] 1.078 in	0.51 in	15 - 7600 psi	Water	VIII Div. 1
2 NPS	3 NPS	1.496 sq in	[J] 1.38 in	0.82 in	15 - 7600 psi	Water	VIII Div. 1
3 NPS	4 NPS	3.317 sq in	[L] 2.055 in	1.155 in	15 - 7600 psi	Water	VIII Div. 1
4 NPS	6 NPS	7.069 sq in	[P] 3 in	1.62 in	15 - 7600 psi	Water	VIII Div. 1
6 NPS	8, 10 NPS	15.904 sq in	[R] 4.5 in	2.435 in	15 - 7600 psi	Water	VIII Div. 1
8 NPS	10 NPS	28.274 sq in	[T] 6 in	3.12 in	15 - 7600 psi	Water	VIII Div. 1

Certification Number: **01348** Design Series or catalog number **463/469/566/863/869/963/969/5066/5069 (Liquids)**

Type Classification: **Pilot Operated Pressure Relief Valve**

Capacity Tests: **Sec. VIII Div. 1 at Anderson Greenwood & Co. on August 27, 1997**

Method of Establishing Relieving Capacity: **Flow Capacity, K**

Certified Value: **.712 Unitless**

Test Medium: **Water**

Certified Medium: **Liquid**

Special Service: **None**

Set Pressure Definition: **First Steady Stream**

Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
1.5 NPS	2 NPS	1.496 sq in	1.38 in	0.96 in	15 - 7600 psi	Water	VIII
2 NPS	3 NPS	2.895 sq in	1.92 in	1.155 in	15 - 7600 psi	Water	VIII
3 NPS	4 NPS	6.733 sq in	2.928 in	1.315 in	15 - 7600 psi	Water	VIII
4 NPS	6 NPS	10.758 sq in	3.701 in	2.035 in	15 - 7600 psi	Water	VIII
6 NPS	8 NPS	23.328 sq in	5.45 in	3 in	15 - 7600 psi	Water	VIII
8 NPS	8 NPS	32.17 sq in	6.4 in	3.52 in	15 - 7600 psi	Water	VIII
	10 NPS	44.179 sq in	7.5 in	4.125 in	15 - 7600 psi	Water	VIII
10 NPS	14 NPS	72.006 sq in	9.575 in	5.35 in	15 - 7600 psi	Water	VIII Div. 1

Location: 3950 Greenbriar Drive, Stafford, TX 77477 United States

Acceptable Abbrev.: EMRT

Certification
Number: **01382**Design Series
or catalog number**JLT-JOS-RL/JLT-JBS-RL (Restricted Lift version of Certification 15512)**Type Classification: **Safety Relief Valve**Capacity Tests: **Sec. VIII Div. 1 at Anderson Greenwood & Co. (Stafford TX) on October 13, 2015**Method of Establishing Relieving Capacity: **Flow Capacity, K**Certified Value: **.870 Unitless**Test Medium: **Air/Gas**Certified Medium: **Air/Gas**Special Service: **None**Set Pressure Definition: **Pop**Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
0.75 - 1.5 NPS	2 - 3 NPS	0.1244 sq in	[D] 0.398 in	0.08 in	15 - 6170 psi	Air	VIII Div. 1
1 - 1.5 NPS	2 - 3 NPS	0.2214 sq in	[E] 0.531 in	0.082 in	15 - 6170 psi	Air	VIII Div. 1
		0.3473 sq in	[F] 0.665 in	0.103 in	15 - 6170 psi	Air	VIII Div. 1
1.5 - 2 NPS	2.5, 3 NPS	0.5674 sq in	[G] 0.85 in	0.131 in	15 - 6170 psi	Air	VIII Div. 1
	3 NPS	0.6949 sq in	0.892 in	0.137 in	15 - 2500 psi	Air	VIII Div. 1
		0.8874 sq in	[H] 1.063 in	0.164 in	15 - 3705 psi	Air	VIII Div. 1
2 - 3 NPS	3, 4 NPS	1.453 sq in	[J] 1.36 in	0.21 in	15 - 3705 psi	Air	VIII Div. 1
3 NPS	4, 6 NPS	2.076 sq in	[K] 1.626 in	0.251 in	15 - 3705 psi	Air	VIII Div. 1
3 - 4 NPS	4, 6 NPS	3.221 sq in	[L] 2.025 in	0.313 in	15 - 3705 psi	Air	VIII Div. 1
	6 NPS	4.065 sq in	[M] 2.275 in	0.351 in	15 - 2220 psi	Air	VIII Div. 1
4 NPS	6 NPS	4.9 sq in	[N] 2.498 in	0.386 in	15 - 1480 psi	Air	VIII Div. 1
		7.205 sq in	[P] 3.029 in	0.468 in	15 - 1480 psi	Air	VIII Div. 1
		7.997 sq in	[P2] 3.191 in	0.493 in	15 - 1500 psi	Air	VIII Div. 1
6 NPS	8 NPS	12.472 sq in	[Q] 3.985 in	0.616 in	15 - 1480 psi	Air	VIII Div. 1
	8, 10 NPS	18.065 sq in	[R] 4.796 in	0.741 in	15 - 1480 psi	Air	VIII Div. 1
8 NPS	10, 12 NPS	29.359 sq in	[T] 6.114 in	0.944 in	15 - 740 psi	Air	VIII Div. 1

Location: 3950 Greenbriar Drive, Stafford, TX 77477 United States

Acceptable Abbrev.: EMRT

Certification
Number: **01393**Design Series
or catalog number**JLT-JOS-RL/JLT-JBS-RL (Liquids) (Restricted lift version of Certification 15095)**Type Classification: **Safety Relief Valve**Capacity Tests: **Sec. VIII Div. 1 at Anderson Greenwood & Co. (Stafford TX) on October 14, 2015**Method of Establishing Relieving Capacity: **Flow Capacity, K**Certified Value: **.656 Unitless**Test Medium: **Water**Certified Medium: **Liquid**Special Service: **None**Set Pressure Definition: **First Steady Stream**Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
0.75 - 1.5 NPS	2 - 3 NPS	0.1244 sq in	[D] 0.398 in	0.08 in	15 - 6170 psi	Water	I & VIII Div. 1 III
1 - 1.5 NPS	2 - 3 NPS	0.2214 sq in	[E] 0.531 in	0.082 in	15 - 6170 psi	Water	I & VIII Div. 1 III
		0.3473 sq in	[F] 0.665 in	0.103 in	15 - 6170 psi	Water	I & VIII Div. 1 III
1.5 - 2 NPS	2.5, 3 NPS	0.5674 sq in	[G] 0.85 in	0.131 in	15 - 6170 psi	Water	I & VIII Div. 1 III
	3 NPS	0.6249 sq in	0.892 in	0.137 in	15 - 2500 psi	Water	I & VIII Div. 1 III
		0.8874 sq in	[H] 1.063 in	0.164 in	15 - 3705 psi	Water	I & VIII Div. 1 III
2 - 3 NPS	3, 4 NPS	1.453 sq in	[J] 1.36 in	0.21 in	15 - 3705 psi	Water	I & VIII Div. 1 III
3 NPS	4, 6 NPS	2.076 sq in	[K] 1.626 in	0.251 in	15 - 3705 psi	Water	I & VIII Div. 1 III
3 - 4 NPS	4, 6 NPS	3.221 sq in	[L] 2.025 in	0.313 in	15 - 3705 psi	Water	I & VIII Div. 1 III
	6 NPS	4.065 sq in	[M] 2.275 in	0.351 in	15 - 2220 psi	Water	I & VIII Div. 1 III
4 NPS	6 NPS	4.9 sq in	[N] 2.498 in	0.386 in	15 - 1480 psi	Water	I & VIII Div. 1 III
		7.205 sq in	[P] 3.029 in	0.468 in	15 - 1480 psi	Water	I & VIII Div. 1 III
		7.997 sq in	[P2] 3.191 in	0.493 in	15 - 1500 psi	Water	I & VIII Div. 1 III
6 NPS	8 NPS	12.472 sq in	[Q] 3.985 in	0.616 in	15 - 1480 psi	Water	I & VIII Div. 1 III
	8, 10 NPS	18.065 sq in	[R] 4.796 in	0.741 in	15 - 1480 psi	Water	I & VIII Div. 1 III
8 NPS	10, 12 NPS	29.359 sq in	[T] 6.114 in	0.944 in	15 - 740 psi	Water	I & VIII Div. 1 III

Location: 3950 Greenbriar Drive, Stafford, TX 77477 United States

Acceptable Abbrev.: EMRT

Certification Number: **01562** Design Series or catalog number: **243/249/443/449/843/849-RL (Restricted Lift version of Cert No. 01292)**

Type Classification: Pilot Operated Pressure Relief Valve

Capacity Tests: Sec. VIII Div. 1 at Anderson Greenwood & Co. (Stafford TX) on May 24, 2017

Method of Establishing Relieving Capacity: Flow Capacity, K

Certified Value: .878 Unitless

Test Medium: Air

Certified Medium: Air/Gas

Special Service: None

Set Pressure Definition: 1.Pop 3.Initial Audible Discharge

Blowdown: Adjustable and Fixed for Mod. Pilot

Scope of Nominal Size and Set Pressure Ranges:

Inlet Size	Outlet Size	Flow Area	Orifice [designator] diameter	Lift	Set Pressure Range	Media	Code Section
1 - 1.5 NPS	2 NPS	0.357 sq in	[F] 0.674 in	0.08 in	15 - 15000 psi	Air	VIII Div. 1
1.5 NPS	2, 3 NPS	0.913 sq in	[H] 1.078 in	0.134 in	15 - 10600 psi	Air	VIII Div. 1
2 NPS	3 NPS	1.496 sq in	[J] 1.38 in	0.193 in	15 - 15000 psi	Air	VIII Div. 1
3 NPS	4 NPS	3.317 sq in	[L] 2.055 in	0.347 in	15 - 10600 psi	Air	VIII Div. 1
4 NPS	6 NPS	7.645 sq in	[P] 3.12 in	0.486 in	15 - 10600 psi	Air	VIII Div. 1
6 NPS	8, 10 NPS	18.597 sq in	[R] 4.866 in	0.731 in	15 - 10600 psi	Air	VIII Div. 1
8 NPS	10 NPS	30.582 sq in	[T] 6.24 in	0.936 in	15 - 10600 psi	Air	VIII Div. 1

Certification Number: **01573** Design Series or catalog number: **443/449/843/849-RL (Restricted Lift version of Cert No. 01337) - Liquid**

Type Classification: Pilot Operated Pressure Relief Valve

Capacity Tests: Sec. VIII Div. 1 at Anderson Greenwood & Co. (Stafford TX) on June 09, 2017

Certified Value: .767 Unitless

Test Medium: Liquid

Certified Medium: Liquid

Special Service: None

Set Pressure Definition: First Steady Stream

Blowdown: Fixed

Scope of Nominal Size and Set Pressure Ranges:

Inlet Size	Outlet Size	Flow Area	Orifice [designator] diameter	Lift	Set Pressure Range	Media	Code Section
1 - 1.5 NPS	2 NPS	0.357 sq in	[F] 0.674 in	0.08 in	15 - 7600 psi	Water	VIII Div. 1
1.5 NPS	2, 3 NPS	0.913 sq in	[H] 1.078 in	0.154 in	15 - 7600 psi	Water	VIII Div. 1
2 NPS	3 NPS	1.496 sq in	[J] 1.38 in	0.246 in	15 - 7600 psi	Water	VIII Div. 1
3 NPS	4 NPS	3.317 sq in	[L] 2.055 in	0.347 in	15 - 7600 psi	Water	VIII Div. 1
4 NPS	6 NPS	7.069 sq in	[P] 3 in	0.486 in	15 - 7600 psi	Water	VIII Div. 1
6 NPS	8, 10 NPS	15.904 sq in	[R] 4.5 in	0.731 in	15 - 7600 psi	Water	VIII Div. 1
7 NPS	20 NPS	28.274 sq in	[T] 6 in	0.936 in	15 - 7600 psi	Water	VIII Div. 1

Location: 3950 Greenbriar Drive, Stafford, TX 77477 United States

Acceptable Abbrev.: EMRT

Certification Number: **15006** Design Series or catalog number **H Series (HCI, HSJ, HCA, HA, HB, HC, HCB, HCP, HJO, HN, HNA, HNB, HNP, HS, HSA, HSB, HSC, HSP)**

Type Classification: **Safety Valve**Capacity Tests: **Sec. I at Ohio State University (Robinson Laboratory) on September 01, 1939**Method of Establishing Relieving Capacity: **Flow Capacity, K**Certified Value: **.878 Unitless**Test Medium: **Steam**Certified Medium: **Steam**Set Pressure Definition: **Pop**Blowdown: **Adjustable**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
0.75 NPS	1.5 NPS	0.11 sq in	[D] 0.375 in	0.094 in	15 - 500 psi	Steam	I
		0.196 sq in	[E] 0.5 in	0.125 in	15 - 500 psi	Steam	I
1 - 1.5 NPS	2 - 3 NPS	0.307 sq in	[F] 0.625 in	0.156 in	15 - 3100 psi	Steam	I
1 - 2 NPS	2.5, 3 NPS	0.503 sq in	[G] 0.8 in	0.2 in	15 - 3100 psi	Steam	I
1.5 NPS	3 NPS	0.865 sq in	1.05 in	0.262 in	15 - 3100 psi	Steam	I
		0.994 sq in	[H2] 1.125 in	0.281 in	15 - 3100 psi	Steam	I
1.5 - 2 NPS	3, 4, 6 NPS	0.785 sq in	[H] 1 in	0.25 in	15 - 5000 psi	Steam	I
2 NPS	4 NPS	1.431 sq in	[J2] 1.35 in	0.338 in	15 - 3100 psi	Steam	I
2 - 3 NPS	3, 4, 6 NPS	1.288 sq in	[J] 1.281 in	0.32 in	15 - 5000 psi	Steam	I
2.5 NPS	6 NPS	2.545 sq in	[K2] 1.8 in	0.45 in	15 - 5000 psi	Steam	I
2.5 - 3 NPS	4, 6 NPS	1.84 sq in	[K] 1.531 in	0.383 in	15 - 5000 psi	Steam	I
3 NPS	6 NPS	3.341 sq in	[L2] 2.062 in	0.516 in	15 - 3100 psi	Steam	I
	6, 8 NPS	3.976 sq in	[M2] 2.25 in	0.563 in	15 - 5000 psi	Steam	I
3 - 4 NPS	4, 6 NPS	2.853 sq in	[L] 1.906 in	0.476 in	15 - 3100 psi	Steam	I
	6, 8 NPS	3.6 sq in	[M] 2.14 in	0.535 in	15 - 5000 psi	Steam	I
4 NPS	6 NPS	4.341 sq in	[N] 2.351 in	0.588 in	15 - 3100 psi	Steam	I
		6.38 sq in	[P] 2.85 in	0.712 in	15 - 1500 psi	Steam	I
		7.07 sq in	[P2] 3 in	0.75 in	15 - 3100 psi	Steam	I
6 NPS	8 NPS	11.045 sq in	[Q] 3.75 in	0.937 in	15 - 1500 psi	Steam	I
		12.25 sq in	[Q2] 3.95 in	0.988 in	15 - 3100 psi	Steam	I
	8, 10 NPS	16 sq in	[R] 4.513 in	1.128 in	15 - 1200 psi	Steam	I
	10 NPS	19.29 sq in	[RR] 4.956 in	1.239 in	15 - 3100 psi	Steam	I
8 NPS	10, 12 NPS	26 sq in	[T] 5.75 in	1.437 in	15 - 500 psi	Steam	I
	12, 14 NPS	28.274 sq in	6 in	1.5 in	15 - 2000 psi	Steam	I
10 NPS	14 NPS	44.18 sq in	7.5 in	1.875 in	15 - 500 psi	Steam	I
12 NPS	16 NPS	63.62 sq in	9 in	2.25 in	15 - 500 psi	Steam	I
14 NPS	18 NPS	86.59 sq in	10.5 in	2.625 in	15 - 500 psi	Steam	I
16 NPS	18, 20 NPS	95.21 sq in	11.01 in	2.753 in	15 - 500 psi	Steam	I
		114.04 sq in	12.05 in	3.02 in	15 - 500 psi	Steam	I
18 NPS	24 NPS	143.14 sq in	13.5 in	3.375 in	15 - 500 psi	Steam	I
20 NPS	24 NPS	176.71 sq in	15 in	3.75 in	15 - 500 psi	Steam	I

Location: 3950 Greenbriar Drive, Stafford, TX 77477 United States

Acceptable Abbrev.: EMRT

Certification
Number: **15039**Design Series
or catalog number **HE**Type Classification: **Safety Valve**Capacity Tests: **Sec. I at Crosby Valve & Gage on November 15, 1970**Method of Establishing Relieving Capacity: **Flow Capacity, K**Certified Value: **.8775 Unitless**Test Medium: **Steam**Certified Medium: **Steam**Special Service: **None**Set Pressure Definition: **Pop**Blowdown: **Adjustable by Dual Ring**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
1.5 NPS	2.5 NPS	0.307 sq in	0.625 in	0.156 in	15 - 3100 psi	Steam	I
		0.503 sq in	0.8 in	0.2 in	15 - 3100 psi	Steam	I
	3 NPS	0.785 sq in	[H] 1 in	0.25 in	15 - 3100 psi	Steam	I
2 NPS	4 NPS	1.288 sq in	[J] 1.281 in	0.32 in	15 - 3100 psi	Steam	I
2.5 NPS	6 NPS	1.84 sq in	[K] 1.531 in	0.382 in	15 - 3100 psi	Steam	I
		2.545 sq in	[K2] 1.8 in	0.45 in	15 - 3100 psi	Steam	I
3 NPS	6 NPS	3.6 sq in	[M] 2.14 in	0.535 in	15 - 3100 psi	Steam	I
		3.976 sq in	[M2] 2.25 in	0.562 in	15 - 3100 psi	Steam	I
4 NPS	6 NPS	6.38 sq in	2.85 in	0.712 in	15 - 3100 psi	Steam	I
		7.069 sq in	[P2] 3 in	0.75 in	15 - 3100 psi	Steam	I
6 NPS	8 NPS	11.045 sq in	3.75 in	0.937 in	15 - 3100 psi	Steam	I
6 - 8 NPS	8, 10 NPS	16 sq in	[R] 4.513 in	1.128 in	15 - 1500 psi	Steam	I
8 NPS	10, 12, 14 NPS	19.369 sq in	[R3] 4.966 in	1.242 in	15 - 3100 psi	Steam	I
		21.1 sq in	[R5] 5.183 in	1.295 in	15 - 3100 psi	Steam	I
10 NPS	16 NPS	36.4 sq in	[T2] 6.808 in	1.707 in	15 - 3100 psi	Steam	I

Location: 3950 Greenbriar Drive, Stafford, TX 77477 United States

Acceptable Abbrev.: EMRT

Certification Number: **15095** Design Series or catalog number **JLT (Liquids)**

Type Classification: **Safety Relief Valve**Capacity Tests: **Sec. VIII Div. 1 at Crosby Valve & Gage on February 05, 1980**Method of Establishing Relieving Capacity: **Flow Capacity, K**Certified Value: **.656 Unitless**Test Medium: **Water**Certified Medium: **Liquid**Special Service: **None**Set Pressure Definition: **First Steady Stream**Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
0.75 - 1.5 NPS	2 - 3 NPS	0.1244 sq in	[D] 0.398 in	0.151 in	15 - 6170 psi	Water	I & VIII Div. 1 III
1 - 1.5 NPS	2 - 3 NPS	0.2214 sq in	[E] 0.531 in	0.205 in	15 - 6170 psi	Water	I & VIII Div. 1 III
		0.3473 sq in	[F] 0.665 in	0.257 in	15 - 6170 psi	Water	I & VIII Div. 1 III
1.5 - 2 NPS	2.5, 3 NPS	0.5674 sq in	[G] 0.85 in	0.328 in	15 - 6170 psi	Water	I & VIII Div. 1 III
	3 NPS	0.6249 sq in	0.892 in	0.342 in	15 - 2500 psi	Water	I & VIII Div. 1 III
		0.8874 sq in	[H] 1.063 in	0.41 in	15 - 3705 psi	Water	I & VIII Div. 1 III
2 - 3 NPS	3, 4 NPS	1.453 sq in	[J] 1.36 in	0.525 in	15 - 3705 psi	Water	I & VIII Div. 1 III
3 NPS	4, 6 NPS	2.076 sq in	[K] 1.626 in	0.628 in	15 - 3705 psi	Water	I & VIII Div. 1 III
3 - 4 NPS	4, 6 NPS	3.221 sq in	[L] 2.025 in	0.782 in	15 - 3705 psi	Water	I & VIII Div. 1 III
	6 NPS	4.065 sq in	[M] 2.275 in	0.878 in	15 - 2220 psi	Water	I & VIII Div. 1 III
4 NPS	6 NPS	4.9 sq in	[N] 2.498 in	0.964 in	15 - 1480 psi	Water	I & VIII Div. 1 III
		7.205 sq in	[P] 3.029 in	1.169 in	15 - 1480 psi	Water	I & VIII Div. 1 III
		7.997 sq in	[P2] 3.191 in	1.232 in	15 - 1500 psi	Water	I & VIII Div. 1 III
6 NPS	8 NPS	12.472 sq in	[Q] 3.985 in	1.539 in	15 - 1480 psi	Water	I & VIII Div. 1 III
	8, 10 NPS	18.065 sq in	[R] 4.796 in	1.852 in	15 - 1480 psi	Water	I & VIII Div. 1 III
8 NPS	10, 12 NPS	29.359 sq in	[T] 6.114 in	2.361 in	15 - 740 psi	Water	I & VIII Div. 1 III

Location: 3950 Greenbriar Drive, Stafford, TX 77477 United States

Acceptable Abbrev.: EMRT

Certification Number: **15208** Design Series or catalog number **JOS-E/JBS-E/JOS-H-E 8400 AC/AB**

Type Classification: **Safety Relief Valve**Capacity Tests: **Sec. VIII Div. 1 at Crosby Valve & Gage on April 01, 1975**Method of Establishing Relieving Capacity: **Flow Capacity, K**Certified Value: **.865 Unitless**Test Medium: **Steam & Air/Gas**Certified Medium: **Steam & Air/Gas**Special Service: **None**Set Pressure Definition: **Pop**Blowdown: **Adjustable by Single Ring**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
0.75 - 1.5 NPS	2 - 3 NPS	0.1244 sq in	[D] 0.398 in	0.121 in	15 - 15000 psi	Air	III & VIII Div.1
					15 - 2000 psi	Steam	III & VIII Div.1
1 - 1.5 NPS	2 - 3 NPS	0.187 sq in	0.488 in	0.151 in	15 - 2000 psi	Steam	VIII Div. 1
					15 - 8490 psi	Air	VIII Div. 1
		0.2214 sq in	[E] 0.531 in	0.165 in	15 - 15000 psi	Air	III & VIII Div.1
					15 - 2000 psi	Steam	III & VIII Div.1
		0.3473 sq in	[F] 0.665 in	0.207 in	15 - 15000 psi	Air	III & VIII Div.1
					15 - 2000 psi	Steam	III & VIII Div.1
1.5 - 2 NPS	2.5, 3 NPS	0.5674 sq in	[G] 0.85 in	0.265 in	15 - 15000 psi	Air	III & VIII Div.1
					15 - 2000 psi	Steam	III & VIII Div.1
	3 NPS	0.8874 sq in	[H] 1.063 in	0.331 in	15 - 15000 psi	Air	III & VIII Div.1
					15 - 2000 psi	Steam	III & VIII Div.1
2 - 3 NPS	3, 4 NPS	1.453 sq in	[J] 1.36 in	0.424 in	15 - 10000 psi	Air	III & VIII Div.1
					15 - 2000 psi	Steam	III & VIII Div.1
3 NPS	4, 6 NPS	2.076 sq in	[K] 1.626 in	0.507 in	15 - 10000 psi	Air	III & VIII Div.1
					15 - 2000 psi	Steam	III & VIII Div.1
3 - 4 NPS	4, 6 NPS	3.221 sq in	[L] 2.025 in	0.631 in	15 - 2000 psi	Steam	III & VIII Div.1
					15 - 5000 psi	Air	III & VIII Div.1
					15 - 2000 psi	Steam	III & VIII Div.1
					15 - 5000 psi	Air	III & VIII Div.1
4 NPS	6 NPS	2.714 sq in	1.859 in	0.601 in	15 - 1000 psi	Steam	III & VIII Div.1
					15 - 3000 psi	Air	III & VIII Div.1
		4.9 sq in	[N] 2.498 in	0.779 in	15 - 1480 psi	Steam	III & VIII Div.1
					15 - 3000 psi	Air	III & VIII Div.1
		5.444 sq in	2.633 in	0.85 in	15 - 2250 psi	Air	III & VIII Div.1
					15 - 2250 psi	Steam	III & VIII Div.1
		7.206 sq in	[P] 3.029 in	0.945 in	15 - 1480 psi	Steam	III & VIII Div.1
					15 - 3000 psi	Air	III & VIII Div.1
6 NPS	8 NPS	11.045 sq in	3.75 in	1.243 in	15 - 1000 psi	Steam	III & VIII Div.1
					15 - 3750 psi	Air	III & VIII Div.1
		12.174 sq in	3.937 in	1.243 in	15 - 2250 psi	Air	III & VIII Div.1
					15 - 2250 psi	Steam	III & VIII Div.1
	10 NPS	12.236 sq in	3.947 in	1.496 in	15 - 2250 psi	Air	III & VIII Div.1
					15 - 2250 psi	Steam	III & VIII Div.1
	8 NPS	12.472 sq in	[Q] 3.985 in	1.243 in	15 - 1480 psi	Steam	III & VIII Div.1
					15 - 3000 psi	Air	III & VIII Div.1
		15.288 sq in	4.412 in	1.414 in	15 - 2250 psi	Air	III & VIII Div.1
					15 - 2250 psi	Steam	III & VIII Div.1
	8, 10 NPS	18.065 sq in	[R] 4.796 in	1.496 in	15 - 1480 psi	Air	III & VIII Div.1
					15 - 1480 psi	Steam	III & VIII Div.1
		18.254 sq in	4.821 in	1.907 in	15 - 2250 psi	Air	III & VIII Div.1
					15 - 2250 psi	Steam	III & VIII Div.1
8 NPS	10 NPS	29.359 sq in	[T] 6.114 in	1.907 in	15 - 740 psi	Air	III & VIII Div.1
					15 - 740 psi	Steam	III & VIII Div.1
		31.47 sq in	[T2] 6.33 in	1.974 in	15 - 740 psi	Air	III & VIII Div.1
					15 - 740 psi	Steam	III & VIII Div.1
					15 - 740 psi	Steam	III & VIII Div.1

Emerson Automation Solutions Final Control US LP (AGC)

NB#: 15208

Location: 3950 Greenbriar Drive, Stafford, TX 77477 United States

Acceptable Abbrev.: EMRT

...Continued							
Inlet Size	Outlet Size	Flow Area	Orifice [designator] diameter	Lift	Set Pressure Range	Media	Code Section
10 - 12 NPS	14, 16 NPS	47.84 sq in	[V] 7.805 in	2.435 in	15 - 325 psi	Air	VIII Div. 1
						Steam	VIII Div. 1
12 - 14 NPS	16. 20 NPS	78.08 sq in	[W] 9.971 in	3.111 in	15 - 325 psi	Air	VIII Div. 1
						Steam	VIII Div. 1

Certification Number: **15275** Design Series or catalog number **JQU - 1.5 (with breaking pin)**

Type Classification: **Safety Relief Valve**Capacity Tests: **Sec. VIII Div. 1 at Crosby Valve & Gage on May 01, 1978**Method of Establishing Relieving Capacity: **Flow Capacity, Slope**Certified Value: **9.26 Unitless**Test Medium: **Steam**Certified Medium: **Gas**Special Service: **None**Set Pressure Definition: **Pop**Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

Inlet Size	Outlet Size	Flow Area	Orifice [designator] diameter	Lift	Set Pressure Range	Media	Code Section
1.5 NPS	4 NPS	0.849 sq in	1.04 in	0.26 in	15 - 375 psi	Air	VIII Div. 1

Certification Number: **15286** Design Series or catalog number **JQU - 1.5 (without breaking pin)**

Type Classification: **Safety Relief Valve**Capacity Tests: **Sec. VIII Div. 1 at Crosby Valve & Gage on May 01, 1978**Method of Establishing Relieving Capacity: **Flow Capacity, Slope**Certified Value: **9.43 PPH/PSIA**Certified Value (alternate medium): **3.36 SCFM/PSIA**Test Medium: **Steam**Certified Medium: **Gas**Set Pressure Definition: **Pop**Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

Inlet Size	Outlet Size	Flow Area	Orifice [designator] diameter	Lift	Set Pressure Range	Media	Code Section
1.5 NPS	4 NPS	0.849 sq in	1.04 in	0.26 in	15 - 375 psi	Air	VIII

Certification Number: **15297** Design Series or catalog number **JQU - 4 (with breaking pin)**

Type Classification: **Safety Relief Valve**Capacity Tests: **Sec. VIII Div. 1 at Phillips Petroleum on July 06, 1959**Method of Establishing Relieving Capacity: **Flow Capacity, Slope**Certified Value: **39.8 SCFM/PSIA**Test Medium: **Gas**Certified Medium: **Air/Gas**Special Service: **None**Set Pressure Definition: **Pop**Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

Inlet Size	Outlet Size	Flow Area	Orifice [designator] diameter	Lift	Set Pressure Range	Media	Code Section
4 NPS	6 NPS	3.141 sq in	2 in	0.5 in	50 - 375 psi	Air	VIII Div. 1

Emerson Automation Solutions Final Control US LP (AGC)

NB#: 15354

Location: 3950 Greenbriar Drive, Stafford, TX 77477 United States

Acceptable Abbrev.: EMRT

Certification Number: **15354** Design Series or catalog number **PVR-3**

Type Classification: **Safety Relief Valve**Capacity Tests: **Sec. VIII Div. 1 at Crosby Valve & Gage on July 14, 1980**Method of Establishing Relieving Capacity: **Flow Capacity, Slope**Certified Value: **47.13 SCFM/PSIA**Test Medium: **Air/Gas**Certified Medium: **Air/Gas**Special Service: **None**Set Pressure Definition: **Pop**Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
3 NPS	4 NPS	3.757 sq in	2.187 in	0.8 in	15 - 125 psi	Air	VIII Div. 1

Certification Number: **15365** Design Series or catalog number **PVR-4**

Type Classification: **Safety Relief Valve**Capacity Tests: **Sec. VIII Div. 1 at Crosby Valve & Gage on June 26, 1981**Method of Establishing Relieving Capacity: **Flow Capacity, Slope**Certified Value: **87.57 SCFM/PSIA**Test Medium: **Air/Gas**Certified Medium: **Air/Gas**Special Service: **None**Set Pressure Definition: **Pop**Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
4 NPS	5 NPS	7.67 sq in	3.125 in	1.125 in	15 - 125 psi	Air	VIII Div. 1

Certification Number: **15411** Design Series or catalog number **900 Series, 7700, SNC**

Type Classification: **Safety Relief Valve**Capacity Tests: **Sec. VIII Div. 1 at Crosby Valve & Gage on February 14, 1990**Method of Establishing Relieving Capacity: **Flow Capacity, K**Certified Value: **.878 Unitless**Test Medium: **Air**Certified Medium: **Steam & Air/Gas**Special Service: **None**Set Pressure Definition: **Pop**Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
0.5 - 1 NPS	.5 - 1 NPS	0.0551 sq in	[#10] 0.265 in	0.074 in	15 - 10000 psi	Air	VIII Div. 1
					15 - 2900 psi	Steam	III & VIII Div.1
	1 - 1.5 NPS	0.0845 sq in	[#5] 0.328 in	0.106 in	15 - 10000 psi	Air	VIII Div. 1
					15 - 2900 psi	Steam	III & VIII Div.1
		0.1244 sq in	[#6] 0.398 in	0.128 in	15 - 10000 psi	Air	VIII Div. 1
					15 - 2900 psi	Steam	III & VIII Div.1
1 - 1.5 NPS	1.5 NPS	0.2198 sq in	[#7] 0.529 in	0.17 in	15 - 2900 psi	Steam	III & VIII Div.1
					15 - 5000 psi	Air	VIII Div. 1
1.5 NPS	2.5 NPS	0.5674 sq in	[#9] 0.85 in	0.274 in	15 - 2900 psi	Steam	III & VIII Div.1
					15 - 5000 psi	Air	VIII Div. 1
1.5 - 2 NPS	2 NPS	0.3473 sq in	[#8] 0.665 in	0.215 in	15 - 2900 psi	Steam	III & VIII Div.1
					15 - 5000 psi	Air	VIII Div. 1

Location: 3950 Greenbriar Drive, Stafford, TX 77477 United States

Acceptable Abbrev.: EMRT

Certification
Number: **15466**Design Series
or catalog number **800**Type Classification: **Safety Relief Valve**Capacity Tests: **Sec. III at Crosby Valve & Gage on August 08, 1991**Method of Establishing Relieving Capacity: **Flow Capacity, K**Certified Value: **.877 Unitless**Test Medium: **Steam**Certified Medium: **Steam & Air/Gas**Special Service: **None**Set Pressure Definition: **Pop**Blowdown: **Adjustable by Single Ring**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
0.75 - 1 NPS	1 NPS	0.1244 sq in	[#6] 0.398 in	0.128 in	15 - 10000 psi	Air	VIII Div. 1
					15 - 2900 psi	Steam	III VIII Div. 1
1 - 1.5 NPS	1, 1.5 NPS	0.2198 sq in	[#7] 0.529 in	0.17 in	15 - 2900 psi	Steam	III VIII Div. 1
					15 - 5000 psi	Air	VIII Div. 1
1 - 2 NPS	1.5, 2 NPS	0.3473 sq in	[#8] 0.665 in	0.215 in	15 - 2900 psi	Steam	III & VIII Div.1
					15 - 5000 psi	Air	VIII Div. 1
1.5 NPS	2.5 NPS	0.5674 sq in	[#9] 0.85 in	0.274 in	15 - 2900 psi	Steam	III VIII Div. 1
					15 - 5000 psi	Air	VIII Div. 1

Certification
Number: **15499**Design Series
or catalog number **900 Series (Liquid), 7700, SNC**Type Classification: **Relief Valve**Capacity Tests: **Sec. VIII Div. 1 at Crosby Valve & Gage on February 09, 1990**Method of Establishing Relieving Capacity: **Flow Capacity, K**Certified Value: **.6615 Unitless**Test Medium: **Water**Certified Medium: **Liquid**Special Service: **None**Set Pressure Definition: **First Steady Stream**Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
0.5 - 1 NPS	.5 - 1 NPS	0.0551 sq in	[#10] 0.265 in	0.074 in	15 - 10000 psi	Water	I & VIII Div. 1 III
	1 - 1.5 NPS	0.0845 sq in	[#5] 0.328 in	0.106 in	15 - 10000 psi	Water	I & VIII Div. 1 III
		0.1244 sq in	[#6] 0.398 in	0.128 in	15 - 10000 psi	Water	I & VIII Div. 1 III
1 - 1.5 NPS	1.5 NPS	0.2198 sq in	[#7] 0.529 in	0.17 in	15 - 5000 psi	Water	I & VIII Div. 1 III
	1.5 - 2 NPS	0.2951 sq in	0.613 in	0.265 in	15 - 5000 psi	Water	I & VIII Div. 1
1.5 NPS	2.5 NPS	0.5674 sq in	[#9] 0.85 in	0.274 in	15 - 5000 psi	Water	I & VIII Div. 1 III
1.5 - 2 NPS	2 NPS	0.3473 sq in	[#8] 0.665 in	0.215 in	15 - 5000 psi	Water	I & VIII Div. 1 III

Location: 3950 Greenbriar Drive, Stafford, TX 77477 United States

Acceptable Abbrev.: EMRT

Certification
Number: **15501**Design Series
or catalog number **BP**Type Classification: **Relief Valve**Capacity Tests: **Sec. VIII Div. 1 at Crosby Valve & Gage on August 24, 1995**Method of Establishing Relieving Capacity: **Flow Capacity, K**Certified Value: **.841 Unitless**Test Medium: **Air/Gas**Certified Medium: **Air/Gas**Set Pressure Definition: **Pop**Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
0.75 - 1 NPS	1 NPS	0.0539 sq in	[#4] 0.262 in	0.06 in	50 - 3000 psi	Air	VIII
		0.0929 sq in	[#5] 0.344 in	0.085 in	50 - 3000 psi	Air	VIII
		0.114 sq in	[#5A] 0.381 in	0.098 in	50 - 3000 psi	Air	VIII
		0.1364 sq in	[#6] 0.417 in	0.112 in	50 - 3000 psi	Air	VIII

Certification
Number: **15512**Design Series
or catalog number **JLT/JOS, JLT/JBS, 8500, ACL/ABL**Type Classification: **Safety Relief Valve**Capacity Tests: **Sec. VIII Div. 1 at Crosby Valve & Gage on June 28, 1994**Method of Establishing Relieving Capacity: **Flow Capacity, K**Certified Value: **.870 Unitless**Test Medium: **Air/Gas**Certified Medium: **Air/Gas**Special Service: **None**Set Pressure Definition: **Pop**Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
0.75 - 1.5 NPS	2 - 3 NPS	0.1244 sq in	[D] 0.398 in	0.151 in	15 - 6170 psi	Air	VIII Div. 1
1 - 1.5 NPS	2 - 3 NPS	0.2214 sq in	[E] 0.531 in	0.205 in	15 - 6170 psi	Air	VIII Div. 1
		0.3473 sq in	[F] 0.665 in	0.257 in	15 - 6170 psi	Air	VIII Div. 1
1.5 - 2 NPS	2.5, 3 NPS	0.5674 sq in	[G] 0.85 in	0.328 in	15 - 6170 psi	Air	VIII Div. 1
	3 NPS	0.8874 sq in	[H] 1.063 in	0.41 in	15 - 3705 psi	Air	VIII Div. 1
2 - 3 NPS	3, 4 NPS	1.453 sq in	[J] 1.36 in	0.525 in	15 - 3705 psi	Air	VIII Div. 1
3 NPS	4, 6 NPS	2.076 sq in	[K] 1.626 in	0.628 in	15 - 3705 psi	Air	VIII Div. 1
3 - 4 NPS	4, 6 NPS	3.221 sq in	[L] 2.025 in	0.782 in	15 - 3705 psi	Air	VIII Div. 1
	6 NPS	4.065 sq in	[M] 2.275 in	0.878 in	15 - 2220 psi	Air	VIII Div. 1
4 NPS	6 NPS	4.9 sq in	[N] 2.498 in	0.964 in	15 - 1480 psi	Air	VIII Div. 1
		7.205 sq in	[P] 3.029 in	1.169 in	15 - 1480 psi	Air	VIII Div. 1
6 NPS	8 NPS	12.472 sq in	[Q] 3.985 in	1.539 in	15 - 1480 psi	Air	VIII Div. 1
	8, 10 NPS	18.065 sq in	[R] 4.796 in	1.852 in	15 - 1480 psi	Air	VIII Div. 1
8 NPS	10, 12 NPS	29.359 sq in	[T] 6.114 in	2.361 in	15 - 740 psi	Air	VIII Div. 1

location: 3950 Greenbriar Drive, Stafford, TX 77477 United States

Acceptable Abbrev.: EMRT

Certification Number: **15534** Design Series or catalog number **BP (Liquids)**

Type Classification: **Relief Valve**Capacity Tests: **Sec. VIII Div. 1 at Crosby Valve & Gage on September 15, 1995**Method of Establishing Relieving Capacity: **Flow Capacity, K**Certified Value: **.631 Unitless**Test Medium: **Water**Certified Medium: **Liquid**Special Service: **None**Set Pressure Definition: **First Steady Stream**Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
0.75 - 1 NPS	1 NPS	0.0539 sq in	[#4] 0.262 in	0.06 in	50 - 3000 psi	Water	I & VIII Div. 1
		0.0929 sq in	[#5] 0.344 in	0.085 in	50 - 3000 psi	Water	I & VIII Div. 1
		0.114 sq in	[#5A] 0.381 in	0.085 in	50 - 3000 psi	Water	I & VIII Div. 1
		0.1364 sq in	[#6] 0.417 in	0.112 in	50 - 3000 psi	Water	I & VIII Div. 1

Location: 3950 Greenbriar Drive, Stafford, TX 77477 United States

Acceptable Abbrev.: EMRT

Certification Number: **15567** Design Series or catalog number **H Series (Restricted Lift version of Cert # 15006)**

Type Classification: **Safety Valve**Capacity Tests: **Sec. I at Crosby Valve & Gage on August 06, 1996**Method of Establishing Relieving Capacity: **Flow Capacity, K**Certified Value: **.878 Unitless**Certification Provisions: **per CC 1923 &/or 1945**Test Medium: **Steam**Certified Medium: **Steam**Special Service: **None**Set Pressure Definition: **Pop**Blowdown: **Adjustable by Dual Ring**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
0.75 NPS	1.5 NPS	0.11 sq in	0.375 in	0.08 in	15 - 500 psi	Steam	I
		0.196 sq in	0.5 in	0.08 in	15 - 500 psi	Steam	I
1 - 1.5 NPS	2, 2.5, 3 NPS	0.307 sq in	0.625 in	0.08 in	15 - 3100 psi	Steam	I
1 - 2 NPS	2.5, 3 NPS	0.503 sq in	0.8 in	0.08 in	15 - 3100 psi	Steam	I
1.5 NPS	3 NPS	0.865 sq in	1.05 in	0.08 in	15 - 3100 psi	Steam	I
		0.994 sq in	1.125 in	0.084 in	15 - 3100 psi	Steam	I
1.5 - 2 NPS	3, 4 NPS	0.785 sq in	1 in	0.08 in	15 - 3100 psi	Steam	I
2 NPS	4 NPS	1.431 sq in	1.35 in	0.101 in	15 - 3100 psi	Steam	I
2 - 3 NPS	3,4,6 NPS	0.288 sq in	1.281 in	0.096 in	15 - 5000 psi	Steam	I
2.5 NPS	6 NPS	2.545 sq in	1.8 in	0.135 in	15 - 3100 psi	Steam	I
2.5 - 3 NPS	4, 6 NPS	1.84 sq in	1.531 in	0.115 in	15 - 3100 psi	Steam	I
3 NPS	6 NPS	3.341 sq in	2.062 in	0.155 in	15 - 3100 psi	Steam	I
		3.976 sq in	2.25 in	0.169 in	15 - 3100 psi	Steam	I
3 - 4 NPS	4, 6 NPS	2.853 sq in	1.906 in	0.143 in	15 - 3100 psi	Steam	I
	6 NPS	3.6 sq in	2.14 in	0.161 in	15 - 5000 psi	Steam	I
4 NPS	6 NPS	4.341 sq in	2.351 in	0.176 in	15 - 3100 psi	Steam	I
		6.38 sq in	2.85 in	0.213 in	15 - 1500 psi	Steam	I
		7.07 sq in	3 in	0.225 in	15 - 3100 psi	Steam	I
6 NPS	8 NPS	11.045 sq in	3.75 in	0.296 in	15 - 1500 psi	Steam	I
	8, 10 NPS	16 sq in	4.513 in	0.338 in	15 - 1200 psi	Steam	I
	10 NPS	19.29 sq in	4.956 in	0.371 in	15 - 3100 psi	Steam	I
8 NPS	10, 12 NPS	26 sq in	5.75 in	0.431 in	15 - 500 psi	Steam	I
	12, 14 NPS	28.274 sq in	6 in	0.45 in	15 - 2000 psi	Steam	I
10 NPS	14 NPS	44.18 sq in	7.5 in	0.562 in	15 - 500 psi	Steam	I
12 NPS	16 NPS	63.62 sq in	9 in	0.675 in	15 - 500 psi	Steam	I
14 NPS	18 NPS	86.59 sq in	10.5 in	0.787 in	15 - 500 psi	Steam	I
16 NPS	18, 20 NPS	95.21 sq in	11.01 in	0.826 in	15 - 500 psi	Steam	I
		114.04 sq in	12.05 in	0.906 in	15 - 500 psi	Steam	I
18 NPS	24 NPS	143.14 sq in	13.5 in	1.012 in	15 - 500 psi	Steam	I
20 NPS	24 NPS	176.71 sq in	15 in	1.125 in	15 - 500 psi	Steam	I

Location: 3950 Greenbriar Drive, Stafford, TX 77477 United States

Acceptable Abbrev.: EMRT

Certification Number: **15589** Design Series or catalog number **HL, HSL**

Type Classification: **Safety Valve**Capacity Tests: **Sec. I at Crosby Valve & Gage on November 03, 1999**Method of Establishing Relieving Capacity: **Flow Capacity, K**Certified Value: **0.869 Unitless**Test Medium: **Steam**Certified Medium: **Steam**Special Service: **None**Set Pressure Definition: **Pop**Blowdown: **Adjustable by Dual Ring**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
1.25 - 2 NPS	1.5 NPS	0.339 sq in	[F] 0.657 in	0.164 in	15 - 725 psi	Steam	I & VIII Div. 1
		0.553 sq in	[G] 0.839 in	0.21 in	15 - 725 psi	Steam	I & VIII Div. 1
1.5 - 2.5 NPS	2.5 NPS	0.868 sq in	[H] 1.051 in	0.263 in	15 - 725 psi	Steam	I & VIII Div. 1
		1.327 sq in	[J] 1.3 in	0.325 in	15 - 725 psi	Steam	I & VIII Div. 1
2 - 3 NPS	4 NPS	2.046 sq in	[K] 1.614 in	0.404 in	15 - 725 psi	Steam	I & VIII Div. 1
2.5 - 4 NPS	6 NPS	3.167 sq in	[L] 2.008 in	0.502 in	15 - 725 psi	Steam	I & VIII Div. 1
3 NPS	6 NPS	3.955 sq in	[M] 2.244 in	0.561 in	15 - 725 psi	Steam	I & VIII Div. 1
4 NPS	6 NPS	4.831 sq in	[N] 2.48 in	0.62 in	15 - 725 psi	Steam	I & VIII Div. 1
		7.031 sq in	[P] 2.992 in	0.748 in	15 - 725 psi	Steam	I & VIII Div. 1
6 NPS	8 NPS	11.045 sq in	[QQ] 3.75 in	0.937 in	15 - 725 psi	Steam	I & VIII Div. 1
		12.174 sq in	[Q] 3.937 in	0.984 in	15 - 725 psi	Steam	I & VIII Div. 1

Certification Number: **36368** Design Series or catalog number **LCP**

Type Classification: **Pilot Operated Pressure Relief Valve**Capacity Tests: **Sec. VIII Div. 1 at Anderson Greenwood & Co. on March 01, 1999**Method of Establishing Relieving Capacity: **Flow Capacity, K**Certified Value: **.86 Unitless**Test Medium: **Air/Gas**Certified Medium: **Air/Gas**Set Pressure Definition: **Pop**Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
1 NPS	2 NPS	0.785 sq in	1 in	0.5 in	25 - 2220 psi	Air	VIII Div. 1
1.25 NPS	2 NPS	1.227 sq in	1.25 in	0.625 in	25 - 2220 psi	Air	VIII Div. 1
1.5 NPS	2 NPS	1.767 sq in	1.5 in	0.99 in	25 - 2220 psi	Air	VIII Div. 1
2 NPS	3 NPS	3.142 sq in	2 in	1.1 in	25 - 2220 psi	Air	VIII Div. 1
3 NPS	4 NPS	7.069 sq in	3 in	1.75 in	25 - 1480 psi	Air	VIII Div. 1

Location: 3950 Greenbriar Drive, Stafford, TX 77477 United States

Acceptable Abbrev.: EMRT

Certification Number: **36458** Design Series or catalog number: **5200 Series (Water K = 0.674)**

Type Classification: Pilot Operated Pressure Relief Valve

Capacity Tests: Sec. I & VIII Div. 1 at National Board T L (Worthington) on August 05, 2011

Method of Establishing Relieving Capacity: Flow Capacity, K

Certified Value: 0.878 Unitless

Certified Value (alternate medium): 0.674 Unitless

Test Medium: Steam/Water

Certified Medium: Steam, Air/Gas & Liquid

Set Pressure Definition: 1.Initial Audible Discharge 3.First Steady Stream

Blowdown: Fixed

Scope of Nominal Size and Set Pressure Ranges:

Inlet Size	Outlet Size	Flow Area	Orifice [designator] diameter	Lift	Set Pressure Range	Media	Code Section
1 - 1.5 NPS	2 - 3 NPS	0.347 sq in	[F] 0.665 in	0.207 in	15 - 6170 psi	Air	VIII Div. 1
						Steam	I & VIII Div. 1
						Water	I
1.5 - 2 NPS	2.5, 3 NPS	0.5674 sq in	[G] 0.85 in	0.265 in	15 - 6170 psi	Air	VIII Div. 1
						Steam	I & VIII Div. 1
						Water	I
	3 NPS	0.887 sq in	[H] 1.063 in	0.331 in	15 - 3705 psi	Air	VIII Div. 1
						Steam	I & VIII Div. 1
						Water	I
2 - 3 NPS	3, 4 NPS	1.453 sq in	[J] 1.36 in	0.424 in	15 - 3705 psi	Air	VIII Div. 1
						Steam	I & VIII Div. 1
						Water	I
2.5 - 3 NPS	4 NPS	2.076 sq in	[K] 1.626 in	0.507 in	15 - 3705 psi	Air	VIII Div. 1
						Steam	I & VIII Div. 1
						Water	I
3 - 4 NPS	4, 6 NPS	3.221 sq in	[L] 2.025 in	0.631 in	15 - 3705 psi	Air	VIII Div. 1
						Steam	I & VIII Div. 1
						Water	I
4 NPS	6 NPS	3.6 sq in	[M] 2.141 in	0.709 in	15 - 2220 psi	Air	VIII Div. 1
						Steam	I & VIII Div. 1
						Water	I
		4.34 sq in	[N] 2.351 in	0.779 in	15 - 1480 psi	Air	VIII Div. 1
						Steam	I & VIII Div. 1
						Water	I
	8 NPS	7.206 sq in	[P] 3.029 in	1.263 in	15 - 1480 psi	Air	VIII Div. 1
						Steam	I & VIII Div. 1
						Water	I
6 NPS	8 NPS	12.472 sq in	[Q] 3.985 in	1.243 in	15 - 1480 psi	Air	VIII Div. 1
						Steam	I & VIII Div. 1
						Water	I
	8, 10 NPS	18.065 sq in	[R] 4.796 in	2 in	15 - 1480 psi	Air	VIII Div. 1
						Steam	I & VIII Div. 1
						Water	I
8 NPS	10 NPS	29.359 sq in	[T] 6.114 in	2.55 in	15 - 1480 psi	Air	VIII Div. 1
						Steam	I & VIII Div. 1
						Water	I

Emerson Automation Solutions Final Control, US LP (KBM)

NB#: 36043

location: 953 Old US Highway 70, Black Mountain, NC 28711 United States

Acceptable Abbrev.: EMRN

Emerson Automation Solutions Final Control, US LP (KBM)

location: 953 Old US Highway 70, Black Mountain, NC 28711 United States

Acceptable Abbrev.: EMRN

Certification Number:	36043	Design Series or catalog number	Kunkle 189, 363, 389
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Type Classification: **Safety Relief Valve**Capacity Tests: **Sec. VIII Div. 1 at Ohio State University (Robinson Laboratory) on April 15, 1958**Method of Establishing Relieving Capacity: **Flow Capacity, K**Certified Value: **.874 Unitless**Test Medium: **Air**Certified Medium: **Air/Gas**Special Service: **None**Set Pressure Definition: **Pop**Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
0.5 - 0.75 NPS	.75 NPS	0.034 sq in	0.5 in	0.031 in	50 - 2500 psi	Air	VIII Div. 1

Location: 953 Old US Highway 70, Black Mountain, NC 28711 United States

Acceptable Abbrev.: EMRN

Certification Number: **36076** Design Series or catalog number **300,600**

Type Classification: **Safety Valve**Capacity Tests: **Sec. I at Ohio State University (Robinson Laboratory) on February 10, 1961**Method of Establishing Relieving Capacity: **Flow Capacity, K**Certified Value: **.878 Unitless**Test Medium: **Steam**Certified Medium: **Steam & Air/Gas**Set Pressure Definition: **Pop**Blowdown: **Adjustable by Dual Ring**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
1.25 NPS	1.5 NPS	0.307 sq in	[F] 0.625 in	0.156 in	15 - 1000 psi	Air	VIII
						Steam	I VIII
		0.503 sq in	[G] 0.8 in	0.2 in	15 - 1000 psi	Air	VIII
						Steam	I VIII
1.5 NPS	2.5 NPS	0.785 sq in	[H] 1 in	0.25 in	15 - 1000 psi	Air	VIII
						Steam	I VIII
		1.287 sq in	[J] 1.28 in	0.32 in	15 - 1000 psi	Air	VIII
						Steam	I VIII
2 NPS	3 NPS	1.839 sq in	[K] 1.53 in	0.383 in	15 - 1000 psi	Air	VIII
						Steam	I VIII
2.5 NPS	4 NPS	2.853 sq in	[L] 1.906 in	0.477 in	15 - 1000 psi	Air	VIII
						Steam	I VIII
3 NPS	4 NPS	3.597 sq in	[M] 2.14 in	0.535 in	15 - 1000 psi	Air	VIII
						Steam	I VIII
4 NPS	6 NPS	4.34 sq in	[N] 2.35 in	0.588 in	15 - 750 psi	Air	VIII
						Steam	I VIII
		6.38 sq in	[P] 2.85 in	0.713 in	15 - 750 psi	Air	VIII
						Steam	I VIII
6 NPS	8 NPS	11.045 sq in	[Q] 3.75 in	0.938 in	15 - 600 psi	Air	VIII
						Steam	I VIII

Certification Number: **36087** Design Series or catalog number **330, 330S, 333S**

Type Classification: **Safety Relief Valve**Capacity Tests: **Sec. VIII Div. 1 at Ohio State University (Robinson Laboratory) on June 14, 1972**Method of Establishing Relieving Capacity: **Flow Capacity, Slope**Certified Value: **.026 SCFM/PSIA**Test Medium: **Air/Gas**Certified Medium: **Gas**Special Service: **None**Set Pressure Definition: **Initial Audible Discharge**Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
0.25 - 0.5 NPS			0.047 in	0.05 in	1000 - 7500 psi	Air	VIII Div. 1
0.4375 in			0.047 in	0.05 in	1000 - 7500 psi	Air	VIII Div. 1

Location: 953 Old US Highway 70, Black Mountain, NC 28711 United States

Acceptable Abbrev.: EMRN

Certification Number: **36098** Design Series or catalog number: **920, 921, 927, Agco A (High Temp. water)**

Type Classification: **Safety Valve**Capacity Tests: **Sec. I at Ohio State University (Robinson Laboratory) on May 19, 1969**Method of Establishing Relieving Capacity: **Flow Capacity, K**Certified Value: **.878 Unitless**Test Medium: **Steam**Certified Medium: **Steam & Air/Gas**Special Service: **Organic fluid vaporizers**Set Pressure Definition: **Pop**Blowdown: **Adjustable by Single Ring**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
0.5 - 1 NPS	.75, 1 NPS	0.1213 sq in	[D] 0.393 in	0.106 in	15 - 1400 psi	Steam	I
0.75 - 1.25 NPS	1.25 NPS	0.2157 sq in	[E] 0.524 in	0.142 in	15 - 1100 psi	Steam	I
1 - 1.5 NPS	1.5 NPS	0.3369 sq in	[F] 0.655 in	0.177 in	15 - 1100 psi	Steam	I
1.25 - 2 NPS	2 NPS	0.553 sq in	[G] 0.839 in	0.227 in	15 - 1100 psi	Steam	I
1.5 NPS	2.5 NPS	0.864 sq in	[H] 1.049 in	0.283 in	15 - 1000 psi	Steam	I
2 NPS	3 NPS	1.415 sq in	[J] 1.342 in	0.363 in	15 - 800 psi	Steam	I

Certification Number: **36100** Design Series or catalog number: **910 to 919**

Type Classification: **Safety Relief Valve**Capacity Tests: **Sec. VIII Div. 1 at National Board T L (Picaway) on May 19, 1969**Method of Establishing Relieving Capacity: **Flow Capacity, K**Certified Value: **.878 Unitless**Test Medium: **Steam**Certified Medium: **Steam & Air/Gas**Special Service: **None**Set Pressure Definition: **Pop**Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
0.5 - 1 NPS	.75, 1 NPS	0.1213 sq in	[D] 0.393 in	0.106 in	15 - 1400 psi	Air	VIII Div. 1
						Steam	VIII Div. 1
0.75 - 1.25 NPS	1.25 NPS	0.2157 sq in	[E] 0.524 in	0.142 in	15 - 1100 psi	Air	VIII Div. 1
						Steam	VIII Div. 1
1 - 1.5 NPS	1.5 NPS	0.3369 sq in	[F] 0.655 in	0.177 in	15 - 1100 psi	Air	VIII Div. 1
						Steam	VIII Div. 1
1.25 - 2 NPS	2 NPS	0.553 sq in	[G] 0.839 in	0.227 in	15 - 1100 psi	Air	VIII Div. 1
						Steam	VIII Div. 1
1.5 NPS	2.5 NPS	0.864 sq in	[H] 1.049 in	0.283 in	15 - 1000 psi	Air	VIII Div. 1
						Steam	VIII Div. 1
2 NPS	3 NPS	1.415 sq in	[J] 1.342 in	0.363 in	15 - 800 psi	Air	VIII Div. 1
						Steam	VIII Div. 1

Location: 953 Old US Highway 70, Black Mountain, NC 28711 United States

Acceptable Abbrev.: EMRN

Certification Number: **36111** Design Series or catalog number: **910 to 919 (Liquid)**

Type Classification: Relief Valve

Capacity Tests: Sec. VIII Div. 1 at National Board T L (Picaway) on May 08, 1985

Method of Establishing Relieving Capacity: Flow Capacity, K

Certified Value: .710 Unitless

Test Medium: Water

Certified Medium: Liquid

Special Service: None

Set Pressure Definition: First Steady Stream

Scope of Nominal Size and Set Pressure Ranges:

Inlet Size	Outlet Size	Flow Area	Orifice [designator] diameter	Lift	Set Pressure Range	Media	Code Section
0.5 - 1 NPS	.75 , 1 NPS	0.1213 sq in	[D] 0.393 in	0.126 in	15 - 1400 psi	Water	I & VIII Div. 1
0.75 - 1.25 NPS	1.25 NPS	0.2157 sq in	[E] 0.524 in	0.168 in	15 - 1000 psi	Water	I & VIII Div. 1
1 - 1.5 NPS	1.5 NPS	0.3369 sq in	[F] 0.655 in	0.21 in	15 - 700 psi	Water	I & VIII Div. 1
1.25 - 2 NPS	2 NPS	0.553 sq in	[G] 0.839 in	0.268 in	15 - 600 psi	Water	I & VIII Div. 1
1.5 NPS	2.5 NPS	0.864 sq in	[H] 1.049 in	0.336 in	15 - 500 psi	Water	I & VIII Div. 1
2 NPS	3 NPS	1.415 sq in	[J] 1.342 in	0.429 in	15 - 500 psi	Water	I & VIII Div. 1

Certification Number: **36122** Design Series or catalog number: **Kunkle Fig. 930**

Type Classification: Safety Valve

Capacity Tests: Sec. IV at National Board T L (Picaway) on April 13, 1975

Method of Establishing Relieving Capacity: Flow Capacity, K

Certified Value: .818 Unitless

Test Medium: Steam

Certified Medium: Steam

Set Pressure Definition: Pop

Blowdown: Fixed

Scope of Nominal Size and Set Pressure Ranges:

Inlet Size	Outlet Size	Flow Area	Orifice [designator] diameter	Lift	Set Pressure Range	Media	Code Section
2 NPS	2 NPS	2.164 sq in	1.66 in	0.498 in	15 - 15 psi	Steam	IV
2.5 NPS	2.5 NPS	3.079 sq in	1.98 in	0.594 in	15 - 15 psi	Steam	IV
3 NPS	3 NPS	4.753 sq in	2.46 in	0.738 in	15 - 15 psi	Steam	IV

Certification Number: **36223** Design Series or catalog number: **1, 2**

Type Classification: Safety Valve

Capacity Tests: Sec. VIII Div. 1 at Ohio State University (Robinson Laboratory) on July 01, 1953

Method of Establishing Relieving Capacity: Flow Capacity, K

Certified Value: .823 Unitless

Test Medium: Steam

Certified Medium: Steam & Air/Gas

Set Pressure Definition: Pop

Blowdown: Fixed

Scope of Nominal Size and Set Pressure Ranges:

Inlet Size	Outlet Size	Flow Area	Orifice [designator] diameter	Lift	Set Pressure Range	Media	Code Section
0.5 - 0.75 NPS	.75, Top NPS	0.049 sq in	0.75 in	0.029 in	15 - 250 psi	Air	VIII
						Steam	VIII
1 NPS	1, Top NPS	0.0844 sq in	1 in	0.038 in	15 - 250 psi	Air	VIII
						Steam	VIII

Location: 953 Old US Highway 70, Black Mountain, NC 28711 United States

Acceptable Abbrev.: EMRN

Certification Number: **36267** Design Series or catalog number **Kunkle 264, 265, 266 & 267**

Type Classification: **Safety Relief Valve**Capacity Tests: **Sec. VIII Div. 1 at Ohio State University (Robinson Laboratory) on July 20, 1956**Method of Establishing Relieving Capacity: **Flow Capacity, K**Certified Value: **.766 Unitless**Test Medium: **Steam & Air/Gas**Certified Medium: **Steam & Air/Gas**Set Pressure Definition: **Pop**Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
0.5 - 1 NPS	.75, 1 NPS	0.11 sq in	0.375 in	0.115 in	15 - 2000 psi	Steam	VIII Div. 1
					15 - 3300 psi	Air	VIII Div. 1

Certification Number: **36278** Design Series or catalog number **Kunkle 337**

Type Classification: **Safety Relief Valve**Capacity Tests: **Sec. VIII Div. 1 at National Board T L (Picaway) on February 22, 1982**Method of Establishing Relieving Capacity: **Flow Capacity, K**Certified Value: **.86 Unitless**Test Medium: **Air/Gas**Certified Medium: **Air/Gas**Set Pressure Definition: **Pop**Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
2 NPS	2 NPS	1.916 sq in	1.562 in	0.612 in	15 - 60 psi	Air	VIII Div. 1
2.5 NPS	2.5 NPS	2.786 sq in	1.883 in	0.755 in	15 - 60 psi	Air	VIII Div. 1
3 NPS	3 NPS	4.037 sq in	2.267 in	0.91 in	15 - 60 psi	Air	VIII Div. 1

Certification Number: **36289** Design Series or catalog number **Kunkle 537**

Type Classification: **Safety Relief Valve**Capacity Tests: **Sec. IV at National Board T L (Picaway) on March 29, 1990**Method of Establishing Relieving Capacity: **Flow Capacity, K**Certified Value: **.806 Unitless**Test Medium: **Steam**Certified Medium: **Saturated Water**Set Pressure Definition: **Pop**Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
0.75 NPS	1 NPS	0.533 sq in	0.824 in	0.33 in	15 - 160 psi	Steam	IV
1 NPS	1.25 NPS	0.833 sq in	1.03 in	0.412 in	15 - 160 psi	Steam	IV
1.5 NPS	2 NPS	1.767 sq in	1.5 in	0.6 in	15 - 160 psi	Steam	IV
2 NPS	2.5 NPS	3.142 sq in	2 in	0.82 in	15 - 160 psi	Steam	IV

Emerson Automation Solutions Final Control, US LP (KBM)

NB#: 36290

Location: 953 Old US Highway 70, Black Mountain, NC 28711 United States

Acceptable Abbrev.: EMRN

Certification Number: **36290** Design Series or catalog number **Kunkle 548-A (.295 Orifice)**

Type Classification: **Safety Relief Valve**Capacity Tests: **Sec. VIII Div. 1 at Kunkle (Fort Wayne, IN) on May 20, 1988**Method of Establishing Relieving Capacity: **Flow Capacity, Slope**Certified Value: **1.0 SCFM/PSIA**Test Medium: **Air/Gas**Certified Medium: **Air/Gas**Set Pressure Definition: **Pop**Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
0.25 - 0.375 NPS	Side	0.068 sq in	0.295 in	0.126 in	15 - 400 psi	Air	VIII

Certification Number: **36302** Design Series or catalog number **Kunkle 541-C/542-C/548-C (.422 Orifice)**

Type Classification: **Safety Relief Valve**Capacity Tests: **Sec. VIII Div. 1 at Kunkle (Fort Wayne, IN) on May 20, 1988**Method of Establishing Relieving Capacity: **Flow Capacity, Slope**Certified Value: **2.0 SCFM/PSIA**Test Medium: **Air/Gas**Certified Medium: **Air/Gas**Set Pressure Definition: **Pop**Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
0.5 - 0.75 NPS	Side	0.14 sq in	0.422 in	0.2 in	15 - 400 psi	Air	VIII Div. 1

Certification Number: **36313** Design Series or catalog number **Kunkle 6933, 6934, 6935, 6254**

Type Classification: **Safety Valve**Capacity Tests: **Sec. IV at National Board T L (Picaway) on October 31, 1984**Method of Establishing Relieving Capacity: **Flow Capacity, K**Certified Value: **.878 Unitless**Test Medium: **Steam**Certified Medium: **Steam**Set Pressure Definition: **Pop**Blowdown: **Adjustable by Dual Ring**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
0.5 - 0.75 NPS	.75 NPS	0.121 sq in	[D] 0.393 in	0.094 in	15 - 15 psi	Steam	IV
0.75 - 1 NPS	1 NPS	0.216 sq in	[E] 0.524 in	0.125 in	15 - 15 psi	Steam	IV
1 - 1.25 NPS	1.25 NPS	0.336 sq in	[F] 0.654 in	0.156 in	15 - 15 psi	Steam	IV
1.25 - 1.5 NPS	1.5 NPS	0.554 sq in	[G] 0.84 in	0.2 in	15 - 15 psi	Steam	IV
1.5 - 2 NPS	2 NPS	0.863 sq in	[H] 1.048 in	0.25 in	15 - 15 psi	Steam	IV
1.5 - 2.5 NPS	2.5 NPS	1.414 sq in	[J] 1.342 in	0.32 in	15 - 15 psi	Steam	IV
2 - 3 NPS	3 NPS	2.022 sq in	[K] 1.605 in	0.432 in	15 - 15 psi	Steam	IV
2.5 - 4 NPS	4 NPS	3.138 sq in	[L] 1.999 in	0.539 in	15 - 15 psi	Steam	IV
3 - 4 NPS	4 NPS	3.96 sq in	[M] 2.246 in	0.605 in	15 - 15 psi	Steam	IV
4 NPS	6 NPS	4.774 sq in	[N] 2.466 in	0.664 in	15 - 15 psi	Steam	IV
		7.018 sq in	[P] 2.99 in	0.805 in	15 - 15 psi	Steam	IV

Location: 953 Old US Highway 70, Black Mountain, NC 28711 United States

Acceptable Abbrev.: EMRN

Certification
Number: **36335**Design Series
or catalog number **Kunkle 30**Type Classification: **Safety Relief Valve**Capacity Tests: **Sec. VIII Div. 1 at Kunkle (Fort Wayne, IN) on December 18, 1989**Method of Establishing Relieving Capacity: **Flow Capacity, Slope**Certified Value: **.186 SCFM/PSIA**Test Medium: **Air/Gas**Certified Medium: **Air/Gas**Set Pressure Definition: **Pop**Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
0.25 NPS	Side		0.157 in	0.1 in	60 - 4000 psi	Air	VIII Div. 1

Certification
Number: **36425**Design Series
or catalog number **C776**Type Classification: **Safety Relief Valve**Capacity Tests: **Sec. VIII Div. 1 at Anderson Greenwood & Co. on July 15, 2002**Method of Establishing Relieving Capacity: **Flow Capacity, K**Certified Value: **.790 Unitless**Test Medium: **Air/Gas**Certified Medium: **Gas**Special Service: **None**Set Pressure Definition: **Initial Audible Discharge**Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
0.5 - 0.75 NPS	.75, 1 NPS	0.169 sq in	0.465 in	0.116 in	15 - 600 psi	Air	VIII Div. 1
0.75 - 1 NPS	1.25 NPS	0.486 sq in	0.787 in	0.197 in	15 - 600 psi	Air	VIII Div. 1
1 NPS	1.25 NPS	0.34 sq in	0.658 in	0.164 in	15 - 500 psi	Air	VIII Div. 1
1.25 NPS	1.5 NPS	0.645 sq in	0.906 in	0.227 in	15 - 500 psi	Air	VIII Div. 1
1.5 NPS	2 NPS	1.024 sq in	1.142 in	0.286 in	15 - 500 psi	Air	VIII Div. 1
2 - 2.5 NPS	2.5 NPS	1.667 sq in	1.457 in	0.364 in	15 - 500 psi	Air	VIII Div. 1

Certification
Number: **36469**Design Series
or catalog number **Kunkle 541-A/542-A (.295 orifice)**Type Classification: **Safety Relief Valve**Capacity Tests: **Sec. VIII Div. 1 at Anderson Greenwood & Co. (Stafford TX) on December 14, 2010**Method of Establishing Relieving Capacity: **Flow Capacity, Slope**Certified Value: **1.0 SCFM/PSIA**Test Medium: **Air/Gas**Certified Medium: **Air/Gas**Special Service: **None**Set Pressure Definition: **Pop**Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
0.25 NPS	Side	0.068 sq in	0.295 in	0.126 in	15 - 200 psi	Air	VIII Div. 1

Location: 953 Old US Highway 70, Black Mountain, NC 28711 United States

Acceptable Abbrev.: EMRN

Certification Number: **36470** Design Series or catalog number **82 Series D Orifice**

Type Classification: **Safety Valve**Capacity Tests: **Sec. VIII Div. 1 at Anderson Greenwood & Co. (Stafford TX) on March 07, 2012**Method of Establishing Relieving Capacity: **Flow Capacity, Slope**Certified Value: **2.03 SCFM/PSIA**Test Medium: **Gas**Certified Medium: **Gas**Set Pressure Definition: **Pop**Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
0.75 - 1 NPS	1 NPS	0.127 sq in	[D] 0.402 in	0.101 in	15 - 1500 psi		VIII Div. 1

Certification Number: **36481** Design Series or catalog number **82 Series E Orifice**

Type Classification: **Safety Valve**Capacity Tests: **Sec. VIII at Anderson Greenwood & Co. (Stafford TX) on March 07, 2012**Method of Establishing Relieving Capacity: **Flow Capacity, Slope**Certified Value: **3.47 SCFM/PSIA**Test Medium: **Gas**Certified Medium: **Gas**Set Pressure Definition: **Pop**Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
0.75 - 1 NPS	1 NPS	0.221 sq in	[E] 0.53 in	0.133 in	15 - 1500 psi	Air	VIII Div. 1

Certification Number: **36492** Design Series or catalog number **Cash C600**

Type Classification: **Safety Valve**Capacity Tests: **Sec. VIII Div. 1 at Anderson Greenwood & Co. (Stafford TX) on March 11, 2015**Method of Establishing Relieving Capacity: **Flow Capacity, Slope**Certified Value: **0.792 SCFM/PSIA**Test Medium: **Gas**Certified Medium: **Gas**Special Service: **None**Set Pressure Definition: **Pop**Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
0.25 - 0.5 NPS	Top	0.065 sq in	0.289 in	0.072 in	90 - 600 psi	Air	VIII Div. 1
0.5625 in	Top	0.065 sq in	0.289 in	0.072 in	90 - 600 psi	Air	VIII Div. 1

Emerson Process Management Regulator Technologies, Inc. (FCF)

NB#: 22262

location: Avenida Industrias No. 6025, Parque Industrial FINSA, Nuevo Laredo, Tamaulipas 88275 Mexico

Acceptable Abbrev.: Fromex S.A. de C.V.

Emerson Process Management Regulator Technologies, Inc. (FCF)

location: Avenida Industrias No. 6025, Parque Industrial FINSA, Nuevo Laredo, Tamaulipas 88275 Mexico

Acceptable Abbrev.: Fromex S.A. de C.V.

Certification Number: **22262** Design Series or catalog number **H722/ H822**

Type Classification: Safety Relief Valve

Capacity Tests: Sec. VIII Div. 1 at National Board T L (Worthington) on October 21, 2002

Method of Establishing Relieving Capacity: Flow Capacity, Slope

Certified Value: 10.2 SCFM/PSIA

Certification Provisions: Cert. @ 20% OP

Test Medium: Air/Gas

Certified Medium: Gas

Special Service: Non-refrigerated liquified compressed gases

Set Pressure Definition: Start-to-Leak

Blowdown: Fixed

Scope of Nominal Size and Set Pressure Ranges:

Inlet Size	Outlet Size	Flow Area	Orifice [designator] diameter	Lift	Set Pressure Range	Media	Code Section
2 NPS	Top	0.823 sq in	1.09 in		100 - 400 psi	Air	VIII Div. 1

Certification Number: **22273** Design Series or catalog number **H732/H832/H732F3/H832F3/H732A/H832A**

Type Classification: Safety Relief Valve

Capacity Tests: Sec. VIII Div. 1 at National Board T L (Worthington) on January 03, 2003

Method of Establishing Relieving Capacity: Flow Capacity, Slope

Certified Value: 28.0 SCFM/PSIA

Test Medium: Air/Gas

Certified Medium: Gas

Special Service: Non-refrigerated liquified compressed gases

Set Pressure Definition: Start-to-Leak

Blowdown: Fixed

Scope of Nominal Size and Set Pressure Ranges:

Inlet Size	Outlet Size	Flow Area	Orifice [designator] diameter	Lift	Set Pressure Range	Media	Code Section
3 NPS	Top	2.463 sq in	1.84 in		100 - 400 psi	Air	VIII Div. 1

Certification Number: **22284** Design Series or catalog number **H282/ H284/ H882/ H884/ H5112/ H5114/ H8112/ H8114/H5118/H8118**

Type Classification: Safety Relief Valve

Capacity Tests: Sec. VIII Div. 1 at National Board T L (Worthington) on November 07, 2002

Method of Establishing Relieving Capacity: Flow Capacity, Slope

Certified Value: 30.9 SCFM/PSIA

Test Medium: Air/Gas

Certified Medium: Gas

Special Service: Non-refrigerated liquified compressed gases

Set Pressure Definition: Start-to-Leak

Blowdown: Fixed

Scope of Nominal Size and Set Pressure Ranges:

Inlet Size	Outlet Size	Flow Area	Orifice [designator] diameter	Lift	Set Pressure Range	Media	Code Section
2 NPS	Top	2.463 sq in			100 - 400 psi	Air	VIII Div. 1

Emerson Process Management Regulator Technologies, Inc. (FCF)

NB#: 22295

location: Avenida Industrias No. 6025, Parque Industrial FINSA, Nuevo Laredo, Tamaulipas 88275 Mexico

Acceptable Abbrev.: Fromex S.A. de C.V.

Certification Number: **22295** Design Series or catalog number: **H733/H833/H733F3/H833F3**

Type Classification: **Safety Relief Valve**Capacity Tests: **Sec. VIII Div. 1 at National Board T L (Worthington) on April 23, 2013**Method of Establishing Relieving Capacity: **Flow Capacity, Slope**Certified Value: **29.77 SCFM/PSIA**Test Medium: **Air/Gas**Certified Medium: **Gas**Set Pressure Definition: **Start-to-Leak**Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
3 NPS	Top	2.463 sq in	1.84 in		100 - 400 psi	Air	VIII Div. 1

Enertech, A Business Unit of Curtiss-Wright Flow Control Company (ECW)

NB#: 00662

location: 2950 E. Birch Street,

Acceptable Abbrev.: Enertech

Enertech, A Business Unit of Curtiss-Wright Flow Control Company (ECW)

location: 2950 E. Birch Street,

Acceptable Abbrev.: Enertech

Certification
Number: **00662**Design Series
or catalog number **NV51-1**Type Classification: **Relief Valve**Capacity Tests: **Sec. III NB at National Board T L (Worthington) on December 07, 2015**Method of Establishing Relieving Capacity: **Flow Capacity, 1 valve method**Certified Value: **6.3 GPM**Test Medium: **Water**Certified Medium: **Liquid**Special Service: **None**Set Pressure Definition: **First Steady Stream**Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
0.5 in	.5 in	0.075 in	0.519 in	0.1 in	50 - 50 psi	Water	III NB

Engineered Controls International, LLC (REG)

NB#: 46000

Location: 100 Rego Drive, Elon, NC 27244 United States

Acceptable Abbrev.: ECII, RegO

Engineered Controls International, LLC (REG)

Location: 100 Rego Drive, Elon, NC 27244 United States

Acceptable Abbrev.: ECII, RegO

Certification Number: **46000** Design Series or catalog number: **AA3130A250**

Type Classification: **Safety Relief Valve**Capacity Tests: **Sec. VIII Div. 1 at National Board T L (Picaway) on February 09, 1981**Method of Establishing Relieving Capacity: **Flow Capacity, 3 valve average**Certified Value: **1706 SCFM**Test Medium: **Air/Gas**Certified Medium: **Gas**Set Pressure Definition: **Start-to-Leak**Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
0.75 NPS	Top	0.423 sq in	0.734 in	0.184 in	250 - psi	Air	VIII Div. 1

Certification Number: **46011** Design Series or catalog number: **AA3130UA250**

Type Classification: **Safety Relief Valve**Capacity Tests: **Sec. VIII Div. 1 at National Board T L (Picaway) on August 30, 1978**Method of Establishing Relieving Capacity: **Flow Capacity, 3 valve average**Certified Value: **1838 SCFM**Test Medium: **Air/Gas**Certified Medium: **Gas**Special Service: **Non-refrigerated liquified compressed gases**Set Pressure Definition: **Start-to-Leak**Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
0.75 NPS	Top	0.423 sq in	0.734 in	0.184 in	250 - psi	Air	VIII Div. 1

Certification Number: **46022** Design Series or catalog number: **AA3130UA265**

Type Classification: **Safety Relief Valve**Capacity Tests: **Sec. VIII Div. 1 at National Board T L (Picaway) on August 30, 1978**Method of Establishing Relieving Capacity: **Flow Capacity, 3 valve average**Certified Value: **1912 SCFM**Certification Provisions: **Cert. @ 20% OP**Test Medium: **Air/Gas**Certified Medium: **Gas**Special Service: **None**Set Pressure Definition: **Start-to-Leak**Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
0.75 NPS	Top	0.423 sq in	0.734 in	0.184 in	265 - psi	Air	VIII Div. 1

Location: 100 Rego Drive, Elon, NC 27244 United States

Acceptable Abbrev.: ECII, RegO

Certification Number: **46033** Design Series or catalog number: **3131 (20% OP)**

Type Classification: **Safety Relief Valve**Capacity Tests: **Sec. VIII Div. 1 at National Board T L (Picaway) on February 27, 1981**Method of Establishing Relieving Capacity: **Flow Capacity, Slope**Certified Value: **6.161 SCFM/PSIA**Certification Provisions: **Cert. @ 20% OP**Test Medium: **Air/Gas**Certified Medium: **Gas**Special Service: **None**Set Pressure Definition: **Start-to-Leak**Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
0.75 NPS	Top	0.423 sq in	0.734 in		225 - 290 psi	Air	VIII

Certification Number: **46055** Design Series or catalog number: **AA3135A150**

Type Classification: **Safety Relief Valve**Capacity Tests: **Sec. VIII Div. 1 at Rego (Chicago IL) on February 20, 1980**Method of Establishing Relieving Capacity: **Flow Capacity, 3 valve average**Certified Value: **2969 SCFM**Test Medium: **Air/Gas**Certified Medium: **Gas**Special Service: **None**Set Pressure Definition: **Start-to-Leak**Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
1.25 NPS	Top	1.196 sq in	1.234 in	0.309 in	150 - psi	Air	VIII Div. 1

Certification Number: **46066** Design Series or catalog number: **AA3135A300**

Type Classification: **Safety Relief Valve**Capacity Tests: **Sec. VIII Div. 1 at Rego (Chicago IL) on February 20, 1980**Method of Establishing Relieving Capacity: **Flow Capacity, 3 valve average**Certified Value: **5733 SCFM**Test Medium: **Air/Gas**Certified Medium: **Gas**Set Pressure Definition: **Start-to-Leak**Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
1.25 NPS	Top	1.053 sq in	1.153 in	0.288 in	300 - psi	Air	VIII Div. 1

Location: 100 Rego Drive, Elon, NC 27244 United States

Acceptable Abbrev.: ECII, RegO

Certification Number: **46077** Design Series or catalog number: **A3149 (20% OP)**

Type Classification: **Safety Relief Valve**Capacity Tests: **Sec. VIII Div. 1 at Rego (Chicago IL) on February 09, 1981**Method of Establishing Relieving Capacity: **Flow Capacity, Slope**Certified Value: **29.086 SCFM/PSIA**Test Medium: **Air/Gas**Certified Medium: **Gas**Special Service: **Non-refrigerated liquified compressed gases**Set Pressure Definition: **Start-to-Leak**Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
2.5 NPS	Top	2.11 sq in	1.641 in	0.41 in	200 - 358 psi	Air	VIII Div. 1

Certification Number: **46099** Design Series or catalog number: **7534 (20% OP)**

Type Classification: **Safety Relief Valve**Capacity Tests: **Sec. VIII Div. 1 at National Board T L (Picaway) on February 09, 1981**Method of Establishing Relieving Capacity: **Flow Capacity, Slope**Certified Value: **33.12 SCFM/PSIA**Test Medium: **Air/Gas**Certified Medium: **Gas**Special Service: **Non-refrigerated liquified compressed gases**Set Pressure Definition: **Start-to-Leak**Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
2 NPS	Top	2.472 sq in	1.843 in		225 - 290 psi	Air	VIII Div. 1

Certification Number: **46101** Design Series or catalog number: **7583 (20% OP)**

Type Classification: **Safety Relief Valve**Capacity Tests: **Sec. VIII Div. 1 at National Board T L (Picaway) on January 21, 1981**Method of Establishing Relieving Capacity: **Flow Capacity, Slope**Certified Value: **5.74 SCFM/PSIA**Test Medium: **Air/Gas**Certified Medium: **Gas**Special Service: **Non-refrigerated liquified compressed gases**Set Pressure Definition: **Start-to-Leak**Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
0.75 NPS	Top	0.374 sq in	0.795 in	0.199 in	225 - 290 psi	Air	VIII Div. 1

Location: 100 Rego Drive, Elon, NC 27244 United States

Acceptable Abbrev.: ECII, RegO

Certification Number: **46112** Design Series or catalog number **A8434G**

Type Classification: **Safety Relief Valve**Capacity Tests: **Sec. VIII Div. 1 at National Board T L (Picaway) on April 29, 1988**Method of Establishing Relieving Capacity: **Flow Capacity, 3 valve average**Certified Value: **3456 SCFM**Certification Provisions: **Cert. @ 20% OP**Test Medium: **Air/Gas**Certified Medium: **Gas**Special Service: **Non-refrigerated liquified compressed gases**Set Pressure Definition: **Start-to-Leak**Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
2 NPS	Top	0.7234 sq in	1.015 in	0.254 in	250 - 250 psi	Air	VIII

Certification Number: **46123** Design Series or catalog number **A8434N**

Type Classification: **Safety Relief Valve**Capacity Tests: **Sec. VIII Div. 1 at Rego (Chicago IL) on January 22, 1983**Method of Establishing Relieving Capacity: **Flow Capacity, 3 valve average**Certified Value: **3659 SCFM**Certification Provisions: **Cert. @ 20% OP**Test Medium: **Air/Gas**Certified Medium: **Gas**Special Service: **None**Set Pressure Definition: **Start-to-Leak**Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
2 NPS	Top	0.7324 sq in	1.015 in	0.254 in	265 - psi	Air	VIII Div. 1

Certification Number: **46134** Design Series or catalog number **A8436G, VA8436G**

Type Classification: **Safety Relief Valve**Capacity Tests: **Sec. VIII Div. 1 at National Board T L (Picaway) on May 02, 1988**Method of Establishing Relieving Capacity: **Flow Capacity, 3 valve average**Certified Value: **9598 SCFM**Certification Provisions: **Cert. @ 20% OP**Test Medium: **Air/Gas**Certified Medium: **Gas**Special Service: **Non-refrigerated liquified compressed gases**Set Pressure Definition: **Start-to-Leak**Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
3 NPS	Top	2.253 sq in	1.766 in	0.442 in	250 - 250 psi	Air	VIII

Location: 100 Rego Drive, Elon, NC 27244 United States

Acceptable Abbrev.: ECII, RegO

Certification Number: **46145** Design Series or catalog number: **A8436N, VA8436N (20% OP)**

Type Classification: **Safety Relief Valve**Capacity Tests: **Sec. VIII Div. 1 at Rego (Chicago IL) on January 21, 1981**Method of Establishing Relieving Capacity: **Flow Capacity, 3 valve average**Certified Value: **9839 SCFM**Certification Provisions: **Cert. @ 20% OP**Test Medium: **Air/Gas**Certified Medium: **Gas**Set Pressure Definition: **Start-to-Leak**Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
3 NPS	Top	2.253 sq in	1.766 in		265 - 265 psi	Air	VIII Div. 1

Certification Number: **46156** Design Series or catalog number: **8543 (20% OP)**

Type Classification: **Safety Relief Valve**Capacity Tests: **Sec. VIII Div. 1 at Rego (Chicago IL) on May 24, 1982**Method of Establishing Relieving Capacity: **Flow Capacity, Slope**Certified Value: **4.45 SCFM/PSIA**Test Medium: **Air**Certified Medium: **Gas**Special Service: **Non-refrigerated liquified compressed gases**Set Pressure Definition: **Start-to-Leak**Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
1.25 NPS	Top	0.304 sq in	0.65 in	0.163 in	225 - 312 psi	Air	VIII Div. 1

Certification Number: **46167** Design Series or catalog number: **8544 (20% OP)**

Type Classification: **Safety Relief Valve**Capacity Tests: **Sec. VIII Div. 1 at Rego (Chicago IL) on December 20, 1985**Method of Establishing Relieving Capacity: **Flow Capacity, Slope**Certified Value: **2.979 SCFM/PSIA**Test Medium: **Air**Certified Medium: **Gas**Special Service: **Non-refrigerated liquified compressed gases**Set Pressure Definition: **Start-to-Leak**Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
1.25 NPS	Top	0.228 sq in	0.57 in	0.143 in	229 - 386 psi	Air	VIII Div. 1

Location: 100 Rego Drive, Elon, NC 27244 United States

Acceptable Abbrev.: ECII, RegO

Certification Number: **46178** Design Series or catalog number: **8684 (20% OP)**

Type Classification: **Safety Relief Valve**Capacity Tests: **Sec. VIII Div. 1 at National Board T L (Picaway) on January 22, 1981**Method of Establishing Relieving Capacity: **Flow Capacity, Slope**Certified Value: **8.15 SCFM/PSIA**Test Medium: **Air/Gas**Certified Medium: **Gas**Special Service: **None**Set Pressure Definition: **Start-to-Leak**Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
1 NPS	Top	0.593 sq in	0.921 in	0.305 in	225 - 290 psi	Air	VIII Div. 1

Certification Number: **46189** Design Series or catalog number: **8685 (20% OP)**

Type Classification: **Safety Relief Valve**Capacity Tests: **Sec. VIII Div. 1 at National Board T L (Picaway) on January 22, 1981**Method of Establishing Relieving Capacity: **Flow Capacity, Slope**Certified Value: **12.82 SCFM/PSIA**Test Medium: **Air/Gas**Certified Medium: **Gas**Special Service: **None**Set Pressure Definition: **Start-to-Leak**Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
1.25 NPS	Top	1.06 sq in	1.218 in	0.305 in	225 - 290 psi	Air	VIII Div. 1

Certification Number: **46190** Design Series or catalog number: **B-19434B & C-19434B**

Type Classification: **Safety Relief Valve**Capacity Tests: **Sec. VIII Div. 1 at Rego (Chicago IL) on June 28, 1983**Method of Establishing Relieving Capacity: **Flow Capacity, Slope**Certified Value: **1.744 SCFM/PSIA**Test Medium: **Air/Gas**Certified Medium: **Gas**Set Pressure Definition: **Start-to-Leak**Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
0.5 NPS	Side	0.118 sq in	0.387 in		235 - 300 psi	Air	VIII Div. 1

Location: 100 Rego Drive, Elon, NC 27244 United States

Acceptable Abbrev.: ECII, RegO

Certification Number: **46213** Design Series or catalog number: **UA3149A**

Type Classification: **Safety Relief Valve**Capacity Tests: **Sec. VIII Div. 1 at National Board T L (Worthington) on May 17, 1994**Method of Establishing Relieving Capacity: **Flow Capacity, Slope**Certified Value: **28.4 SCFM/PSIA**Test Medium: **Air**Certified Medium: **Gas**Set Pressure Definition: **Start-to-Leak**Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
2.5 NPS	Top	2.11 sq in	1.641 in	0.41 in	303 - 358 psi	Air	VIII Div. 1

Certification Number: **46268** Design Series or catalog number: **AA3135 (20% OP)**

Type Classification: **Safety Relief Valve**Capacity Tests: **Sec. VIII Div. 1 at Engineered Controls on October 13, 2000**Method of Establishing Relieving Capacity: **Flow Capacity, Slope**Certified Value: **20.15 SCFM/PSIA**Test Medium: **Air/Gas**Certified Medium: **Gas**Special Service: **None**Set Pressure Definition: **Start-to-Leak**Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
1.25 NPS	Top	1.196 sq in	1.234 in	0.309 in	225 - 265 psi	Air	VIII Div. 1

Certification Number: **46279** Design Series or catalog number: **PRV19430 , PRV29430**

Type Classification: **Safety Relief Valve**Capacity Tests: **Sec. VIII Div. 1 at Engineered Controls on February 11, 2000**Method of Establishing Relieving Capacity: **Flow Capacity, Slope**Certified Value: **.783 SCFM/PSIA**Test Medium: **Air**Certified Medium: **Gas**Set Pressure Definition: **Start-to-Leak**Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
0.25 - 0.5 NPS	Top	0.062 sq in	0.281 in		90 - 600 psi	Air	VIII Div. 1

Location: 100 Rego Drive, Elon, NC 27244 United States

Acceptable Abbrev.: ECII, RegO

Certification Number: **46291** Design Series or catalog number: **A3149 (20% OP)**

Type Classification: **Safety Relief Valve**Capacity Tests: **Sec. VIII Div. 1 at Engineered Controls on August 20, 2002**Method of Establishing Relieving Capacity: **Flow Capacity, Slope**Certified Value: **32.66 SCFM/PSIA**Test Medium: **Air/Gas**Certified Medium: **Gas**Special Service: **Non-refrigerated liquified compressed gases**Set Pressure Definition: **Start-to-Leak**Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
2.5 NPS	Top	2.11 sq in	1.641 in	0.41 in	55 - 150 psi	Air	VIII Div. 1

Certification Number: **46303** Design Series or catalog number: **AA3135A (20% OP)**

Type Classification: **Safety Relief Valve**Capacity Tests: **Sec. VIII Div. 1 at Engineered Controls on December 03, 2003**Method of Establishing Relieving Capacity: **Flow Capacity, Slope**Certified Value: **14.8 SCFM/PSIA**Test Medium: **Air**Certified Medium: **Gas**Special Service: **None**Set Pressure Definition: **Start-to-Leak**Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
1.25 NPS	Top	1.053 sq in	1.153 in	0.288 in	50 - 140 psi	Air	VIII Div. 1

Certification Number: **46314** Design Series or catalog number: **6555 Series**

Type Classification: **Safety Relief Valve**Capacity Tests: **Sec. VIII Div. 1 at Engineered Controls on December 05, 2005**Method of Establishing Relieving Capacity: **Flow Capacity, 3 valve average**Certified Value: **700 SCFM**Certification Provisions: **Cert. @ 20% OP**Test Medium: **Gas**Certified Medium: **Gas**Special Service: **None**Set Pressure Definition: **Start-to-Leak**Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
0.75 NPS	Top	0.255 sq in	0.57 in	0.143 in	250 psi	Air	VIII Div. 1

Location: 100 Rego Drive, Elon, NC 27244 United States

Acceptable Abbrev.: ECII, RegO

Certification Number: **46336** Design Series or catalog number: **8546T (20% OP)**

Type Classification: Relief Valve

Capacity Tests: Sec. VIII Div. 1 at Engineered Controls on July 18, 2008

Method of Establishing Relieving Capacity: Flow Capacity, 3 valve average

Certified Value: 792 SCFM

Certification Provisions: Cert. @ 20% OP

Test Medium: Gas

Certified Medium: Gas

Special Service: None

Set Pressure Definition: Start-to-Leak

Blowdown: Fixed

Scope of Nominal Size and Set Pressure Ranges:

Inlet Size	Outlet Size	Flow Area	Orifice [designator] diameter	Lift	Set Pressure Range	Media	Code Section
0.75 NPS	Top	0.159 sq in	0.45 in		312 psi	Air	VIII Div. 1

Certification Number: **46347** Design Series or catalog number: **8546G (20% OP)**

Type Classification: Safety Relief Valve

Capacity Tests: Sec. VIII Div. 1 at Engineered Controls on July 18, 2008

Method of Establishing Relieving Capacity: Flow Capacity, 3 valve average

Certified Value: 651 SCFM

Certification Provisions: Cert. @ 20% OP

Test Medium: Gas

Certified Medium: Gas

Special Service: None

Set Pressure Definition: Start-to-Leak

Blowdown: Fixed

Scope of Nominal Size and Set Pressure Ranges:

Inlet Size	Outlet Size	Flow Area	Orifice [designator] diameter	Lift	Set Pressure Range	Media	Code Section
0.75 NPS	Top	0.159 sq in	0.45 in		250 psi	Air	VIII Div. 1

Certification Number: **46358** Design Series or catalog number: **3135 (20% OP)**

Type Classification: Safety Relief Valve

Capacity Tests: Sec. VIII Div. 1 at Engineered Controls on October 22, 2010

Method of Establishing Relieving Capacity: Flow Capacity, 3 valve average

Certified Value: 5554 SCFM

Certification Provisions: Cert. @ 20% OP

Test Medium: Gas

Certified Medium: Gas

Set Pressure Definition: Start-to-Leak

Blowdown: Fixed

Scope of Nominal Size and Set Pressure Ranges:

Inlet Size	Outlet Size	Flow Area	Orifice [designator] diameter	Lift	Set Pressure Range	Media	Code Section
1.25 NPS	Top	1.055 sq in	1.159 in		250 psi	Air	VIII Div. 1

Location: 100 Rego Drive, Elon, NC 27244 United States

Acceptable Abbrev.: ECII, RegO

Certification Number: **46369** Design Series or catalog number **AR4106A, AR5106A**

Type Classification: **Safety Relief Valve**Capacity Tests: **Sec. VIII Div. 1 at Engineered Controls on February 07, 2012**Method of Establishing Relieving Capacity: **Flow Capacity, Slope**Certified Value: **1.56 SCFM/PSIA**Test Medium: **Gas**Certified Medium: **Gas**Set Pressure Definition: **Start-to-Leak**Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
0.75 NPS	1 NPS	0.135 sq in	0.415 in	0.104 in	75 - 400 psi	Air	VIII Div. 1

Certification Number: **46370** Design Series or catalog number **AR4108A, AR5108A**

Type Classification: **Safety Relief Valve**Capacity Tests: **Sec. VIII Div. 1 at Engineered Controls on February 07, 2012**Method of Establishing Relieving Capacity: **Flow Capacity, Slope**Certified Value: **3.46 SCFM/PSIA**Test Medium: **Gas**Certified Medium: **Gas**Set Pressure Definition: **Start-to-Leak**Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
1 NPS	1.25 NPS	0.276 sq in	0.593 in	0.191 in	75 - 425 psi	Air	VIII Div. 1

Certification Number: **46381** Design Series or catalog number **AR4112A, AR5112A**

Type Classification: **Safety Relief Valve**Capacity Tests: **Sec. VIII Div. 1 at Engineered Controls on February 07, 2012**Method of Establishing Relieving Capacity: **Flow Capacity, Slope**Certified Value: **7.86 SCFM/PSIA**Test Medium: **Gas**Certified Medium: **Gas**Set Pressure Definition: **Start-to-Leak**Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
1.5 NPS	2 NPS	0.65 sq in	0.91 in	0.248 in	80 - 425 psi	Air	VIII Div. 1

Certification Number: **46392** Design Series or catalog number **AR4104A, AR5104A**

Type Classification: **Safety Relief Valve**Capacity Tests: **Sec. VIII Div. 1 at Engineered Controls on June 06, 2013**Method of Establishing Relieving Capacity: **Flow Capacity, Slope**Certified Value: **1.40 SCFM/PSIA**Test Medium: **Gas**Certified Medium: **Gas**Set Pressure Definition: **Start-to-Leak**Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
0.5 NPS	1 NPS	0.135 sq in	0.415 in	0.104 in	75 - 500 psi	Air	VIII Div. 1

Location: 100 Rego Drive, Elon, NC 27244 United States

Acceptable Abbrev.: ECII, RegO

Certification Number: **46404** Design Series or catalog number: **NG9008M**

Type Classification: **Safety Relief Valve**Capacity Tests: **Sec. VIII Div. 1 at Engineered Controls on January 29, 2014**Method of Establishing Relieving Capacity: **Flow Capacity, Slope**Certified Value: **1.026 SCFM/PSIA**Certification Provisions: **Cert. @ 20% OP**Test Medium: **Gas**Certified Medium: **Gas**Special Service: **None**Set Pressure Definition: **Start-to-Leak**Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
0.5	3/8	0.062	0.281 in		230 - 415 psi	Air	VIII Div. 1

Certification Number: **46415** Design Series or catalog number: **PRV19430, PRV29430 (Low Pressure)**

Type Classification: **Safety Relief Valve**Capacity Tests: **Sec. VIII Div. 1 at National Board T L (Worthington) on October 16, 2017**Method of Establishing Relieving Capacity: **Flow Capacity, Slope**Certified Value: **0.750 SCFM/PSIA**Test Medium: **Gas**Certified Medium: **Gas**Set Pressure Definition: **Start-to-Leak**Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
0.25 - 0.5 NPS	Top	0.062 sq in	0.281 in		15 - 89 psi	Air	VIII Div. 1

Enviro Valve Inc (ENV)

NB#: 58025

location: 807 N. Sycamore Ave., Broken Arrow, OK 74012 United States

Acceptable Abbrev.: EnviroValve

Enviro Valve Inc (ENV)

location: 807 N. Sycamore Ave., Broken Arrow, OK 74012 United States

Acceptable Abbrev.: EnviroValve

Certification
Number: **58025**Design Series
or catalog number **EVSP**Type Classification: **Breaking Bar Non-reclosing Device**Capacity Tests: **Sec. VIII Div. 1 at National Board T L (Worthington) on July 18, 2013**Method of Establishing Relieving Capacity: **Resistance Factor, 3 Size, Krg**Certified Value: **3.71 Unitless**Test Medium: **Air/Gas**Certified Medium: **Air or gases (Krg)**Set Pressure Definition: **Breaking Pressure**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
8 NPS	8 NPS	24.57 sq in	7.3 in		15 - 45 psi	Air	VIII Div. 1
		25.23 sq in	7.31 in		5 - 15 psi	Air	VIII Div. 1
10 NPS	10 NPS	44.39 sq in	9.31 in		15 - 45 psi	Air	VIII Div. 1
		45.69 sq in	9.33 in		5 - 15 psi	Air	VIII Div. 1
12 NPS	12 NPS	70.65 sq in	11.2 in		15 - 45 psi	Air	VIII Div. 1
		72.01 sq in	11.23 in		5 - 15 psi	Air	VIII Div. 1
14 NPS	14 NPS	86.65 sq in	12.38 in		15 - 45 psi	Air	VIII Div. 1
		87.86 sq in	12.41 in		5 - 15 psi	Air	VIII Div. 1
16 NPS	16 NPS	122 sq in	14.28 in		15 - 45 psi	Air	VIII Div. 1
		122.71 sq in	14.3 in		5 - 15 psi	Air	VIII Div. 1
18 NPS	18 NPS	162.22 sq in	16.21 in		15 - 45 psi	Air	VIII Div. 1
		162.28 sq in	16.21 in		5 - 15 psi	Air	VIII Div. 1
20 NPS	20 NPS	208.93 sq in	18.12 in		5 - 45 psi	Air	VIII Div. 1
24 NPS	24 NPS	316.59 sq in	21.95 in		5 - 15 psi	Air	VIII Div. 1
		316.61 sq in	21.95 in		15 - 45 psi	Air	VIII Div. 1

F. C. Kingston Company (KNG)

NB#: 35008

location: 23201 Normandie Avenue, Torrance, CA 90501 United States

Acceptable Abbrev.: Kingston

F. C. Kingston Company (KNG)

location: 23201 Normandie Avenue, Torrance, CA 90501 United States

Acceptable Abbrev.: Kingston

Certification Number: **35008** Design Series or catalog number: **110C**

Type Classification: **Safety Relief Valve**Capacity Tests: **Sec. VIII Div. 1 at Ladewig Valve Company on November 01, 1967**Method of Establishing Relieving Capacity: **Flow Capacity, Slope**Certified Value: **.59 SCFM/PSIA**Test Medium: **Air/Gas**Certified Medium: **Air/Gas**Special Service: **None**Set Pressure Definition: **Pop**Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
0.25 - 0.375 NPS	Side	0.069 sq in	0.296 in	0.074 in	25 - 600 psi	Air	VIII

Certification Number: **35019** Design Series or catalog number: **112C (.250" Orif.)**

Type Classification: **Safety Relief Valve**Capacity Tests: **Sec. VIII Div. 1 at Phillips Petroleum on February 11, 1966**Method of Establishing Relieving Capacity: **Flow Capacity, Slope**Certified Value: **.51 SCFM/PSIA**Test Medium: **Gas**Certified Medium: **Air/Gas**Set Pressure Definition: **Pop**Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
0.25 - 0.375 NPS	Side	0.049 sq in	0.25 in	0.062 in	25 - 300 psi	Air	VIII Div. 1

Certification Number: **35020** Design Series or catalog number: **112C (.375" Orif.)**

Type Classification: **Safety Relief Valve**Capacity Tests: **Sec. VIII Div. 1 at Phillips Petroleum on February 11, 1966**Method of Establishing Relieving Capacity: **Flow Capacity, Slope**Certified Value: **.78 SCFM/PSIA**Test Medium: **Gas**Certified Medium: **Air/Gas**Set Pressure Definition: **Pop**Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
0.5 NPS	Side	0.11 sq in	0.375 in	0.094 in	25 - 300 psi	Air	VIII Div. 1

F. C. Kingston Company (KNG)

NB#: 35031

Location: 23201 Normandie Avenue, Torrance, CA 90501 United States

Acceptable Abbrev.: Kingston

Certification Number: **35031** Design Series or catalog number **Fig. 114 (.437" Orif.)**

Type Classification: **Safety Relief Valve**Capacity Tests: **Sec. VIII Div. 1 at National Board T L (Picaway) on January 17, 1982**Method of Establishing Relieving Capacity: **Flow Capacity, Slope**Certified Value: **1.6 SCFM/PSIA**Test Medium: **Air/Gas**Certified Medium: **Air/Gas**Special Service: **None**Set Pressure Definition: **Pop**Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
0.75 NPS	Side	0.15 sq in	0.437 in	0.144 in	25 - 250 psi	Air	VIII Div. 1

Certification Number: **35042** Design Series or catalog number **Fig. 114 (.625" Orif.)**

Type Classification: **Safety Relief Valve**Capacity Tests: **Sec. VIII Div. 1 at Phillips Petroleum on January 17, 1962**Method of Establishing Relieving Capacity: **Flow Capacity, Slope**Certified Value: **2.37 SCFM/PSIA**Test Medium: **Air/Gas**Certified Medium: **Air/Gas**Set Pressure Definition: **Pop**Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
1 NPS	Side	0.307 sq in	0.625 in	0.156 in	25 - 250 psi	Air	VIII Div. 1

Certification Number: **35053** Design Series or catalog number **Fig. 114 & 115 (.219" Orif.)**

Type Classification: **Safety Relief Valve**Capacity Tests: **Sec. VIII Div. 1 at Phillips Petroleum on May 08, 1961**Method of Establishing Relieving Capacity: **Flow Capacity, Slope**Certified Value: **.52 SCFM/PSIA**Certified Value (alternate medium): **1.46 PPH/PSIA**Test Medium: **Gas**Certified Medium: **Steam & Air/Gas**Special Service: **None**Set Pressure Definition: **Pop**Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
0.25 NPS	Side	0.038 sq in	0.219 in	0.055 in	25 - 300 psi	Air	VIII Div. 1
					35 - 50 psi	Steam	VIII Div. 1

F. C. Kingston Company (KNG)

NB#: 35064

Location: 23201 Normandie Avenue, Torrance, CA 90501 United States

Acceptable Abbrev.: Kingston

Certification Number: **35064** Design Series or catalog number **Fig. 114 & 115 (.265 Orif.)**

Type Classification: **Safety Relief Valve**Capacity Tests: **Sec. VIII Div. 1 at Phillips Petroleum on October 23, 1961**Method of Establishing Relieving Capacity: **Flow Capacity, Slope**Certified Value: **.69 SCFM/PSIA**Test Medium: **Gas**Certified Medium: **Air/Gas**Set Pressure Definition: **Pop**Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
0.375 NPS	Side	0.055 sq in	0.265 in	0.066 in	25 - 275 psi	Air	VIII Div. 1

Certification Number: **35075** Design Series or catalog number **Fig. 114 & 115 (.312" Orif.)**

Type Classification: **Safety Relief Valve**Capacity Tests: **Sec. VIII Div. 1 at Phillips Petroleum on October 23, 1961**Method of Establishing Relieving Capacity: **Flow Capacity, Slope**Certified Value: **.85 SCFM/PSIA**Test Medium: **Gas**Certified Medium: **Air/Gas**Special Service: **None**Set Pressure Definition: **Pop**Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
0.5 NPS	Side	0.076 sq in	0.312 in	0.078 in	25 - 275 psi	Air	VIII Div. 1

Certification Number: **35086** Design Series or catalog number **Fig. 118C & 119 (.302" Orif.)**

Type Classification: **Safety Relief Valve**Capacity Tests: **Sec. VIII Div. 1 at National Board T L (Picaway) on June 04, 1977**Method of Establishing Relieving Capacity: **Flow Capacity, Slope**Certified Value: **1.07 SCFM/PSIA**Test Medium: **Air/Gas**Certified Medium: **Air/Gas**Special Service: **None**Set Pressure Definition: **Pop**Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
0.25 NPS	Side	0.068 sq in	0.295 in	0.074 in	25 - 300 psi	Air	VIII Div. 1

F. C. Kingston Company (KNG)

NB#: 35097

Location: 23201 Normandie Avenue, Torrance, CA 90501 United States

Acceptable Abbrev.: Kingston

Certification Number: **35097** Design Series or catalog number **Fig. 118C & 119 (.359" Orif.)**

Type Classification: **Safety Relief Valve**Capacity Tests: **Sec. VIII Div. 1 at National Board T L (Picaway) on June 24, 1977**Method of Establishing Relieving Capacity: **Flow Capacity, Slope**Certified Value: **1.54 SCFM/PSIA**Test Medium: **Gas**Certified Medium: **Air/Gas**Set Pressure Definition: **Pop**Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
0.375 - 0.5 NPS	Side	0.101 sq in	0.359 in	0.123 in	25 - 300 psi	Air	VIII Div. 1

Certification Number: **35109** Design Series or catalog number **Fig. 118C & 119 (.578" Orif)**

Type Classification: **Safety Relief Valve**Capacity Tests: **Sec. VIII Div. 1 at National Board T L (Picaway) on June 01, 1977**Method of Establishing Relieving Capacity: **Flow Capacity, Slope**Certified Value: **3.67 SCFM/PSIA**Test Medium: **Air/Gas**Certified Medium: **Air/Gas**Set Pressure Definition: **Pop**Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
0.75 - 1 NPS	Side	0.262 sq in	0.578 in	0.144 in	25 - 300 psi	Air	VIII

Certification Number: **35121** Design Series or catalog number **KSV12P-1 & KSV25P-2**

Type Classification: **Safety Relief Valve**Capacity Tests: **Sec. VIII Div. 1 at National Board T L (Worthington) on July 10, 1997**Method of Establishing Relieving Capacity: **Flow Capacity, Slope**Certified Value: **.726 SCFM/PSIA**Certified Value (alternate medium): **2.04 PPH/PSIA**Test Medium: **Air/Gas**Certified Medium: **Steam & Air/Gas**Set Pressure Definition: **Pop**Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
0.125 - 0.25 NPS	Side	0.049 sq in	0.25 in		25 - 375 psi	Air	VIII Div. 1
					36 - 54 psi	Steam	VIII Div. 1

F. C. Kingston Company (KNG)

NB#: 35132

Location: 23201 Normandie Avenue, Torrance, CA 90501 United States

Acceptable Abbrev.: Kingston

Certification Number: **35132** Design Series or catalog number: **KSV10-1 & KSV10-2**

Type Classification: **Safety Relief Valve**Capacity Tests: **Sec. VIII Div. 1 at National Board T L (Worthington) on September 18, 1997**Method of Establishing Relieving Capacity: **Flow Capacity, Slope**Certified Value: **.283 SCFM/PSIA**Test Medium: **Air/Gas**Certified Medium: **Air/Gas**Set Pressure Definition: **Pop**Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
0.125 - 0.25 NPS	Side	0.019 sq in	0.156 in		50 - 275 psi	Air	VIII

Certification Number: **35143** Design Series or catalog number: **112C Steam Service**

Type Classification: **Safety Relief Valve**Capacity Tests: **Sec. VIII Div. 1 at National Board T L (Worthington) on June 03, 1996**Method of Establishing Relieving Capacity: **Flow Capacity, Slope**Certified Value: **1.48 PPH/PSIA**Test Medium: **Steam**Certified Medium: **Steam**Set Pressure Definition: **Pop**Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
0.25 - 0.375 NPS	Side	0.049 sq in	0.25 in	0.062 in	36 - 56 psi	Steam	VIII Div. 1

Certification Number: **35154** Design Series or catalog number: **710D**

Type Classification: **Safety Relief Valve**Capacity Tests: **Sec. VIII Div. 1 at National Board T L (Worthington) on January 23, 2013**Method of Establishing Relieving Capacity: **Flow Capacity, Slope**Certified Value: **2.20 SCFM/PSIA**Certified Value (alternate medium): **6.18 PPH/PSIA**Test Medium: **Steam & Air/Gas**Certified Medium: **Steam & Air/Gas**Special Service: **None**Set Pressure Definition: **Pop**Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
0.5 - 1 NPS	.75, 1 NPS	0.137 sq in	[D] 0.418 in	0.104 in	15 - 250 psi	Steam	VIII Div. 1
					15 - 400 psi	Air	VIII Div. 1

Farris Engineering (FIC)

NB#: 57259

location: 15 Shaver Street, Brantford, ON N3T 5T3 Canada

Acceptable Abbrev.: Farris Engineering, Div. of Curtiss-Wright F.C.C.

Farris Engineering (FIC)

location: 15 Shaver Street, Brantford, ON N3T 5T3 Canada

Acceptable Abbrev.: Farris Engineering, Div. of Curtiss-Wright F.C.C.

Certification
Number: **57259**Design Series
or catalog number **4700L (liquids)**

Type Classification: Relief Valve

Capacity Tests: Sec. VIII Div. 1 at National Board T L (Picaway) on May 21, 1985

Method of Establishing Relieving Capacity: Flow Capacity, K

Certified Value: .654 Unitless

Test Medium: Water

Certified Medium: Liquid

Set Pressure Definition: First Steady Stream

Blowdown: Fixed

Scope of Nominal Size and Set Pressure Ranges:

Inlet Size	Outlet Size	Flow Area	Orifice [designator] diameter	Lift	Set Pressure Range	Media	Code Section
0.5 - 1 NPS	.75, 1, 1.5 NPS	0.028 sq in	[B] 0.395 in	0.047 in	15 - 6000 psi	Water	VIII Div. 1
		0.049 sq in	[C] 0.395 in	0.062 in	15 - 6000 psi	Water	VIII Div. 1
		0.123 sq in	[D] 0.66 in	0.099 in	15 - 6000 psi	Water	VIII Div. 1
		0.225 sq in	[E] 0.66 in	0.134 in	15 - 6000 psi	Water	VIII Div. 1
1 NPS	1.5 NPS	0.062 sq in	[C] 0.395 in	0.062 in	15 - 6000 psi	Water	VIII Div. 1

Certification
Number: **57383**Design Series
or catalog number **954C55-120/S4**

Type Classification: Vacuum Relief Valve

Capacity Tests: Sec. III ND at National Board T L (Worthington) on March 24, 2016

Method of Establishing Relieving Capacity: Flow Capacity, 1 valve method

Certified Value: 253 SCFM

Test Medium: Gas

Certified Medium: Air/Gas

Set Pressure Definition: Opening Pressure

Blowdown: Fixed

Scope of Nominal Size and Set Pressure Ranges:

Inlet Size	Outlet Size	Flow Area	Orifice [designator] diameter	Lift	Set Pressure Range	Media	Code Section
2 in	2 in	1.85 sq in	1.88 in	0.23 in	-0.25 psi	Air	III ND

Certification
Number: **59116**Design Series
or catalog number **SS-114-657**

Type Classification: Power Actuated Relief Valve

Capacity Tests: Sec. III NB at Farris (Brecksville OH) on June 12, 2014

Method of Establishing Relieving Capacity: Flow Capacity, K

Certified Value: .402 Unitless

Test Medium: Water

Certified Medium: Liquid

Special Service: None

Set Pressure Definition: Heavy Flow

Blowdown: Adjustable

Scope of Nominal Size and Set Pressure Ranges:

Inlet Size	Outlet Size	Flow Area	Orifice [designator] diameter	Lift	Set Pressure Range	Media	Code Section
6 NPS	8 NPS	9.276 sq in	3.438 in	1.125 in	1516 psi	Water	III NB

Farris Engineering (TFO)

NB#: 57002

location: 10195 Brecksville Road, Brecksville, OH 44141 United States

Farris Engineering (TFO)

location: 10195 Brecksville Road, Brecksville, OH 44141 United States

Certification Number: **57002** Design Series or catalog number: **1850, 1850H, 1851, 1852, 1855, 1856M, 2850, 2852, 2856, 2850H**

Type Classification: **Safety Relief Valve**Capacity Tests: **Sec. VIII Div. 1 at Farris (Brecksville OH) on May 05, 1979**Method of Establishing Relieving Capacity: **Flow Capacity, K**Certified Value: **.652 Unitless**Test Medium: **Steam & Air/Gas**Certified Medium: **Steam & Air/Gas**Special Service: **None**Set Pressure Definition: **Pop**Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
0.5 - 0.75 NPS	1, 1.5 NPS	0.107 sq in	0.5 in	0.068 in	15 - 2500 psi	Air	VIII Div. 1
					15 - 800 psi	Steam	VIII Div. 1
0.75 - 1 NPS	1 - 1.5 NPS	0.24 sq in	0.75 in	0.102 in	15 - 800 psi	Air	VIII Div. 1
						Steam	VIII Div. 1
1 NPS	1.5, 2 NPS	0.411 sq in	1 in	0.131 in	15 - 300 psi	Air	VIII
						Steam	VIII
1.5 NPS	2, 2.5 NPS	0.668 sq in	1.25 in	0.17 in	15 - 200 psi	Air	VIII Div. 1
						Steam	VIII Div. 1
		0.961 sq in	1.5 in	0.204 in	15 - 300 psi	Air	VIII
						Steam	VIII
2 - 2.5 NPS	3 NPS	1.539 sq in	2 in	0.245 in	15 - 300 psi	Air	VIII Div. 1
						Steam	VIII Div. 1
2.5 - 3 NPS	4 NPS	2.662 sq in	2.5 in	0.339 in	15 - 250 psi	Air	VIII Div. 1
						Steam	VIII Div. 1
3 NPS	4 NPS	3.836 sq in	3 in	0.407 in	15 - 250 psi	Air	VIII Div. 1
						Steam	VIII Div. 1

Certification Number: **57013** Design Series or catalog number: **1890, 1892, 1895, 1896**

Type Classification: **Safety Relief Valve**Capacity Tests: **Sec. VIII Div. 1 at Teledyne Farris (Brecksville OH) on September 19, 1988**Method of Establishing Relieving Capacity: **Flow Capacity, Slope**Certified Value: **4.41 PPH/PSIA**Certified Value (alternate medium): **1.57 SCFM/PSIA**Test Medium: **Steam & Air/Gas**Certified Medium: **Steam & Air/Gas**Set Pressure Definition: **Pop**Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
0.5 - 0.75 NPS	.75, 1 NPS	0.11 sq in	0.375 in	0.094 in	15 - 800 psi	Air	III VIII Div. 1
						Steam	III VIII Div. 1

Certification
Number: **57024**Design Series
or catalog number **3800**Type Classification: **Pilot Operated Pressure Relief Valve**Capacity Tests: **Sec. VIII Div. 1 at Teledyne Farris (Palisades Park NJ) on May 20, 1994**Method of Establishing Relieving Capacity: **Flow Capacity, K**Certified Value: **.859 Unitless**Test Medium: **Steam & Air/Gas**Certified Medium: **Steam & Air/Gas**Set Pressure Definition: **1.Pop 2.Initial Audible Discharge**Blowdown: **Adjustable and Fixed for Mod. Pilot**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
1 - 1.5 NPS	2 NPS	0.15 sq in	[D] 0.437 in	0.162 in	15 - 10000 psi	Air	VIII Div. 1
					15 - 1050 psi	Steam	VIII Div. 1
		0.225 sq in	[E] 0.535 in	0.198 in	15 - 10000 psi	Air	VIII Div. 1
					15 - 1050 psi	Steam	VIII Div. 1
		0.371 sq in	[F] 0.687 in	0.254 in	15 - 10000 psi	Air	VIII Div. 1
					15 - 1050 psi	Steam	VIII Div. 1
1 - 2 NPS	2, 3 NPS	0.559 sq in	[G] 0.844 in	0.312 in	15 - 1050 psi	Steam	VIII Div. 1
					15 - 7000 psi	Air	VIII Div. 1
1.5 - 2 NPS	2, 3 NPS	0.873 sq in	[H] 1.054 in	0.39 in	15 - 1050 psi	Steam	VIII Div. 1
					15 - 6000 psi	Air	VIII Div. 1
1.5 - 3 NPS	2, 3, 4 NPS	1.43 sq in	[J] 1.35 in	0.5 in	15 - 1050 psi	Steam	VIII Div. 1
					15 - 6000 psi	Air	VIII Div. 1
2 - 3 NPS	3, 4 NPS	2.042 sq in	[K] 1.612 in	0.596 in	15 - 1050 psi	Steam	VIII Div. 1
					15 - 5000 psi	Air	VIII Div. 1
3 - 4 NPS	4, 6 NPS	3.17 sq in	[L] 2.009 in	0.743 in	15 - 1050 psi	Steam	VIII Div. 1
					15 - 4000 psi	Air	VIII Div. 1
		3.42 sq in	[L1] 2.088 in	0.773 in	15 - 1050 psi	Steam	VIII Div. 1
					15 - 4000 psi	Air	VIII Div. 1
		4 sq in	[M] 2.257 in	0.835 in	15 - 1050 psi	Steam	VIII Div. 1
					15 - 3000 psi	Air	VIII Div. 1
		4.822 sq in	[N] 2.478 in	0.917 in	15 - 1050 psi	Steam	VIII Div. 1
					15 - 3000 psi	Air	VIII Div. 1
4 - 6 NPS	6, 8 NPS	7.087 sq in	[P] 3.004 in	1.111 in	15 - 1050 psi	Steam	VIII Div. 1
					15 - 2500 psi	Air	VIII Div. 1
6 NPS	8 NPS	12.27 sq in	[Q] 3.952 in	1.462 in	15 - 1050 psi	Steam	VIII Div. 1
					15 - 2000 psi	Air	VIII Div. 1
6 - 8 NPS	8, 10 NPS	17.78 sq in	[R] 4.758 in	1.76 in	15 - 1050 psi	Steam	VIII Div. 1
					15 - 2000 psi	Air	VIII Div. 1
8 NPS	10 NPS	28.94 sq in	[T] 6.07 in	2.246 in	15 - 1050 psi	Steam	VIII Div. 1
					15 - 1480 psi	Air	VIII Div. 1

Location: 10195 Brecksville Road, Brecksville, OH 44141 United States

Certification
Number: **57035**Design Series
or catalog number **3800FP**Type Classification: **Pilot Operated Pressure Relief Valve**Capacity Tests: **Sec. VIII Div. 1 at Teledyne Farris (Brecksville OH) on April 26, 1994**Method of Establishing Relieving Capacity: **Flow Capacity, K**Certified Value: **.801 Unitless**Test Medium: **Steam & Air/Gas**Certified Medium: **Steam & Air/Gas**Special Service: **None**Set Pressure Definition: **1.Pop 2.Initial Audible Discharge**Blowdown: **Adjustable and Fixed for Mod. Pilot**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
1 NPS	2, 3 NPS	0.719 sq in	[A] 0.957 in	0.354 in	15 - 10000 psi	Air	VIII Div. 1
					15 - 1050 psi	Steam	VIII Div. 1
1.5 NPS	2, 3 NPS	1.767 sq in	[1] 1.5 in	0.555 in	15 - 1050 psi	Steam	VIII Div. 1
					15 - 7000 psi	Air	VIII Div. 1
2 NPS	3 NPS	2.953 sq in	[2] 1.939 in	0.717 in	15 - 1050 psi	Steam	VIII Div. 1
					15 - 6000 psi	Air	VIII Div. 1
3 NPS	4 NPS	6.605 sq in	[3] 2.9 in	1.073 in	15 - 1050 psi	Steam	VIII Div. 1
					15 - 5000 psi	Air	VIII Div. 1
4 NPS	6 NPS	11.5 sq in	[4] 3.826 in	1.416 in	15 - 1050 psi	Steam	VIII Div. 1
					15 - 4000 psi	Air	VIII Div. 1
6 NPS	8 NPS	26.07 sq in	[6] 5.761 in	2.132 in	15 - 1050 psi	Steam	VIII Div. 1
					15 - 2000 psi	Air	VIII Div. 1
8 NPS	10 NPS	45.66 sq in	[8] 7.625 in	2.821 in	15 - 1050 psi	Steam	VIII Div. 1
					15 - 1500 psi	Air	VIII Div. 1
12 NPS	16 NPS	109.5 sq in	[12] 11.81 in	4.37 in	15 - 800 psi	Air	VIII Div. 1
						Steam	VIII Div. 1

Certification Number: **57046** Design Series or catalog number **6400/6600 (previously 2500 & 4600)**

Type Classification: **Safety Valve**

Capacity Tests: **Sec. I & VIII Div. 1 at Ohio State University (Robinson Laboratory) on January 28, 1972**

Method of Establishing Relieving Capacity: **Flow Capacity, K**

Certified Value: **.858 Unitless**

Test Medium: **Steam**

Certified Medium: **Steam & Air/Gas**

Special Service: **None**

Set Pressure Definition: **Pop**

Blowdown: **Adjustable by Dual Ring**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
1 - 1.5 NPS	2 - 3 NPS	0.15 sq in	[D] 0.437 in	0.109 in	15 - 2900 psi	Air	VIII Div. 1
						Steam	I VIII Div. 1
		0.225 sq in	[E] 0.535 in	0.134 in	15 - 2900 psi	Air	VIII Div. 1
						Steam	I VIII Div. 1
1.5 NPS	2 - 3 NPS	0.371 sq in	[F] 0.687 in	0.172 in	15 - 2900 psi	Air	VIII Div. 1
						Steam	I VIII Div. 1
1.5 - 2 NPS	2.5 - 3 NPS	0.559 sq in	[G] 0.844 in	0.211 in	15 - 2900 psi	Air	VIII Div. 1
						Steam	I VIII Div. 1
	3 NPS	0.873 sq in	[H] 1.054 in	0.264 in	15 - 2900 psi	Air	VIII Div. 1
						Steam	I VIII Div. 1
2 - 3 NPS	3 - 4 NPS	1.43 sq in	[J] 1.35 in	0.338 in	15 - 2900 psi	Air	VIII Div. 1
						Steam	I VIII Div. 1
2.5 - 3 NPS	4, 6 NPS	2.042 sq in	[K] 1.612 in	0.403 in	15 - 2900 psi	Air	VIII Div. 1
						Steam	I VIII Div. 1
3 - 4 NPS	4, 6 NPS	3.17 sq in	[L] 2.009 in	0.502 in	15 - 2900 psi	Air	VIII Div. 1
						Steam	I VIII Div. 1
	6 NPS	4 sq in	[M] 2.257 in	0.564 in	15 - 2900 psi	Air	VIII Div. 1
						Steam	I VIII Div. 1
		4.822 sq in	[N] 2.478 in	0.62 in	15 - 2900 psi	Air	VIII Div. 1
						Steam	I VIII Div. 1
4 NPS	6 NPS	7.087 sq in	[P] 3.004 in	0.751 in	15 - 2900 psi	Air	VIII Div. 1
						Steam	I VIII Div. 1
6 NPS	8 NPS	12.27 sq in	[Q] 3.952 in	0.988 in	15 - 2000 psi	Air	VIII Div. 1
						Steam	I VIII Div. 1
	8, 10 NPS	17.78 sq in	[R] 4.758 in	1.19 in	15 - 2000 psi	Air	VIII Div. 1
						Steam	I VIII Div. 1
8 NPS	10 NPS	28.94 sq in	[T] 6.07 in	1.518 in	15 - 1500 psi	Air	VIII Div. 1
						Steam	I VIII Div. 1

Certification
Number: **57057**Design Series
or catalog number **2600 & 2600S**Type Classification: **Safety Relief Valve**Capacity Tests: **Sec. VIII Div. 1 at Ohio State University (Robinson Laboratory) on June 11, 1972**Method of Establishing Relieving Capacity: **Flow Capacity, K**Certified Value: **.858 Unitless**Test Medium: **Steam & Air/Gas**Certified Medium: **Steam & Air/Gas**Set Pressure Definition: **Pop**Blowdown: **Adjustable by Single Ring**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
1 - 2 NPS	2 - 3 NPS	0.15 sq in	[D] 0.437 in	0.109 in	15 - 10000 psi	Air	VIII Div. 1
					15 - 2900 psi	Steam	VIII Div. 1
		0.225 sq in	[E] 0.535 in	0.134 in	15 - 10000 psi	Air	VIII Div. 1
					15 - 2900 psi	Steam	VIII Div. 1
1.5 - 2 NPS	2 - 3 NPS	0.371 sq in	[F] 0.687 in	0.172 in	15 - 10000 psi	Air	VIII Div. 1
					15 - 2900 psi	Steam	VIII Div. 1
	2.5, 3 NPS	0.559 sq in	[G] 0.844 in	0.253 in	15 - 2900 psi	Steam	VIII Div. 1
					15 - 7000 psi	Air	VIII Div. 1
	3 NPS	0.873 sq in	[H] 1.054 in	0.316 in	15 - 2900 psi	Steam	VIII Div. 1
					15 - 6000 psi	Air	VIII Div. 1
2 - 3 NPS	3, 4 NPS	1.43 sq in	[J] 1.35 in	0.405 in	15 - 2900 psi	Steam	VIII Div. 1
					15 - 6000 psi	Air	VIII Div. 1
3 NPS	4 - 6 NPS	2.042 sq in	[K] 1.612 in	0.484 in	15 - 2900 psi	Steam	VIII Div. 1
					15 - 5000 psi	Air	VIII Div. 1
3 - 4 NPS	4 - 6 NPS	3.17 sq in	[L] 2.009 in	0.603 in	15 - 2900 psi	Steam	VIII Div. 1
					15 - 4000 psi	Air	VIII Div. 1
4 NPS	6 NPS	4 sq in	[M] 2.257 in	0.677 in	15 - 2900 psi	Steam	VIII Div. 1
					15 - 3000 psi	Air	VIII Div. 1
		4.822 sq in	[N] 2.478 in	0.743 in	15 - 2900 psi	Steam	VIII Div. 1
					15 - 3000 psi	Air	VIII Div. 1
		7.087 sq in	[P] 3.004 in	0.901 in	15 - 2500 psi	Air	VIII Div. 1
						Steam	VIII Div. 1
6 NPS	8 NPS	12.27 sq in	[Q] 3.952 in	1.186 in	15 - 2000 psi	Air	VIII Div. 1
						Steam	VIII Div. 1
6 - 8 NPS	8 - 10 NPS	17.78 sq in	[R] 4.758 in	1.427 in	15 - 1500 psi	Air	VIII Div. 1
						Steam	VIII Div. 1
8 - 10 NPS	10, 12 NPS	28.94 sq in	[T] 6.07 in	1.821 in	15 - 1000 psi	Air	VIII Div. 1
						Steam	VIII Div. 1
		31.5 sq in	[U] 6.333 in	1.899 in	15 - 300 psi	Air	VIII Div. 1
						Steam	VIII Div. 1
10 NPS	14 NPS	49.4 sq in	[V] 7.93 in	2.379 in	15 - 1000 psi	Air	VIII Div. 1
						Steam	VIII Div. 1
12 NPS	16 NPS	63.62 sq in	[W] 9 in	2.7 in	15 - 1000 psi	Air	VIII Div. 1
						Steam	VIII Div. 1
16 NPS	18 NPS	104 sq in	[W2] 11.507 in	3.452 in	15 - 750 psi	Air	VIII Div. 1
						Steam	VIII Div. 1
	20 NPS	113.1 sq in	[X] 12 in	3.6 in	15 - 750 psi	Air	VIII Div. 1
						Steam	VIII Div. 1
18 NPS	24 NPS	143.1 sq in	[Y] 13.5 in	4.05 in	15 - 750 psi	Air	VIII Div. 1
						Steam	VIII Div. 1
20 NPS	24 NPS	176.7 sq in	[Z] 15 in	4.5 in	15 - 750 psi	Air	VIII Div. 1
						Steam	VIII Div. 1

Location: 10195 Brecksville Road, Brecksville, OH 44141 United States

Certification Number: **57068** Design Series or catalog number **2600L (Liquids)**

Type Classification: Relief Valve

Capacity Tests: Sec. VIII Div. 1 at National Board T L (Picaway) on January 29, 1985

Method of Establishing Relieving Capacity: Flow Capacity, K

Certified Value: .652 Unitless

Test Medium: Water

Certified Medium: Liquid

Special Service: None

Set Pressure Definition: First Steady Stream

Blowdown: Fixed

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
1 - 2 NPS	2 - 3 NPS	0.15 sq in	[D] 0.437 in	0.131 in	15 - 10000 psi	Water	VIII Div. 1
		0.225 sq in	[E] 0.535 in	0.16 in	15 - 6000 psi	Water	VIII Div. 1
1.5 - 2 NPS	2 - 3 NPS	0.371 sq in	[F] 0.687 in	0.206 in	15 - 5000 psi	Water	VIII Div. 1
	2.5, 3 NPS	0.559 sq in	[G] 0.844 in	0.326 in	15 - 3600 psi	Water	VIII Div. 1
	3 NPS	0.873 sq in	[H] 1.054 in	0.407 in	15 - 2750 psi	Water	VIII Div. 1
2 - 3 NPS	2 - 4 NPS	1.43 sq in	[J] 1.35 in	0.521 in	15 - 2700 psi	Water	VIII Div. 1
3 NPS	4, 6 NPS	2.041 sq in	[K] 1.612 in	0.622 in	15 - 2200 psi	Water	VIII Div. 1
3 - 4 NPS	4, 6 NPS	3.17 sq in	[L] 2.009 in	0.775 in	15 - 1500 psi	Water	VIII Div. 1
4 NPS	6 NPS	4 sq in	[M] 2.257 in	0.871 in	15 - 1100 psi	Water	VIII Div. 1
		4.822 sq in	[N] 2.478 in	0.957 in	15 - 1000 psi	Water	VIII Div. 1
		7.087 sq in	[P] 3.004 in	1.16 in	15 - 1000 psi	Water	VIII Div. 1
6 NPS	8 NPS	12.27 sq in	[Q] 3.952 in	1.525 in	15 - 900 psi	Water	VIII Div. 1
6 - 8 NPS	8, 10 NPS	17.78 sq in	[R] 4.758 in	1.837 in	15 - 600 psi	Water	VIII Div. 1
8 - 10 NPS	10, 12 NPS	28.94 sq in	[T] 6.07 in	2.339 in	15 - 300 psi	Water	VIII Div. 1
		31.5 sq in	[U] 6.333 in	2.47 in	15 - 300 psi	Water	VIII Div. 1

Certification Number: **57192** Design Series or catalog number **1890L, 1892L, 1895L, 1896L (Liquids)**

Type Classification: Relief Valve

Capacity Tests: Sec. VIII Div. 1 at Teledyne Farris (Palisades Park NJ) on January 14, 1993

Method of Establishing Relieving Capacity: Flow Capacity, Flow Factor

Certified Value: 2.21 GPM/SQ.RT. PSID

Test Medium: Water

Certified Medium: Liquid

Special Service: None

Set Pressure Definition: First Steady Stream

Blowdown: Fixed

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
0.5 - 0.75 NPS	3/4, 1 NPS	0.11 sq in	0.375 in	0.08 in	15 - 800 psi	Water	VIII Div. 1

location: 10195 Brecksville Road, Brecksville, OH 44141 United States

Certification Number: **57215** Design Series or catalog number: **3800L, PCL, PCM pilots**

Type Classification: **Pilot Operated Pressure Relief Valve**Capacity Tests: **Sec. VIII Div. 1 at Teledyne Farris (Brecksville OH) on February 04, 1997**Method of Establishing Relieving Capacity: **Flow Capacity, K**Certified Value: **.782 Unitless**Test Medium: **Water**Certified Medium: **Liquid**Special Service: **None**Set Pressure Definition: **1.Pop 2.First Steady Stream**Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
1 - 1.5 NPS	2 NPS	0.15 sq in	[D] 0.437 in	0.162 in	15 - 6170 psi	Water	VIII Div. 1
		0.225 sq in	[E] 0.535 in	0.198 in	15 - 6170 psi	Water	VIII Div. 1
		0.371 sq in	[F] 0.687 in	0.254 in	15 - 6170 psi	Water	VIII Div. 1
1.5 - 2 NPS	2,3 NPS	0.559 sq in	[G] 0.844 in	0.312 in	15 - 6170 psi	Water	VIII Div. 1
	2, 3 NPS	0.873 sq in	[H] 1.054 in	0.39 in	15 - 6170 psi	Water	VIII Div. 1
2 - 3 NPS	3, 4 NPS	1.43 sq in	[J] 1.35 in	0.5 in	15 - 6170 psi	Water	VIII Div. 1
3 NPS	4 NPS	2.042 sq in	[K] 1.612 in	0.596 in	15 - 3705 psi	Water	VIII Div. 1
3 - 4 NPS	4,6 NPS	3.17 sq in	[L] 2.009 in	0.743 in	15 - 3705 psi	Water	VIII Div. 1
	4, 6 NPS	3.42 sq in	[L1] 2.088 in	0.773 in	15 - 3705 psi	Water	VIII Div. 1
		4 sq in	[M] 2.257 in	0.835 in	15 - 1480 psi	Water	VIII Div. 1
4 NPS	6 NPS	4.822 sq in	[N] 2.478 in	0.917 in	15 - 1480 psi	Water	VIII Div. 1
4 - 6 NPS	6, 8 NPS	7.087 sq in	[P] 3.004 in	1.111 in	15 - 1480 psi	Water	VIII Div. 1
6 NPS	8 NPS	12.27 sq in	[Q] 3.952 in	1.462 in	15 - 1480 psi	Water	VIII Div. 1
	8, 10 NPS	17.78 sq in	[R] 4.758 in	1.76 in	15 - 1480 psi	Water	VIII Div. 1
8 NPS	10 NPS	28.94 sq in	[T] 6.07 in	2.246 in	15 - 1480 psi	Water	VIII Div. 1

Farris Engineering (TFO)

NB#: 57237

Location: 10195 Brecksville Road, Brecksville, OH 44141 United States

Certification Number: **57237** Design Series or catalog number: **2700, 2700S, 3700, 3700S**

Type Classification: **Safety Relief Valve**Capacity Tests: **Sec. VIII Div. 1 at Teledyne Farris (Brecksville OH) on September 14, 1994**Method of Establishing Relieving Capacity: **Flow Capacity, K**Certified Value: **.878 Unitless**Test Medium: **Steam & Air/Gas**Certified Medium: **Steam & Air/Gas**Special Service: **None**Set Pressure Definition: **Pop**Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
0.5 - 1 NPS	.75, 1 NPS	0.038 sq in	[B] 0.22 in	0.05 in	15 - 16000 psi	Air	VIII Div. 1
					15 - 2900 psi	Steam	VIII Div. 1
	.75 - 1.5 NPS	0.068 sq in	[C] 0.295 in	0.074 in	15 - 10000 psi	Air	VIII Div. 1
					15 - 2900 psi	Steam	VIII Div. 1
	.75, 1 NPS	0.098 sq in	[1] 0.358 in	0.0895 in	15 - 10000 psi	Air	VIII Div. 1
					15 - 2900 psi	Steam	VIII Div. 1
1 NPS	1.5, 2 NPS	0.125 sq in	[D] 0.4 in	0.1 in	15 - 10000 psi	Air	VIII Div. 1
					15 - 2900 psi	Steam	VIII Div. 1
1.5 - 2 NPS	1.5, 2 NPS	0.223 sq in	[E] 0.533 in	0.134 in	15 - 10000 psi	Air	VIII Div. 1
					15 - 2900 psi	Steam	VIII Div. 1
	2, 2.5 NPS	0.35 sq in	[F] 0.668 in	0.167 in	15 - 2900 psi	Steam	VIII Div. 1
					15 - 7000 psi	Air	VIII Div. 1
2 NPS	2., 3 NPS	0.573 sq in	[G] 0.855 in	0.215 in	15 - 2900 psi	Steam	VIII Div. 1
					15 - 5000 psi	Air	VIII Div. 1
3 NPS	3 NPS	0.898 sq in	[H] 1.069 in	0.268 in	15 - 2900 psi	Steam	VIII Div. 1
					15 - 4000 psi	Air	VIII Div. 1
3 NPS	4 NPS	1.47 sq in	[J] 1.368 in	0.342 in	15 - 2900 psi	Steam	VIII Div. 1
					15 - 3000 psi	Air	VIII Div. 1

Certification Number: **57248** Design Series or catalog number: **2700L, 3700L (Liquids)**

Type Classification: **Relief Valve**Capacity Tests: **Sec. VIII Div. 1 at Teledyne Farris (Brecksville OH) on September 20, 1994**Method of Establishing Relieving Capacity: **Flow Capacity, K**Certified Value: **.676 Unitless**Test Medium: **Water**Certified Medium: **Liquid**Special Service: **None**Set Pressure Definition: **First Steady Stream**Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
0.5 - 1 NPS	.75, 1 NPS	0.038 sq in	[B] 0.22 in	0.05 in	15 - 16000 psi	Water	VIII Div. 1
	.75 - 1.5 NPS	0.068 sq in	[C] 0.295 in	0.074 in	15 - 10000 psi	Water	VIII Div. 1
	.75, 1 NPS	0.098 sq in	[1] 0.358 in	0.089 in	15 - 10000 psi	Water	VIII Div. 1
	1, 1.5 NPS	0.125 sq in	[D] 0.4 in	0.1 in	15 - 10000 psi	Water	VIII Div. 1
1 NPS	1.5, 2 NPS	0.223 sq in	[E] 0.533 in	0.134 in	15 - 10000 psi	Water	VIII Div. 1
1.5 NPS	2, 2.5 NPS	0.35 sq in	[F] 0.668 in	0.167 in	15 - 7000 psi	Water	VIII Div. 1
1.5 - 2 NPS	2., 3 NPS	0.573 sq in	[G] 0.855 in	0.215 in	15 - 5000 psi	Water	VIII Div. 1
2 NPS	3 NPS	0.898 sq in	[H] 1.069 in	0.268 in	15 - 4000 psi	Water	VIII Div. 1
3 NPS	4 NPS	1.47 sq in	[J] 1.368 in	0.342 in	15 - 3000 psi	Water	VIII Div. 1

Certification Number: **57260** Design Series or catalog number: **2600L (Air & Steam)**

Type Classification: **Safety Relief Valve**

Capacity Tests: **Sec. VIII Div. 1 at Farris (Brecksville OH) on March 05, 2004**

Method of Establishing Relieving Capacity: **Flow Capacity, K**

Certified Value: **.858 Unitless**

Test Medium: **Steam & Air/Gas**

Certified Medium: **Steam & Air/Gas**

Set Pressure Definition: **Pop**

Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
1 - 2 NPS	2 - 3 NPS	0.15 sq in	[D] 0.437 in	0.131 in	15 - 10000 psi	Air	VIII Div. 1
					15 - 2900 psi	Steam	VIII Div. 1
		0.225 sq in	[E] 0.535 in	0.16 in	15 - 10000 psi	Air	VIII Div. 1
					15 - 2900 psi	Steam	VIII Div. 1
1.5 - 2 NPS	2 - 3 NPS	0.371 sq in	[F] 0.687 in	0.206 in	15 - 10000 psi	Air	VIII Div. 1
					15 - 2900 psi	Steam	VIII Div. 1
	2.5, 3 NPS	0.559 sq in	[G] 0.844 in	0.295 in	15 - 2900 psi	Steam	VIII Div. 1
					15 - 7000 psi	Air	VIII Div. 1
	3 NPS	0.873 sq in	[H] 1.054 in	0.369 in	15 - 2900 psi	Steam	VIII Div. 1
					15 - 6000 psi	Air	VIII Div. 1
2 - 3 NPS	3, 4 NPS	1.43 sq in	[J] 1.35 in	0.473 in	15 - 2900 psi	Steam	VIII Div. 1
					15 - 6000 psi	Air	VIII Div. 1
3 NPS	4, 6 NPS	2.042 sq in	[K] 1.612 in	0.564 in	15 - 2900 psi	Steam	VIII Div. 1
					15 - 5000 psi	Air	VIII Div. 1
3 - 4 NPS	4, 6 NPS	3.17 sq in	[L] 2.009 in	0.703 in	15 - 2900 psi	Steam	VIII Div. 1
					15 - 4000 psi	Air	VIII Div. 1
4 NPS	6 NPS	4 sq in	[M] 2.257 in	0.79 in	15 - 2900 psi	Steam	VIII Div. 1
					15 - 3000 psi	Air	VIII Div. 1
		4.822 sq in	[N] 2.478 in	0.867 in	15 - 2900 psi	Steam	VIII Div. 1
					15 - 3000 psi	Air	VIII Div. 1
		7.087 sq in	[P] 3.004 in	1.05 in	15 - 2500 psi	Air	VIII Div. 1
						Steam	VIII Div. 1
6 NPS	8 NPS	12.27 sq in	[Q] 3.952 in	1.383 in	15 - 2000 psi	Air	VIII Div. 1
						Steam	VIII Div. 1
	8, 10 NPS	17.78 sq in	[R] 4.758 in	1.665 in	15 - 1500 psi	Air	VIII Div. 1
						Steam	VIII Div. 1
8 - 10 NPS	10, 12 NPS	28.94 sq in	[T] 6.07 in	2.125 in	15 - 1000 psi	Air	VIII Div. 1
						Steam	VIII Div. 1
		31.5 sq in	[U] 6.333 in	2.217 in	15 - 300 psi	Air	VIII Div. 1
						Steam	VIII Div. 1

Location: 10195 Brecksville Road, Brecksville, OH 44141 United States

Certification Number: **57282** Design Series or catalog number: **4200 / 4400**

Type Classification: **Safety Valve**Capacity Tests: **Sec. I at National Board T L (Worthington) on June 09, 2005**Method of Establishing Relieving Capacity: **Flow Capacity, K**Certified Value: **.872 Unitless**Test Medium: **Steam**Certified Medium: **Steam**Special Service: **None**Set Pressure Definition: **Pop**Blowdown: **Adjustable by Dual Ring**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
1.25 NPS	1.5 NPS	0.316 sq in	[F] 0.634 in	0.159 in	15 - 1480 psi	Steam	I
		0.518 sq in	[G] 0.812 in	0.203 in	15 - 1480 psi	Steam	I
1.5 NPS	2.5 NPS	0.809 sq in	[H] 1.015 in	0.254 in	15 - 1480 psi	Steam	I
		1.325 sq in	[J] 1.299 in	0.325 in	15 - 1480 psi	Steam	I
2 NPS	3 NPS	1.897 sq in	[K] 1.554 in	0.389 in	15 - 1480 psi	Steam	I
2.5 NPS	4 NPS	2.938 sq in	[L] 1.934 in	0.484 in	15 - 1480 psi	Steam	I
3 NPS	4 NPS	3.822 sq in	[M] 2.206 in	0.552 in	15 - 1480 psi	Steam	I
4 NPS	6 NPS	4.471 sq in	[N] 2.386 in	0.597 in	15 - 1480 psi	Steam	I
		6.573 sq in	[P] 2.893 in	0.723 in	15 - 1480 psi	Steam	I
6 NPS	8 NPS	11.389 sq in	[Q] 3.808 in	0.952 in	15 - 1480 psi	Steam	I

Certification
Number: **57394**Design Series
or catalog number **3800L PCM**Type Classification: **Pilot Operated Pressure Relief Valve**Capacity Tests: **Sec. VIII Div. 1 at Teledyne Farris (Palisades Park NJ) on May 20, 1994**Method of Establishing Relieving Capacity: **Flow Capacity, K**Certified Value: **0.859 Unitless**Certified Value (alternate medium): **0.782 Unitless**Test Medium: **Steam & Air/Gas**Certified Medium: **Steam, Air/Gas & Liquid**Set Pressure Definition: **1.Initial Audible Discharge 3.First Steady Stream**Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
1 - 1.5 NPS	2 NPS	0.15 sq in	[D] 0.437 in	0.162 in	15 - 10000 psi	Air	VIII Div. 1
					15 - 1050 psi	Steam	VIII Div. 1
					15 - 6170 psi	Water	VIII Div. 1
		0.225 sq in	[E] 0.535 in	0.198 in	15 - 10000 psi	Air	VIII Div. 1
					15 - 1050 psi	Steam	VIII Div. 1
					15 - 6170 psi	Water	VIII Div. 1
		0.371 sq in	[F] 0.687 in	0.254 in	15 - 10000 psi	Air	VIII Div. 1
					15 - 1050 psi	Steam	VIII Div. 1
					15 - 6170 psi	Water	VIII Div. 1
1 - 2 NPS	2, 3 NPS	0.559 sq in	[G] 0.844 in	0.312 in	15 - 1050 psi	Steam	VIII Div. 1
					15 - 6170 psi	Water	VIII Div. 1
					15 - 7000 psi	Air	VIII Div. 1
1.5 - 2 NPS	2, 3 NPS	0.873 sq in	[H] 1.054 in	0.39 in	15 - 1050 psi	Steam	VIII Div. 1
					15 - 6000 psi	Air	VIII Div. 1
					15 - 6170 psi	Water	VIII Div. 1
1.5 - 3 NPS	2, 3, 4 NPS	1.43 sq in	[J] 1.35 in	0.5 in	15 - 1050 psi	Steam	VIII Div. 1
					15 - 6000 psi	Air	VIII Div. 1
					15 - 6170 psi	Water	VIII Div. 1
2 - 3 NPS	3, 4 NPS	2.042 sq in	[K] 1.612 in	0.596 in	15 - 1050 psi	Steam	VIII Div. 1
					15 - 3705 psi	Water	VIII Div. 1
					15 - 5000 psi	Air	VIII Div. 1
3 - 4 NPS	4, 6 NPS	3.17 sq in	[L] 2.009 in	0.743 in	15 - 1050 psi	Steam	VIII Div. 1
					15 - 3705 psi	Water	VIII Div. 1
					15 - 4000 psi	Air	VIII Div. 1
		3.42 sq in	[L1] 2.088 in	0.773 in	15 - 1050 psi	Steam	VIII Div. 1
					15 - 3705 psi	Water	VIII Div. 1
					15 - 4000 psi	Air	VIII Div. 1
		4 sq in	[M] 2.257 in	0.835 in	15 - 1050 psi	Steam	VIII Div. 1
					15 - 1480 psi	Water	VIII Div. 1
					15 - 3000 psi	Air	VIII Div. 1
		4.822 sq in	[N] 2.478 in	0.917 in	15 - 1050 psi	Steam	VIII Div. 1
					15 - 1480 psi	Water	VIII Div. 1
					15 - 3000 psi	Air	VIII Div. 1
4 - 6 NPS	6, 8 NPS	7.087 sq in	[P] 3.004 in	1.111 in	15 - 1050 psi	Steam	VIII Div. 1
					15 - 1480 psi	Water	VIII Div. 1
					15 - 2500 psi	Air	VIII Div. 1
6 NPS	8 NPS	12.27 sq in	[Q] 3.952 in	1.462 in	15 - 1050 psi	Steam	VIII Div. 1
					15 - 1480 psi	Water	VIII Div. 1
					15 - 2000 psi	Air	VIII Div. 1
6 - 8 NPS	8, 10 NPS	17.78 sq in	[R] 4.758 in	1.76 in	15 - 1050 psi	Steam	VIII Div. 1
					15 - 1480 psi	Water	VIII Div. 1
					15 - 2000 psi	Air	VIII Div. 1
8 NPS	10 NPS	28.94 sq in	[T] 6.07 in	2.246 in	15 - 1050 psi	Steam	VIII Div. 1
					15 - 1480 psi	Air	VIII Div. 1
						Water	VIII Div. 1

Certification
Number: **57406**Design Series
or catalog number **2600 Series Restricted lift**Type Classification: **Safety Valve**Capacity Tests: **Sec. VIII Div. 1 at Farris (Brecksville OH) on February 10, 2017**Method of Establishing Relieving Capacity: **Flow Capacity, K**Certified Value: **.858 Unitless**Test Medium: **Air**Certified Medium: **Steam & Air/Gas**Special Service: **None**Set Pressure Definition: **Pop**Blowdown: **Adjustable by Single Ring**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
1 - 1.5 in	2, 2.5, 3 in	0.15 sq in	[D] 0.437 in	0.08 in	15 - 10000 psi	Air	VIII Div. 1
						Steam	VIII Div. 1
		0.225 sq in	[E] 0.535 in	0.08 in	15 - 10000 psi	Air	VIII Div. 1
						Steam	VIII Div. 1
1.5 in	2, 2.5, 3 in	0.371 sq in	[F] 0.687 in	0.08 in	15 - 10000 psi	Air	VIII Div. 1
						Steam	VIII Div. 1
1.5 - 2 in	2.5, 3 in	0.559 sq in	[G] 0.844 in	0.08 in	15 - 7000 psi	Air	VIII Div. 1
						Steam	VIII Div. 1
	3 in	0.873 sq in	[H] 1.054 in	0.095 in	15 - 6000 psi	Air	VIII Div. 1
						Steam	VIII Div. 1
2 - 3 in	3, 4 in	1.43 sq in	[J] 1.35 in	0.122 in	15 - 6000 psi	Air	VIII Div. 1
						Steam	VIII Div. 1
3 in	4, 6 in	2.042 sq in	[K] 1.612 in	0.145 in	15 - 5000 psi	Air	VIII Div. 1
						Steam	VIII Div. 1
3 - 4 in	4, 6 in	3.17 sq in	[L] 2.009 in	0.181 in	15 - 4000 psi	Air	VIII Div. 1
						Steam	VIII Div. 1
4 in	6 in	4 sq in	[M] 2.257 in	0.203 in	15 - 3000 psi	Air	VIII Div. 1
						Steam	VIII Div. 1
		4.822 sq in	[N] 2.478 in	0.223 in	15 - 3000 psi	Air	VIII Div. 1
						Steam	VIII Div. 1
		7.087 sq in	[P] 3.004 in	0.27 in	15 - 2500 psi	Air	VIII Div. 1
						Steam	VIII Div. 1
6 in	8 in	12.27 sq in	[Q] 3.952 in	0.356 in	15 - 2000 psi	Air	VIII Div. 1
						Steam	VIII Div. 1
	8, 10 in	17.78 sq in	[R] 4.758 in	0.428 in	15 - 1500 psi	Air	VIII Div. 1
						Steam	VIII Div. 1
8 in	10 in	28.94 sq in	[T] 6.07 in	0.546 in	15 - 1000 psi	Air	VIII Div. 1
						Steam	VIII Div. 1
		31.5 sq in	[U] 6.333 in	0.57 in	15 - 300 psi	Air	VIII Div. 1
						Steam	VIII Div. 1
10 in	14 in	49.4 sq in	[V] 7.93 in	0.714 in	15 - 1000 psi	Air	VIII Div. 1
						Steam	VIII Div. 1
12 in	16 in	63.62 sq in	[W] 9 in	0.81 in	15 - 1000 psi	Air	VIII Div. 1
						Steam	VIII Div. 1
16 in	18 in	104 sq in	[W2] 11.507 in	1.036 in	15 - 750 psi	Air	VIII Div. 1
						Steam	VIII Div. 1
	20 in	113.1 sq in	[X] 12 in	1.08 in	15 - 750 psi	Air	VIII Div. 1
						Steam	VIII Div. 1
18 in	24 in	143.1 sq in	[Y] 13.5 in	1.215 in	15 - 750 psi	Air	VIII Div. 1
						Steam	VIII Div. 1
20 in	24 in	176.7 sq in	[Z] 15 in	1.35 in	15 - 750 psi	Air	VIII Div. 1
						Steam	VIII Div. 1

Certification Number: **57417** Design Series or catalog number: **2600L (Liquids) Series Restricted lift**

Type Classification: **Safety Relief Valve**

Capacity Tests: **Sec. VIII Div. 1 at Farris (Brecksville OH) on January 23, 2017**

Method of Establishing Relieving Capacity: **Flow Capacity, K**

Certified Value: **.652 Unitless**

Test Medium: **Liquid**

Certified Medium: **Liquid**

Special Service: **None**

Set Pressure Definition: **First Steady Stream**

Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
1 - 1.5 in	2, 2.5, 3 in	0.15 sq in	[D] 0.437 in	0.08 in	15 - 10000 psi	Water	VIII Div. 1
		0.225 sq in	[E] 0.535 in	0.08 in	15 - 6000 psi	Water	VIII Div. 1
1.5 in	2, 2.5, 3 in	0.371 sq in	[F] 0.687 in	0.08 in	15 - 5000 psi	Water	VIII Div. 1
1.5 - 2 in	2.5, 3 in	0.559 sq in	[G] 0.844 in	0.098 in	15 - 3600 psi	Water	VIII Div. 1
	3 in	0.873 sq in	[H] 1.054 in	0.122 in	15 - 2750 psi	Water	VIII Div. 1
2 - 3 in	3, 4 in	1.43 sq in	[J] 1.35 in	0.156 in	15 - 2700 psi	Water	VIII Div. 1
3 in	4, 6 in	2.041 sq in	[K] 1.612 in	0.187 in	15 - 2200 psi	Water	VIII Div. 1
3 - 4 in	4, 6 in	3.17 sq in	[L] 2.009 in	0.232 in	15 - 1500 psi	Water	VIII Div. 1
4 in	6 in	4 sq in	[M] 2.257 in	0.261 in	15 - 1100 psi	Water	VIII Div. 1
		4.822 sq in	[N] 2.478 in	0.287 in	15 - 1000 psi	Water	VIII Div. 1
		7.087 sq in	[P] 3.004 in	0.348 in	15 - 1000 psi	Water	VIII Div. 1
6 in	8 in	12.27 sq in	[Q] 3.952 in	0.458 in	15 - 900 psi	Water	VIII Div. 1
6 - 8 in	8, 10 in	17.78 sq in	[R] 4.758 in	0.551 in	15 - 600 psi	Water	VIII Div. 1
8 in	10 in	28.94 sq in	[T] 6.07 in	0.702 in	15 - 300 psi	Water	VIII Div. 1
		31.5 sq in	[U] 6.333 in	0.741 in	15 - 300 psi	Water	VIII Div. 1

FDC Co., Ltd. (FDC)

NB#: 00695

location: 99, Seobu-ro 1293beon-gil, Juchon-myeon, Gimhae-si, Gyeongsangnam-do 50877 South Korea

FDC Co., Ltd. (FDC)

location: 99, Seobu-ro 1293beon-gil, Juchon-myeon, Gimhae-si, Gyeongsangnam-do 50877 South Korea

Certification Number: **00695** Design Series or catalog number: **KSRC**

Holder Designation: **SS**Type Classification: **Rupture Disk Device**Capacity Tests: **Sec. VIII Div. 1 at National Board T L (Worthington) on March 30, 2016**Method of Establishing Relieving Capacity: **Resistance Factor, 3 Size, Krgl**Certified Value: **0.75 Unitless**Test Medium: **Air or gases, and liquid (Krgl)**Certified Medium: **Air or gases, and liquid (Krgl)**Set Pressure Definition: **Burst Pressure**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
0.75 NPS		0.48 sq in			30 - 4640 psi		VIII Div. 1
1 NPS		0.66 sq in			30 - 4640 psi		VIII Div. 1
1.5 NPS		1.69 sq in			23 - 2900 psi		VIII Div. 1
2 NPS		3.04 sq in			30 - 2900 psi		VIII Div. 1
2.5 NPS		4.77 sq in			26 - 2770 psi		VIII Div. 1
3 NPS		7.09 sq in			20 - 2770 psi		VIII Div. 1
4 NPS		11.41 sq in			14.5 - 2480 psi		VIII Div. 1
5 NPS		15.27 sq in			14 - 2480 psi		VIII Div. 1
6 NPS		25.36 sq in			12 - 2390 psi		VIII Div. 1
8 NPS		46.09 sq in			8 - 1750 psi		VIII Div. 1
10 NPS		73.56 sq in			6 - 900 psi		VIII Div. 1
12 NPS		105.8 sq in			6 - 720 psi		VIII Div. 1
14 NPS		133.82 sq in			4 - 720 psi		VIII Div. 1
16 NPS		179.3 sq in			4 - 720 psi		VIII Div. 1
18 NPS		210.87 sq in			4 - 720 psi		VIII Div. 1
20 NPS		271.16 sq in			4 - 580 psi		VIII Div. 1
24 NPS		398.24 sq in			4 - 580 psi		VIII Div. 1
26 NPS		500 sq in			4 - 170 psi		VIII Div. 1
28 NPS		583 sq in			4 - 170 psi		VIII Div. 1
30 NPS		671 sq in			4 - 170 psi		VIII Div. 1
32 NPS		766 sq in			4 - 170 psi		VIII Div. 1
36 NPS		975 sq in			4 - 170 psi		VIII Div. 1
40 NPS		1209 sq in			4 - 170 psi		VIII Div. 1
42 NPS		1336 sq in			4 - 170 psi		VIII Div. 1
44 NPS		1469 sq in			4 - 170 psi		VIII Div. 1

location: 99, Seobu-ro 1293beon-gil, Juchon-myeon, Gimhae-si, Gyeongsangnam-do 50877 South Korea

Certification
Number: **00943**Design Series
or catalog number **KSRSR**Holder Designation: **FS, FS(SP)**Type Classification: **Rupture Disk Device**Capacity Tests: **Sec. VIII Div. 1 at National Board T L (Worthington) on March 30, 2016**Method of Establishing Relieving Capacity: **Resistance Factor, 3 Size, Krg**Certified Value: **0.68 Unitless**Test Medium: **Air or gases (Krg)**Certified Medium: **Air or gases (Krg)**Set Pressure Definition: **Burst Pressure**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
0.5 NPS		0.3 sq in			190 - 1460 psi		VIII Div. 1
0.75 NPS		0.53 sq in			80 - 1460 psi		VIII Div. 1
1 NPS		0.86 sq in			80 - 1460 psi		VIII Div. 1
1.5 NPS		2.03 sq in			34 - 1460 psi		VIII Div. 1
2 NPS		3.17 sq in			40 - 1460 psi		VIII Div. 1
2.5 NPS		4.77 sq in			40 - 880 psi		VIII Div. 1
3 NPS		7.38 sq in			28 - 880 psi		VIII Div. 1
4 NPS		11.61 sq in			28 - 730 psi		VIII Div. 1
5 NPS		19.55 sq in			28 - 730 psi		VIII Div. 1
6 NPS		28.71 sq in			28 - 1070 psi		VIII Div. 1
8 NPS		49.23 sq in			28 - 440 psi		VIII Div. 1
10 NPS		63.87 sq in			28 - 300 psi		VIII Div. 1
12 NPS		102.78 sq in			28 - 240 psi		VIII Div. 1
14 NPS		137.92 sq in			28 - 150 psi		VIII Div. 1
16 NPS		176.41 sq in			28 - 150 psi		VIII Div. 1
18 NPS		221.57 sq in			28 - 150 psi		VIII Div. 1
20 NPS		272.62 sq in			28 - 150 psi		VIII Div. 1
24 NPS		393.13 sq in			28 - 150 psi		VIII Div. 1
26 NPS		500 sq in			20 - 100 psi		VIII Div. 1
28 NPS		583 sq in			20 - 100 psi		VIII Div. 1
30 NPS		671 sq in			15 - 80 psi		VIII Div. 1
32 NPS		766 sq in			15 - 80 psi		VIII Div. 1

Fike Corporation (FIK)

NB#: 80008

location: 704 South 10th Street, Blue Springs, MO 64015 United States

Fike Corporation (FIK)

location: 704 South 10th Street, Blue Springs, MO 64015 United States

Certification Number: **80008** Design Series or catalog number: **Poly-SD Single Hinge**

Holder Designation: Poly SD

Type Classification: Rupture Disk Device

Capacity Tests: Sec. VIII Div. 1 at National Board T L (Worthington) on November 23, 1998

Method of Establishing Relieving Capacity: Resistance Factor, 3 Size, Krgl

Certified Value: .34 Unitless

Test Medium: Air/Gas & Liquid

Certified Medium: Air or gases, and liquid (Krgl)

Set Pressure Definition: Burst Pressure

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
1 NPS		0.785 sq in			31 - 2250 psi		VIII Div. 1
1.5 NPS		1.77 sq in			27.5 - 1800 psi		VIII Div. 1
2 NPS		3.36 sq in			21.2 - 1600 psi		VIII Div. 1
3 NPS		7.39 sq in			14 - 1300 psi		VIII Div. 1
4 NPS		12.7 sq in			14 - 1100 psi		VIII Div. 1
6 NPS		28.9 sq in			14 - 700 psi		VIII Div. 1

Certification Number: **80019** Design Series or catalog number: **Poly-SD Double Hinge**

Holder Designation: Poly-SD

Type Classification: Rupture Disk Device

Capacity Tests: Sec. VIII Div. 1 at National Board T L (Worthington) on September 11, 1998

Method of Establishing Relieving Capacity: Resistance Factor, 3 Size, Krgl

Certified Value: .34 Unitless

Test Medium: Air/Gas

Certified Medium: Air or gases, and liquid (Krgl)

Set Pressure Definition: Burst Pressure

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
1 NPS		0.785 sq in			32 - 2250 psi		VIII Div. 1
1.5 NPS		1.77 sq in			28 - 1800 psi		VIII Div. 1
2 NPS		3.36 sq in			21 - 1600 psi		VIII Div. 1
3 NPS		7.39 sq in			14 - 1300 psi		VIII Div. 1
4 NPS		12.7 sq in			14 - 1100 psi		VIII Div. 1
6 NPS		28.9 sq in			14 - 700 psi		VIII Div. 1

Fike Corporation (FIK)

NB#: 80020

location: 704 South 10th Street, Blue Springs, MO 64015 United States

Certification Number: **80020** Design Series or catalog number: **Poly-SD Cross Score**

Holder Designation: Poly SD

Type Classification: Rupture Disk Device

Capacity Tests: Sec. VIII Div. 1 at National Board T L (Worthington) on September 11, 1998

Method of Establishing Relieving Capacity: Resistance Factor, 3 Size, Krg

Certified Value: .99 Unitless

Test Medium: Air/Gas

Certified Medium: Air or gases (Krg)

Set Pressure Definition: Burst Pressure

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
0.75 NPS		0.442 sq in			250 - 3000 psi		N/A
1 NPS		0.785 sq in			124 - 2700 psi		N/A
1.5 NPS		1.77 sq in			115 - 2400 psi		N/A
2 NPS		3.36 sq in			70 - 2100 psi		N/A
3 NPS		7.39 sq in			52 - 1800 psi		N/A
4 NPS		12.7 sq in			47 - 1500 psi		N/A
6 NPS		28.9 sq in			47 - 800 psi		N/A
8 NPS		50 sq in			28 - 700 psi		N/A
10 NPS		78.9 sq in			22 - 600 psi		N/A
12 NPS		113 sq in			19 - 500 psi		N/A
14 NPS		138 sq in			16 - 450 psi		N/A
16 NPS		183 sq in			28 - 400 psi		N/A
18 NPS		234 sq in			23 - 300 psi		N/A
20 NPS		291 sq in			23 - 250 psi		N/A
24 NPS		425 sq in			19 - 150 psi		N/A

Certification Number: **80031** Design Series or catalog number: **SRL**

Holder Designation: SRL -GI, -TQ, SRLO-GI, -TQ, XL

Type Classification: Rupture Disk Device

Capacity Tests: Sec. VIII Div. 1 at National Board T L (Worthington) on September 11, 1998

Method of Establishing Relieving Capacity: Resistance Factor, 3 Size, Krg

Certified Value: .43 Unitless

Test Medium: Air/Gas

Certified Medium: Air or gases (Krg)

Set Pressure Definition: Burst Pressure

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
1 NPS		0.864 sq in			27 - 352 psi		VIII Div. 1
1.25 NPS		1.5 sq in			28 - 320 psi		VIII Div. 1
1.5 NPS		1.67 sq in			27 - 352 psi		VIII Div. 1
2 NPS		3.36 sq in			17 - 291 psi		VIII Div. 1
2.5 NPS		4.36 sq in			17 - 291 psi		VIII Div. 1
3 NPS		7.39 sq in			13 - 220 psi		VIII Div. 1
3.5 NPS		8.89 sq in			13 - 220 psi		VIII Div. 1
4 NPS		12.7 sq in			10 - 198 psi		VIII Div. 1
6 NPS		25.2 sq in			8 - 165 psi		VIII Div. 1
8 NPS		44.8 sq in			8 - 148 psi		VIII Div. 1

Fike Corporation (FIK)

NB#: 80042

location: 704 South 10th Street, Blue Springs, MO 64015 United States

Certification
Number: **80042**Design Series
or catalog number **SRX**Holder Designation: **SRX -GI, -TQ**Type Classification: **Rupture Disk Device**Capacity Tests: **Sec. VIII Div. 1 at National Board T L (Worthington) on September 11, 1998**Method of Establishing Relieving Capacity: **Resistance Factor, 3 Size, Krg**Certified Value: **.99 Unitless**Test Medium: **Air/Gas**Certified Medium: **Air or gases (Krg)**Set Pressure Definition: **Burst Pressure**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
1 NPS		0.864 sq in			95 - 720 psi		VIII Div. 1
1.5 NPS		1.54 sq in			80 - 720 psi		VIII Div. 1
2 NPS		3.36 sq in			74 - 720 psi		VIII Div. 1
2.5 NPS		4.26 sq in			74 - 720 psi		VIII Div. 1
3 NPS		7.39 sq in			54 - 720 psi		VIII Div. 1
3.5 NPS		8.36 sq in			54 - 720 psi		VIII Div. 1
4 NPS		12.7 sq in			45 - 720 psi		VIII Div. 1
6 NPS		25.3 sq in			36 - 630 psi		VIII Div. 1
8 NPS		43.3 sq in			32 - 500 psi		VIII Div. 1
10 NPS		69.6 sq in			27 - 350 psi		VIII Div. 1
12 NPS		102 sq in			24 - 250 psi		VIII Div. 1
14 NPS		138 sq in			27 - 165 psi		VIII Div. 1
16 NPS		183 sq in			22 - 150 psi		VIII Div. 1
18 NPS		234 sq in			22 - 135 psi		VIII Div. 1
20 NPS		291 sq in			18 - 120 psi		VIII Div. 1
24 NPS		425 sq in			18 - 120 psi		VIII Div. 1

Certification
Number: **80053**Design Series
or catalog number **PV, CP-C, CPV, CPV-C**Holder Designation: **CONV A, B, C, D, E, F, G, GI, H, I**Type Classification: **Rupture Disk Device**Capacity Tests: **Sec. VIII Div. 1 at National Board T L (Worthington) on September 10, 1998**Method of Establishing Relieving Capacity: **Resistance Factor, 3 Size, Krgl**Certified Value: **3.50 Unitless**Test Medium: **Air/Gas**Certified Medium: **Air or gases, and liquid (Krgl)**Set Pressure Definition: **Burst Pressure**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
0.75 NPS		0.407 sq in			96 - 10000 psi		VIII Div. 1
1 NPS		0.694 sq in			73 - 6000 psi		VIII Div. 1
1.5 NPS		1.43 sq in			48 - 3000 psi		VIII Div. 1
2 NPS		3.34 sq in			31 - 3000 psi		VIII Div. 1
3 NPS		7.31 sq in			22 - 3000 psi		VIII Div. 1
4 NPS		12.6 sq in			16.6 - 3000 psi		VIII Div. 1
6 NPS		27.1 sq in			12.5 - 2160 psi		VIII Div. 1
8 NPS		47.2 sq in			9.6 - 1440 psi		VIII Div. 1
10 NPS		67.2 sq in			7.4 - 720 psi		VIII Div. 1
12 NPS		99.4 sq in			6.5 - 720 psi		VIII Div. 1
14 NPS		138 sq in			5.6 - 720 psi		VIII Div. 1
16 NPS		183 sq in			4.8 - 720 psi		VIII Div. 1
18 NPS		234 sq in			4.4 - 720 psi		VIII Div. 1
20 NPS		291 sq in			3.9 - 720 psi		VIII Div. 1
24 NPS		425 sq in			3.3 - 720 psi		VIII Div. 1

Fike Corporation (FIK)

NB#: 80064

location: 704 South 10th Street, Blue Springs, MO 64015 United States

Certification
Number: **80064**Design Series
or catalog number **HO/HOV**Holder Designation: **CONV**Type Classification: **Rupture Disk Device**Capacity Tests: **Sec. VIII Div. 1 at National Board T L (Worthington) on January 14, 1999**Method of Establishing Relieving Capacity: **Resistance Factor, 3 Size, Krgl**Certified Value: **2.02 Unitless**Test Medium: **Gas**Certified Medium: **Air or gases, and liquid (Krgl)**Set Pressure Definition: **Burst Pressure**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
1 NPS		0.694 sq in			29 - 6000 psi		VIII Div. 1
1.5 NPS		1.43 sq in			20 - 3000 psi		VIII Div. 1
2 NPS		3.34 sq in			13 - 3000 psi		VIII Div. 1
3 NPS		7.31 sq in			8.4 - 3000 psi		VIII Div. 1
4 NPS		12.7 sq in			4.8 - 3000 psi		VIII Div. 1
6 NPS		27.1 sq in			3.6 - 2160 psi		VIII Div. 1
8 NPS		47.2 sq in			2.7 - 1440 psi		VIII Div. 1
10 NPS		67.2 sq in			2.4 - 720 psi		VIII Div. 1
12 NPS		99.4 sq in			2.4 - 720 psi		VIII Div. 1
14 NPS		138 sq in			2.4 - 720 psi		VIII Div. 1
16 NPS		183 sq in			2.3 - 720 psi		VIII Div. 1
18 NPS		234 sq in			2 - 720 psi		VIII Div. 1
20 NPS		291 sq in			1.8 - 720 psi		VIII Div. 1
24 NPS		425 sq in			1.5 - 720 psi		VIII Div. 1

Fike Corporation (FIK)

NB#: 80075

location: 704 South 10th Street, Blue Springs, MO 64015 United States

Certification Number: **80075** Design Series or catalog number **FSR Scored**

Holder Designation: **FSR**Type Classification: **Rupture Disk Device**Capacity Tests: **Sec. VIII Div. 1 at National Board T L (Worthington) on September 11, 1998**Method of Establishing Relieving Capacity: **Resistance Factor, 3 Size, Krg**Certified Value: **.55 Unitless**Test Medium: **Air or gases (Krg)**Certified Medium: **Air or gases (Krg)**Set Pressure Definition: **Burst Pressure**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
1 NPS		0.785 sq in			146 - 6000 psi		VIII Div. 1
1.5 NPS		1.77 sq in			240 - 6000 psi		VIII Div. 1
2 NPS		3.36 sq in			195 - 9000 psi		VIII Div. 1
2.5 NPS		4.79 sq in			195 - 6000 psi		VIII Div. 1
3 NPS		7.39 sq in			50 - 6000 psi		VIII Div. 1
3.5 NPS		9.89 sq in			50 - 6000 psi		VIII Div. 1
4 NPS		12.7 sq in			47 - 6000 psi		VIII Div. 1
6 NPS		28.9 sq in			47 - 7500 psi		VIII Div. 1
8 NPS		50 sq in			28 - 6000 psi		VIII Div. 1
10 NPS		78.9 sq in			22 - 3000 psi		VIII Div. 1
12 NPS		113 sq in			19 - 3000 psi		VIII Div. 1
14 NPS		138 sq in			16 - 2500 psi		VIII Div. 1
16 NPS		183 sq in			28 - 1800 psi		VIII Div. 1
18 NPS		234 sq in			23 - 1500 psi		VIII Div. 1
20 NPS		291 sq in			23 - 1200 psi		VIII Div. 1
24 NPS		425 sq in			19 - 900 psi		VIII Div. 1
28 NPS		583 sq in			100 - 600 psi		VIII Div. 1
30 NPS		672 sq in			110 - 500 psi		VIII Div. 1
32 NPS		767 sq in			100 - 400 psi		VIII Div. 1
34 NPS		868 sq in			105 - 300 psi		VIII Div. 1
36 NPS		976 sq in			105 - 250 psi		VIII Div. 1

Certification Number: **80097** Design Series or catalog number **SR-H**

Type Classification: **Rupture Disk Device**Capacity Tests: **Sec. VIII Div. 1 at National Board T L (Worthington) on November 23, 1998**Method of Establishing Relieving Capacity: **Resistance Factor, 3 Size, Krgl**Certified Value: **1.88 Unitless**Test Medium: **Air/Gas & Liquid**Certified Medium: **Air or gases, and liquid (Krgl)**Set Pressure Definition: **Burst Pressure**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
1.5 NPS		1.34 sq in			18 - 163 psi		VIII Div. 1
2 NPS		2.55 sq in			13 - 117 psi		VIII Div. 1
3 NPS		6.1 sq in			13 - 117 psi		VIII Div. 1
4 NPS		11 sq in			10 - 64 psi		VIII Div. 1
40 DN		1.6 sq in			16 - 163 psi		VIII Div. 1
50 DN		2.72 sq in			13 - 117 psi		VIII Div. 1

Fike Corporation (FIK)

NB#: 80109

location: 704 South 10th Street, Blue Springs, MO 64015 United States

Certification Number: **80109** Design Series or catalog number: **MRK, RKB, Reverse Knife Blade**

Holder Designation: **MRK, RKB (A, B, C, D, E, F, G, GI, H, I)**Type Classification: **Rupture Disk Device**Capacity Tests: **Sec. VIII Div. 1 at National Board T L (Worthington) on September 11, 1998**Method of Establishing Relieving Capacity: **Resistance Factor, 3 Size, Krg**Certified Value: **1.56 Unitless**Test Medium: **Air/Gas**Certified Medium: **Air or gases (Krg)**Set Pressure Definition: **Burst Pressure**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
1 NPS		0.785 sq in			52 - 1440 psi		VIII Div. 1
1.5 NPS		1.56 sq in			30 - 1000 psi		VIII Div. 1
2 NPS		3.36 sq in			22 - 1000 psi		VIII Div. 1
3 NPS		7.39 sq in			23 - 1000 psi		VIII Div. 1
4 NPS		12.7 sq in			18.4 - 1000 psi		VIII Div. 1
6 NPS		27.3 sq in			14 - 1000 psi		VIII Div. 1
8 NPS		50 sq in			11 - 250 psi		VIII Div. 1
10 NPS		78.9 sq in			9 - 200 psi		VIII Div. 1
12 NPS		113 sq in			6 - 160 psi		VIII Div. 1
14 NPS		138 sq in			6 - 135 psi		VIII Div. 1
16 NPS		183 sq in			4.8 - 120 psi		VIII Div. 1
18 NPS		234 sq in			4 - 85 psi		VIII Div. 1
20 NPS		291 sq in			4 - 70 psi		VIII Div. 1
24 NPS		425 sq in			3.2 - 45 psi		VIII Div. 1
28 NPS		583 sq in			4 - 45 psi		VIII Div. 1
30 NPS		683 sq in			4 - 45 psi		VIII Div. 1
32 NPS		779 sq in			4 - 45 psi		VIII Div. 1
34 NPS		868 sq in			4 - 45 psi		VIII Div. 1
36 NPS		976 sq in			4 - 45 psi		VIII Div. 1
38 NPS		1090 sq in			4 - 45 psi		VIII Div. 1
40 NPS		1210 sq in			4 - 45 psi		VIII Div. 1
42 NPS		1340 sq in			4 - 45 psi		VIII Div. 1
44 NPS		1470 sq in			4 - 45 psi		VIII Div. 1

Fike Corporation (FIK)

NB#: 80132

location: 704 South 10th Street, Blue Springs, MO 64015 United States

Certification Number: **80132** Design Series or catalog number **P, CP,CPC**

Holder Designation: A, B, C, D, E, F, G, GI, H, I, UT, ST

Type Classification: Rupture Disk Device

Capacity Tests: Sec. VIII Div. 1 at National Board T L (Worthington) on February 08, 1999

Method of Establishing Relieving Capacity: Resistance Factor, 3 Size, Krgl

Certified Value: 1.35 Unitless

Test Medium: Air/Gas & Liquid

Certified Medium: Air or gases, and liquid (Krgl)

Set Pressure Definition: Burst Pressure

Scope of Nominal Size and Set Pressure Ranges:

Inlet Size	Outlet Size	Flow Area	Orifice [designator] diameter	Lift	Set Pressure Range	Media	Code Section
0.75 NPS		0.442 sq in			42 - 10000 psi		VIII Div. 1
1 NPS		0.785 sq in			30 - 6000 psi		VIII Div. 1
1.5 NPS		1.77 sq in			23 - 3000 psi		VIII Div. 1
2 NPS		3.34 sq in			15 - 3000 psi		VIII Div. 1
3 NPS		7.37 sq in			8.5 - 3000 psi		VIII Div. 1
4 NPS		12.7 sq in			7 - 3000 psi		VIII Div. 1
6 NPS		28.9 sq in			6 - 2160 psi		VIII Div. 1
8 NPS		50 sq in			4 - 1440 psi		VIII Div. 1
10 NPS		78.5 sq in			3.6 - 720 psi		VIII Div. 1
12 NPS		113 sq in			3.2 - 720 psi		VIII Div. 1
14 NPS		138 sq in			2.8 - 720 psi		VIII Div. 1
16 NPS		183 sq in			2.5 - 720 psi		VIII Div. 1
18 NPS		234 sq in			2.3 - 720 psi		VIII Div. 1
20 NPS		291 sq in			2 - 720 psi		VIII Div. 1
24 NPS		425 sq in			1.5 - 720 psi		VIII Div. 1

Certification Number: **80154** Design Series or catalog number **SCRD FSR-VT**

Holder Designation: FSR-VT

Type Classification: Rupture Disk Device

Capacity Tests: Sec. VIII Div. 1 at National Board T L (Worthington) on March 29, 2000

Method of Establishing Relieving Capacity: Resistance Factor, 3 Size, Krg

Certified Value: 2.38 Unitless

Test Medium: Air/Gas

Certified Medium: Air or gases (Krg)

Set Pressure Definition: Burst Pressure

Scope of Nominal Size and Set Pressure Ranges:

Inlet Size	Outlet Size	Flow Area	Orifice [designator] diameter	Lift	Set Pressure Range	Media	Code Section
1 NPS		0.785 sq in			285 - 6000 psi		VIII Div. 1
1.5 NPS		1.77 sq in			240 - 6000 psi		VIII Div. 1
2 NPS		3.36 sq in			195 - 6000 psi		VIII Div. 1
2.5 NPS		4.79 sq in			195 - 6000 psi		VIII Div. 1
3 NPS		7.39 sq in			50 - 6000 psi		VIII Div. 1
3.5 NPS		9.89 sq in			50 - 6000 psi		VIII Div. 1
4 NPS		12.7 sq in			47 - 6000 psi		VIII Div. 1
6 NPS		28.9 sq in			47 - 6000 psi		VIII Div. 1
8 NPS		50 sq in			28 - 6000 psi		VIII Div. 1
10 NPS		78.9 sq in			22 - 1480 psi		VIII Div. 1
12 NPS		113 sq in			19 - 1000 psi		VIII Div. 1
14 NPS		138 sq in			16 - 910 psi		VIII Div. 1
16 NPS		183 sq in			28 - 800 psi		VIII Div. 1
18 NPS		234 sq in			23 - 700 psi		VIII Div. 1
20 NPS		291 sq in			23 - 600 psi		VIII Div. 1
24 NPS		425 sq in			19 - 540 psi		VIII Div. 1

Fike Corporation (FIK)

NB#: 80187

location: 704 South 10th Street, Blue Springs, MO 64015 United States

Certification Number: **80187** Design Series or catalog number: **SCRD-FSR-VT (Liquid)**

Holder Designation: **FSR-VT**Type Classification: **Rupture Disk Device**Capacity Tests: **Sec. VIII Div. 1 at National Board T L (Worthington) on July 06, 2000**Method of Establishing Relieving Capacity: **Resistance Factor, 3 Size, Krl**Certified Value: **8.71 Unitless**Test Medium: **Liquid**Certified Medium: **Liquid (Krl)**Set Pressure Definition: **Burst Pressure**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
1 NPS		0.59 sq in			285 - 6000 psi		VIII Div. 1
1.5 NPS		1.35 sq in			240 - 6000 psi		VIII Div. 1
2 NPS		3.36 sq in			195 - 6000 psi		VIII Div. 1
2.5 NPS		4.79 sq in			195 - 6000 psi		VIII Div. 1
3 NPS		7.39 sq in			50 - 6000 psi		VIII Div. 1
3.5 NPS		9.89 sq in			50 - 6000 psi		VIII Div. 1
4 NPS		12.7 sq in			47 - 6000 psi		VIII Div. 1
6 NPS		28.9 sq in			47 - 6000 psi		VIII Div. 1
8 NPS		50 sq in			28 - 6000 psi		VIII Div. 1
10 NPS		78.9 sq in			22 - 1480 psi		VIII Div. 1
12 NPS		113 sq in			19 - 1000 psi		VIII Div. 1
14 NPS		138 sq in			16 - 910 psi		VIII Div. 1
16 NPS		183 sq in			28 - 800 psi		VIII Div. 1
18 NPS		234 sq in			23 - 700 psi		VIII Div. 1
20 NPS		291 sq in			23 - 600 psi		VIII Div. 1
24 NPS		425 sq in			19 - 540 psi		VIII Div. 1

Certification Number: **80200** Design Series or catalog number: **SCRD-V Cross Score**

Holder Designation: **GI, TQ**Type Classification: **Rupture Disk Device**Capacity Tests: **Sec. VIII Div. 1 at Fike on August 01, 2011**Method of Establishing Relieving Capacity: **Resistance Factor, 3 Size, Krl**Certified Value: **1.5 Unitless**Test Medium: **Air/Gas & Liquid**Certified Medium: **Air or gases, and liquid (Krgl)**Set Pressure Definition: **Burst Pressure**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
2 NPS		3.36 sq in			100 - 2100 psi	Air	VIII Div. 1
3 NPS		7.35 sq in			70 - 1800 psi	Air	VIII Div. 1
4 NPS		12.7 sq in			62.1 - 1500 psi	Air	VIII Div. 1
6 NPS		22.3 sq in			47 - 800 psi	Air	VIII Div. 1
8 NPS		40.7 sq in			27.9 - 700 psi	Air	VIII Div. 1
10 NPS		67.2 sq in			22 - 600 psi	Air	VIII Div. 1
12 NPS		99.4 sq in			18.6 - 500 psi	Air	VIII Div. 1
14 NPS		138 sq in			15.8 - 450 psi	Air	VIII Div. 1
16 NPS		183 sq in			27.8 - 400 psi	Air	VIII Div. 1
18 NPS		234 sq in			23 - 300 psi	Air	VIII Div. 1
20 NPS		291 sq in			23 - 250 psi	Air	VIII Div. 1
24 NPS		425 sq in			18.6 - 150 psi	Air	VIII Div. 1

Fike Corporation (FIK)

NB#: 80277

location: 704 South 10th Street, Blue Springs, MO 64015 United States

Certification Number: **80277** Design Series or catalog number: **SRL (gas/liq.)**

Holder Designation: **SRL, XL**Type Classification: **Rupture Disk Device**Capacity Tests: **Sec. VIII Div. 1 at Fike on February 14, 2002**Method of Establishing Relieving Capacity: **Resistance Factor, 3 Size, Krgl**Certified Value: **0.59 Unitless**Test Medium: **Air/Gas & Liquid**Certified Medium: **Air or gases, and liquid (Krgl)**Set Pressure Definition: **Burst Pressure**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
1 NPS		0.864 sq in			27 - 352 psi		VIII Div. 1
1.5 NPS		1.67 sq in			27 - 352 psi		VIII Div. 1
2 NPS		3.36 sq in			17 - 291 psi		VIII Div. 1
2.5 NPS		4.36 sq in			17 - 291 psi		VIII Div. 1
3 NPS		7.39 sq in			13 - 220 psi		VIII Div. 1
3.5 NPS		8.89 sq in			13 - 220 psi		VIII Div. 1
4 NPS		12.7 sq in			10 - 195 psi		VIII Div. 1
6 NPS		25.2 sq in			8 - 198 psi		VIII Div. 1
8 NPS		44.8 sq in			8 - 148 psi		VIII Div. 1

Certification Number: **80288** Design Series or catalog number: **3/4" Poly SD Double Hinge (DH)**

Holder Designation: **Poly-SD**Type Classification: **Rupture Disk Device**Capacity Tests: **Sec. VIII Div. 1 at Fike on February 25, 2002**Method of Establishing Relieving Capacity: **Resistance Factor, 3 Size, Krgl**Certified Value: **2.4 Unitless**Test Medium: **Air/Gas & Liquid**Certified Medium: **Air or gases, and liquid (Krgl)**Set Pressure Definition: **Burst Pressure**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
0.75 NPS		0.442 sq in			50 - 2500 psi		VIII Div. 1

Certification Number: **80299** Design Series or catalog number: **1/2" Poly SD Double Hinge (DH)**

Holder Designation: **Poly-SD**Type Classification: **Rupture Disk Device**Capacity Tests: **Sec. VIII Div. 1 at Fike on February 13, 2002**Method of Establishing Relieving Capacity: **Resistance Factor, 1 Size, Krg**Certified Value: **3.04 Unitless**Test Medium: **Air/Gas**Certified Medium: **Air or gases (Krg)**Set Pressure Definition: **Burst Pressure**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
0.5 NPS		0.196 sq in			80 - 3000 psi		VIII Div. 1

Fike Corporation (FIK)

NB#: 80301

location: 704 South 10th Street, Blue Springs, MO 64015 United States

Certification Number: **80301** Design Series or catalog number: **1/2" Poly SD Double Hinge (DH) liquid**

Holder Designation: Poly-SD

Type Classification: Rupture Disk Device

Capacity Tests: Sec. VIII Div. 1 at Fike on February 13, 2002

Method of Establishing Relieving Capacity: Resistance Factor, 1 Size, Krl

Certified Value: 5.3 Unitless

Test Medium: Air/Gas & Liquid

Certified Medium: Liquid (Krl)

Set Pressure Definition: Burst Pressure

Scope of Nominal Size and Set Pressure Ranges:

Inlet Size	Outlet Size	Flow Area	Orifice [designator] diameter	Lift	Set Pressure Range	Media	Code Section
0.5 NPS		0.196 sq in			80 - 3000 psi		VIII Div. 1

Certification Number: **80334** Design Series or catalog number: **Poly SD Cross Score, Liquid**

Holder Designation: GI

Type Classification: Rupture Disk Device

Capacity Tests: Sec. VIII Div. 1 at Fike on February 11, 2002

Method of Establishing Relieving Capacity: Resistance Factor, 3 Size, Krl

Certified Value: 1.1 Unitless

Test Medium: Air/Gas & Liquid

Certified Medium: Liquid (Krl)

Set Pressure Definition: Burst Pressure

Scope of Nominal Size and Set Pressure Ranges:

Inlet Size	Outlet Size	Flow Area	Orifice [designator] diameter	Lift	Set Pressure Range	Media	Code Section
0.75 NPS		0.442 sq in			250 - 3000 psi		VIII Div. 1
1 NPS		0.785 sq in			124 - 2700 psi		VIII Div. 1
1.5 NPS		1.77 sq in			115 - 2400 psi		VIII Div. 1
2 NPS		3.36 sq in			70 - 2100 psi		VIII Div. 1
3 NPS		7.39 sq in			52 - 1800 psi		VIII Div. 1
4 NPS		12.7 sq in			47 - 1500 psi		VIII Div. 1
6 NPS		28.9 sq in			47 - 800 psi		VIII Div. 1
8 NPS		50 sq in			27.9 - 700 psi		VIII Div. 1
10 NPS		78.9 sq in			22 - 600 psi		VIII Div. 1
12 NPS		113 sq in			18.6 - 500 psi		VIII Div. 1
14 NPS		138 sq in			15.8 - 450 psi		VIII Div. 1
16 NPS		183 sq in			27.9 - 400 psi		VIII Div. 1
18 NPS		234 sq in			23 - 300 psi		VIII Div. 1
20 NPS		291 sq in			23 - 250 psi		VIII Div. 1
24 NPS		425 sq in			18.6 - 150 psi		VIII Div. 1

Certification Number: **80345** Design Series or catalog number: **1/2" Poly SD Cross Score (liquid)**

Holder Designation: Poly SD

Type Classification: Rupture Disk Device

Capacity Tests: Sec. VIII Div. 1 at Fike on March 12, 2002

Method of Establishing Relieving Capacity: Resistance Factor, 1 Size, Krl

Certified Value: 5.71 Unitless

Test Medium: Air/Gas & Liquid

Certified Medium: Liquid (Krl)

Set Pressure Definition: Burst Pressure

Scope of Nominal Size and Set Pressure Ranges:

Inlet Size	Outlet Size	Flow Area	Orifice [designator] diameter	Lift	Set Pressure Range	Media	Code Section
0.5 NPS		0.196 sq in			450 - 4500 psi		VIII Div. 1

Fike Corporation (FIK)

NB#: 80356

Location: 704 South 10th Street, Blue Springs, MO 64015 United States

Certification Number: **80356** Design Series or catalog number: **1/2" Poly SD Cross Score**

Holder Designation: Poly-SD

Type Classification: Rupture Disk Device

Capacity Tests: Sec. VIII Div. 1 at Fike on March 08, 2002

Method of Establishing Relieving Capacity: Resistance Factor, 3 Size, Krg

Certified Value: 2.39 Unitless

Test Medium: Air/Gas

Certified Medium: Air or gases (Krg)

Set Pressure Definition: Burst Pressure

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
0.5 NPS		0.196 sq in			450 - 4500 psi		VIII Div. 1

Certification Number: **80367** Design Series or catalog number: **1/2" Poly SD Cross Score w. Liner**

Holder Designation: Poly-SD

Type Classification: Rupture Disk Device

Capacity Tests: Sec. VIII Div. 1 at Fike on March 25, 2002

Method of Establishing Relieving Capacity: Resistance Factor, 1 Size, Krg

Certified Value: 3.03 Unitless

Test Medium: Air/Gas

Certified Medium: Air or gases (Krg)

Set Pressure Definition: Burst Pressure

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
0.5 NPS		0.15 sq in			450 - 3000 psi		VIII Div. 1

Certification Number: **80402** Design Series or catalog number: **A8701-X**

Type Classification: Rupture Disk Device

Capacity Tests: Sec. VIII Div. 1 at Fike on November 08, 2002

Method of Establishing Relieving Capacity: Resistance Factor, 3 Size, KrgI

Certified Value: 2.75 Unitless

Test Medium: Air/Gas & Liquid

Certified Medium: Air or gases, and liquid (KrgI)

Set Pressure Definition: Burst Pressure

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
2 NPS		2.45 sq in	[-1]		150 - 1300 psi		VIII Div. 1
3 NPS		4.97 sq in	[-4]		100 - 1300 psi		VIII Div. 1
		5.33 sq in	[-2]		100 - 1300 psi		VIII Div. 1
4 NPS		9.1 sq in	[-3]		100 - 1300 psi		VIII Div. 1
6 NPS		21.9 sq in	[-5]		75 - 1300 psi		VIII Div. 1
8 NPS		31 sq in	[6,7]		75 - 1300 psi		VIII Div. 1

Fike Corporation (FIK)

NB#: 80424

Location: 704 South 10th Street, Blue Springs, MO 64015 United States

Certification Number: **80424** Design Series or catalog number: **3/4" Poly-SD Single Hinge**

Type Classification: Rupture Disk Device

Capacity Tests: Sec. VIII Div. 1 at Fike on December 12, 2002

Method of Establishing Relieving Capacity: Resistance Factor, 1 Size, Krgl

Certified Value: 0.90 Unitless

Test Medium: Air/Gas & Liquid

Certified Medium: Air or gases, and liquid (Krgl)

Set Pressure Definition: Burst Pressure

Scope of Nominal Size and Set Pressure Ranges:

Inlet Size	Outlet Size	Flow Area	Orifice [designator] diameter	Lift	Set Pressure Range	Media	Code Section
0.75 NPS		0.442 sq in			37.6 - 2500 psi		VIII Div. 1

Certification Number: **80457** Design Series or catalog number: **P, CP, CPC - Union Type Holder**

Holder Designation: UT

Type Classification: Rupture Disk Device

Capacity Tests: Sec. VIII Div. 1 at Fike on October 22, 2003

Method of Establishing Relieving Capacity: Resistance Factor, 3 Size, Krgl

Certified Value: 4.80 Unitless

Test Medium: Air/Gas & Liquid

Certified Medium: Air or gases, and liquid (Krgl)

Set Pressure Definition: Burst Pressure

Scope of Nominal Size and Set Pressure Ranges:

Inlet Size	Outlet Size	Flow Area	Orifice [designator] diameter	Lift	Set Pressure Range	Media	Code Section
0.5 NPS		0.196 sq in			61 - 6000 psi		VIII Div. 1
0.75 NPS		0.432 sq in			42 - 6000 psi		VIII Div. 1
1 NPS		0.719 sq in			30 - 6000 psi		VIII Div. 1
1.5 NPS		1.77 sq in			23 - 3000 psi		VIII Div. 1
2 NPS		2.95 sq in			15 - 1000 psi		VIII Div. 1

Certification Number: **80468** Design Series or catalog number: **PV, CP-C, CPV, CPV-C with Union Type Holder**

Holder Designation: UT

Type Classification: Rupture Disk Device

Capacity Tests: Sec. VIII Div. 1 at Fike on December 08, 2003

Method of Establishing Relieving Capacity: Resistance Factor, 3 Size, Krgl

Certified Value: 8.8 Unitless

Test Medium: Gas

Certified Medium: Air or gases, and liquid (Krgl)

Set Pressure Definition: Burst Pressure

Scope of Nominal Size and Set Pressure Ranges:

Inlet Size	Outlet Size	Flow Area	Orifice [designator] diameter	Lift	Set Pressure Range	Media	Code Section
0.5 NPS		0.138 sq in			164 - 6000 psi		VIII Div. 1
0.75 NPS		0.33 sq in			96 - 6000 psi		VIII Div. 1
1 NPS		0.562 sq in			73 - 6000 psi		VIII Div. 1
1.5 NPS		1.16 sq in			48 - 3000 psi		VIII Div. 1
2 NPS		2.39 sq in			31 - 1000 psi		VIII Div. 1

Fike Corporation (FIK)

NB#: 80479

location: 704 South 10th Street, Blue Springs, MO 64015 United States

Certification Number: **80479** Design Series or catalog number: **HO, HOV with Union Type holder**

Holder Designation: **UT**Type Classification: **Rupture Disk Device**Capacity Tests: **Sec. VIII Div. 1 at Fike on October 08, 2003**Method of Establishing Relieving Capacity: **Resistance Factor, 3 Size, Krgl**Certified Value: **3.5 Unitless**Test Medium: **Air/Gas & Liquid**Certified Medium: **Air or gases, and liquid (Krgl)**Set Pressure Definition: **Burst Pressure**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
1 NPS		0.694 sq in			29 - 6000 psi		VIII Div. 1
1.5 NPS		1.43 sq in			20 - 3000 psi		VIII Div. 1
2 NPS		2.95 sq in			13 - 1000 psi		VIII Div. 1

Certification Number: **80514** Design Series or catalog number: **FSR Scored (Liquid)**

Holder Designation: **GI**Type Classification: **Rupture Disk Device**Capacity Tests: **Sec. VIII Div. 1 at Fike on November 18, 2004**Method of Establishing Relieving Capacity: **Resistance Factor, 3 Size, Krl**Certified Value: **2.4 Unitless**Test Medium: **Air/Gas & Liquid**Certified Medium: **Liquid (Krl)**Set Pressure Definition: **Burst Pressure**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
1 NPS		0.59 sq in			285 - 6000 psi		VIII Div. 1
1.5 NPS		1.35 sq in			240 - 6000 psi		VIII Div. 1
2 NPS		3.36 sq in			195 - 6000 psi		VIII Div. 1
3 NPS		7.39 sq in			50 - 6000 psi		VIII Div. 1
3.5 NPS		9.89 sq in			50 - 6000 psi		VIII Div. 1
4 NPS		12.7 sq in			47 - 6000 psi		VIII Div. 1
6 NPS		28.9 sq in			47 - 7500 psi		VIII Div. 1
8 NPS		50 sq in			28 - 6000 psi		VIII Div. 1
10 NPS		78.9 sq in			22 - 3000 psi		VIII Div. 1
12 NPS		113 sq in			19 - 3000 psi		VIII Div. 1
14 NPS		138 sq in			16 - 2500 psi		VIII Div. 1
16 NPS		183 sq in			28 - 1800 psi		VIII Div. 1
18 NPS		234 sq in			23 - 1500 psi		VIII Div. 1
20 NPS		291 sq in			23 - 1200 psi		VIII Div. 1
24 NPS		425 sq in			19 - 900 psi		VIII Div. 1
28 NPS		583 sq in			100 - 600 psi		VIII Div. 1
30 NPS		672 sq in			110 - 500 psi		VIII Div. 1
32 NPS		767 sq in			100 - 400 psi		VIII Div. 1
34 NPS		868 sq in			105 - 300 psi		VIII Div. 1
36 NPS		976 sq in			105 - 250 psi		VIII Div. 1

Fike Corporation (FIK)

NB#: 80525

location: 704 South 10th Street, Blue Springs, MO 64015 United States

Certification Number: **80525** Design Series or catalog number **1/2 " P ST FS**

Holder Designation: **Screw type flat seat**Type Classification: **Rupture Disk Device**Capacity Tests: **Sec. VIII Div. 1 at Fike on February 09, 2004**Method of Establishing Relieving Capacity: **Resistance Factor, 1 Size, Krgl**Certified Value: **5.39 Unitless**Test Medium: **Air/Gas & Liquid**Certified Medium: **Air or gases, and liquid (Krgl)**Set Pressure Definition: **Burst Pressure**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
0.5 NPS		0.15 sq in	0.438 in		42 - 15000 psi		VIII Div. 1
		0.196 sq in	0.5 in		42 - 10000 psi		VIII Div. 1

Certification Number: **80536** Design Series or catalog number **1/2 " SCR D ST FS Cross Scored**

Holder Designation: **Screw type flat seat**Type Classification: **Rupture Disk Device**Capacity Tests: **Sec. VIII Div. 1 at Fike on March 20, 2003**Method of Establishing Relieving Capacity: **Resistance Factor, 1 Size, Krgl**Certified Value: **5.39 Unitless**Test Medium: **Air/Gas & Liquid**Certified Medium: **Air or gases, and liquid (Krgl)**Set Pressure Definition: **Burst Pressure**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
0.5 NPS		0.15 sq in	0.438 in		450 - 15000 psi		VIII Div. 1
		0.196 sq in	0.5 in		450 - 10000 psi		VIII Div. 1

Certification Number: **80547** Design Series or catalog number **1/2 " SCR D ST FS Double Hinge**

Holder Designation: **Screw type flat seat**Type Classification: **Rupture Disk Device**Capacity Tests: **Sec. VIII Div. 1 at Fike on March 17, 2003**Method of Establishing Relieving Capacity: **Resistance Factor, 1 Size, Krgl**Certified Value: **5.39 Unitless**Test Medium: **Air/Gas & Liquid**Certified Medium: **Air or gases, and liquid (Krgl)**Set Pressure Definition: **Burst Pressure**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
0.5 NPS		0.15 sq in	0.438 in		80 - 15000 psi		VIII Div. 1
		0.196 sq in	0.5 in		80 - 10000 psi		VIII Div. 1

Fike Corporation (FIK)

NB#: 80558

location: 704 South 10th Street, Blue Springs, MO 64015 United States

Certification
Number: **80558**Design Series
or catalog number **Axius**Holder Designation: **SRL, SRLO - GI, -TQ**Type Classification: **Rupture Disk Device**Capacity Tests: **Sec. VIII Div. 1 at Fike on September 19, 2005**Method of Establishing Relieving Capacity: **Resistance Factor, 3 Size, Krgl**Certified Value: **0.45 Unitless**Test Medium: **Air/Gas & Liquid**Certified Medium: **Air or gases, and liquid (Krgl)**Set Pressure Definition: **Burst Pressure**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
1 NPS		0.864 sq in			9.2 - 65 psi		VIII Div. 1
1.5 NPS		2.04 sq in			8 - 65 psi		VIII Div. 1
2 NPS		3.36 sq in			8 - 65 psi		VIII Div. 1
3 NPS		7.39 sq in			6.9 - 65 psi		VIII Div. 1
4 NPS		12.7 sq in			6.7 - 65 psi		VIII Div. 1
6 NPS		23.6 sq in			8 - 65 psi	Air	VIII Div. 1
						Water	VIII Div. 1
8 NPS		41.8 sq in			8 - 65 psi	Air	VIII Div. 1
10 NPS		64.9 sq in			8 - 50 psi		VIII Div. 1
12 NPS		94.2 sq in			8 - 35 psi		VIII Div. 1

Certification
Number: **80570**Design Series
or catalog number **HOV Flat Seat Single Hinge**Holder Designation: **HOV**Type Classification: **Rupture Disk Device**Capacity Tests: **Sec. VIII Div. 1 at Fike on April 19, 2006**Method of Establishing Relieving Capacity: **Resistance Factor, 1 Size, Krgl**Certified Value: **0.99 Unitless**Test Medium: **Air/Gas & Liquid**Certified Medium: **Air or gases, and liquid (Krgl)**Set Pressure Definition: **Burst Pressure**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
2 NPS		3.34 sq in			15.9 - 285 psi		VIII Div. 1
3 NPS		7.31 sq in			11.4 - 285 psi		VIII Div. 1
4 NPS		12.7 sq in			8 - 285 psi		VIII Div. 1
8 NPS		47.2 sq in			4.5 - 285 psi		VIII Div. 1
24 NPS		387 sq in			1.5 - 40 psi		VIII Div. 1
26 NPS		459 sq in			1.5 - 35 psi		VIII Div. 1
28 NPS		539 sq in			1.5 - 35 psi		VIII Div. 1
30 NPS		624 sq in			1.5 - 30 psi		VIII Div. 1
32 NPS		716 sq in			1.5 - 30 psi		VIII Div. 1
34 NPS		814 sq in			1.5 - 30 psi		VIII Div. 1
36 NPS		918 sq in			1.5 - 25 psi		VIII Div. 1
38 NPS		1030 sq in			1.5 - 25 psi		VIII Div. 1
40 NPS		1150 sq in			1.5 - 25 psi		VIII Div. 1
42 NPS		1270 sq in			1.5 - 20 psi		VIII Div. 1
44 NPS		1400 sq in			1.5 - 20 psi		VIII Div. 1
48 NPS		1680 sq in			1.5 - 20 psi		VIII Div. 1

Fike Corporation (FIK)

NB#: 80581

location: 704 South 10th Street, Blue Springs, MO 64015 United States

Certification Number: **80581** Design Series or catalog number: **HOV Flat Seat Multi-Petal**

Holder Designation: **HOV**Type Classification: **Rupture Disk Device**Capacity Tests: **Sec. VIII Div. 1 at Fike on July 11, 2006**Method of Establishing Relieving Capacity: **Resistance Factor, 3 Size, Krgl**Certified Value: **0.99 Unitless**Test Medium: **Air/Gas & Liquid**Certified Medium: **Air or gases, and liquid (Krgl)**Set Pressure Definition: **Burst Pressure**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
2 NPS		3.34 sq in			133 - 720 psi		VIII Div. 1
3 NPS		7.31 sq in			95 - 720 psi		VIII Div. 1
4 NPS		12.7 sq in			88 - 720 psi		VIII Div. 1
8 NPS		47.2 sq in			44 - 720 psi		VIII Div. 1
24 NPS		387 sq in			10 - 65 psi		VIII Div. 1
26 NPS		459 sq in			10 - 65 psi		VIII Div. 1
28 NPS		539 sq in			10 - 65 psi		VIII Div. 1
30 NPS		624 sq in			10 - 65 psi		VIII Div. 1
32 NPS		716 sq in			10 - 45 psi		VIII Div. 1
34 NPS		814 sq in			10 - 45 psi		VIII Div. 1
36 NPS		918 sq in			10 - 37 psi		VIII Div. 1
38 NPS		1030 sq in			10 - 37 psi		VIII Div. 1
40 NPS		1150 sq in			10 - 37 psi		VIII Div. 1
42 NPS		1270 sq in			10 - 30 psi		VIII Div. 1
44 NPS		1400 sq in			10 - 30 psi		VIII Div. 1
48 NPS		1680 sq in			10 - 30 psi		VIII Div. 1

Certification Number: **80592** Design Series or catalog number: **Poly-SD, SCRD-V (Double Disc)**

Holder Designation: **Poly SD**Type Classification: **Rupture Disk Device**Capacity Tests: **Sec. VIII Div. 1 at Fike on August 25, 2006**Method of Establishing Relieving Capacity: **Resistance Factor, 3 Size, Krgl**Certified Value: **1.5 Unitless**Test Medium: **Air/Gas & Liquid**Certified Medium: **Air or gases, and liquid (Krgl)**Set Pressure Definition: **Burst Pressure**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
2 NPS		3.36 sq in			100 - 2100 psi		VIII Div. 1
3 NPS		7.35 sq in			70 - 1800 psi		VIII Div. 1
4 NPS		12.7 sq in			62 - 1500 psi		VIII Div. 1
6 NPS		22.3 sq in			47 - 800 psi		VIII Div. 1
8 NPS		40.7 sq in			28 - 700 psi		VIII Div. 1
10 NPS		67.2 sq in			22 - 600 psi		VIII Div. 1
12 NPS		99.4 sq in			19 - 500 psi		VIII Div. 1
14 NPS		138 sq in			16 - 450 psi		VIII Div. 1
16 NPS		183 sq in			28 - 400 psi		VIII Div. 1
18 NPS		234 sq in			23 - 300 psi		VIII Div. 1
20 NPS		291 sq in			23 - 250 psi		VIII Div. 1
24 NPS		425 sq in			19 - 150 psi		VIII Div. 1

Fike Corporation (FIK)

NB#: 80604

location: 704 South 10th Street, Blue Springs, MO 64015 United States

Certification Number: **80604** Design Series or catalog number: **Axius (liquid)**

Holder Designation: **XL, GI**Type Classification: **Rupture Disk Device**Capacity Tests: **Sec. VIII Div. 1 at Fike on September 06, 2006**Method of Establishing Relieving Capacity: **Resistance Factor, 3 Size, Krl**Certified Value: **1.25 Unitless**Test Medium: **Liquid**Certified Medium: **Liquid (Krl)**Special Service: **None**Set Pressure Definition: **Burst Pressure**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
1 NPS		0.864 sq in			65 - 600 psi		VIII Div. 1
1.5 NPS		2.04 sq in			65 - 385 psi		VIII Div. 1
2 NPS		3.36 sq in			65 - 470 psi		VIII Div. 1
3 NPS		7.39 sq in			65 - 430 psi		VIII Div. 1
4 NPS		12.6 sq in			65 - 300 psi		VIII Div. 1
6 NPS		21.6 sq in			65 - 200 psi		VIII Div. 1
8 NPS		38.4 sq in			65 - 150 psi		VIII Div. 1
10 NPS		59.5 sq in			50 - 100 psi		VIII Div. 1
12 NPS		86.4 sq in			35 - 70 psi		VIII Div. 1

Certification Number: **80615** Design Series or catalog number: **Axius (gas)**

Holder Designation: **XL, GI**Type Classification: **Rupture Disk Device**Capacity Tests: **Sec. VIII Div. 1 at Fike on September 06, 2006**Method of Establishing Relieving Capacity: **Resistance Factor, 3 Size, Krg**Certified Value: **0.45 Unitless**Test Medium: **Gas**Certified Medium: **Air or gases (Krg)**Special Service: **None**Set Pressure Definition: **Burst Pressure**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
1 NPS		0.864 sq in			65 - 600 psi		VIII Div. 1
1.5 NPS		2.04 sq in			65 - 385 psi		VIII Div. 1
2 NPS		3.36 sq in			65 - 470 psi		VIII Div. 1
3 NPS		7.39 sq in			65 - 430 psi		VIII Div. 1
4 NPS		12.6 sq in			65 - 300 psi		VIII Div. 1
6 NPS		21.6 sq in			65 - 200 psi		VIII Div. 1
8 NPS		38.4 sq in			65 - 150 psi		VIII Div. 1
10 NPS		59.5 sq in			50 - 100 psi		VIII Div. 1
12 NPS		86.4 sq in			35 - 70 psi		VIII Div. 1

Fike Corporation (FIK)

NB#: 80626

location: 704 South 10th Street, Blue Springs, MO 64015 United States

Certification
Number: **80626**Design Series
or catalog number **Axius SC**Holder Designation: **Axius SC Sanitary**Type Classification: **Rupture Disk Device**Capacity Tests: **Sec. VIII Div. 1 at Fike on June 26, 2007**Method of Establishing Relieving Capacity: **Resistance Factor, 3 Size, Krgl**Certified Value: **1.88 Unitless**Test Medium: **Air/Gas & Liquid**Certified Medium: **Air or gases, and liquid (Krgl)**Special Service: **None**Set Pressure Definition: **Burst Pressure**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
1 NPS		0.41 sq in			25 - 275 psi		VIII Div. 1
1.5 NPS		1.109 sq in			10 - 200 psi		VIII Div. 1
2 NPS		2.111 sq in			10 - 145 psi		VIII Div. 1
3 NPS		5.007 sq in			10 - 80 psi		VIII Div. 1
4 NPS		9.022 sq in			10 - 60 psi		VIII Div. 1
38 DN		1.109 sq in			10 - 200 psi		VIII Div. 1
40 DN		1.33 sq in			10 - 170 psi		VIII Div. 1
50 DN		2.111 sq in			10 - 140 psi		VIII Div. 1
51 DN		2.111 sq in			10 - 140 psi		VIII Div. 1
76 DN		5.007 sq in			10 - 80 psi		VIII Div. 1

Certification
Number: **80637**Design Series
or catalog number **A9172-X**Holder Designation: **A8483-3 housing**Type Classification: **Rupture Disk Device**Capacity Tests: **Sec. VIII Div. 1 at Fike on October 18, 2007**Method of Establishing Relieving Capacity: **Resistance Factor, 1 Size, Krg**Certified Value: **0.74 Unitless**Test Medium: **Gas**Certified Medium: **Air or gases (Krg)**Set Pressure Definition: **Burst Pressure**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
1 NPS		0.945 sq in			16 - 60 psi		VIII Div. 1

Certification
Number: **80648**Design Series
or catalog number **A9182-X**Holder Designation: **A8483-6, A8483-8**Type Classification: **Rupture Disk Device**Capacity Tests: **Sec. VIII Div. 1 at Fike on November 21, 2007**Method of Establishing Relieving Capacity: **Resistance Factor, 1 Size, Krg**Certified Value: **7.40 Unitless**Test Medium: **Air/Gas**Certified Medium: **Air or gases (Krg)**Set Pressure Definition: **Burst Pressure**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
0.5 NPS	0.5, 0.75 NPS	0.132 sq in			16 - 60 psi		VIII Div. 1

Fike Corporation (FIK)

NB#: 80659

location: 704 South 10th Street, Blue Springs, MO 64015 United States

Certification Number: **80659** Design Series or catalog number: **A9111-X**

Holder Designation: **A8483-2**Type Classification: **Rupture Disk Device**Capacity Tests: **Sec. VIII Div. 1 at Fike on November 21, 2007**Method of Establishing Relieving Capacity: **Resistance Factor, 1 Size, Krg**Certified Value: **2..58 Unitless**Test Medium: **Air/Gas**Certified Medium: **Air or gases (Krg)**Set Pressure Definition: **Burst Pressure**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
0.5 NPS	.5 NPS	0.302 sq in			16 - 100 psi		VIII Div. 1

Certification Number: **80716** Design Series or catalog number: **ATLAS**

Holder Designation: **Atlas**Type Classification: **Rupture Disk Device**Capacity Tests: **Sec. VIII Div. 1 at Fike on February 27, 2012**Method of Establishing Relieving Capacity: **Resistance Factor, 3 Size, Krg**Certified Value: **0.65 Unitless**Test Medium: **Air/Gas**Certified Medium: **Air or gases (Krg)**Set Pressure Definition: **Burst Pressure**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
1 NPS		0.7 sq in			200 - 1500 psi	Air	VIII Div. 1
1.5 NPS		1.8 sq in			120 - 1200 psi	Air	VIII Div. 1
2 NPS		2.93 sq in			75 - 1060 psi	Air	VIII Div. 1
3 NPS		6.35 sq in			60 - 865 psi	Air	VIII Div. 1
4 NPS		10.9 sq in			60 - 750 psi	Air	VIII Div. 1
6 NPS		22.1 sq in			165 - 290 psi	Air	VIII Div. 1
14 NPS		117 sq in			6 - 300 psi	Air	VIII Div. 1
16 NPS		153 sq in			5 - 250 psi	Air	VIII Div. 1
18 NPS		195 sq in			5 - 200 psi	Air	VIII Div. 1
20 NPS		239 sq in			4.5 - 180 psi	Air	VIII Div. 1
24 NPS		346 sq in			3.5 - 150 psi	Air	VIII Div. 1
26 NPS		408 sq in			3.5 - 150 psi	Air	VIII Div. 1
28 NPS		474 sq in			3.5 - 150 psi	Air	VIII Div. 1
30 NPS		541 sq in			3.5 - 140 psi	Air	VIII Div. 1
32 NPS		617 sq in			3.25 - 125 psi	Air	VIII Div. 1
36 NPS		784 sq in			3.25 - 100 psi	Air	VIII Div. 1
42 NPS		1066 sq in			3.25 - 80 psi	Air	VIII Div. 1

Fike Corporation (FIK)

NB#: 80727

location: 704 South 10th Street, Blue Springs, MO 64015 United States

Certification Number: **80727** Design Series or catalog number: **ATLAS (Liquid)**

Type Classification: **Rupture Disk Device**Capacity Tests: **Sec. VIII Div. 1 at Fike on February 27, 2012**Method of Establishing Relieving Capacity: **Resistance Factor, 3 Size, Krl**Certified Value: **1.50 N/A**Test Medium: **Air/Gas & Liquid**Certified Medium: **Liquid (Krl)**Special Service: **None**Set Pressure Definition: **Burst Pressure**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
1 NPS		0.7 sq in			200 - 1500 psi	Water	VIII Div. 1
1.5 NPS		1.8 sq in			120 - 1200 psi	Water	VIII Div. 1
2 NPS		2.93 sq in			75 - 1060 psi	Water	VIII Div. 1
3 NPS		6.35 sq in			60 - 865 psi	Water	VIII Div. 1
4 NPS		10.9 sq in			60 - 750 psi	Water	VIII Div. 1
6 NPS		22.1 sq in			165 - 290 psi		VIII Div. 1

Certification Number: **80738** Design Series or catalog number: **SRL DOUBLE DISC (DD)**

Holder Designation: **SRL GI / XL GI**Type Classification: **Rupture Disk Device**Capacity Tests: **Sec. VIII Div. 1 at Fike on July 19, 2012**Method of Establishing Relieving Capacity: **Resistance Factor, 3 Size, Krgl**Certified Value: **1.18 Unitless**Test Medium: **Air/Gas & Liquid**Certified Medium: **Air or gases, and liquid (Krgl)**Set Pressure Definition: **Burst Pressure**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
1 NPS	1 NPS	0.864 sq in			27 - 352 psi	Air	VIII Div. 1
1.5 NPS	1.5 NPS	1.67 sq in			27 - 352 psi	Air	VIII Div. 1
2 NPS	2 NPS	3.36 sq in			17 - 291.5 psi	Air	VIII Div. 1
3 NPS	3 NPS	7.39 sq in			13 - 220 psi	Air	VIII Div. 1
4 NPS	4 NPS	12.7 sq in			10 - 198 psi	Air	VIII Div. 1
6 NPS	6 NPS	25.2 sq in			8 - 165 psi	Air	VIII Div. 1
8 NPS	8 NPS	44.8 sq in			8 - 148.5 psi	Air	VIII

Fike Corporation (FIK)

NB#: 80749

location: 704 South 10th Street, Blue Springs, MO 64015 United States

Certification Number: **80749** Design Series or catalog number: **Axius Double Disc (Axius DD)**

Holder Designation: XL

Type Classification: Rupture Disk Device

Capacity Tests: Sec. VIII Div. 1 at Fike on October 31, 2013

Method of Establishing Relieving Capacity: Resistance Factor, 3 Size, Krg

Certified Value: 0.68 N/A

Test Medium: Gas

Certified Medium: Air or gases (Krg)

Set Pressure Definition: Burst Pressure

Scope of Nominal Size and Set Pressure Ranges:

Inlet Size	Outlet Size	Flow Area	Orifice [designator] diameter	Lift	Set Pressure Range	Media	Code Section
1 NPS		0.864 sq in			10 - 600 psi	Air	VIII Div. 1
1.5 NPS		2.04 sq in			8 - 485 psi	Air	VIII Div. 1
2 NPS		3.36 sq in			8 - 470 psi	Air	VIII Div. 1
3 NPS		7.39 sq in			7 - 430 psi	Air	VIII Div. 1
4 NPS		12.6 sq in			7 - 300 psi	Air	VIII Div. 1
6 NPS		21.6 sq in			8 - 200 psi	Air	VIII Div. 1
8 NPS		38.4 sq in			8 - 150 psi	Air	VIII Div. 1
10 NPS		59.5 sq in			8 - 100 psi	Air	VIII Div. 1
12 NPS		86.4 sq in			8 - 70 psi	Air	VIII Div. 1

Certification Number: **80750** Design Series or catalog number: **Axius Double Disc (Axius DD) (Liquid)**

Holder Designation: XL DD

Type Classification: Rupture Disk Device

Capacity Tests: Sec. VIII Div. 1 at Fike on October 31, 2013

Method of Establishing Relieving Capacity: Resistance Factor, 3 Size, Krl

Certified Value: 1.10 N/A

Test Medium: Water

Certified Medium: Liquid (Krl)

Set Pressure Definition: Burst Pressure

Scope of Nominal Size and Set Pressure Ranges:

Inlet Size	Outlet Size	Flow Area	Orifice [designator] diameter	Lift	Set Pressure Range	Media	Code Section
1 NPS		0.864 sq in			10 - 600 psi	Water	VIII Div. 1
1.5 NPS		2.04 sq in			8 - 485 psi	Water	VIII Div. 1
2 NPS		3.36 sq in			8 - 470 psi	Water	VIII Div. 1
3 NPS		7.39 sq in			7 - 430 psi	Water	VIII Div. 1
4 NPS		12.6 sq in			7 - 300 psi	Water	VIII Div. 1
6 NPS		21.6 sq in			8 - 200 psi	Water	VIII Div. 1
8 NPS		38.4 sq in			8 - 150 Pa	Water	VIII Div. 1
10 NPS		59.5 sq in			8 - 100 psi	Water	VIII Div. 1
12 NPS		86.4 sq in			8 - 70 psi	Water	VIII Div. 1

Fike Corporation (FIK)

NB#: 80761

location: 704 South 10th Street, Blue Springs, MO 64015 United States

Certification
Number: **80761**Design Series
or catalog number **SCRD-FSR-SQ**Holder Designation: **Gi / FSR-SQ**Type Classification: **Rupture Disk Device**Capacity Tests: **Sec. VIII Div. 1 at Fike on May 16, 2015**Method of Establishing Relieving Capacity: **Resistance Factor, 3 Size, Krg**Certified Value: **2.0 Unitless**Test Medium: **Air/Gas**Certified Medium: **Gas**Special Service: **None**Set Pressure Definition: **Burst Pressure**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
2 NPS		2.4 sq in			500 - 4000 psi	Air	VIII Div. 1
3 NPS		5.25 sq in			400 - 4000 psi	Air	VIII Div. 1
4 NPS		9.12 sq in			400 - 4000 psi	Air	VIII Div. 1
10 NPS		57.3 sq in			400 - 4000 psi	Air	VIII Div. 1

Flow Safe, Inc. (FLW)

NB#: 28000

location: S-3865 Taylor Road, Orchard Park, NY 14127 United States

Flow Safe, Inc. (FLW)

location: S-3865 Taylor Road, Orchard Park, NY 14127 United States

Certification Number: **28000** Design Series or catalog number: **F7100, F7200, F7300, F7400, F7500**

Type Classification: **Pilot Operated Pressure Relief Valve**Capacity Tests: **Sec. VIII Div. 1 at National Board T L (Worthington) on January 05, 1996**Method of Establishing Relieving Capacity: **Flow Capacity, K**Certified Value: **.824 Unitless**Test Medium: **Air/Gas**Certified Medium: **Air/Gas**Special Service: **None**Set Pressure Definition: **1.Pop 3.Initial Audible Discharge**Blowdown: **Adjustable and Fixed for Mod. Pilot**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
1 NPS	2 NPS	0.521 sq in	0.815 in	0.43 in	1500 - 6000 psi	Air	VIII Div. 1
		0.719 sq in	0.957 in	0.43 in	15 - 2220 psi	Air	VIII Div. 1
1.5 NPS	3 NPS	0.95 sq in	1.1 in	0.665 in	3706 - 6000 psi	Air	VIII Div. 1
		1.404 sq in	1.337 in	0.665 in	1000 - 3705 psi	Air	VIII Div. 1
		1.767 sq in	1.5 in	0.665 in	15 - 1480 psi	Air	VIII Div. 1
2 NPS	3, 3 dual NPS	1.774 sq in	1.503 in	0.865 in	3706 - 6000 psi	Air	VIII Div. 1
		2.241 sq in	1.689 in	0.865 in	1481 - 3705 psi	Air	VIII Div. 1
		2.953 sq in	1.939 in	0.865 in	15 - 1480 psi	Air	VIII Div. 1
3 NPS	4, 4 dual NPS	5.408 sq in	2.624 in	1.235 in	1481 - 3705 psi	Air	VIII Div. 1
		6.605 sq in	2.9 in	1.235 in	15 - 1480 psi	Air	VIII Div. 1
4 NPS	6, 6 dual NPS	10.315 sq in	3.624 in	1.53 in	1481 - 3705 psi	Air	VIII Div. 1
		11.437 sq in	3.816 in	1.53 in	15 - 1480 psi	Air	VIII Div. 1
6 NPS	8, 8 dual NPS	26.06 sq in	5.76 in	2.2 in	15 - 1480 psi	Air	VIII Div. 1
8 NPS	10, 8 dual, 10 dual NPS	45.66 sq in	7.625 in	2.86 in	15 - 1480 psi	Air	VIII Div. 1
10 NPS	12 NPS	71.85 sq in	9.565 in	3.64 in	15 - 750 psi	Air	VIII Div. 1
12 NPS	16 NPS	111.87 sq in	11.935 in	4.17 in	15 - 285 psi	Air	VIII Div. 1

Location: S-3865 Taylor Road, Orchard Park, NY 14127 United States

Certification Number: **28011** Design Series or catalog number **F7100, F7300, F7400, F7500 (Liquids)**

Type Classification: **Pilot Operated Pressure Relief Valve**Capacity Tests: **Sec. VIII Div. 1 at National Board T L (Worthington) on January 05, 1996**Method of Establishing Relieving Capacity: **Flow Capacity, K**Certified Value: **.634 Unitless**Test Medium: **Water**Certified Medium: **Liquid**Special Service: **None**Set Pressure Definition: **First Steady Stream**Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
1 NPS	2 NPS	0.522 sq in	0.815 in	0.43 in	2221 - 6000 psi	Water	VIII Div. 1
		0.719 sq in	0.957 in	0.43 in	15 - 2220 psi	Water	VIII Div. 1
1.5 NPS	3 NPS	0.95 sq in	1.1 in	0.665 in	3706 - 6000 psi	Water	VIII Div. 1
		1.404 sq in	1.337 in	0.665 in	1481 - 3705 psi	Water	VIII Div. 1
		1.767 sq in	1.5 in	0.665 in	15 - 1480 psi	Water	VIII Div. 1
2 NPS	3 NPS	1.774 sq in	1.503 in	0.865 in	3706 - 6000 psi	Water	VIII Div. 1
		2.24 sq in	1.689 in	0.865 in	1481 - 3705 psi	Water	VIII Div. 1
		2.953 sq in	1.939 in	0.865 in	15 - 1480 psi	Water	VIII Div. 1
3 NPS	4 NPS	5.408 sq in	2.624 in	1.235 in	1481 - 3705 psi	Water	VIII Div. 1
		6.605 sq in	2.9 in	1.235 in	15 - 1480 psi	Water	VIII Div. 1
4 NPS	6 NPS	10.315 sq in	3.624 in	1.53 in	1481 - 3705 psi	Water	VIII Div. 1
		11.437 sq in	3.816 in	1.53 in	15 - 1480 psi	Water	VIII Div. 1
6 NPS	8 NPS	26.06 sq in	5.76 in	2.2 in	15 - 1480 psi	Water	VIII Div. 1
8 NPS	10 NPS	45.66 sq in	7.625 in	2.86 in	15 - 1480 psi	Water	VIII Div. 1
10 NPS	12 NPS	71.85 sq in	9.565 in	3.64 in	15 - 750 psi	Water	VIII Div. 1
12 NPS	16 NPS	111.87 sq in	11.935 in	4.17 in	15 - 285 psi	Water	VIII Div. 1

Location: S-3865 Taylor Road, Orchard Park, NY 14127 United States

Certification Number: **28022** Design Series or catalog number **F8100, F8200, F8300, F8400, F8500**

Type Classification: Pilot Operated Pressure Relief Valve

Capacity Tests: Sec. VIII Div. 1 at National Board T L (Worthington) on August 30, 1995

Method of Establishing Relieving Capacity: Flow Capacity, K

Certified Value: .878 Unitless

Test Medium: Air/Gas

Certified Medium: Air/Gas

Special Service: None

Set Pressure Definition: 1.Initial Audible Discharge 3.Pop

Blowdown: Adjustable and Fixed for Mod. Pilot

Scope of Nominal Size and Set Pressure Ranges:

Inlet Size	Outlet Size	Flow Area	Orifice [designator] diameter	Lift	Set Pressure Range	Media	Code Section
1 NPS	2 NPS	0.134 sq in	[D] 0.815 in	0.43 in	2221 - 6000 psi	Air	VIII Div. 1
			[D] 0.957 in	0.43 in	15 - 2220 psi	Air	VIII Div. 1
		0.235 sq in	[E] 0.815 in	0.43 in	2221 - 6000 psi	Air	VIII Div. 1
			[E] 0.957 in	0.43 in	15 - 2220 psi	Air	VIII Div. 1
		0.358 sq in	[F] 0.815 in	0.43 in	2221 - 3705 psi	Air	VIII Div. 1
			[F] 0.957 in	0.43 in	15 - 2220 psi	Air	VIII Div. 1
1.5 NPS	3 NPS	0.358 sq in	[F] 1.1 in	0.665 in	3706 - 6000 psi	Air	VIII Div. 1
			[F] 1.337 in	0.665 in	1481 - 3705 psi	Air	VIII Div. 1
			[F] 1.5 in	0.665 in	15 - 1480 psi	Air	VIII Div. 1
		0.588 sq in	[G] 1.1 in	0.665 in	3706 - 6000 psi	Air	VIII Div. 1
			[G] 1.337 in	0.665 in	1481 - 3705 psi	Air	VIII Div. 1
			[G] 1.5 in	0.665 in	15 - 1480 psi	Air	VIII Div. 1
		0.916 sq in	[H] 1.1 in	0.665 in	3706 - 6000 psi	Air	VIII Div. 1
			[H] 1.337 in	0.665 in	1481 - 3705 psi	Air	VIII Div. 1
			[H] 1.5 in	0.665 in	15 - 1480 psi	Air	VIII Div. 1
2 NPS	3, 3 dual NPS	0.588 sq in	[G] 1.503 in	0.865 in	3706 - 6000 psi	Air	VIII Div. 1
			[G] 1.689 in	0.865 in	1481 - 3705 psi	Air	VIII Div. 1
			[G] 1.939 in	0.865 in	15 - 1480 psi	Air	VIII Div. 1
		0.916 sq in	[H] 1.503 in	0.865 in	3706 - 6000 psi	Air	VIII Div. 1
			[H] 1.689 in	0.865 in	1481 - 3705 psi	Air	VIII Div. 1
			[H] 1.939 in	0.865 in	15 - 1480 psi	Air	VIII Div. 1
		1.503 sq in	[J] 1.503 in	0.865 in	3706 - 6000 psi	Air	VIII Div. 1
			[J] 1.689 in	0.865 in	1481 - 3705 psi	Air	VIII Div. 1
			[J] 1.939 in	0.865 in	15 - 1480 psi	Air	VIII Div. 1
3 NPS	4, 4 dual NPS	1.503 sq in	[J] 2.624 in	1.235 in	1481 - 3705 psi	Air	VIII Div. 1
			[J] 2.9 in	1.235 in	15 - 1480 psi	Air	VIII Div. 1
		2.147 sq in	[K] 2.624 in	1.235 in	1481 - 3705 psi	Air	VIII Div. 1
			[K] 2.9 in	1.235 in	15 - 1480 psi	Air	VIII Div. 1
		3.277 sq in	[L] 2.624 in	1.235 in	1481 - 3705 psi	Air	VIII Div. 1
			[L] 2.9 in	1.235 in	15 - 1480 psi	Air	VIII Div. 1
4 NPS	6, 6 dual NPS	3.277 sq in	[L] 3.624 in	1.53 in	1481 - 3705 psi	Air	VIII Div. 1
			[L] 3.816 in	1.53 in	15 - 1480 psi	Air	VIII Div. 1
		4.147 sq in	[M] 3.624 in	1.53 in	1481 - 3705 psi	Air	VIII Div. 1
			[M] 3.816 in	1.53 in	15 - 1480 psi	Air	VIII Div. 1
		5.014 sq in	[N] 3.624 in	1.53 in	1481 - 3705 psi	Air	VIII Div. 1
			[N] 3.816 in	1.53 in	15 - 1480 psi	Air	VIII Div. 1
		7.397 sq in	[P] 3.624 in	1.53 in	1481 - 3705 psi	Air	VIII Div. 1
			[P] 3.816 in	1.53 in	15 - 1480 psi	Air	VIII Div. 1
6 NPS	8, 8 dual NPS	12.913 sq in	[Q] 5.76 in	2.2 in	15 - 1480 psi	Air	VIII Div. 1
		18.704 sq in	[R] 5.76 in	2.2 in	15 - 1480 psi	Air	VIII Div. 1
8 NPS	10 NPS	16.53 sq in	[R-1] 7.625 in	2.86 in	15 - 1480 psi	Air	VIII Div. 1
	10, 8 dual, 10 dual NPS	30.409 sq in	[T] 7.625 in	2.86 in	15 - 1480 psi	Air	VIII Div. 1
10 NPS	12 NPS	51 sq in	[V] 9.565 in	3.64 in	15 - 750 psi	Air	VIII Div. 1
12 NPS	16 NPS	78.81 sq in	[W] 11.935 in	4.17 in	15 - 285 psi	Air	VIII Div. 1

Flow Safe, Inc. (FLW)

NB#: 28044

Location: S-3865 Taylor Road, Orchard Park, NY 14127 United States

Certification Number: **28044** Design Series or catalog number **F84L-4, F88-4 (Liquids)**

Type Classification: Relief Valve

Capacity Tests: Sec. VIII Div. 1 at National Board T L (Worthington) on December 18, 1996

Method of Establishing Relieving Capacity: Flow Capacity, Slope

Certified Value: 3.79 GPM/SQ.RT. PSID

Test Medium: Water

Certified Medium: Liquid

Set Pressure Definition: 93% of pop

Blowdown: Fixed

Scope of Nominal Size and Set Pressure Ranges:

Inlet Size	Outlet Size	Flow Area	Orifice [designator] diameter	Lift	Set Pressure Range	Media	Code Section
0.5 - 1 NPS	1 NPS	0.116 sq in	[4] 0.577 in	0.27 in	30 - 8382 psi	Water	VIII Div. 1

Certification Number: **28055** Design Series or catalog number **F84L, F88 (liquids)**

Type Classification: Safety Relief Valve

Capacity Tests: Sec. VIII Div. 1 at National Board T L (Worthington) on August 26, 1996

Method of Establishing Relieving Capacity: Flow Capacity, K

Certified Value: .798 Unitless

Test Medium: Water

Certified Medium: Liquid

Special Service: None

Set Pressure Definition: 93% of pop

Blowdown: Fixed

Scope of Nominal Size and Set Pressure Ranges:

Inlet Size	Outlet Size	Flow Area	Orifice [designator] diameter	Lift	Set Pressure Range	Media	Code Section
0.75 - 1 NPS	1 NPS	0.261 sq in	[#8] 0.577 in	0.27 in	30 - 4292 psi	Water	VIII Div. 1
1.5 NPS	2 NPS	0.663 sq in	[G] 0.919 in	0.34 in	30 - 3705 psi	Water	VIII Div. 1
2 NPS	3 NPS	1.69 sq in	[J] 1.467 in	0.6 in	30 - 2700 psi	Water	VIII Div. 1

Certification Number: **28066** Design Series or catalog number **F84, F85**

Type Classification: Safety Relief Valve

Capacity Tests: Sec. VIII Div. 1 at National Board T L (Worthington) on January 18, 1996

Method of Establishing Relieving Capacity: Flow Capacity, K

Certified Value: .878 Unitless

Test Medium: Air/Gas

Certified Medium: Air/Gas

Set Pressure Definition: Pop

Blowdown: Adjustable by Single Ring

Scope of Nominal Size and Set Pressure Ranges:

Inlet Size	Outlet Size	Flow Area	Orifice [designator] diameter	Lift	Set Pressure Range	Media	Code Section
0.25 - 0.75 NPS	.5 - .75 NPS	0.003 sq in	[-1] 0.062 in	0.06 in	15 - 10313 psi	Air	VIII Div. 1
	.5, .75 NPS	0.015 sq in	[-2] 0.138 in	0.075 in	15 - 9944 psi	Air	VIII Div. 1
0.5 - 0.75 NPS	.5, .75 NPS	0.034 sq in	[-3] 0.209 in	0.113 in	15 - 890 psi	Air	VIII Div. 1
0.5 - 1 NPS	.5 - 1 NPS	0.065 sq in	[-4] 0.289 in	0.152 in	15 - 9612 psi	Air	VIII Div. 1
	1 NPS	0.149 sq in	[-6] 0.436 in	0.211 in	15 - 6100 psi	Air	VIII Div. 1
0.75 - 1 NPS	1 NPS	0.261 sq in	[-8] 0.577 in	0.262 in	15 - 4292 psi	Air	VIII Div. 1
1.5 NPS	2 NPS	0.405 sq in	[F] 0.718 in	0.328 in	15 - 5000 psi	Air	VIII Div. 1
		0.664 sq in	[G] 0.919 in	0.411 in	15 - 3705 psi	Air	VIII Div. 1
1.5 - 2 NPS	3 NPS	1.036 sq in	[H] 1.149 in	0.493 in	15 - 2750 psi	Air	VIII Div. 1
2 NPS	3 NPS	1.689 sq in	[J] 1.467 in	0.631 in	15 - 2700 psi	Air	VIII Div. 1

Flow Safe, Inc. (FLW)

NB#: 28077

Location: S-3865 Taylor Road, Orchard Park, NY 14127 United States

Certification Number: **28077** Design Series or catalog number: **F88-8**

Type Classification: **Safety Valve**Capacity Tests: **Sec. VIII Div. 1 at National Board T L (Worthington) on October 20, 2004**Method of Establishing Relieving Capacity: **Flow Capacity, Slope**Certified Value: **4.20 SCFM/PSIA**Test Medium: **Air/Gas**Certified Medium: **Air/Gas**Set Pressure Definition: **Pop**Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
0.75 - 1 NPS	1 NPS	0.261 sq in	0.577 in	0.27 in	50 - 4292 psi	Air	VIII Div. 1

Certification Number: **28088** Design Series or catalog number: **F88-4**

Type Classification: **Safety Valve**Capacity Tests: **Sec. VIII Div. 1 at National Board T L (Worthington) on October 20, 2004**Method of Establishing Relieving Capacity: **Flow Capacity, Slope**Certified Value: **1.87 SCFM/PSIA**Test Medium: **Air/Gas**Certified Medium: **Air/Gas**Set Pressure Definition: **Pop**Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
0.5 - 1 NPS	1 NPS	0.116 sq in	0.577 in	0.27 in	50 - 4292 psi	Air	VIII Div. 1

Flow Safe, Inc. (FLW)

NB#: 28099

Location: S-3865 Taylor Road, Orchard Park, NY 14127 United States

Certification Number: **28099** Design Series or catalog number **F8100, F8300, F8500 (liquid)**

Type Classification: **Pilot Operated Pressure Relief Valve**Capacity Tests: **Sec. VIII Div. 1 at National Board T L (Worthington) on February 12, 2008**Method of Establishing Relieving Capacity: **Flow Capacity, K**Certified Value: **0.83 Unitless**Test Medium: **Water**Certified Medium: **Liquid**Special Service: **None**Set Pressure Definition: **First Steady Stream**Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

Inlet Size	Outlet Size	Flow Area	Orifice [designator] diameter	Lift	Set Pressure Range	Media	Code Section
1 NPS	2 NPS	0.134 sq in	[D] 0.815 in	0.43 in	2221 - 6000 psi	Water	VIII Div. 1
			[D] 0.957 in	0.43 in	15 - 2220 psi	Water	VIII Div. 1
		0.235 sq in	[E] 0.815 in	0.43 in	2221 - 6000 psi	Water	VIII Div. 1
			[E] 0.957 in	0.43 in	15 - 2220 psi	Water	VIII Div. 1
1.5 NPS	3 NPS	0.358 sq in	[F] 0.957 in	0.43 in	15 - 2220 psi	Water	VIII Div. 1
			[F] 1.1 in	0.665 in	3706 - 6000 psi	Water	VIII Div. 1
			[F] 1.337 in	0.665 in	1481 - 3705 psi	Water	VIII Div. 1
		0.588 sq in	[F] 1.5 in	0.665 in	15 - 1480 psi	Water	VIII Div. 1
			[G] 1.337 in	0.665 in	1481 - 3705 psi	Water	VIII Div. 1
			[G] 1.5 in	0.665 in	15 - 1480 psi	Water	VIII Div. 1
2 NPS	3 NPS	0.916 sq in	[H] 1.5 in	0.665 in	15 - 1480 psi	Water	VIII Div. 1
			[G] 1.503 in	0.865 in	3706 - 6000 psi	Water	VIII Div. 1
			[G] 1.689 in	0.865 in	1481 - 3705 psi	Water	VIII Div. 1
		1.503 sq in	[G] 1.939 in	0.865 in	15 - 1480 psi	Water	VIII Div. 1
			[H] 1.503 in	0.865 in	3706 - 6000 psi	Water	VIII Div. 1
			[H] 1.689 in	0.865 in	1481 - 3705 psi	Water	VIII Div. 1
3 NPS	4 NPS	1.503 sq in	[H] 1.939 in	0.865 in	15 - 1480 psi	Water	VIII Div. 1
			[J] 1.939 in	0.865 in	15 - 1480 psi	Water	VIII Div. 1
			[J] 2.624 in	1.235 in	1481 - 3705 psi	Water	VIII Div. 1
		2.147 sq in	[J] 2.9 in	1.235 in	15 - 1480 psi	Water	VIII Div. 1
			[K] 2.624 in	1.235 in	1481 - 3705 psi	Water	VIII Div. 1
			[K] 2.9 in	1.235 in	15 - 1480 psi	Water	VIII Div. 1
4 NPS	6 NPS	3.277 sq in	[L] 2.9 in	1.235 in	15 - 1480 psi	Water	VIII Div. 1
			[L] 3.624 in	1.53 in	1481 - 3705 psi	Water	VIII Div. 1
			[L] 3.816 in	1.53 in	15 - 1480 psi	Water	VIII Div. 1
		4.147 sq in	[M] 3.624 in	1.53 in	1481 - 3705 psi	Water	VIII Div. 1
			[M] 3.816 in	1.53 in	15 - 1480 psi	Water	VIII Div. 1
			[N] 3.624 in	1.53 in	1481 - 3705 psi	Water	VIII Div. 1
6 NPS	8 NPS	12.913 sq in	[N] 3.816 in	1.53 in	15 - 1480 psi	Water	VIII Div. 1
			[Q] 5.76 in	2.2 in	15 - 1480 psi	Water	VIII Div. 1

Certification Number: **28101** Design Series or catalog number **F88-J**

Type Classification: **Safety Valve**Capacity Tests: **Sec. VIII Div. 1 at National Board T L (Worthington) on November 15, 2010**Method of Establishing Relieving Capacity: **Flow Capacity, Slope**Certified Value: **27.1 SCFM/PSIA**Test Medium: **Air/Gas**Certified Medium: **Air/Gas**Special Service: **None**Set Pressure Definition: **Pop**Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

Inlet Size	Outlet Size	Flow Area	Orifice [designator] diameter	Lift	Set Pressure Range	Media	Code Section
2 NPS	3 NPS	1.69 sq in	[J] 1.467 in	0.6 in	50 - 2700 psi	Air	VIII Div. 1

Location: S-3865 Taylor Road, Orchard Park, NY 14127 United States

Certification Number: **28112** Design Series or catalog number: **F88-G**

Type Classification: **Safety Valve**Capacity Tests: **Sec. VIII Div. 1 at National Board T L (Worthington) on November 15, 2010**Method of Establishing Relieving Capacity: **Flow Capacity, Slope**Certified Value: **10.3 SCFM/PSIA**Test Medium: **Air/Gas**Certified Medium: **Air/Gas**Special Service: **None**Set Pressure Definition: **Pop**Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
1.5 NPS	2 NPS	0.663 sq in	[G] 0.919 in	0.34 in	50 - 3705 psi	Air	VIII Div. 1

Certification Number: **28123** Design Series or catalog number: **F84L-2**

Type Classification: **Safety Relief Valve**Capacity Tests: **Sec. VIII Div. 1 at National Board T L (Worthington) on October 05, 2010**Method of Establishing Relieving Capacity: **Flow Capacity, Flow Factor**Certified Value: **.353 GPM/SQ.RT. PSID**Test Medium: **Water**Certified Medium: **Liquid**Special Service: **None**Set Pressure Definition: **93% of pop**Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
0.5 - 1 NPS	.5 - .75 NPS	0.015 sq in	[-2] 0.138 in	0.07 in	200 - 24277 psi	Water	VIII Div. 1

Certification Number: **28134** Design Series or catalog number: **F88-3**

Type Classification: **Safety Valve**Capacity Tests: **Sec. VIII Div. 1 at National Board T L (Worthington) on September 04, 2014**Method of Establishing Relieving Capacity: **Flow Capacity, Slope**Certified Value: **1.06 SCFM/PSIA**Test Medium: **Gas**Certified Medium: **Air/Gas**Special Service: **None**Set Pressure Definition: **Pop**Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
0.5 - 1 in	1 in	0.065 sq in	[-3] 0.546 in	0.27 in	50 - 4292 psi	Air	VIII Div. 1

Location: S-3865 Taylor Road, Orchard Park, NY 14127 United States

Certification Number: **28145** Design Series or catalog number **F84L-3, F88-3 (Liquid)**

Type Classification: **Safety Relief Valve**Capacity Tests: **Sec. VIII Div. 1 at National Board T L (Worthington) on August 12, 2014**Method of Establishing Relieving Capacity: **Flow Capacity, Flow Factor**Certified Value: **2.07 GPM/SQ.RT. PSID**Test Medium: **Water**Certified Medium: **Liquid**Special Service: **None**Set Pressure Definition: **93% of pop**Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
0.5 - 1 in	1 in	0.065 sq in	[-3] 0.577 in	0.27 in	50 - 8382 psi	Water	VIII Div. 1

Certification Number: **28156** Design Series or catalog number **F8100, F8300, F8500 (High Beta Ratio Sizes) (Liquid)**

Type Classification: **Pilot Operated Pressure Relief Valve**Capacity Tests: **Sec. VIII Div. 1 at National Board T L (Worthington) on March 12, 2015**Method of Establishing Relieving Capacity: **Flow Capacity, K**Certified Value: **.730 Unitless**Test Medium: **Water**Certified Medium: **Liquid**Set Pressure Definition: **First Steady Stream**Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
3 NPS	4 NPS	3.277 sq in	[L] 2.624 in	1.235 in	1481 - 3705 psi	Water	VIII Div. 1
4 NPS	6 NPS	7.397 sq in	[P] 3.816 in	1.53 in	15 - 3705 psi	Water	VIII Div. 1
6 NPS	8 NPS	18.704 sq in	[R] 5.76 in	2.2 in	15 - 1480 psi	Water	VIII Div. 1
8 NPS	10 NPS	30.409 sq in	[T] 7.625 in	2.86 in	15 - 1480 psi	Water	VIII Div. 1
10 NPS	12 NPS	51 sq in	[V] 9.565 in	3.64 in	15 - 750 psi	Water	VIII Div. 1
12 NPS	16 NPS	78.81 sq in	[W] 10.017 in	4.17 in	15 - 285 psi	Water	VIII Div. 1

Certification Number: **28167** Design Series or catalog number **F84L-2 LP**

Type Classification: **Safety Relief Valve**Capacity Tests: **Sec. VIII Div. 1 at National Board T L (Worthington) on December 07, 2015**Method of Establishing Relieving Capacity: **Flow Capacity, Flow Factor**Certified Value: **0.362 GPM/SQ.RT. PSID**Test Medium: **Water**Certified Medium: **Liquid**Special Service: **None**Set Pressure Definition: **93% of pop**Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
0.5 - 1 in	.5-.75 in	0.015 sq in	0.138 in	0.07 in	50 - 2085 psi	Water	VIII Div. 1

Fluid Handling LLC (Bell & Gossett, McDonnell & Miller) (BGT)

NB#: 31004

location: 8200 North Austin Ave., Morton Grove, IL 60053 United States

Fluid Handling LLC (Bell & Gossett, McDonnell & Miller) (BGT)

location: 8200 North Austin Ave., Morton Grove, IL 60053 United States

Certification Number: **31004** Design Series or catalog number: **790 & McDonnell & Miller 250-3/4**

Type Classification: **Safety Relief Valve**Capacity Tests: **Sec. IV at National Board T L (Picaway) on November 19, 1982**Method of Establishing Relieving Capacity: **Flow Capacity, Slope**Certified Value: **16668 BTU/HR/PSIA**Test Medium: **Steam**Certified Medium: **Saturated Water**Special Service: **None**Set Pressure Definition: **Pop**Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
0.75 NPS	.75 NPS	0.52 sq in	0.814 in	0.343 in	15 - 125 psi	Steam	IV

Certification Number: **31015** Design Series or catalog number: **1170 & McDonnell & Miller 250-1**

Type Classification: **Safety Relief Valve**Capacity Tests: **Sec. IV at National Board T L (Picaway) on November 19, 1982**Method of Establishing Relieving Capacity: **Flow Capacity, Slope**Certified Value: **24561 BTU/HR/PSIA**Test Medium: **Steam**Certified Medium: **Saturated Water**Special Service: **None**Set Pressure Definition: **Pop**Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
1 NPS	1 NPS	0.886 sq in	1.062 in	0.343 in	15 - 125 psi	Steam	IV

Certification Number: **31026** Design Series or catalog number: **3301 & McDonnell & Miller 260-1-1/2**

Type Classification: **Safety Relief Valve**Capacity Tests: **Sec. IV at National Board T L (Picaway) on September 28, 1981**Method of Establishing Relieving Capacity: **Flow Capacity, Slope**Certified Value: **71910 BTU/HR/PSIA**Test Medium: **Steam**Certified Medium: **Saturated Water**Special Service: **None**Set Pressure Definition: **Pop**Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
1.5 NPS	2 NPS	2.58 sq in	1.812 in	0.453 in	30 - 50 psi	Steam	IV

Certification Number: **31037** Design Series or catalog number: **4100 & McDonnell & Miller 250-2**

Type Classification: **Safety Relief Valve**

Capacity Tests: **Sec. IV at Ohio State University (Robinson Laboratory) on August 20, 1955**

Method of Establishing Relieving Capacity: **Flow Capacity, Slope**

Certified Value: **85700 BTU/HR/PSIA**

Test Medium: **Steam**

Certified Medium: **Saturated Water**

Special Service: **None**

Set Pressure Definition: **Pop**

Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
2 NPS	2 NPS	2.98 sq in	1.812 in	0.453 in	30 - 50 psi	Steam	IV

Fluid Mechanics Valve Company (FMV)

NB#: 25007

location: 12803 FM 529, Houston, TX 77041 United States

Acceptable Abbrev.: F/M

Fluid Mechanics Valve Company (FMV)

location: 12803 FM 529, Houston, TX 77041 United States

Acceptable Abbrev.: F/M

Certification Number: **25007** Design Series or catalog number: **1511, 1521, 1611, 1621**

Type Classification: **Safety Relief Valve**Capacity Tests: **Sec. VIII Div. 1 at Dresser Industries Inc. on June 20, 1989**Method of Establishing Relieving Capacity: **Flow Capacity, Slope**Certified Value: **.654 SCFM/PSIA**Test Medium: **Air/Gas**Certified Medium: **Air/Gas**Special Service: **Force Flow Steam Generator or High Temperature Water Boilers**Set Pressure Definition: **Pop**Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
0.5 - 2 NPS	.75 - 2.5 NPS		0.25 in	0.0625 in	40 - 15000 psi	Air	VIII Div. 1

Certification Number: **25018** Design Series or catalog number: **1513, 1523, 1613, 1623**

Type Classification: **Safety Relief Valve**Capacity Tests: **Sec. VIII Div. 1 at Dresser Industries Inc. on June 20, 1989**Method of Establishing Relieving Capacity: **Flow Capacity, Slope**Certified Value: **1.577 SCFM/PSIA**Test Medium: **Air/Gas**Certified Medium: **Air/Gas**Special Service: **None**Set Pressure Definition: **Pop**Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
0.75 - 2 NPS	1 - 2.5 NPS		0.375 in	0.0937 in	40 - 6000 psi	Air	VIII Div. 1

Certification Number: **25029** Design Series or catalog number: **1524 - 1548, 1624 - 1648**

Type Classification: **Safety Relief Valve**Capacity Tests: **Sec. VIII Div. 1 at Dresser Industries Inc. on June 20, 1989**Method of Establishing Relieving Capacity: **Flow Capacity, K**Certified Value: **.842 Unitless**Test Medium: **Air/Gas**Certified Medium: **Air/Gas**Set Pressure Definition: **Pop**Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
1 - 2 NPS	1.5 - 3 NPS	0.196 sq in	0.5 in	0.125 in	40 - 7500 psi	Air	VIII Div. 1
		0.307 sq in	0.625 in	0.156 in	40 - 6000 psi	Air	VIII Div. 1
1.5 - 3 NPS	2 - 3 NPS	0.503 sq in	0.8 in	0.2 in	40 - 3800 psi	Air	VIII Div. 1
	2 - 4 NPS	0.785 sq in	1 in	0.25 in	40 - 3000 psi	Air	VIII Div. 1
2 - 4 NPS	2.5 - 4 NPS	1.289 sq in	1.281 in	0.32 in	40 - 1100 psi	Air	VIII Div. 1

Fluid Mechanics Valve Company (FMV)

NB#: 25030

Location: 12803 FM 529, Houston, TX 77041 United States

Acceptable Abbrev.: F/M

Certification Number: **25030** Design Series or catalog number: **4000 & 4200 (.312 soft seat)**

Type Classification: **Safety Relief Valve**Capacity Tests: **Sec. VIII Div. 1 at National Board T L (Picaway) on September 03, 1987**Method of Establishing Relieving Capacity: **Flow Capacity, Slope**Certified Value: **.34 SCFM/PSIA**Test Medium: **Air/Gas**Certified Medium: **Air/Gas**Special Service: **None**Set Pressure Definition: **Pop**Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
0.5 - 2 NPS	.75 - 2 NPS		0.312 in	0.078 in	50 - 6000 psi	Air	VIII Div. 1

Certification Number: **25041** Design Series or catalog number: **4000 & 4200 Model (405 & 425)**

Type Classification: **Safety Relief Valve**Capacity Tests: **Sec. VIII Div. 1 at National Board T L (Picaway) on May 04, 1983**Method of Establishing Relieving Capacity: **Flow Capacity, Slope**Certified Value: **1.24 SCFM/PSIA**Test Medium: **Air/Gas**Certified Medium: **Air/Gas**Special Service: **None**Set Pressure Definition: **Pop**Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
0.75 - 2 NPS	1 - 2 NPS		0.437 in	0.109 in	50 - 3500 psi	Air	VIII Div. 1

Certification Number: **25063** Design Series or catalog number: **3900 Model (392 Series), .250 Soft Seat**

Type Classification: **Relief Valve**Capacity Tests: **Sec. VIII Div. 1 at National Board T L (Worthington) on October 29, 2002**Method of Establishing Relieving Capacity: **Flow Capacity, Flow Factor**Certified Value: **0.797 GPM/SQ.RT. PSID**Test Medium: **Water**Certified Medium: **Liquid**Special Service: **None**Set Pressure Definition: **First Steady Stream**Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
0.5 NPS	.5 NPS	0.049 sq in	0.25 in	0.087 in	75 - 2000 psi	Water	VIII Div. 1

Fukui Seisakusho Company, Limited (FKI)

NB#: 27032

location: 6 - 1 Chome, Shodai-Tajika, Hirakata City, Osaka 573-1132 Japan

Fukui Seisakusho Company, Limited (FKI)

location: 6 - 1 Chome, Shodai-Tajika, Hirakata City, Osaka 573-1132 Japan

Certification
Number: **27032**Design Series
or catalog number **RE Series**Type Classification: **Safety Relief Valve**Capacity Tests: **Sec. VIII Div. 1 at National Board T L (Picaway) on October 01, 1979**Method of Establishing Relieving Capacity: **Flow Capacity, K**Certified Value: **.869 Unitless**Test Medium: **Steam**Certified Medium: **Steam & Air/Gas**Special Service: **None**Set Pressure Definition: **Pop**Blowdown: **Adjustable**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
0.75 - 1.5 NPS	1-3 NPS	0.1368 sq in	[D] 0.4173 in	0.106 in	15 - 6000 psi	Air	VIII
						Steam	VIII
		0.2812 sq in	[E] 0.5984 in	0.15 in	15 - 6000 psi	Air	VIII
						Steam	VIII
1 - 1.5 NPS	2-3 NPS	0.3772 sq in	[F] 0.693 in	0.174 in	15 - 5000 psi	Air	VIII
						Steam	VIII
1.5 - 2 NPS	2-4 NPS	0.5945 sq in	[G] 0.87 in	0.221 in	15 - 4000 psi	Air	VIII
						Steam	VIII
		0.9212 sq in	[H] 1.083 in	0.272 in	15 - 3000 psi	Air	VIII
						Steam	VIII
		1.095 sq in	[H2] 1.181 in	0.295 in	15 - 3000 psi	Air	VIII Div. 1
						Steam	VIII Div. 1
2 - 3 NPS	3-6 NPS	1.491 sq in	[J] 1.378 in	0.346 in	15 - 3000 psi	Air	VIII
						Steam	VIII
2.5 - 3 NPS	3-6 NPS	2.128 sq in	[K] 1.646 in	0.413 in	15 - 3000 psi	Air	VIII
						Steam	VIII
3 - 4 NPS	4, 6 NPS	3.317 sq in	[L] 2.055 in	0.517 in	15 - 3500 psi	Air	VIII
						Steam	VIII
4 NPS	6 NPS	4.165 sq in	[M] 2.303 in	0.579 in	15 - 3000 psi	Air	VIII
						Steam	VIII
		5.063 sq in	[N] 2.539 in	0.638 in	15 - 1500 psi	Air	VIII
						Steam	VIII
		7.407 sq in	[P] 3.071 in	0.768 in	15 - 1000 psi	Steam	VIII
					15 - 1600 psi	Air	VIII
6 NPS	8, 10 NPS	13.042 sq in	[Q] 4.075 in	1.02 in	15 - 800 psi	Air	VIII
						Steam	VIII
		18.505 sq in	[R] 4.854 in	1.216 in	15 - 800 psi	Air	VIII
						Steam	VIII
8 NPS	10 NPS	29.244 sq in	[T] 6.102 in	1.528 in	15 - 600 psi	Air	VIII
						Steam	VIII
		32.98 sq in	[Ts] 6.48 in	1.622 in	15 - 600 psi	Air	VIII
						Steam	VIII
10 NPS	14 NPS	47.97 sq in	[V] 7.815 in	1.957 in	15 - 500 psi	Air	VIII
						Steam	VIII
12 NPS	16 NPS	68.96 sq in	[W] 9.37 in	2.343 in	15 - 500 psi	Air	VIII
						Steam	VIII
14 NPS	18 NPS	94.08 sq in	[Y] 10.945 in	2.737 in	15 - 500 psi	Air	VIII
						Steam	VIII
16 NPS	18 NPS	103.8 sq in	[Z] 11.496 in	2.753 in	15 - 500 psi	Air	VIII
						Steam	VIII
		123.49 sq in	[Z2] 12.539 in	3.138 in	15 - 500 psi	Air	VIII
						Steam	VIII
18 NPS	24 NPS	155.15 sq in	[A] 14.055 in	3.516 in	15 - 500 psi	Air	VIII
						Steam	VIII
20 NPS	24 NPS	191.87 sq in	[B] 15.63 in	3.91 in	15 - 500 psi	Air	VIII
						Steam	VIII

location: 6 - 1 Chome, Shodai-Tajika, Hirakata City, Osaka 573-1132 Japan

Certification Number: **27043** Design Series or catalog number: **RECL & REBL (Liquids)**

Type Classification: **Relief Valve**Capacity Tests: **Sec. VIII Div. 1 at National Board T L (Picaway) on January 14, 1986**Method of Establishing Relieving Capacity: **Flow Capacity, K**Certified Value: **.717 Unitless**Test Medium: **Water**Certified Medium: **Liquid**Special Service: **None**Set Pressure Definition: **First Steady Stream**Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
0.5 NPS		0.06 sq in	0.2756 in	0.069 in	15 - 6000 psi	Water	VIII
0.75 - 1.5 NPS	1-3 NPS	0.1368 sq in	[D] 0.4173 in	0.106 in	15 - 6000 psi	Water	VIII
		0.2812 sq in	[E] 0.5984 in	0.15 in	15 - 6000 psi	Water	VIII
1 - 1.5 NPS	2-3 NPS	0.3772 sq in	[F] 0.693 in	0.174 in	15 - 5000 psi	Water	VIII
1.5 - 2 NPS	2-4 NPS	0.5945 sq in	[G] 0.87 in	0.221 in	15 - 4000 psi	Water	VIII
		0.9212 sq in	[H] 1.083 in	0.272 in	15 - 3000 psi	Water	VIII
		1.095 sq in	[H2] 1.181 in	0.295 in	15 - 3000 psi	Water	VIII
2 - 3 NPS	3-6 NPS	1.491 sq in	[J] 1.378 in	0.346 in	15 - 3000 psi	Water	VIII
2.5 - 3 NPS	3-6 NPS	2.128 sq in	[K] 1.646 in	0.413 in	15 - 3000 psi	Water	VIII
3 - 4 NPS	4-6 NPS	3.317 sq in	[L] 2.055 in	0.517 in	15 - 3500 psi	Water	VIII
4 NPS	6 NPS	4.165 sq in	[M] 2.303 in	0.579 in	15 - 3000 psi	Water	VIII
		5.063 sq in	[N] 2.539 in	0.638 in	15 - 1500 psi	Water	VIII
		7.407 sq in	[P] 3.071 in	0.768 in	15 - 1600 psi	Water	VIII
6 NPS	8-10 NPS	13.042 sq in	[Q] 4.075 in	1.02 in	15 - 800 psi	Water	VIII
		18.505 sq in	[R] 4.854 in	1.216 in	15 - 800 psi	Water	VIII
8 NPS	10 NPS	29.244 sq in	[T] 6.102 in	1.528 in	15 - 600 psi	Water	VIII
10 NPS	14 NPS	47.97 sq in	[V] 7.815 in	1.957 in	15 - 500 psi	Water	VIII
12 NPS	16 NPS	68.96 sq in	[W] 9.37 in	2.343 in	15 - 500 psi	Water	VIII
14 NPS	18 NPS	94.08 sq in	[Y] 10.945 in	2.737 in	15 - 500 psi	Water	VIII
16 NPS	18 NPS	103.8 sq in	[Z] 11.496 in	2.753 in	15 - 500 psi	Water	VIII
		123.49 sq in	[Z2] 12.539 in	3.138 in	15 - 500 psi	Water	VIII
18 NPS	24 NPS	155.15 sq in	[A] 14.055 in	3.516 in	15 - 500 psi	Water	VIII
20 NPS	24 NPS	191.87 sq in	[B] 15.63 in	3.91 in	15 - 500 psi	Water	VIII

Certification
Number: **27054**Design Series
or catalog number **RP Series**Type Classification: **Pilot Operated Pressure Relief Valve**Capacity Tests: **Sec. VIII Div. 1 at National Board T L (Picaway) on February 21, 1980**Method of Establishing Relieving Capacity: **Flow Capacity, K**Certified Value: **.877 Unitless**Test Medium: **Air/Gas**Certified Medium: **Air/Gas**Special Service: **None**Set Pressure Definition: **Pop**Blowdown: **Adjustable**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
1 - 2 NPS	2 NPS	0.124 sq in	[D] 0.397 in	0.1 in	15 - 10000 psi	Air	VIII
		0.219 sq in	[E] 0.528 in	0.134 in	15 - 10000 psi	Air	VIII
		0.343 sq in	[F] 0.661 in	0.166 in	15 - 10000 psi	Air	VIII
1.25 - 3 NPS	3, 4 NPS	0.562 sq in	[G] 0.846 in	0.212 in	15 - 7000 psi	Air	VIII
1.5 - 2 NPS	3, 4 NPS	0.874 sq in	[H] 1.055 in	0.264 in	15 - 7000 psi	Air	VIII
1.5 - 3 NPS	3, 4 NPS	1.35 sq in	[1] 1.311 in	0.328 in	15 - 6000 psi	Air	VIII
2 NPS	3, Dual 3 NPS	2.53 sq in	[2] 1.795 in	0.449 in	15 - 4000 psi	Air	VIII
2 - 3 NPS	3, 4 NPS	1.431 sq in	[J] 1.35 in	0.338 in	15 - 6000 psi	Air	VIII
	3, 4 NPS	2.046 sq in	[K] 1.614 in	0.404 in	15 - 4000 psi	Air	VIII
3 NPS	4, Dual 4 NPS	5.628 sq in	[3] 2.677 in	0.67 in	15 - 4000 psi	Air	VIII
3 - 4 NPS	4, 6 NPS	3.179 sq in	[L] 2.012 in	0.503 in	15 - 4000 psi	Air	VIII
	6 NPS	4.011 sq in	[M] 2.26 in	0.565 in	15 - 4000 psi	Air	VIII
		4.83 sq in	[N] 2.48 in	0.62 in	15 - 4000 psi	Air	VIII
4 NPS	6 NPS	7.116 sq in	[P] 3.01 in	0.753 in	15 - 4000 psi	Air	VIII
	6, Dual 6 NPS	9.621 sq in	[4] 3.5 in	0.875 in	15 - 2000 psi	Air	VIII
6 NPS	8 NPS	12.3 sq in	[Q] 3.957 in	0.99 in	15 - 2000 psi	Air	VIII
	8, 10 NPS	17.8 sq in	[R] 4.76 in	1.19 in	15 - 2000 psi	Air	VIII
	Dual 8 NPS	21.53 sq in	[5] 5.236 in	1.309 in	15 - 2000 psi	Air	VIII
8 NPS	10 NPS	28.91 sq in	[T] 6.067 in	1.517 in	15 - 1500 psi	Air	VIII
	Dual 8 NPS	29.43 sq in	[6] 6.122 in	1.531 in	15 - 1500 psi	Air	VIII
8 - 10 NPS	Dual 10, 14 NPS	44.18 sq in	[V, 7] 7.5 in	1.875 in	15 - 1500 psi	Air	VIII
10 - 12 NPS	14, 16 NPS	63.62 sq in	[W] 9 in	2.25 in	15 - 500 psi	Air	VIII
12 - 14 NPS	16, 18 NPS	86.59 sq in	[Y] 10.5 in	2.625 in	15 - 500 psi	Air	VIII
14 - 16 NPS	20 NPS	95.38 sq in	[Z] 11.02 in	2.753 in	15 - 500 psi	Air	VIII
		113.1 sq in	[Z1] 12 in	3 in	15 - 500 psi	Air	VIII
16 - 18 NPS	24 NPS	143.1 sq in	[A] 13.5 in	3.375 in	15 - 500 psi	Air	VIII
18 - 20 NPS	24 NPS	176.7 sq in	[B] 15 in	3.75 in	15 - 500 psi	Air	VIII
20 NPS	24 NPS	227 sq in	[B2] 17 in	4.25 in	15 - 500 psi	Air	VIII

Certification Number: **27065** Design Series or catalog number **RPSL (Liquids)**

Type Classification: **Relief Valve**

Capacity Tests: **Sec. VIII Div. 1 at National Board T L (Picaway) on January 15, 1986**

Method of Establishing Relieving Capacity: **Flow Capacity, K**

Certified Value: **.743 Unitless**

Test Medium: **Water**

Certified Medium: **Liquid**

Set Pressure Definition: **First Steady Stream**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
1 - 2 NPS	2 NPS	0.124 sq in	[D] 0.397 in	0.1 in	15 - 10000 psi	Water	VIII
		0.219 sq in	[E] 0.528 in	0.134 in	15 - 10000 psi	Water	VIII
		0.343 sq in	[F] 0.661 in	0.166 in	15 - 10000 psi	Water	VIII
1.25 - 3 NPS	3, 4 NPS	0.562 sq in	[G] 0.846 in	0.212 in	15 - 7000 psi	Water	VIII
1.5 - 2 NPS	3, 4 NPS	0.874 sq in	[H] 1.055 in	0.264 in	15 - 7000 psi	Water	VIII
1.5 - 3 NPS	3, 4 NPS	1.35 sq in	[1] 1.311 in	0.328 in	15 - 6000 psi	Water	VIII
2 NPS	3, Dual 3 NPS	2.53 sq in	[2] 1.795 in	0.449 in	15 - 4000 psi	Water	VIII
2 - 3 NPS	3, 4 NPS	1.431 sq in	[J] 1.35 in	0.338 in	15 - 6000 psi	Water	VIII
		2.046 sq in	[K] 1.614 in	0.404 in	15 - 4000 psi	Water	VIII
3 NPS	4, Dual 4 NPS	5.628 sq in	[3] 2.677 in	0.67 in	15 - 4000 psi	Water	VIII
3 - 4 NPS	4, 6 NPS	3.179 sq in	[L] 2.012 in	0.503 in	15 - 4000 psi	Water	VIII
	6 NPS	4.011 sq in	[M] 2.26 in	0.565 in	15 - 4000 psi	Water	VIII
		4.83 sq in	[N] 2.48 in	0.62 in	15 - 4000 psi	Water	VIII
4 NPS	6 NPS	7.116 sq in	[P] 3.01 in	0.753 in	15 - 4000 psi	Water	VIII
	6, Dual 6 NPS	9.621 sq in	[4] 3.5 in	0.875 in	15 - 2000 psi	Water	VIII
6 NPS	8 NPS	12.3 sq in	[Q] 3.957 in	0.99 in	15 - 2000 psi	Water	VIII
	8, 10 NPS	17.8 sq in	[R] 4.76 in	1.19 in	15 - 2000 psi	Water	VIII
	Dual 8 NPS	21.53 sq in	[5] 5.236 in	1.309 in	15 - 2000 psi	Water	VIII
8 NPS	10 NPS	28.91 sq in	[T] 6.067 in	1.517 in	15 - 1500 psi	Water	VIII
	Dual 8 NPS	29.43 sq in	[6] 6.122 in	1.531 in	15 - 1500 psi	Water	VIII
8 - 10 NPS	Dual 10, 14 NPS	44.18 sq in	[V, 7] 7.5 in	1.875 in	15 - 1500 psi	Water	VIII
10 - 12 NPS	14, 16 NPS	63.62 sq in	[W] 9 in	2.25 in	15 - 500 psi	Water	VIII
12 - 14 NPS	16, 18 NPS	86.59 sq in	[Y] 10.5 in	2.625 in	15 - 500 psi	Water	VIII
14 - 16 NPS	20 NPS	95.38 sq in	[Z] 11.02 in	2.753 in	15 - 500 psi	Water	VIII
		113.1 sq in	[Z1] 12 in	3 in	15 - 500 psi	Water	VIII
16 - 18 NPS	24 NPS	143.1 sq in	[A] 13.5 in	3.375 in	15 - 500 psi	Water	VIII
18 - 20 NPS	24 NPS	176.7 sq in	[B] 15 in	3.75 in	15 - 500 psi	Water	VIII
20 NPS	24 NPS	227 sq in	[B2] 17 in	4.25 in	15 - 500 psi	Water	VIII

Certification
Number: **27076**Design Series
or catalog number **SL Series**Type Classification: **Safety Valve**Capacity Tests: **Sec. I at National Board T L (Picaway) on November 16, 1979**Method of Establishing Relieving Capacity: **Flow Capacity, K**Certified Value: **.878 Unitless**Test Medium: **Steam**Certified Medium: **Steam**Special Service: **None**Set Pressure Definition: **Pop**Blowdown: **Adjustable**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
0.75 - 1 NPS	1-2 NPS	0.122 sq in	[D] 0.394 in	0.098 in	15 - 5500 psi	Steam	I & VIII Div. 1
		0.216 sq in	[E] 0.524 in	0.134 in	15 - 5500 psi	Steam	I & VIII Div. 1
1 - 2 NPS	2-4 NPS	0.336 sq in	[F1] 0.654 in	0.0906 in	15 - 5500 psi	Steam	I & VIII Div. 1
			[F] 0.654 in	0.165 in	15 - 5500 psi	Steam	I & VIII Div. 1
		0.439 sq in	[19] 0.748 in	0.189 in	15 - 5500 psi	Steam	I & VIII Div. 1
1.25 - 2 NPS	2.5-4 NPS	0.548 sq in	[G1] 0.835 in	0.146 in	15 - 5500 psi	Steam	I & VIII Div. 1
			[G] 0.835 in	0.209 in	15 - 5500 psi	Steam	I & VIII Div. 1
		0.701 sq in	[24] 0.945 in	0.236 in	15 - 5500 psi	Steam	I & VIII Div. 1
1.5 - 2 NPS	3-4 NPS	0.861 sq in	[H] 1.047 in	0.264 in	15 - 5500 psi	Steam	I & VIII Div. 1
		1.095 sq in	[30] 1.181 in	0.295 in	15 - 5500 psi	Steam	I & VIII Div. 1
2 - 3 NPS	3-6 NPS	1.408 sq in	[J] 1.339 in	0.335 in	15 - 5500 psi	Steam	I & VIII Div. 1
		1.758 sq in	[38] 1.496 in	0.374 in	15 - 5500 psi	Steam	I & VIII Div. 1
		1.804 sq in	[J3] 1.515 in	0.38 in	15 - 5500 psi	Steam	I & VIII Div. 1
2.5 - 4 NPS	4-8 NPS	2.006 sq in	[K] 1.598 in	0.402 in	15 - 5500 psi	Steam	I & VIII Div. 1
		2.676 sq in	[K2] 1.846 in	0.465 in	15 - 5500 psi	Steam	I & VIII Div. 1
		2.863 sq in	[K3] 1.909 in	0.477 in	15 - 5500 psi	Steam	I & VIII Div. 1
		2.922 sq in	[49] 1.929 in	0.484 in	15 - 5500 psi	Steam	I & VIII Div. 1
		3.117 sq in	[L] 1.992 in	0.5 in	15 - 5500 psi	Steam	I & VIII Div. 1
3 - 4 NPS	4-6 NPS	3.819 sq in	[56] 2.205 in	0.551 in	15 - 5500 psi	Steam	I & VIII Div. 1
		3.927 sq in	[M] 2.236 in	0.559 in	15 - 5500 psi	Steam	I & VIII Div. 1
	6-8 NPS	4.008 sq in	[M2] 2.259 in	0.565 in	15 - 5500 psi	Steam	I & VIII Div. 1
3.5 - 4 NPS	6-8 NPS	4.741 sq in	[N] 2.457 in	0.614 in	15 - 3000 psi	Steam	I & VIII Div. 1
		5.143 sq in	[65] 2.559 in	0.642 in	15 - 3000 psi	Steam	I & VIII Div. 1
		5.301 sq in	[N2] 2.598 in	0.65 in	15 - 3000 psi	Steam	I & VIII Div. 1
4 - 6 NPS	6-8 NPS	6.487 sq in	[73] 2.874 in	0.72 in	15 - 3000 psi	Steam	I & VIII Div. 1
		6.793 sq in	[74.7] 2.941 in	0.736 in	15 - 3000 psi	Steam	I & VIII Div. 1
		6.975 sq in	[P] 2.98 in	0.748 in	15 - 3000 psi	Steam	I & VIII Div. 1
		7.388 sq in	[77.9] 3.067 in	0.768 in	15 - 3000 psi	Steam	I & VIII Div. 1
4.5 - 6 NPS	8-10 NPS	8.184 sq in	[82] 3.228 in	0.807 in	15 - 3000 psi	Steam	I & VIII Div. 1
		8.465 sq in	[Q0] 3.283 in	0.823 in	15 - 3000 psi	Steam	I & VIII Div. 1
5 - 6 NPS	8-10 NPS	9.43 sq in	[88] 3.465 in	0.866 in	15 - 2000 psi	Steam	I & VIII Div. 1
		9.948 sq in	[Q1] 3.559 in	0.89 in	15 - 1500 psi	Steam	I & VIII Div. 1
5.5 - 6 NPS	8-10 NPS	12.07 sq in	[Q] 3.921 in	0.98 in	15 - 1500 psi	Steam	I & VIII Div. 1
		13.422 sq in	[105] 4.134 in	1.035 in	15 - 1500 psi	Steam	I & VIII Div. 1
6 NPS	8-10 NPS	13.914 sq in	[106.9] 4.209 in	1.055 in	15 - 1500 psi	Steam	I & VIII Div. 1
		16.1 sq in	[115] 4.528 in	1.134 in	15 - 1500 psi	Steam	I & VIII Div. 1
		17.48 sq in	[R] 4.717 in	1.181 in	15 - 1500 psi	Steam	I & VIII Div. 1
		19.67 sq in	[RR] 5.004 in	1.251 in	15 - 1500 psi	Steam	I & VIII Div. 1
8 NPS	10-12 NPS	28.43 sq in	[T] 6.016 in	1.504 in	15 - 800 psi	Steam	I & VIII Div. 1
		28.5 sq in	[153] 6.024 in	1.507 in	15 - 800 psi	Steam	I & VIII Div. 1
10 NPS	14 NPS	52.82 sq in	[V] 8.201 in	2.051 in	15 - 300 psi	Steam	I & VIII Div. 1
12 NPS	16 NPS	76.03 sq in	[W] 9.839 in	2.461 in	15 - 300 psi	Steam	I & VIII Div. 1

Certification Number: **27098** Design Series or catalog number **PSH 2-1/2 K 4**

Type Classification: **Power Actuated Relief Valve**

Capacity Tests: **Sec. I at National Board T L (Worthington) on October 26, 1999**

Method of Establishing Relieving Capacity: **Flow Capacity, Slope**

Certified Value: **87.9 PPH/PSIA**

Test Medium: **Steam**

Certified Medium: **Steam**

Set Pressure Definition: **Power Actuated**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
2.5 NPS	4 NPS	2.006 sq in	[K] 1.598 in	0.511 in	500 - 5000 psi	Steam	I

Certification Number: **27100** Design Series or catalog number **PSH 2-1/2 L 4**

Type Classification: **Power Actuated Relief Valve**

Capacity Tests: **Sec. I at National Board T L (Worthington) on October 26, 1999**

Method of Establishing Relieving Capacity: **Flow Capacity, Slope**

Certified Value: **121.9 PPH/PSIA**

Test Medium: **Steam**

Certified Medium: **Steam**

Set Pressure Definition: **Power Actuated**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
2.5 NPS	4 NPS	2.922 sq in	[L] 1.928 in	0.59 in	500 - 5000 psi	Steam	I

Certification Number: **27133** Design Series or catalog number **RTE Liquid**

Type Classification: **Relief Valve**

Capacity Tests: **Sec. VIII Div. 1 at National Board T L (Worthington) on October 26, 2004**

Method of Establishing Relieving Capacity: **Flow Capacity, Flow Factor**

Certified Value: **3.98 GPM/SQ.RT. PSID**

Test Medium: **Water**

Certified Medium: **Liquid**

Set Pressure Definition: **Heavy Flow**

Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
0.75 - 1 NPS	1, 2 NPS	0.137 sq in	0.417 in	0.106 in	50 - 15000 psi	Water	VIII Div. 1

Certification Number: **27144** Design Series or catalog number **RTE**

Type Classification: **Safety Relief Valve**

Capacity Tests: **Sec. VIII Div. 1 at National Board T L (Worthington) on October 27, 2004**

Method of Establishing Relieving Capacity: **Flow Capacity, Slope**

Certified Value: **2.20 SCFM/PSIA**

Test Medium: **Steam & Air/Gas**

Certified Medium: **Steam & Air/Gas**

Set Pressure Definition: **Pop**

Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
0.75 - 1 NPS	1, 2 NPS	0.137 sq in	0.417 in	0.106 in	50 - 15000 psi	Air	VIII Div. 1
					50 - 2900 psi	Steam	VIII Div. 1

Certification Number: **27177** Design Series or catalog number **RPE (Water K = 0.681)**

Type Classification: **Pilot Operated Pressure Relief Valve**

Capacity Tests: **Sec. I at National Board T L (Worthington) on May 17, 2011**

Method of Establishing Relieving Capacity: **Flow Capacity, K**

Certified Value: **.875 Unitless**

Certified Value (alternate medium): **.681 Water Unitless**

Test Medium: **Steam/Water**

Certified Medium: **Steam/Water**

Set Pressure Definition: **Initial Audible Discharge**

Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
1 NPS	2 NPS	0.219 sq in	[13.4] 0.528 in	0.194 in	50 - 6000 psi	Steam	I & VIII Div. 1
						Water	I & VIII Div. 1
1.25 - 1.5 NPS	2.5-3 NPS	0.377 sq in	[17.6] 0.693 in	0.196 in	50 - 6000 psi	Steam	I & VIII Div. 1
						Water	I & VIII Div. 1
		0.594 sq in	[22.1] 0.87 in	0.236 in	50 - 6000 psi	Steam	I & VIII Div. 1
						Water	I & VIII Div. 1
1.5 NPS	3 NPS	1.576 sq in	[36] 1.417 in	0.393 in	50 - 6000 psi	Steam	I & VIII Div. 1
						Water	I & VIII Div. 1
2 NPS	3 NPS	2.465 sq in	[45] 1.772 in	0.512 in	50 - 6000 psi	Steam	I & VIII Div. 1
						Water	I & VIII Div. 1
3 NPS	4-6 NPS	6.309 sq in	[72] 2.835 in	0.787 in	50 - 6000 psi	Steam	I & VIII Div. 1
						Water	I & VIII Div. 1
4 NPS	6 NPS	9.854 sq in	[90] 3.543 in	0.945 in	50 - 2500 psi	Steam	I & VIII Div. 1
						Water	I & VIII Div. 1
6 NPS	8 NPS	22.176 sq in	[135] 5.315 in	1.417 in	50 - 1500 psi	Steam	I & VIII Div. 1
						Water	I & VIII Div. 1
8 NPS	10 NPS	39.427 sq in	[180] 7.087 in	1.89 in	50 - 1500 psi	Steam	I & VIII Div. 1
						Water	I & VIII Div. 1

Certification Number: **27188** Design Series or catalog number **PCV**

Type Classification: **Power Actuated Relief Valve**

Capacity Tests: **Sec. I at National Board T L (Worthington) on September 27, 2012**

Method of Establishing Relieving Capacity: **Flow Capacity, K**

Certified Value: **.818 Unitless**

Test Medium: **Steam**

Certified Medium: **Steam**

Special Service: **None**

Set Pressure Definition: **Power Actuated**

Blowdown: **Adjustable**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
1.5 NPS	3 NPS	0.486 sq in	0.787 in	0.276 in	150 - 4500 psi	Steam	I
		0.701 sq in	0.945 in	0.331 in	150 - 4500 psi	Steam	I
		1.095 sq in	1.181 in	0.629 in	150 - 4500 psi	Steam	I
2 NPS	4 NPS	1.711 sq in	1.476 in	0.787 in	150 - 4500 psi	Steam	I
2.5 NPS	4 NPS	2.922 sq in	1.929 in	1.023 in	150 - 4500 psi	Steam	I
3 NPS	6 NPS	4.382 sq in	2.362 in	1.259 in	150 - 4500 psi	Steam	I
4 NPS	6 NPS	6.847 sq in	2.953 in	1.574 in	150 - 3000 psi	Steam	I
6 NPS	8 NPS	15.407 sq in	4.429 in	2.362 in	150 - 1500 psi	Steam	I
8 NPS	10 NPS	27.39 sq in	5.906 in	3.149 in	150 - 600 psi	Steam	I

Certification
Number: **27199**Design Series
or catalog number **SL-xxxx PA**Type Classification: **Power Actuated Relief Valve**Capacity Tests: **Sec. I at National Board T L (Worthington) on September 24, 2015**Method of Establishing Relieving Capacity: **Flow Capacity, K**Certified Value: **.878 Unitless**Test Medium: **Steam**Certified Medium: **Steam**Set Pressure Definition: **Power Actuated**Blowdown: **Adjustable**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
0.75 NPS	1 NPS	0.122 sq in	0.524 in	0.098 in	15 - 4750 psi	Steam	I
				0.134 in	15 - 4750 psi	Steam	I
1 NPS	2 NPS	0.336 sq in	0.654 in	0.165 in	15 - 4750 psi	Steam	I
		0.439 sq in	0.748 in	0.189 in	15 - 4750 psi	Steam	I
1.25 NPS	2.5 NPS	0.548 sq in	0.835 in	0.209 in	15 - 4750 psi	Steam	I
		0.701 sq in	0.945 in	0.236 in	15 - 4750 psi	Steam	I
1.5 NPS	3 NPS	0.861 sq in	1.047 in	0.265 in	15 - 4750 psi	Steam	I
		1.095 sq in	1.181 in	0.295 in	15 - 4750 psi	Steam	I
2 NPS	3 NPS	1.408 sq in	1.339 in	0.335 in	15 - 4750 psi	Steam	I
		1.758 sq in	1.496 in	0.374 in	15 - 4750 psi	Steam	I
		1.804 sq in	1.515 in	0.38 in	15 - 4750 psi	Steam	I
2.5 NPS	4 NPS	2.006 sq in	1.598 in	0.402 in	15 - 4750 psi	Steam	I
		2.676 sq in	1.846 in	0.465 in	15 - 4750 psi	Steam	I
		2.863 sq in	1.909 in	0.477 in	15 - 4750 psi	Steam	I
		2.922 sq in	1.929 in	0.484 in	15 - 4750 psi	Steam	I
		3.117 sq in	1.992 in	0.5 in	15 - 4740 psi	Steam	I
3 NPS	4 NPS	3.819 sq in	2.205 in	0.551 in	15 - 4750 psi	Steam	I
		3.927 sq in	2.236 in	0.559 in	15 - 4750 psi	Steam	I
	6, 8 NPS	4.008 sq in	2.259 in	0.565 in	15 - 4750 psi	Steam	I
3.5 NPS	6 NPS	4.741 sq in	2.457 in	0.614 in	15 - 3000 psi	Steam	I
		5.143 sq in	2.559 in	0.642 in	15 - 3000 psi	Steam	I
		5.301 sq in	2.598 in	0.65 in	15 - 3000 psi	Steam	I
4 NPS	8 NPS	6.487 sq in	2.874 in	0.72 in	15 - 3000 psi	Steam	I
		6.793 sq in	2.941 in	0.736 in	15 - 3000 psi	Steam	I
		6.975 sq in	2.98 in	0.748 in	15 - 3000 psi	Steam	I
		7.388 sq in	3.067 in	0.768 in	15 - 3000 psi	Steam	I
4.5 NPS	8 NPS	8.184 sq in	3.228 in	0.807 in	15 - 3000 psi	Steam	I
		8.465 sq in	3.283 in	0.823 in	15 - 3000 psi	Steam	I
5 NPS	8 NPS	9.43 sq in	3.465 in	0.866 in	15 - 2000 psi	Steam	I
		9.948 sq in	3.559 in	0.89 in	15 - 1500 psi	Steam	I
5.5 NPS	8 NPS	12.07 sq in	3.921 in	0.98 in	15 - 1500 psi	Steam	I
6 NPS	10 NPS	13.422 sq in	4.134 in	1.035 in	15 - 1500 psi	Steam	I
		13.914 sq in	4.209 in	1.055 in	15 - 1500 psi	Steam	I
		16.1 sq in	4.528 in	1.134 in	15 - 1500 psi	Steam	I
		17.48 sq in	4.717 in	1.181 in	15 - 1500 psi	Steam	I
		19.67 sq in	5.004 in	1.251 in	15 - 1500 psi	Steam	I
8 NPS	10, 12 NPS	28.43 sq in	6.016 in	1.504 in	15 - 800 psi	Steam	I
		28.5 sq in	6.024 in	1.507 in	15 - 800 psi	Steam	I
10 NPS	14 NPS	52.82 sq in	8.201 in	2.051 in	15 - 300 psi	Steam	I
12 NPS	16 NPS	76.03 sq in	9.839 in	2.461 in	15 - 300 psi	Steam	I

GEA AWP GmbH (GEA)

NB#: 07085

location: Armaturenstrasse 2, Prenzlau 17291 Germany
 Acceptable Abbrev.: GEA AWP GMBH PRENZLAU, GERMANY

GEA AWP GmbH (GEA)

location: Armaturenstrasse 2, Prenzlau 17291 Germany
 Acceptable Abbrev.: GEA AWP GMBH PRENZLAU, GERMANY

Certification Number: **07085** Design Series or catalog number **SVA type 455, 456 / SVU type 457, 458 (1.189 orifice)**

Type Classification: **Safety Relief Valve**

Capacity Tests: **Sec. VIII Div. 1 at National Board T L (Worthington) on March 15, 2013**

Method of Establishing Relieving Capacity: **Flow Capacity, Slope**

Certified Value: **15.02 SCFM/PSIA**

Test Medium: **Air/Gas**

Certified Medium: **Gas**

Special Service: **None**

Set Pressure Definition: **Initial Audible Discharge**

Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
1.5 NPS	2.5 NPS	1.11 sq in	1.189 in	0.512 in	116 - 580 psi	Air	VIII Div. 1

Certification Number: **07096** Design Series or catalog number **SVA type 455, 456 / SVU 457, 458 (0.648 orifice)**

Type Classification: **Safety Relief Valve**

Capacity Tests: **Sec. VIII Div. 1 at National Board T L (Worthington) on June 13, 2013**

Method of Establishing Relieving Capacity: **Flow Capacity, Slope**

Certified Value: **4.41 SCFM/PSIA**

Test Medium: **Air/Gas**

Certified Medium: **Gas**

Set Pressure Definition: **Initial Audible Discharge**

Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
0.75 NPS	1.25 NPS	0.296 sq in	0.638 in	0.275 in	117 - 913 psi	Air	VIII Div. 1

Certification Number: **07142** Design Series or catalog number **SVA type 455, 456/ SVU type 457, 458 (0.953 orifice)**

Type Classification: **Safety Relief Valve**

Capacity Tests: **Sec. VIII Div. 1 at National Board T L (Worthington) on August 29, 2013**

Method of Establishing Relieving Capacity: **Flow Capacity, Slope**

Certified Value: **8.86 SCFM/PSIA**

Test Medium: **Air/Gas**

Certified Medium: **Gas**

Special Service: **None**

Set Pressure Definition: **Initial Audible Discharge**

Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
1.25 NPS	2 NPS	0.713 sq in	0.953 in	0.354 in	87 - 580 psi	Air	VIII Div. 1

GEA AWP GmbH (GEA)

NB#: 07153

location: Armaturenstrasse 2, Prenzlau 17291 Germany

Acceptable Abbrev.: GEA AWP GMBH PRENZLAU, GERMANY

Certification Number: **07153** Design Series or catalog number: **SVA type 455, 456/ SVU type 457, 458 (0.480 orifice)**

Type Classification: **Safety Relief Valve**Capacity Tests: **Sec. N/A at National Board T L (Worthington) on March 15, 2013**Method of Establishing Relieving Capacity: **Flow Capacity, Slope**Certified Value: **2.84 SCFM/PSIA**Test Medium: **Air/Gas**Certified Medium: **Air/Gas**Special Service: **None**Set Pressure Definition: **Initial Audible Discharge**Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
0.5 NPS	1 NPS	0.181 sq in	0.48 in	0.236 in	116 - 913 psi	Air	VIII Div. 1

Certification Number: **07164** Design Series or catalog number: **SVA type 455, 456 / SVU type 457, 458 (0.795 orifice)**

Type Classification: **Safety Relief Valve**Capacity Tests: **Sec. VIII Div. 1 at National Board T L (Worthington) on March 15, 2013**Method of Establishing Relieving Capacity: **Flow Capacity, Slope**Certified Value: **7.31 SCFM/PSIA**Test Medium: **Air/Gas**Certified Medium: **Air/Gas**Special Service: **None**Set Pressure Definition: **Initial Audible Discharge**Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
1 NPS	1.5 NPS	0.496 sq in	0.795 in	0.335 in	116 - 913 psi	Air	VIII Div. 1

Goetze KG Armaturen (GTZ)

NB#: 96005

location: Robert-Mayer-Strasse 21, Ludwigsburg 71636 Germany

Acceptable Abbrev.: Goetze KG

Goetze KG Armaturen (GTZ)

location: Robert-Mayer-Strasse 21, Ludwigsburg 71636 Germany

Acceptable Abbrev.: Goetze KG

Certification Number: **96005** Design Series or catalog number: **812, 412, 1812**

Type Classification: **Safety Relief Valve**Capacity Tests: **Sec. VIII Div. 1 at National Board T L (Worthington) on August 14, 2013**Method of Establishing Relieving Capacity: **Flow Capacity, K**Certified Value: **.774 Unitless**Test Medium: **Air/Gas**Certified Medium: **Air/Gas**Special Service: **None**Set Pressure Definition: **Pop**Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
0.5 NPS	Side	0.238 sq in	0.551 in	0.138 in	15 - 725 psi	Air	VIII Div. 1
0.75 NPS	Side	0.486 sq in	0.787 in	0.197 in	15 - 725 psi	Air	VIII Div. 1
1 NPS	Side	0.701 sq in	0.945 in	0.236 in	15 - 725 psi	Air	VIII Div. 1
1.25 - 1.5 NPS	Side	1.17 sq in	1.22 in	0.305 in	15 - 725 psi	Air	VIII Div. 1

Certification Number: **96038** Design Series or catalog number: **451, 851**

Type Classification: **Safety Relief Valve**Capacity Tests: **Sec. VIII Div. 1 at National Board T L (Worthington) on October 23, 2015**Method of Establishing Relieving Capacity: **Flow Capacity, K**Certified Value: **0.659 Unitless**Test Medium: **Steam & Air/Gas**Certified Medium: **Steam & Air/Gas**Special Service: **None**Set Pressure Definition: **Pop**Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
0.75 NPS	1.25 NPS	0.3944 sq in	0.7087 in	0.2087 in	15 - 1015 psi	Air	VIII Div. 1
1 NPS	1.5 NPS	0.644 sq in	0.9055 in	0.2402 in	15 - 1015 psi	Air	VIII Div. 1
1.25 NPS	2 NPS	1.1177 sq in	1.1929 in	0.311 in	15 - 1015 psi	Air	VIII Div. 1

Certification Number: **96049** Design Series or catalog number: **451, 851 Liquids**

Type Classification: **Safety Relief Valve**Capacity Tests: **Sec. VIII Div. 1 at National Board T L (Worthington) on July 12, 2016**Method of Establishing Relieving Capacity: **Flow Capacity, K**Certified Value: **0.492 Unitless**Test Medium: **Water**Certified Medium: **Liquid**Special Service: **None**Set Pressure Definition: **Pop**Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
0.75 NPS	1.25 NPS	0.3944 sq in	0.7087 in	0.2087 in	15 - 1015 psi	Water	VIII Div. 1
1 NPS	1.5 NPS	0.644 sq in	0.9055 in	0.2402 in	15 - 1015 psi	Water	VIII Div. 1
1.25 - 2 NPS	1.1177 NPS	1.1177 sq in	1.1929 in	0.311 in	15 - 1015 psi	Water	VIII Div. 1

Goetze KG Armaturen (GTZ)

NB#: 96050

location: Robert-Mayer-Strasse 21, Ludwigsburg 71636 Germany

Acceptable Abbrev.: Goetze KG

Certification Number: **96050** Design Series or catalog number: **451-1/2" , 851-1/2"**

Type Classification: **Safety Relief Valve**Capacity Tests: **Sec. VIII Div. 1 at National Board T L (Worthington) on October 21, 2015**Method of Establishing Relieving Capacity: **Flow Capacity, Slope**Certified Value: **2.47 SCFM/PSIA**Certified Value (alternate medium): **6.94 PPH/PSIA**Test Medium: **Steam & Air/Gas**Certified Medium: **Steam & Air/Gas**Special Service: **None**Set Pressure Definition: **Pop**Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
0.5 NPS	1 NPS	0.3039 sq in	0.622 in	0.0866 in	15 - 1015 psi	Air	VIII Div. 1

Certification Number: **96061** Design Series or catalog number: **451-1/2" , 851-1/2" (Liquids)**

Type Classification: **Safety Relief Valve**Capacity Tests: **Sec. VIII Div. 1 at National Board T L (Worthington) on October 21, 2015**Method of Establishing Relieving Capacity: **Flow Capacity, Flow Factor**Certified Value: **3.046 GPM/SQ.RT. PSID**Test Medium: **Water**Certified Medium: **Liquid**Special Service: **None**Set Pressure Definition: **Pop**Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
0.5 NPS	1 NPS	0.3039 sq in	0.622 in	0.0866 in	15 - 1015 psi	Water	VIII Div. 1

Certification Number: **96072** Design Series or catalog number: **2400 / 2480**

Type Classification: **Safety Relief Valve**Capacity Tests: **Sec. VIII Div. 1 at National Board T L (Worthington) on July 14, 2016**Method of Establishing Relieving Capacity: **Flow Capacity, K**Certified Value: **0.798 Unitless**Test Medium: **Gas**Certified Medium: **Air/Gas**Special Service: **None**Set Pressure Definition: **Pop**Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
0.25 NPS	.375 NPS	0.0438 sq in	0.2362 in	0.0787 in	40 - 1015 psi	Air	VIII Div. 1
0.375 NPS	.50 NPS	0.0685 sq in	0.2953 in	0.0984 in	40 - 1015 psi	Air	VIII Div. 1
0.5 NPS	.75 NPS	0.1342 sq in	0.4134 in	0.1378 in	40 - 1015 psi	Air	VIII Div. 1
0.75 NPS	1.0 NPS	0.2057 sq in	0.5118 in	0.1732 in	40 - 1015 psi	Air	VIII Div. 1
1.25 NPS	1.5 NPS	0.3944 sq in	0.7087 in	0.2362 in	40 - 725 psi	Air	VIII Div. 1
1.5 NPS	2.0 NPS	0.644 sq in	0.9055 in	0.3071 in	40 - 725 psi	Air	VIII Div. 1

Goetze KG Armaturen (GTZ)

NB#: 96083

location: Robert-Mayer-Strasse 21, Ludwigsburg 71636 Germany

Acceptable Abbrev.: Goetze KG

Certification Number: **96083** Design Series or catalog number **2400 / 2480 Liquids**

Type Classification: **Safety Relief Valve**Capacity Tests: **Sec. VIII Div. 1 at National Board T L (Worthington) on July 12, 2016**Method of Establishing Relieving Capacity: **Flow Capacity, K**Certified Value: **0.571 Unitless**Test Medium: **Water**Certified Medium: **Liquid**Special Service: **None**Set Pressure Definition: **Pop**Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
0.5 NPS	.75 NPS	0.1342 sq in	0.4134 in	0.1378 in	40 - 1015 psi	Water	VIII Div. 1
0.75 NPS	1.0 NPS	0.2057 sq in	0.5118 in	0.1732 in	40 - 1015 psi	Water	VIII Div. 1
1.25 NPS	1.5 NPS	0.3944 sq in	0.7087 in	0.2362 in	40 - 725 psi	Water	VIII Div. 1
1.5 NPS	2.0 NPS	0.644 sq in	0.9055 in	0.3071 in	40 - 725 psi	Water	VIII Div. 1

Certification Number: **96094** Design Series or catalog number **410, 810, 1809, 1810**

Type Classification: **Safety Relief Valve**Capacity Tests: **Sec. VIII Div. 1 at National Board T L (Worthington) on October 31, 2016**Method of Establishing Relieving Capacity: **Flow Capacity, K**Certified Value: **0.758 Unitless**Test Medium: **Gas**Certified Medium: **Air/Gas**Special Service: **None**Set Pressure Definition: **Pop**Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
0.25 NPS	Side	0.0685 sq in	0.295 in	0.089 in	15 - 725 psi	Air	VIII Div. 1
0.375 NPS	Side	0.1217 sq in	0.394 in	0.118 in	15 - 725 psi	Air	VIII Div. 1
0.5 NPS	Side	0.1473 sq in	0.433 in	0.13 in	15 - 725 psi	Air	VIII Div. 1
0.75 NPS	Side	0.3116 sq in	0.63 in	0.189 in	15 - 725 psi	Air	VIII Div. 1
1 NPS	Side	0.4869 sq in	0.787 in	0.236 in	15 - 725 psi	Air	VIII Div. 1

Certification Number: **96106** Design Series or catalog number **812-2", 412-2"**

Type Classification: **Safety Relief Valve**Capacity Tests: **Sec. VIII Div. 1 at National Board T L (Worthington) on July 13, 2016**Method of Establishing Relieving Capacity: **Flow Capacity, Slope**Certified Value: **30.116 SCFM/PSIA**Test Medium: **Air**Certified Medium: **Air/Gas**Special Service: **None**Set Pressure Definition: **Pop**Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
2 NPS	Side	2.8005 sq in	1.8883 in	0.315 in	15 - 435 psi	Air	VIII Div. 1

Goetze KG Armaturen (GTZ)

NB#: 96117

Location: Robert-Mayer-Strasse 21, Ludwigsburg 71636 Germany

Acceptable Abbrev.: Goetze KG

Certification Number: **96117** Design Series or catalog number: **492 (6 mm orifice)**

Type Classification: **Safety Relief Valve**Capacity Tests: **Sec. VIII Div. 1 at National Board T L (Worthington) on July 13, 2016**Method of Establishing Relieving Capacity: **Flow Capacity, Slope**Certified Value: **0.669 SCFM/PSIA**Test Medium: **Air**Certified Medium: **Air/Gas**Special Service: **None**Set Pressure Definition: **Pop**Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
0.375 NPS		0.0438 sq in	0.2362 in	0.1181 in	725 - 9135 psi	Air	VIII Div. 1

Certification Number: **96128** Design Series or catalog number: **492 (9 mm orifice)**

Type Classification: **Safety Relief Valve**Capacity Tests: **Sec. VIII Div. 1 at National Board T L (Worthington) on July 13, 2016**Method of Establishing Relieving Capacity: **Flow Capacity, Slope**Certified Value: **1.470 SCFM/PSIA**Test Medium: **Air**Certified Medium: **Air/Gas**Special Service: **None**Set Pressure Definition: **Pop**Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
0.5 NPS		0.0986 sq in	0.3543 in	0.1181 in	725 - 3625 psi	Air	VIII Div. 1

GRISS (SPG)

NB#: 49003

location: 8 Avenue Pierre Brossolette, BP159, Armentieres 59428 France

Acceptable Abbrev.: GRISS

GRISS (SPG)

location: 8 Avenue Pierre Brossolette, BP159, Armentieres 59428 France

Acceptable Abbrev.: GRISS

Certification Number:	49003	Design Series or catalog number	5780-2 & 5781-2
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Type Classification: **Safety Relief Valve**Capacity Tests: **Sec. VIII Div. 1 at National Board T L (Picaway) on October 27, 1986**Method of Establishing Relieving Capacity: **Flow Capacity, Slope**Certified Value: **1.9 SCFM/PSIA**Certified Value (alternate medium): **5.34 PPH/PSIA**Test Medium: **Steam & Air/Gas**Certified Medium: **Steam & Air/Gas**Set Pressure Definition: **Initial Audible Discharge**Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
0.75 in	1 NPS	0.1213 sq in	[#2] 0.39 in	0.102 in	15 - 2900 psi	Steam	VIII Div. 1
					15 - 5600 psi	Air	VIII Div. 1

GRISS (SPG)

NB#: 49047

Location: 8 Avenue Pierre Brossolette, BP159, Armentieres 59428 France

Acceptable Abbrev.: GRISS

Certification
Number: **49047**Design Series
or catalog number **8100**Type Classification: **Safety Valve**Capacity Tests: **Sec. VIII Div. 1 at National Board T L (Picaway) on April 05, 1985**Method of Establishing Relieving Capacity: **Flow Capacity, K**Certified Value: **.8667 Unitless**Test Medium: **Steam & Air/Gas**Certified Medium: **Steam & Air/Gas**Special Service: **None**Set Pressure Definition: **Initial Audible Discharge**Blowdown: **Adjustable**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
1 - 1.5 NPS	2-3 NPS	0.1219 sq in	[D] 0.394 in	0.118 in	15 - 2900 psi	Steam	VIII
					15 - 6000 psi	Air	VIII
	2 - 3 NPS	0.2157 in ²	[E] 0.524 in	0.145 in	15 - 2900 psi	Steam	VIII Div. 1
					15 - 6000 psi	Air	VIII
1.5 NPS	2 - 3 NPS	0.3318 sq in	[F] 0.65 in	0.195 in	15 - 2900 psi	Steam	VIII
					15 - 5000 psi	Air	VIII
1.5 - 2 NPS	2.5, 3 NPS	0.5476 sq in	[G] 0.835 in	0.25 in	15 - 2900 psi	Steam	VIII
					15 - 3500 psi	Air	VIII
	3 NPS	0.8544 sq in	[H] 1.043 in	0.314 in	15 - 2500 psi	Air	VIII
						Steam	VIII
2 - 3 NPS	3, 4 NPS	1.3998 sq in	[J] 1.335 in	0.441 in	15 - 2500 psi	Air	VIII
						Steam	VIII
3 NPS	4, 6 NPS	1.9956 sq in	[K] 1.594 in	0.478 in	15 - 2000 psi	Air	VIII
						Steam	VIII
3 - 4 NPS	4, 6 NPS	3.0915 sq in	[L] 1.984 in	0.595 in	15 - 1500 psi	Air	VIII
						Steam	VIII
4 NPS	6 NPS	3.9127 sq in	[M] 2.232 in	0.671 in	15 - 1100 psi	Air	VIII
						Steam	VIII
		4.6951 sq in	[N] 0.2445 in	0.733 in	15 - 1000 psi	Air	VIII
						Steam	VIII
		6.9046 sq in	[P] 2.965 in	0.89 in	15 - 1000 psi	Air	VIII
						Steam	VIII
6 NPS	8 NPS	11.9337 sq in	[Q] 3.898 in	1.169 in	15 - 600 psi	Air	VIII
						Steam	VIII
	8, 10 NPS	16.7784 sq in	[R] 4.622 in	1.386 in	15 - 300 psi	Air	VIII
						Steam	VIII
8 NPS	10 NPS	28.2743 sq in	[T] 6 in	1.799 in	15 - 300 psi	Air	VIII
						Steam	VIII
10 NPS	14 NPS	45.105 sq in	[V] 7.578 in	1.895 in	15 - 180 psi	Air	VIII
						Steam	VIII
12 NPS	12 x 2 NPS	67.2235 sq in	[W] 9.2516 in	2.313 in	15 - 160 psi	Air	VIII
						Steam	VIII

GRISS (SPG)

NB#: 49058

Location: 8 Avenue Pierre Brossolette, BP159, Armentieres 59428 France

Acceptable Abbrev.: GRISS

Certification
Number: **49058**Design Series
or catalog number **8200**Type Classification: **Relief Valve**Capacity Tests: **Sec. VIII Div. 1 at National Board T L (Worthington) on May 05, 1992**Method of Establishing Relieving Capacity: **Flow Capacity, K**Certified Value: **.719 Unitless**Test Medium: **Water**Certified Medium: **Liquid**Set Pressure Definition: **First Steady Stream**Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
1 - 1.5 NPS	2 - 3 NPS	0.1219 sq in	[D] 0.394 in	0.118 in	20 - 1500 psi	Water	VIII
		0.2157 sq in	[E] 0.524 in	0.145 in	20 - 1500 psi	Water	VIII
1.5 NPS	2 - 3 NPS	0.3318 sq in	[F] 0.65 in	0.195 in	20 - 1500 psi	Water	VIII
1.5 - 2 NPS	2.5, 3 NPS	0.5476 sq in	[G] 0.835 in	0.25 in	20 - 1500 psi	Water	VIII
	3 NPS	0.8544 sq in	[H] 1.043 in	0.314 in	20 - 1500 psi	Water	VIII
2 - 3 NPS	3, 4 NPS	1.3998 sq in	[J] 1.335 in	0.441 in	20 - 1500 psi	Water	VIII
3 NPS	4, 6 NPS	1.9956 sq in	[K] 1.594 in	0.478 in	20 - 1500 psi	Water	VIII
3 - 4 NPS	4, 6 NPS	3.0915 sq in	[L] 1.984 in	0.595 in	20 - 1500 psi	Water	VIII
4 NPS	6 NPS	3.9127 sq in	[M] 2.232 in	0.671 in	20 - 1000 psi	Water	VIII
		4.6951 sq in	[N] 2.445 in	0.733 in	20 - 1000 psi	Water	VIII
		6.9046 sq in	[P] 2.965 in	0.89 in	20 - 1000 psi	Water	VIII
6 NPS	8 NPS	11.9337 sq in	[Q] 3.898 in	1.169 in	20 - 600 psi	Water	VIII

Hansen Technologies Corporation (HTL)

NB#: 70007

location: 3475 Old Maysville Rd, Commerce, GA 30529 United States

Acceptable Abbrev.: Hansen

Hansen Technologies Corporation (HTL)

location: 3475 Old Maysville Rd, Commerce, GA 30529 United States

Acceptable Abbrev.: Hansen

Certification Number: **70007** Design Series or catalog number: **H5613**

Type Classification: **Safety Relief Valve**Capacity Tests: **Sec. VIII Div. 1 at National Board T L (Worthington) on July 07, 1995**Method of Establishing Relieving Capacity: **Flow Capacity, Slope**Certified Value: **3.92 SCFM/PSIA**Test Medium: **Air/Gas**Certified Medium: **Gas**Set Pressure Definition: **Start-to-Leak**Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
1 NPS	1.25 NPS	0.312 sq in	0.75 in	0.125 in	100 - 400 psi	Air	VIII Div. 1

Certification Number: **70018** Design Series or catalog number: **H5600, H5601 & H5602**

Type Classification: **Safety Relief Valve**Capacity Tests: **Sec. VIII Div. 1 at National Board T L (Worthington) on March 12, 1995**Method of Establishing Relieving Capacity: **Flow Capacity, Slope**Certified Value: **2.65 SCFM/PSIA**Test Medium: **Air/Gas**Certified Medium: **Gas**Set Pressure Definition: **Start-to-Leak**Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
0.5 - 0.75 NPS	1 NPS	0.208 sq in	0.515 in	0.125 in	150 - 350 psi	Air	VIII Div. 1

Certification Number: **70029** Design Series or catalog number: **H5604**

Type Classification: **Safety Relief Valve**Capacity Tests: **Sec. VIII Div. 1 at National Board T L (Worthington) on August 25, 1995**Method of Establishing Relieving Capacity: **Flow Capacity, Slope**Certified Value: **5.33 SCFM/PSIA**Test Medium: **Air/Gas**Certified Medium: **Gas**Set Pressure Definition: **Start-to-Leak**Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
1.25 NPS		0.441 sq in	0.75 in	0.125 in	150 - 400 psi	Air	VIII

Hansen Technologies Corporation (HTL)

NB#: 70030

Location: 3475 Old Maysville Rd, Commerce, GA 30529 United States

Acceptable Abbrev.: Hansen

Certification Number: **70030** Design Series or catalog number: **H5600A**

Type Classification: **Safety Relief Valve**Capacity Tests: **Sec. VIII Div. 1 at National Board T L (Worthington) on March 23, 2000**Method of Establishing Relieving Capacity: **Flow Capacity, Slope**Certified Value: **2.32 SCFM/PSIA**Test Medium: **Air/Gas**Certified Medium: **Gas**Set Pressure Definition: **Start-to-Leak**Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
0.5 NPS	.75 NPS	0.172 sq in	0.515 in	0.125 in	150 - 400 psi	Air	VIII Div. 1

Certification Number: **70041** Design Series or catalog number: **H5600R, H5602R**

Type Classification: **Safety Relief Valve**Capacity Tests: **Sec. VIII Div. 1 at National Board T L (Worthington) on January 17, 2001**Method of Establishing Relieving Capacity: **Flow Capacity, Slope**Certified Value: **0.781 SCFM/PSIA**Test Medium: **Air/Gas**Certified Medium: **Gas**Set Pressure Definition: **Start-to-Leak**Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
0.5 - 0.75 NPS	.75 - 1 NPS	0.0468 sq in	0.515 in	0.125 in	150 - 400 psi	Air	VIII Div. 1

Certification Number: **70052** Design Series or catalog number: **H5632R**

Type Classification: **Safety Relief Valve**Capacity Tests: **Sec. VIII Div. 1 at National Board T L (Worthington) on April 22, 2003**Method of Establishing Relieving Capacity: **Flow Capacity, Slope**Certified Value: **1.63 SCFM/PSIA**Test Medium: **Air/Gas**Certified Medium: **Gas**Special Service: **None**Set Pressure Definition: **Start-to-Leak**Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
0.75 NPS	1 NPS	0.102 sq in	0.515 in	0.125 in	150 - 400 psi	Air	VIII Div. 1

Hansen Technologies Corporation (HTL)

NB#: 70063

Location: 3475 Old Maysville Rd, Commerce, GA 30529 United States

Acceptable Abbrev.: Hansen

Certification Number: **70063** Design Series or catalog number **H5633R**

Type Classification: **Safety Relief Valve**Capacity Tests: **Sec. VIII Div. 1 at National Board T L (Worthington) on January 17, 2003**Method of Establishing Relieving Capacity: **Flow Capacity, Slope**Certified Value: **2.10 SCFM/PSIA**Test Medium: **Air/Gas**Certified Medium: **Gas**Special Service: **None**Set Pressure Definition: **Start-to-Leak**Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
1 NPS	1.25 NPS	0.138 sq in	0.75 in	0.125 in	150 - 400 psi	Air	VIII Div. 1

Certification Number: **70074** Design Series or catalog number **H5634R**

Type Classification: **Safety Relief Valve**Capacity Tests: **Sec. VIII Div. 1 at National Board T L (Worthington) on April 29, 2003**Method of Establishing Relieving Capacity: **Flow Capacity, Slope**Certified Value: **2.50 SCFM/PSIA**Test Medium: **Air/Gas**Certified Medium: **Gas**Special Service: **None**Set Pressure Definition: **Start-to-Leak**Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
1.25 NPS	1.5 NPS	0.162 sq in	0.75 in	0.125 in	150 - 400 psi	Air	VIII Div. 1

Certification Number: **70085** Design Series or catalog number **EZLQ**

Type Classification: **Safety Relief Valve**Capacity Tests: **Sec. VIII Div. 1 at National Board T L (Worthington) on October 31, 2011**Method of Establishing Relieving Capacity: **Flow Capacity, Flow Factor**Certified Value: **1.79 GPM/SQ.RT. PSID**Test Medium: **Water**Certified Medium: **Liquid**Special Service: **None**Set Pressure Definition: **First Steady Stream**Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
0.5 - 0.75 NPS	.75, 1 NPS	0.102 sq in	0.36 in	0.09 in	50 - 125 psi	Water	VIII Div. 1

Hansen Technologies Corporation (HTL)

NB#: 70096

Location: 3475 Old Maysville Rd, Commerce, GA 30529 United States

Acceptable Abbrev.: Hansen

Certification
Number: **70096**Design Series
or catalog number **EZC**Type Classification: **Safety Relief Valve**Capacity Tests: **Sec. VIII Div. 1 at National Board T L (Worthington) on May 09, 2011**Method of Establishing Relieving Capacity: **Flow Capacity, Slope**Certified Value: **1.63 SCFM/PSIA**Test Medium: **Air**Certified Medium: **Gas**Special Service: **None**Set Pressure Definition: **Bubble**Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
0.75 NPS	1 NPS	0.169 sq in	0.464 in		150 - 600 psi	Air	VIII Div. 1

Certification
Number: **70108**Design Series
or catalog number **EZB**Type Classification: **Safety Relief Valve**Capacity Tests: **Sec. VIII Div. 1 at National Board T L (Worthington) on October 31, 2011**Method of Establishing Relieving Capacity: **Flow Capacity, Slope**Certified Value: **0.781 SCFM/PSIA**Test Medium: **Air**Certified Medium: **Gas**Special Service: **None**Set Pressure Definition: **Bubble**Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
0.5 - 0.75 NPS	.75, 1 NPS	0.083 sq in	0.326 in	0.082 in	150 - 600 psi	Air	VIII Div. 1

Certification
Number: **70120**Design Series
or catalog number **EZE**Type Classification: **Safety Relief Valve**Capacity Tests: **Sec. VIII Div. 1 at National Board T L (Worthington) on January 12, 2012**Method of Establishing Relieving Capacity: **Flow Capacity, Slope**Certified Value: **2.1 SCFM/PSIA**Test Medium: **Air/Gas**Certified Medium: **Gas**Special Service: **None**Set Pressure Definition: **Bubble**Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
1 - 1.25 NPS	1.25, 1.5 NPS	0.224 sq in	0.534 in	0.134 in	150 - 400 psi	Air	VIII Div. 1

Hansen Technologies Corporation (HTL)

NB#: 70131

location: 3475 Old Maysville Rd, Commerce, GA 30529 United States

Acceptable Abbrev.: Hansen

Certification
Number: **70131**Design Series
or catalog number **EZF**Type Classification: **Safety Relief Valve**Capacity Tests: **Sec. VIII Div. 1 at National Board T L (Worthington) on February 16, 2012**Method of Establishing Relieving Capacity: **Flow Capacity, Slope**Certified Value: **2.5 SCFM/PSIA**Test Medium: **Air/Gas**Certified Medium: **Gas**Special Service: **None**Set Pressure Definition: **Bubble**Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
1 - 1.25 NPS	1.25, 1.5 NPS	0.267 sq in	0.583 in	0.146 in	150 - 400 psi	Air	VIII Div. 1

Henry Technologies, Inc. (ACR)

NB#: 29090

Location: 701 South Main Street, Chatham, IL 62629 United States

Acceptable Abbrev.: HENRY

Henry Technologies, Inc. (ACR)

Location: 701 South Main Street, Chatham, IL 62629 United States

Acceptable Abbrev.: HENRY

Certification Number: 29090	Design Series or catalog number: 5244-1, 5244-3/4, 5344-1, 5344-3/4, B518, B518-JT, B518-JBT
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Type Classification: **Safety Relief Valve**Capacity Tests: **Sec. VIII Div. 1 at Phillips Petroleum on September 18, 1957**Method of Establishing Relieving Capacity: **Flow Capacity, Slope**Certified Value: **2.46 SCFM/PSIA**Test Medium: **Gas**Certified Medium: **Gas**Set Pressure Definition: **Start-to-Leak**Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
0.75 - 1.125 NPS	1, 1-1/8 NPS	0.196 sq in	0.5 in		150 - 450 psi	Air	VIII

Certification Number: 29113	Design Series or catalog number: 5601 & 5602
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Type Classification: **Safety Relief Valve**Capacity Tests: **Sec. VIII Div. 1 at Phillips Petroleum on April 12, 1965**Method of Establishing Relieving Capacity: **Flow Capacity, Slope**Certified Value: **2.65 SCFM/PSIA**Test Medium: **Gas**Certified Medium: **Gas**Set Pressure Definition: **Start-to-Leak**Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
0.5 - 0.75 NPS	1 NPS	0.196 sq in	0.5 in	0.125 in	150 - 450 psi	Air	VIII Div. 1

Certification Number: 29124	Design Series or catalog number: 5603
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Type Classification: **Safety Relief Valve**Capacity Tests: **Sec. VIII Div. 1 at National Board T L (Picaway) on July 20, 1989**Method of Establishing Relieving Capacity: **Flow Capacity, Slope**Certified Value: **2.773 SCFM/PSIA**Test Medium: **Air/Gas**Certified Medium: **Gas**Set Pressure Definition: **Start-to-Leak**Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
1 NPS	1.25 NPS	0.196 sq in	0.5 in		150 - 450 psi	Air	VIII Div. 1

Henry Technologies, Inc. (ACR)

NB#: 29135

location: 701 South Main Street, Chatham, IL 62629 United States

Acceptable Abbrev.: HENRY

Certification Number: **29135** Design Series or catalog number: **5604, 5604-YM, 5604-YP**

Type Classification: **Relief Valve**Capacity Tests: **Sec. VIII Div. 1 at National Board T L (Picaway) on July 20, 1989**Method of Establishing Relieving Capacity: **Flow Capacity, Slope**Certified Value: **5.33 SCFM/PSIA**Test Medium: **Air/Gas**Certified Medium: **Air/Gas**Special Service: **None**Set Pressure Definition: **Bubble**Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
1.25 - 1.625 NPS	1.5, 1-7/8 NPS	0.388 sq in	0.703 in		150 - 450 psi	Air	VIII Div. 1

Certification Number: **29146** Design Series or catalog number: **5600**

Type Classification: **Safety Relief Valve**Capacity Tests: **Sec. VIII Div. 1 at National Board T L (Worthington) on June 12, 1992**Method of Establishing Relieving Capacity: **Flow Capacity, Slope**Certified Value: **2.29 SCFM/PSIA**Test Medium: **Air/Gas**Certified Medium: **Gas**Special Service: **None**Set Pressure Definition: **Bubble**Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
0.5 NPS	.75 NPS	0.196 sq in	0.5 in		150 - 450 psi	Air	VIII Div. 1

Certification Number: **29180** Design Series or catalog number: **5230AX, 5231AX, 5231BX, 5233AX, 5234AX, 5235AX**

Type Classification: **Relief Valve**Capacity Tests: **Sec. VIII Div. 1 at National Board T L (Worthington) on December 01, 2014**Method of Establishing Relieving Capacity: **Flow Capacity, Slope**Certified Value: **0.847 SCFM/PSIA**Test Medium: **Gas**Certified Medium: **Gas**Set Pressure Definition: **Bubble**Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
0.25 - 0.5 NPS	1/2, 5/8, 3/4, 7/8	0.06 sq in	0.276	0.157 sq in	150 - 675 psi	Air	VIII Div. 1

Henry Technologies, Inc. (ACR)

NB#: 29449

location: 701 South Main Street, Chatham, IL 62629 United States

Acceptable Abbrev.: HENRY

Certification Number: **29449** Design Series or catalog number **5246A-1, 5246A 1 1/4, 5246A 1 5/8, 5345A, 5346A 1 1/4**

Type Classification: **Safety Relief Valve**Capacity Tests: **Sec. VIII Div. 1 at National Board T L (Worthington) on September 01, 2009**Method of Establishing Relieving Capacity: **Flow Capacity, Slope**Certified Value: **5.217 SCFM/PSIA**Test Medium: **Air**Certified Medium: **Gas**Set Pressure Definition: **Bubble**Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
1 - 1.625 NPS	1.25 top NPS	0.406 sq in	0.719 in		150 - 400 psi	Air	VIII Div. 1

Certification Number: **29461** Design Series or catalog number **5250-1/2, 5250-7/8, 5252-3/4, 5350-1/2, 5352-3/4, 5250A-1/2, 5350A-1/2**

Type Classification: **Safety Relief Valve**Capacity Tests: **Control Script failed for control txtCoc , Source=**Method of Establishing Relieving Capacity: **Flow Capacity, Slope**Certified Value: **1.412 SCFM/PSIA**Test Medium: **Air**Certified Medium: **Gas**Set Pressure Definition: **Bubble**Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
0.5 - 0.75 NPS	1/2, 3/4 top NPS	0.11 sq in	0.375 in		200 - 500 psi	Air	VIII Div. 1

Herose Gmbh Armaturen Und Metalle (HEG)

NB#: 91011

location: Elly-Heuss-Knapp-Strasse 12, Bad Oldesloe 23843 Germany

Acceptable Abbrev.: Herose

Herose Gmbh Armaturen Und Metalle (HEG)

location: Elly-Heuss-Knapp-Strasse 12, Bad Oldesloe 23843 Germany

Acceptable Abbrev.: Herose

Certification Number: **91011** Design Series or catalog number: **06388/06418/06383/06413.0704/0706**

Type Classification: **Safety Relief Valve**Capacity Tests: **Sec. VIII Div. 1 at Leser Gmbh on July 30, 1999**Method of Establishing Relieving Capacity: **Flow Capacity, Slope**Certified Value: **0.862 SCFM/PSIA**Test Medium: **Air/Gas**Certified Medium: **Air/Gas**Special Service: **None**Set Pressure Definition: **Initial Audible Discharge**Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
0.5 - 0.75 NPS	1 NPS	38.5 sq mm	7 mm	1.5 mm	48 - 725 psi	Air	VIII Div. 1

Certification Number: **91077** Design Series or catalog number: **06388/06418/06383/06413.1510**

Type Classification: **Safety Relief Valve**Capacity Tests: **Sec. VIII Div. 1 at Leser Gmbh on July 30, 1999**Method of Establishing Relieving Capacity: **Flow Capacity, Slope**Certified Value: **2.769 SCFM/PSIA**Test Medium: **Air/Gas**Certified Medium: **Air/Gas**Set Pressure Definition: **Initial Audible Discharge**Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
1 NPS	1.25 NPS	176.6 sq mm	15 mm	2.6 mm	48 - 725 psi	Air	VIII Div. 1

Certification Number: **91088** Design Series or catalog number: **06388/06418/06383/06413.1004/1006**

Type Classification: **Safety Relief Valve**Capacity Tests: **Sec. VIII Div. 1 at Leser Gmbh on July 30, 1999**Method of Establishing Relieving Capacity: **Flow Capacity, Slope**Certified Value: **1.517 SCFM/PSIA**Test Medium: **Air/Gas**Certified Medium: **Air/Gas**Set Pressure Definition: **Initial Audible Discharge**Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
0.5 - 0.75 NPS	1 NPS	86.6 sq mm	10.5 mm	2.2 mm	42 - 725 psi	Air	VIII Div. 1

Herose Gmbh Armaturen Und Metalle (HEG)

NB#: 91101

location: Elly-Heuss-Knapp-Strasse 12, Bad Oldesloe 23843 Germany

Acceptable Abbrev.: Herose

Certification Number: **91101** Design Series or catalog number: **06388/06418/06383/06413.2312/2314**

Type Classification: **Safety Relief Valve**Capacity Tests: **Sec. VIII Div. 1 at Leser Gmbh on August 27, 2002**Method of Establishing Relieving Capacity: **Flow Capacity, Slope**Certified Value: **7.55 SCFM/PSIA**Test Medium: **Air/Gas**Certified Medium: **Air/Gas**Special Service: **None**Set Pressure Definition: **Initial Audible Discharge**Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
1.25 - 1.5 NPS	2 NPS	389.1 sq mm	23 mm	4.8 mm	29 - 725 psi	Air	VIII Div. 1

Certification Number: **91112** Design Series or catalog number: **06216/06217.0600**

Type Classification: **Safety Relief Valve**Capacity Tests: **Sec. VIII Div. 1 at Leser Gmbh on August 26, 2002**Method of Establishing Relieving Capacity: **Flow Capacity, Slope**Certified Value: **4.1 SCFM/PSIA**Test Medium: **Air/Gas**Certified Medium: **Air/Gas**Special Service: **None**Set Pressure Definition: **Initial Audible Discharge**Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
0.75 NPS	Side	177 sq mm	15 mm	5.5 mm	15 - 435 psi	Air	VIII Div. 1

Certification Number: **91123** Design Series or catalog number: **06216/06217.1000**

Type Classification: **Safety Relief Valve**Capacity Tests: **Sec. VIII Div. 1 at Leser Gmbh on August 26, 2002**Method of Establishing Relieving Capacity: **Flow Capacity, Slope**Certified Value: **6.79 SCFM/PSIA**Test Medium: **Air/Gas**Certified Medium: **Air/Gas**Set Pressure Definition: **Initial Audible Discharge**Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
1 NPS	Side	315 sq mm	20 mm	7 mm	15 - 435 psi	Air	VIII Div. 1

Herose Gmbh Armaturen Und Metalle (HEG)

NB#: 91134

location: Elly-Heuss-Knapp-Strasse 12, Bad Oldesloe 23843 Germany

Acceptable Abbrev.: Herose

Certification Number: **91134** Design Series or catalog number: **06216/06217.1200**

Type Classification: **Safety Relief Valve**Capacity Tests: **Sec. VIII Div. 1 at Leser Gmbh on August 26, 2002**Method of Establishing Relieving Capacity: **Flow Capacity, Slope**Certified Value: **10.15 SCFM/PSIA**Test Medium: **Air/Gas**Certified Medium: **Air/Gas**Special Service: **None**Set Pressure Definition: **Initial Audible Discharge**Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
1.25 NPS	Side	492 sq mm	25 mm	9 mm	15 - 319 psi	Air	VIII Div. 1

Certification Number: **91145** Design Series or catalog number: **06216/06217.1400**

Type Classification: **Safety Relief Valve**Capacity Tests: **Sec. VIII Div. 1 at Leser Gmbh on August 26, 2002**Method of Establishing Relieving Capacity: **Flow Capacity, Slope**Certified Value: **16.5 SCFM/PSIA**Test Medium: **Air/Gas**Certified Medium: **Air/Gas**Set Pressure Definition: **Initial Audible Discharge**Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
1.5 NPS	Side	805 sq mm	32 sq mm	12.5 mm	15 - 232 psi	Air	VIII Div. 1

Certification Number: **91156** Design Series or catalog number: **06216/06217.2000**

Type Classification: **Safety Relief Valve**Capacity Tests: **Sec. VIII Div. 1 at Leser Gmbh on August 26, 2002**Method of Establishing Relieving Capacity: **Flow Capacity, Slope**Certified Value: **24.8 SCFM/PSIA**Test Medium: **Air/Gas**Certified Medium: **Air/Gas**Special Service: **None**Set Pressure Definition: **Initial Audible Discharge**Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
2 NPS	Side	1258 sq mm	40 in	15.1 mm	15 - 174 psi	Air	VIII Div. 1

Herose Gmbh Armaturen Und Metalle (HEG)

NB#: 91178

location: Elly-Heuss-Knapp-Strasse 12, Bad Oldesloe 23843 Germany

Acceptable Abbrev.: Herose

Certification Number: **91178** Design Series or catalog number: **06216/06217.0400**

Type Classification: **Safety Relief Valve**Capacity Tests: **Sec. VIII Div. 1 at National Board T L (Worthington) on October 23, 2007**Method of Establishing Relieving Capacity: **Flow Capacity, Slope**Certified Value: **2.59 SCFM/PSIA**Test Medium: **Air**Certified Medium: **Air/Gas**Special Service: **None**Set Pressure Definition: **Initial Audible Discharge**Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
0.5 NPS	Side	113.1 sq mm	12 mm	3.6 mm	15 - 363 psi	Air	VIII Div. 1

Certification Number: **91189** Design Series or catalog number: **06420/06421/06425/06426/06440/06441/06445/06446.0704/0706**

Type Classification: **Safety Relief Valve**Capacity Tests: **Sec. VIII Div. 1 at National Board T L (Worthington) on October 01, 2014**Method of Establishing Relieving Capacity: **Flow Capacity, Slope**Certified Value: **.892 SCFM/PSIA**Test Medium: **Gas**Certified Medium: **Air/Gas**Set Pressure Definition: **Initial Audible Discharge**Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
0.5 - 0.75 NPS	1 NPS	38.5 sq mm	7 mm	3 mm	29 - 725 psi	Air	VIII Div. 1

Certification Number: **91190** Design Series or catalog number: **06420/06421/06425/06426/06440/06441/06445/06446.1004/1006 (10.5mm orifice)**

Type Classification: **Safety Relief Valve**Capacity Tests: **Sec. VIII Div. 1 at National Board T L (Worthington) on September 18, 2015**Method of Establishing Relieving Capacity: **Flow Capacity, Slope**Certified Value: **1.698 SCFM/PSIA**Test Medium: **Gas**Certified Medium: **Air/Gas**Set Pressure Definition: **Initial Audible Discharge**Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
0.5 - 0.75 NPS	1 NPS	86.6 sq mm	10.5 mm	3 mm	35 - 725 psi	Air	VIII Div. 1

Herose GmbH Armaturen Und Metalle (HEG)

NB#: 91202

location: Elly-Heuss-Knapp-Strasse 12, Bad Oldesloe 23843 Germany

Acceptable Abbrev.: Herose

Certification Number: **91202** Design Series or catalog number: **06420/06421/06425/06426/06440/06441/06445/06446.2312 (23 mm orifice)**

Type Classification: **Safety Relief Valve**Capacity Tests: **Sec. VIII Div. 1 at National Board T L (Worthington) on February 27, 2015**Method of Establishing Relieving Capacity: **Flow Capacity, Slope**Certified Value: **6.51 SCFM/PSIA**Test Medium: **Gas**Certified Medium: **Air/Gas**Set Pressure Definition: **Initial Audible Discharge**Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
1.25 NPS	1.5 NPS	415.5 sq mm	23 mm	6 mm	20 - 145 psi	Air	VIII Div. 1

Certification Number: **91213** Design Series or catalog number: **06002/06012/06006/06016**

Type Classification: **Safety Relief Valve**Capacity Tests: **Sec. VIII Div. 1 at National Board T L (Worthington) on February 26, 2015**Method of Establishing Relieving Capacity: **Flow Capacity, Slope**Certified Value: **.337 SCFM/PSIA**Test Medium: **Gas**Certified Medium: **Air/Gas**Set Pressure Definition: **Initial Audible Discharge**Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
0.25 - 0.5 NPS	.375 NPS	28.3 sq mm	6 mm	0.9 mm	72 - 798 psi	Air	VIII Div. 1

Certification Number: **91224** Design Series or catalog number: **06381/06386/06416**

Type Classification: **Safety Relief Valve**Capacity Tests: **Sec. VIII Div. 1 at National Board T L (Worthington) on February 26, 2015**Method of Establishing Relieving Capacity: **Flow Capacity, Slope**Certified Value: **1.70 SCFM/PSIA**Test Medium: **Gas**Certified Medium: **Gas**Set Pressure Definition: **Initial Audible Discharge**Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
0.5 - 0.75 NPS	1 NPS	86.6 sq mm	10.5 mm	2.1 mm	30 - 363 psi	Air	VIII Div. 1

Herose Gmbh Armaturen Und Metalle (HEG)

NB#: 91246

location: Elly-Heuss-Knapp-Strasse 12, Bad Oldesloe 23843 Germany

Acceptable Abbrev.: Herose

Certification Number: **91246** Design Series or catalog number: **06002/06012 gas tight**

Type Classification: **Safety Relief Valve**Capacity Tests: **Sec. VIII Div. 1 at National Board T L (Worthington) on April 09, 2015**Method of Establishing Relieving Capacity: **Flow Capacity, Slope**Certified Value: **0.302 SCFM/PSIA**Test Medium: **Gas**Certified Medium: **Air/Gas**Special Service: **None**Set Pressure Definition: **Initial Audible Discharge**Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
0.25 - 0.5 NPS	.375 NPS	28.3 sq mm	6 mm	0.8 mm	74 - 798 psi	Air	VIII Div. 1

Certification Number: **91257** Design Series or catalog number: **06420/06421/06425/06426/06440/06441/06445/06446.1406/1410 (14 mm orifice 15-28 psi)**

Type Classification: **Safety Relief Valve**Capacity Tests: **Sec. VIII Div. 1 at National Board T L (Worthington) on February 27, 2015**Method of Establishing Relieving Capacity: **Flow Capacity, Slope**Certified Value: **2.82 SCFM/PSIA**Test Medium: **Gas**Certified Medium: **Air/Gas**Special Service: **None**Set Pressure Definition: **Initial Audible Discharge**Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
0.75 - 1 NPS	1.25 NPS	153.9 sq mm	14 mm	4 mm	15 - 28 psi	Air	VIII Div. 1

Certification Number: **91279** Design Series or catalog number: **06420/06421/06425/06426/06440/06441/06445/06446.1406/.1410 (14 mm orifice)**

Type Classification: **Safety Relief Valve**Capacity Tests: **Sec. VIII Div. 1 at National Board T L (Worthington) on September 18, 2015**Method of Establishing Relieving Capacity: **Flow Capacity, Slope**Certified Value: **2.887 SCFM/PSIA**Test Medium: **Gas**Certified Medium: **Air/Gas**Set Pressure Definition: **Initial Audible Discharge**Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
0.75 - 1 NPS	1.25 NPS	153.9 mm	14 mm	4 mm	35 - 580 psi	Air	VIII Div. 1

Herose Gmbh Armaturen Und Metalle (HEG)

NB#: 91280

location: Elly-Heuss-Knapp-Strasse 12, Bad Oldesloe 23843 Germany

Acceptable Abbrev.: Herose

Certification Number: **91280** Design Series or catalog number: **06420/06421/06425/06426/06440/06441/06445/06446.1810/.1812 (18 mm orifice)**

Type Classification: **Safety Relief Valve**Capacity Tests: **Sec. VIII Div. 1 at National Board T L (Worthington) on September 18, 2015**Method of Establishing Relieving Capacity: **Flow Capacity, Slope**Certified Value: **4.773 SCFM/PSIA**Test Medium: **Gas**Certified Medium: **Air/Gas**Set Pressure Definition: **Initial Audible Discharge**Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
1 - 1.25 NPS	1.5 NPS	245.5 sq mm	18 mm	5 mm	38 - 580 psi	Air	VIII Div. 1

Honeywell Technologies S.A.R.L., Environmental & Energy Solutions (HAG)

NB#: 90009

location: Hardhofweg, Mosbach 74821 Germany

Acceptable Abbrev.: Honeywell

Honeywell Technologies S.A.R.L., Environmental & Energy Solutions (HAG)

location: Hardhofweg, Mosbach 74821 Germany

Acceptable Abbrev.: Honeywell

Certification Number: **90009** Design Series or catalog number: **S245**

Type Classification: **Safety Relief Valve**Capacity Tests: **Sec. VIII Div. 1 at Leser GmbH on December 06, 1996**Method of Establishing Relieving Capacity: **Flow Capacity, K**Certified Value: **.863 Unitless**Test Medium: **Air/Gas**Certified Medium: **Air/Gas**Set Pressure Definition: **Initial Audible Discharge**Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
0.5 NPS	Side	0.122 sq in	0.394 in	0.157 in	40 - 435 psi	Air	VIII
0.75 NPS	Side	0.274 sq in	0.591 in	0.236 in	40 - 435 psi	Air	VIII
1 NPS	Side	0.487 sq in	0.787 in	0.346 in	40 - 435 psi	Air	VIII
1.25 NPS	Side	0.76 sq in	0.984 in	0.398 in	40 - 435 psi	Air	VIII
1.5 NPS	Side	1.246 sq in	1.26 in	0.504 in	40 - 435 psi	Air	VIII
2 NPS	Side	1.947 sq in	1.575 in	0.693 in	40 - 435 psi	Air	VIII

Hui Bao Enterprise Co., Ltd (HBO)

NB#: 95037

location: No 28, Lane 446, Sec. 2

Acceptable Abbrev.: THB

Hui Bao Enterprise Co., Ltd (HBO)

location: No 28, Lane 446, Sec. 2

Acceptable Abbrev.: THB

Certification Number: **95037** Design Series or catalog number: **T102N**

Type Classification: **Safety Relief Valve**Capacity Tests: **Sec. VIII Div. 1 at National Board T L (Worthington) on January 31, 2005**Method of Establishing Relieving Capacity: **Flow Capacity, Slope**Certified Value: **.269 SCFM/PSIA**Test Medium: **Air/Gas**Certified Medium: **Air/Gas**Set Pressure Definition: **Pop**Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
0.125 - 0.25 NPS	Side	12.57 sq mm	4 mm	4.8 mm	50 - 275 psi	Air	VIII Div. 1

Jiangsu Reliable Mechanical Equipment Co., Ltd. (JRM)

NB#: 00583

Location: No. 12 Gutan Road

Acceptable Abbrev.: JRME

Jiangsu Reliable Mechanical Equipment Co., Ltd. (JRM)

Location: No. 12 Gutan Road

Acceptable Abbrev.: JRME

Certification
Number: **00583**Design Series
or catalog number **AG-D Series**Type Classification: **Buckling Pin Non-reclosing Device**Capacity Tests: **Sec. VIII Div. 1 at National Board T L (Worthington) on March 24, 2015**Method of Establishing Relieving Capacity: **Resistance Factor, 3 Size, Krg**Certified Value: **2.22 Unitless**Test Medium: **Air**Certified Medium: **Air or gases (Krg)**Set Pressure Definition: **Buckling Pressure**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
2 NPS	2 NPS	3.3 sq in	2	0.93	15 - 720 psi		VIII Div. 1
2.5 NPS	2.5 NPS	4.99 sq in	2.52	1.33	15 - 720 psi		VIII Div. 1
3 NPS	3 NPS	7.03 sq in	2.99	1.62	15 - 720 psi		VIII Div. 1
4 NPS	4 NPS	12.67 sq in	4.02	1.91	15 - 720 psi		VIII Div. 1
6 NPS	6 NPS	28.13 sq in	5.98	2.52	1 - 720 psi		VIII Div. 1
8 NPS	8 NPS	50.17 sq in	7.99	3.02	1 - 720 psi		VIII Div. 1
10 NPS	10 NPS	78.54 sq in	10	3.52	1 - 720 psi		VIII Div. 1
12 NPS	12 NPS	113.25 sq in	12.01	4.02	1 - 720 psi		VIII Div. 1
14 NPS	14 NPS	138.26 sq in	13.27	4.34	1 - 720 psi		VIII Div. 1
16 NPS	16 NPS	182.32 sq in	15.24	4.83	1 - 720 psi		VIII Div. 1
18 NPS	18 NPS	233.54 sq in	17.24	5.53	1 - 720 psi		VIII Div. 1
20 NPS	20 NPS	291.1 sq in	19.25	6.03	1 - 720 psi		VIII Div. 1
24 NPS	24 NPS	425.2 sq in	23.27	7.04	1 - 720 psi		VIII Div. 1
26 NPS	26 NPS	499.15 sq in	25.21	7.69	1 - 720 psi		VIII Div. 1
28 NPS	28 NPS	573.83 sq in	27.03	8.15	1 - 720 psi		VIII Div. 1
30 NPS	30 NPS	658.7 sq in	28.96	8.63	1 - 145 psi		VIII Div. 1
32 NPS	32 NPS	750.88 sq in	30.92	9.12	1 - 145 psi		VIII Div. 1
34 NPS	34 NPS	848.06 sq in	32.86	9.6	1 - 145 psi		VIII Div. 1
36 NPS	36 NPS	957.72 sq in	34.92	10.12	1 - 145 psi		VIII Div. 1
38 NPS	38 NPS	1067.09 sq in	36.86	10.6	1 - 145 psi		VIII Div. 1
40 NPS	40 NPS	1182.37 sq in	38.8	11.28	1 - 145 psi		VIII Div. 1
42 NPS	42 NPS	1303.56 sq in	40.74	12.72	1 - 145 psi		VIII Div. 1
44 NPS	44 NPS	1417.29 sq in	42.48	13.21	1 - 145 psi		VIII Div. 1
46 NPS	46 NPS	1559.48 sq in	44.56	12.71	1 - 145 psi		VIII Div. 1
48 NPS	48 NPS	1698.23 sq in	46.5	13.2	1 - 145 psi		VIII Div. 1

Location: No. 12 Gutan Road

Acceptable Abbrev.: JRME

Certification
Number: **00897**Design Series
or catalog number **IN-P Series**

Design Comments: The flow areas published are for Class 150 flanges. Please consult manufacturer for flow area of other flange classes.

Type Classification: Buckling Pin Non-reclosing Device

Capacity Tests: Sec. VIII Div. 1 at National Board T L (Worthington) on April 22, 2016

Method of Establishing Relieving Capacity: Resistance Factor, 3 Size, Krg

Certified Value: 21.36 Unitless

Test Medium: Gas

Certified Medium: Air/Gas

Set Pressure Definition: Buckling Pressure

Scope of Nominal Size and Set Pressure Ranges:

Inlet Size	Outlet Size	Flow Area	Orifice [designator] diameter	Lift	Set Pressure Range	Media	Code Section
2 NPS	2 NPS	1.557 sq in			.5 - 2250 psi	Air	VIII Div. 1
2.5 NPS	2.5 NPS	2.097 sq in			.5 - 2250 psi	Air	VIII Div. 1
3 NPS	3 NPS	3.816 sq in			.5 - 2250 psi	Air	VIII Div. 1
4 NPS	4 NPS	6.458 sq in			.5 - 2250 psi	Air	VIII Div. 1
6 NPS	6 NPS	17.441 sq in			.5 - 2250 psi	Air	VIII Div. 1
8 NPS	8 NPS	32.375 sq in			.5 - 2250 psi	Air	VIII Div. 1
10 NPS	10 NPS	53.385 sq in			.5 - 2250 psi	Air	VIII Div. 1
12 NPS	12 NPS	78.776 sq in			.5 - 2250 psi	Air	VIII Div. 1
14 NPS	14 NPS	97.342 sq in			.5 - 2250 psi	Air	VIII Div. 1
16 NPS	16 NPS	143.464 sq in			.5 - 2250 psi	Air	VIII Div. 1
18 NPS	18 NPS	178.071 sq in			.5 - 2250 psi	Air	VIII Div. 1
20 NPS	20 NPS	224.149 sq in			.5 - 2250 psi	Air	VIII Div. 1
22 NPS	22 NPS	275.579 sq in			.5 - 2250 psi	Air	VIII Div. 1
24 NPS	24 NPS	330.358 sq in			.5 - 2250 psi	Air	VIII Div. 1
26 NPS	26 NPS	381.907 sq in			.5 - 1440 psi	Air	VIII Div. 1
28 NPS	28 NPS	450.438 sq in			.5 - 1440 psi	Air	VIII Div. 1
30 NPS	30 NPS	524.62 sq in			.5 - 1440 psi	Air	VIII Div. 1
32 NPS	32 NPS	604.455 sq in			.5 - 1440 psi	Air	VIII Div. 1
34 NPS	34 NPS	689.941 sq in			.5 - 1440 psi	Air	VIII Div. 1
36 NPS	36 NPS	781.08 sq in			.5 - 1440 psi	Air	VIII Div. 1
38 NPS	38 NPS	877.87 sq in			.5 - 1440 psi	Air	VIII Div. 1
40 NPS	40 NPS	980.313 sq in			.5 - 1440 psi	Air	VIII Div. 1
42 NPS	42 NPS	1088.407 sq in			.5 - 1440 psi	Air	VIII Div. 1
44 NPS	44 NPS	1202.154 sq in			.5 - 1440 psi	Air	VIII Div. 1
46 NPS	46 NPS	1321.552 sq in			.5 - 1440 psi	Air	VIII Div. 1
48 NPS	48 NPS	1446.603 sq in			.5 - 1440 psi	Air	VIII Div. 1
50 NPS	50 NPS	1577.305 sq in			.5 - 720 psi	Air	VIII Div. 1
52 NPS	52 NPS	1713.66 sq in			.5 - 720 psi	Air	VIII Div. 1
54 NPS	54 NPS	1855.666 sq in			.5 - 720 psi	Air	VIII Div. 1
56 NPS	56 NPS	2003.325 sq in			.5 - 720 psi	Air	VIII Div. 1
58 NPS	58 NPS	2156.635 sq in			.5 - 720 psi	Air	VIII Div. 1
60 NPS	60 NPS	2315.598 sq in			.5 - 720 psi	Air	VIII Div. 1
64 NPS	64 NPS	2650.479 sq in			.5 - 720 psi	Air	VIII Div. 1
68 NPS	68 NPS	3007.968 sq in			.5 - 720 psi	Air	VIII Div. 1
72 NPS	72 NPS	3388.065 sq in			.5 - 720 psi	Air	VIII Div. 1
78 NPS	78 NPS	3670.333 sq in			.5 - 720 psi	Air	VIII Div. 1

Jokwang I.L.I. Co., Ltd. (JOK)

NB#: 89030

location: 37, Sanmakgongdanbuk 10-gil, Yangsan-si, Gyeongsangnam-do 50567 South Korea

Jokwang I.L.I. Co., Ltd. (JOK)

location: 37, Sanmakgongdanbuk 10-gil, Yangsan-si, Gyeongsangnam-do 50567 South Korea

Certification
Number: **89030**Design Series
or catalog number **JSV-FF100**Type Classification: **Safety Relief Valve**Capacity Tests: **Sec. VIII Div. 1 at National Board T L (Worthington) on October 07, 2010**Method of Establishing Relieving Capacity: **Flow Capacity, K**Certified Value: **0.831 Unitless**Test Medium: **Steam & Air/Gas**Certified Medium: **Steam & Air/Gas**Set Pressure Definition: **Pop**Blowdown: **Adjustable by Single Ring**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
0.75 - 1.5 NPS	1 - 3 NPS	0.11 sq in	[D] 0.374 in	0.094 in	15 - 2900 psi	Steam	VIII Div. 1
					15 - 6000 psi	Air	VIII Div. 1
	1-3 NPS	0.206 sq in	[D1] 0.512 in	0.127 in	15 - 2900 psi	Steam	VIII Div. 1
					15 - 6000 psi	Air	VIII Div. 1
1 - 1.5 NPS	2 - 3 NPS	0.196 sq in	[E] 0.5 in	0.125 in	15 - 2900 psi	Steam	VIII Div. 1
					15 - 6000 psi	Air	VIII Div. 1
	2-3 NPS	0.292 sq in	[E1] 0.61 in	0.152 in	15 - 2900 psi	Steam	VIII Div. 1
					15 - 6000 psi	Air	VIII Div. 1
1.5 - 2 NPS	2 - 3 NPS	0.308 sq in	[F] 0.626 in	0.157 in	15 - 2900 psi	Steam	VIII Div. 1
					15 - 5000 psi	Air	VIII Div. 1
	2-3 NPS	0.403 sq in	[F1] 0.717 in	0.179 in	15 - 2900 psi	Steam	VIII Div. 1
					15 - 5000 psi	Air	VIII Div. 1
	3 NPS	0.627 sq in	[G1] 0.894 in	0.223 in	15 - 2900 psi	Steam	VIII Div. 1
					15 - 3700 psi	Air	VIII Div. 1
		0.785 sq in	[H] 1 in	0.25 in	15 - 2500 psi	Steam	VIII Div. 1
					15 - 2750 psi	Air	VIII Div. 1
		0.982 sq in	[H1] 1.118 in	0.279 in	15 - 2500 psi	Steam	VIII Div. 1
					15 - 2750 psi	Air	VIII Div. 1
1.5 - 3 NPS	3 NPS	0.506 sq in	[G] 0.803 in	0.201 in	15 - 2900 psi	Steam	VIII Div. 1
					15 - 3700 psi	Air	VIII Div. 1
					15 - 2500 psi	Steam	VIII Div. 1
2 - 3 NPS	3 - 4 NPS	1.293 sq in	[J] 1.283 in	0.321 in	15 - 2500 psi	Steam	VIII Div. 1
					15 - 2700 psi	Air	VIII Div. 1
	3-4 NPS	1.56 sq in	[J1] 1.409 in	0.352 in	15 - 2500 psi	Steam	VIII Div. 1
					15 - 2750 psi	Air	VIII Div. 1
3 NPS	4 - 6 NPS	1.841 sq in	[K] 1.531 in	0.383 in	15 - 2000 psi	Steam	VIII Div. 1
					15 - 2220 psi	Air	VIII Div. 1
		2.177 sq in	[K1] 1.665 in	0.416 in	15 - 2000 psi	Steam	VIII Div. 1
					15 - 2200 psi	Air	VIII Div. 1
3 - 4 NPS	4 - 6 NPS	2.862 sq in	[L] 1.909 in	0.478 in	15 - 2500 psi	Air	VIII Div. 1
					15 - 2500 psi	Steam	VIII Div. 1
	4-6 NPS	3.484 sq in	[L1] 2.106 in	0.526 in	15 - 2500 psi	Air	VIII Div. 1
					15 - 2500 psi	Steam	VIII Div. 1
4 NPS	6 NPS	3.604 sq in	[M] 2.142 in	0.536 in	15 - 1100 psi	Air	VIII Div. 1
					15 - 1100 psi	Steam	VIII Div. 1
		4.337 sq in	[N] 2.35 in	0.588 in	15 - 1000 psi	Air	VIII Div. 1
					15 - 1000 psi	Steam	VIII Div. 1
		4.383 sq in	[M1] 2.362 in	0.59 in	15 - 1100 psi	Air	VIII Div. 1
					15 - 1100 psi	Steam	VIII Div. 1
		5.303 sq in	[N1] 2.598 in	0.649 in	15 - 1000 psi	Air	VIII Div. 1
					15 - 1000 psi	Steam	VIII Div. 1
		6.379 sq in	[P] 2.85 in	0.713 in	15 - 1000 psi	Air	VIII Div. 1
					15 - 1000 psi	Steam	VIII Div. 1
		7.068 sq in	[P1] 3 in	0.75 in	15 - 1000 psi	Air	VIII Div. 1
					15 - 1000 psi	Steam	VIII Div. 1

<i>...Continued</i> Inlet Size	Outlet Size	Flow Area	Orifice [designator] diameter	Lift	Set Pressure Range	Media	Code Section
6 NPS	8 NPS	11.056 sq in	[Q] 3.752 in	0.938 in	15 - 600 psi	Air	VIII Div. 1
						Steam	VIII Div. 1
		13.041 sq in	[Q1] 4.0748 in	1.018 in	15 - 600 psi	Air	VIII Div. 1
						Steam	VIII Div. 1
	8 - 10 NPS	16.018 sq in	[R] 4.516 in	1.129 in	15 - 300 psi	Air	VIII Div. 1
						Steam	VIII Div. 1
8 NPS	10 NPS	26.021 sq in	[T] 5.756 in	1.439 in	15 - 300 psi	Air	VIII Div. 1
						Steam	VIII Div. 1
		28.274 sq in	[T1] 6 in	1.5 in	15 - 300 psi	Air	VIII Div. 1
						Steam	VIII Div. 1
10 NPS	14 NPS	39.447 sq in	[V] 7.087 in	1.772 in	15 - 300 psi	Air	VIII Div. 1
						Steam	VIII Div. 1
12 NPS	16 NPS	55.748 sq in	[W] 8.425 in	2.107 in	15 - 300 psi	Air	VIII Div. 1
						Steam	VIII Div. 1
14 NPS	18 NPS	76.078 sq in	[Y] 9.842 in	2.461 in	15 - 300 psi	Air	VIII Div. 1
						Steam	VIII Div. 1

Certification Number: **89041** Design Series or catalog number **JSV-FF100 (Liquid)**

Type Classification: **Safety Relief Valve**

Capacity Tests: **Sec. VIII Div. 1 at National Board T L (Worthington) on October 07, 2010**

Method of Establishing Relieving Capacity: **Flow Capacity, K**

Certified Value: **.615 Unitless**

Test Medium: **Water**

Certified Medium: **Liquid**

Set Pressure Definition: **First Steady Stream**

Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
0.75 - 1.5 NPS	1 - 3 NPS	0.11 sq in	[D] 0.374 in	0.094 in	15 - 6000 psi	Water	VIII Div. 1
	1-3 NPS	0.206 sq in	[D1] 0.512 in	0.127 in	15 - 6000 psi	Water	VIII Div. 1
1 - 1.5 NPS	2 - 3 NPS	0.196 sq in	[E] 0.5 in	0.125 in	15 - 6000 psi	Water	VIII Div. 1
	2-3 NPS	0.292 sq in	[E1] 0.612 in	0.152 in	15 - 6000 psi	Water	VIII Div. 1
1.5 - 2 NPS	2 - 3 NPS	0.308 sq in	[F] 0.626 in	0.157 in	15 - 5000 psi	Water	VIII Div. 1
	2-3 NPS	0.403 sq in	[F1] 0.716 in	0.179 in	15 - 5000 psi	Water	VIII Div. 1
	3 NPS	0.506 sq in	[G] 0.803 in	0.201 in	15 - 3700 psi	Water	VIII Div. 1
		0.595 sq in	[G1] 0.87 in	0.217 in	15 - 3700 psi	Water	VIII Div. 1
		0.785 sq in	[H] 1 in	0.25 in	15 - 2750 psi	Water	VIII Div. 1
		0.982 sq in	[H1] 1.1178 in	0.279 in	15 - 2750 psi	Water	VIII Div. 1
2 - 3 NPS	3 - 4 NPS	1.293 sq in	[J] 1.283 in	0.321 in	15 - 2700 psi	Water	VIII Div. 1
	3-4 NPS	1.56 sq in	[J1] 1.4088 in	0.352 in	15 - 2700 psi	Water	VIII Div. 1
3 NPS	4 - 6 NPS	1.841 sq in	[K] 1.531 in	0.383 in	15 - 2220 psi	Water	VIII Div. 1
		2.177 sq in	[K1] 1.665 in	0.416 in	15 - 2200 psi	Water	VIII Div. 1
3 - 4 NPS	4 - 6 NPS	2.862 sq in	[L] 1.909 in	0.478 in	15 - 2500 psi	Water	VIII Div. 1
	4-6 NPS	3.484 sq in	[L1] 2.105 in	0.526 in	15 - 2500 psi	Water	VIII Div. 1
4 NPS	6 NPS	3.604 sq in	[M] 2.142 in	0.536 in	15 - 1100 psi	Water	VIII Div. 1
		4.337 sq in	[N] 2.35 in	0.588 in	15 - 1000 psi	Water	VIII Div. 1
		4.382 sq in	[M1] 2.361 in	0.59 in	15 - 1100 psi	Water	VIII Div. 1
		5.302 sq in	[N1] 2.597 in	0.649 in	15 - 1000 psi	Water	VIII Div. 1
		6.379 sq in	[P] 2.85 in	0.713 in	15 - 1000 psi	Water	VIII Div. 1
		7.521 sq in	[P1] 3.0945 in	0.75 in	15 - 1000 psi	Water	VIII Div. 1
6 NPS	8 NPS	11.056 sq in	[Q] 3.752 in	0.938 in	15 - 600 psi	Water	VIII Div. 1
		13.041 sq in	[Q1] 4.0748 in	1.018 in	15 - 600 psi	Water	VIII Div. 1
8 NPS	8 - 10 NPS	16.018 sq in	[R] 4.516 in	1.129 in	15 - 300 psi	Water	VIII Div. 1
	10 NPS	26.021 sq in	[T] 5.756 in	1.439 in	15 - 300 psi	Water	VIII Div. 1
		30.699 sq in	[T1] 6.252 in	1.562 in	15 - 300 psi	Water	VIII Div. 1
10 NPS	14 NPS	39.447 sq in	[V] 7.087 in	1.772 in	15 - 300 psi	Water	VIII Div. 1
12 NPS	16 NPS	55.748 sq in	[W] 8.425 in	2.107 in	15 - 300 psi	Water	VIII Div. 1
14 NPS	18 NPS	76.078 sq in	[Y] 9.842 in	2.461 in	15 - 300 psi	Water	VIII Div. 1

Certification
Number: **89052**Design Series
or catalog number **JSV-PF100**Type Classification: **Pilot Operated Pressure Relief Valve**Capacity Tests: **Sec. VIII Div. 1 at National Board T L (Worthington) on May 23, 2012**Method of Establishing Relieving Capacity: **Flow Capacity, K**Certified Value: **.873 Unitless**Test Medium: **Steam & Air/Gas**Certified Medium: **Steam & Air/Gas**Special Service: **None**Set Pressure Definition: **1.Pop 3.Initial Audible Discharge**Blowdown: **Adjustable and Fixed for Mod. Pilot**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
1 - 1.5 NPS	2 NPS	0.15 sq in	[D] 0.437 in	0.162 in	15 - 10000 psi	Air	VIII Div. 1
					15 - 1050 psi	Steam	VIII Div. 1
		0.225 sq in	[E] 0.535 in	0.198 in	15 - 10000 psi	Air	VIII Div. 1
					15 - 1050 psi	Steam	VIII Div. 1
1 - 2 NPS	2, 3 NPS	0.371 sq in	[F] 0.687 in	0.254 in	15 - 10000 psi	Air	VIII Div. 1
					15 - 1050 psi	Steam	VIII Div. 1
		0.559 sq in	[G] 0.844 in	0.312 in	15 - 1050 psi	Steam	VIII Div. 1
					15 - 7000 psi	Air	VIII Div. 1
1.5 - 2 NPS	2, 3 NPS	0.873 sq in	[H] 1.054 in	0.39 in	15 - 1050 psi	Steam	VIII Div. 1
					15 - 6000 psi	Air	VIII Div. 1
1.5 - 3 NPS	2 - 4 NPS	1.43 sq in	[J] 1.35 in	0.5 in	15 - 1050 psi	Steam	VIII Div. 1
					15 - 6000 psi	Air	VIII Div. 1
2 - 3 NPS	3, 4 NPS	2.042 sq in	[K] 1.612 in	0.596 in	15 - 1050 psi	Steam	VIII Div. 1
					15 - 5000 psi	Air	VIII Div. 1
3 - 4 NPS	4, 6 NPS	3.17 sq in	[L] 2.009 in	0.743 in	15 - 1050 psi	Steam	VIII Div. 1
					15 - 4000 psi	Air	VIII Div. 1
		4 sq in	[M] 2.257 in	0.835 in	15 - 1050 psi	Steam	VIII Div. 1
					15 - 4000 psi	Air	VIII Div. 1
4 NPS	6 NPS	4.822 sq in	[N] 2.487 in	0.917 in	15 - 1050 psi	Steam	VIII Div. 1
					15 - 3000 psi	Air	VIII Div. 1
		7.087 sq in	[P] 3.004 in	1.111 in	15 - 1050 psi	Steam	VIII Div. 1
					15 - 2500 psi	Air	VIII Div. 1
6 NPS	8 NPS	12.27 sq in	[Q] 3.952 in	1.462 in	15 - 1050 psi	Steam	VIII Div. 1
					15 - 2000 psi	Air	VIII Div. 1
		17.78 sq in	[R] 4.758 in	1.76 in	15 - 1050 psi	Steam	VIII Div. 1
					15 - 2000 psi	Air	VIII Div. 1
8 NPS	10 NPS	28.94 sq in	[T] 6.07 in	2.246 in	15 - 1050 psi	Steam	VIII Div. 1
					15 - 1480 psi	Air	VIII Div. 1
10 NPS	14 NPS	44.18 sq in	[V] 7.5 in	2.775 in	15 - 500 psi	Air	VIII Div. 1
						Steam	VIII Div. 1
12 NPS	16 NPS	63.62 sq in	[W] 9 in	3.33 in	15 - 500 psi	Air	VIII Div. 1
						Steam	VIII Div. 1
14 NPS	18 NPS	86.59 sq in	[Y] 10.68 in	3.951 in	15 - 500 psi	Air	VIII Div. 1
						Steam	VIII Div. 1
16 NPS	20 NPS	95.38 sq in	[Z] 11.02 in	4.077 in	15 - 500 psi	Air	VIII Div. 1
						Steam	VIII Div. 1
		113.1 sq in	[Z2] 12 in	4.44 in	15 - 500 psi	Air	VIII Div. 1
						Steam	VIII Div. 1
18 NPS	24 NPS	143.1 sq in	[A] 13.498 in	4.994 in	15 - 500 psi	Air	VIII Div. 1
						Steam	VIII Div. 1
20 NPS	24 NPS	176.7 sq in	[B] 15 in	5.55 in	15 - 500 psi	Air	VIII Div. 1
						Steam	VIII Div. 1
		227 sq in	[B2] 17 in	6.29 in	15 - 500 psi	Air	VIII Div. 1
						Steam	VIII Div. 1

Certification Number: **89063** Design Series or catalog number **JSV-PF100 (Liquid)**

Type Classification: **Pilot Operated Pressure Relief Valve**

Capacity Tests: **Sec. VIII Div. 1 at National Board T L (Worthington) on May 23, 2012**

Method of Establishing Relieving Capacity: **Flow Capacity, K**

Certified Value: **.795 Unitless**

Test Medium: **Water**

Certified Medium: **Liquid**

Set Pressure Definition: **First Steady Stream**

Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
1 - 1.5 NPS	2 NPS	0.15 sq in	[D] 0.437 in	0.162 in	15 - 6170 psi	Water	VIII Div. 1
		0.225 sq in	[E] 0.535 in	0.198 in	15 - 6170 psi	Water	VIII Div. 1
		0.371 sq in	[F] 0.687 in	0.254 in	15 - 6170 psi	Water	VIII Div. 1
1.5 - 2 NPS	2, 3 NPS	0.559 sq in	[G] 0.844 in	0.312 in	15 - 6170 psi	Water	VIII Div. 1
		0.873 sq in	[H] 1.054 in	0.39 in	15 - 6170 psi	Water	VIII Div. 1
2 - 3 NPS	3, 4 NPS	1.43 sq in	[J] 1.35 in	0.5 in	15 - 6170 psi	Water	VIII Div. 1
3 NPS	4 NPS	2.042 sq in	[K] 1.612 in	0.596 in	15 - 3705 psi	Water	VIII Div. 1
3 - 4 NPS	4, 6 NPS	3.17 sq in	[L] 2.009 in	0.743 in	15 - 3705 psi	Water	VIII Div. 1
		4 sq in	[M] 2.257 in	0.835 in	15 - 1480 psi	Water	VIII Div. 1
4 NPS	6 NPS	4.822 sq in	[N] 2.487 in	0.917 in	15 - 1480 psi	Water	VIII Div. 1
		7.087 sq in	[P] 3.004 in	1.111 in	15 - 1480 psi	Water	VIII Div. 1
6 NPS	8 NPS	12.27 sq in	[Q] 3.952 in	1.462 in	15 - 1480 psi	Water	VIII Div. 1
		17.78 sq in	[R] 4.758 in	1.76 in	15 - 1480 psi	Water	VIII Div. 1
8 NPS	10 NPS	28.94 sq in	[T] 6.07 in	2.246 in	15 - 1480 psi	Water	VIII Div. 1
10 NPS	14 NPS	44.18 sq in	[V] 7.5 in	2.775 in	15 - 500 psi	Water	VIII Div. 1
12 NPS	16 NPS	63.62 sq in	[W] 9 in	3.33 in	15 - 500 psi	Water	VIII Div. 1
14 NPS	18 NPS	86.59 sq in	[Y] 10.68 in	3.951 in	15 - 500 psi	Water	VIII Div. 1
16 NPS	20 NPS	95.38 sq in	[Z] 11.02 in	4.077 in	15 - 500 psi	Water	VIII Div. 1
		113.1 sq in	[Z2] 12 in	4.44 in	15 - 500 psi	Water	VIII Div. 1
18 NPS	24 NPS	143.1 sq in	[A] 13.498 in	4.994 in	15 - 500 psi	Water	VIII Div. 1
20 NPS	24 NPS	176.7 sq in	[B] 15 in	5.55 in	15 - 500 psi	Water	VIII Div. 1
		227 sq in	[B2] 17 in	6.29 in	15 - 500 psi	Water	VIII Div. 1

location: 37, Sanmakgongdanbuk 10-gil, Yangsan-si, Gyeongsangnam-do 50567 South Korea

Certification Number: **89074** Design Series or catalog number **JSV-FF200**

Type Classification: **Safety Valve**Capacity Tests: **Sec. I at National Board T L (Worthington) on June 25, 2014**Method of Establishing Relieving Capacity: **Flow Capacity, K**Certified Value: **.869 Unitless**Test Medium: **Steam**Certified Medium: **Steam**Set Pressure Definition: **Pop**Blowdown: **Adjustable**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
1 - 1.5 NPS	2, 3 NPS	0.439 sq in	0.748 in	0.187 in	15 - 4750 psi	Steam	I
1.25 - 1.5 NPS	2.5, 3 NPS	0.701 sq in	0.945 in	0.236 in	15 - 4750 psi	Steam	I
1.5 - 2 NPS	2.5-4 NPS	1.095 sq in	1.181 in	0.295 in	15 - 4750 psi	Steam	I
2 - 3 NPS	3-6 NPS	1.758 sq in	1.496 in	0.374 in	15 - 5020 psi	Steam	I
2.5 - 3 NPS	4-6 NPS	2.922 sq in	1.929 in	0.482 in	15 - 4750 psi	Steam	I
3 - 4 NPS	5-8 NPS	4.531 sq in	2.402 in	0.601 in	15 - 3000 psi	Steam	I
4 NPS	6-8 NPS	7.031 sq in	2.992 in	0.748 in	15 - 3000 psi	Steam	I
5 - 6 NPS	8-10 NPS	10.986 sq in	3.74 in	0.935 in	15 - 2000 psi	Steam	I
6 NPS	8-10 NPS	12.566 sq in	4 in	1 in	15 - 2000 psi	Steam	I
6 - 8 NPS	8-10 NPS	16.103 sq in	4.528 in	1.132 in	15 - 2000 psi	Steam	I
8 NPS	10-12 NPS	27.395 sq in	5.906 in	1.477 in	15 - 1500 psi	Steam	I
10 NPS	14 NPS	39.447 sq in	7.087 in	1.772 in	15 - 500 psi	Steam	I
12 NPS	16 NPS	55.748 sq in	8.425 in	2.107 in	15 - 500 psi	Steam	I
14 NPS	18 NPS	76.078 sq in	9.842 in	2.461 in	15 - 500 psi	Steam	I

Certification Number: **89085** Design Series or catalog number **JSV-FT100**

Type Classification: **Safety Relief Valve**Capacity Tests: **Sec. VIII Div. 1 at National Board T L (Worthington) on February 10, 2015**Method of Establishing Relieving Capacity: **Flow Capacity, Slope**Certified Value: **1.74 SCFM/PSIA**Certified Value (alternate medium): **4.91 PPH/PSIA**Test Medium: **Steam & Air/Gas**Certified Medium: **Steam & Air/Gas**Special Service: **None**Set Pressure Definition: **Pop**Blowdown: **Adjustable by Single Ring**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
0.5 - 1 NPS	1 NPS	0.11 sq in	[D] 0.374 in	0.094 in	15 - 2500 psi	Steam	VIII Div. 1
					15 - 4500 psi	Air	VIII Div. 1

location: 37, Sanmakgongdanbuk 10-gil, Yangsan-si, Gyeongsangnam-do 50567 South Korea

Certification Number: **89096** Design Series or catalog number: **JSV-FT100 (Liquid)**

Type Classification: **Relief Valve**Capacity Tests: **Sec. VIII Div. 1 at National Board T L (Worthington) on February 10, 2015**Method of Establishing Relieving Capacity: **Flow Capacity, Flow Factor**Certified Value: **2.99 GPM/SQ.RT. PSID**Test Medium: **Water**Certified Medium: **Liquid**Special Service: **None**Set Pressure Definition: **First Steady Stream**Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
0.5 - 1 NPS	1 NPS	0.11 sq in	[D] 0.374 in	0.094 in	15 - 4500 psi	Water	VIII Div. 1

Kunshan Xinxinpeng Mechanical Co. Ltd (KUN)

NB#: 14915

location: No. 28 Daji Road, Dashi Street

Acceptable Abbrev.: XXP

Kunshan Xinxinpeng Mechanical Co. Ltd (KUN)

location: No. 28 Daji Road, Dashi Street

Acceptable Abbrev.: XXP

Certification Number: **14915** Design Series or catalog number: **AX-15**

Type Classification: **Safety Relief Valve**Capacity Tests: **Sec. VIII Div. 1 at National Board T L (Worthington) on August 31, 2006**Method of Establishing Relieving Capacity: **Flow Capacity, Slope**Certified Value: **.328 SCFM/PSIA**Test Medium: **Air**Certified Medium: **Air**Set Pressure Definition: **Pop**Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
0.25 NPS	Side	0.0214 sq in	4.2 mm	1.05 mm	70 - 230 psi	Air	VIII Div. 1

LESER GmbH & Company KG (LES)

NB#: 37022

location: Itzehoer Strasse 63-65, Hohenwestedt 24594 Germany

LESER GmbH & Company KG (LES)

location: Itzehoer Strasse 63-65, Hohenwestedt 24594 Germany

Certification
Number: **37022**Design Series
or catalog number **488**Type Classification: **Safety Relief Valve**Capacity Tests: **Sec. VIII Div. 1 at National Board T L (Picaway) on May 31, 1990**Method of Establishing Relieving Capacity: **Flow Capacity, K**Certified Value: **.721 Unitless**Test Medium: **Steam & Air/Gas**Certified Medium: **Steam & Air/Gas**Special Service: **None**Set Pressure Definition: **Initial Audible Discharge**Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
1 NPS	1.5 NPS	0.644 sq in	0.906 in	0.256 in	20 - 232 psi	Air	VIII Div. 1
						Steam	VIII Div. 1
1.5 NPS	2.5 NPS	1.667 sq in	1.457 in	0.416 in	20 - 232 psi	Air	VIII Div. 1
						Steam	VIII Div. 1
2 NPS	3 NPS	2.576 sq in	1.811 in	0.512 in	20 - 232 psi	Air	VIII Div. 1
						Steam	VIII Div. 1
2.5 NPS	4 NPS	4.383 sq in	2.362 in	0.674 in	20 - 232 psi	Air	VIII Div. 1
						Steam	VIII Div. 1
3 NPS	5 NPS	6.666 sq in	2.913 in	0.832 in	20 - 232 psi	Air	VIII Div. 1
						Steam	VIII Div. 1
4 NPS	6 NPS	10.3 sq in	3.622 in	1.035 in	20 - 232 psi	Air	VIII Div. 1
						Steam	VIII Div. 1

Certification
Number: **37033**Design Series
or catalog number **488 (Liquids)**Type Classification: **Relief Valve**Capacity Tests: **Sec. VIII Div. 1 at National Board T L (Picaway) on June 01, 1990**Method of Establishing Relieving Capacity: **Flow Capacity, K**Certified Value: **0.472 Unitless**Test Medium: **Water**Certified Medium: **Liquid**Set Pressure Definition: **First Steady Stream**Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
1 NPS	1.5 NPS	0.644 sq in	0.906 in	0.216 in	15 - 232 psi	Water	VIII Div. 1
1.5 NPS	2.5 NPS	1.667 sq in	1.457 in	0.347 in	15 - 232 psi	Water	VIII Div. 1
2 NPS	3 NPS	2.576 sq in	1.811 in	0.431 in	15 - 232 psi	Water	VIII Div. 1
2.5 NPS	4 NPS	4.383 sq in	2.362 in	0.562 in	15 - 232 psi	Water	VIII Div. 1
3 NPS	5 NPS	6.666 sq in	2.913 in	0.693 in	15 - 232 psi	Water	VIII Div. 1
4 NPS	6 NPS	10.3 sq in	3.622 in	0.862 in	15 - 232 psi	Water	VIII Div. 1

Certification
Number: **37044**Design Series
or catalog number **441/442/444**Type Classification: **Safety Relief Valve**Capacity Tests: **Sec. VIII Div. 1 at Leser GmbH on February 17, 1997**Method of Establishing Relieving Capacity: **Flow Capacity, K**Certified Value: **.699 Unitless**Test Medium: **Steam & Air/Gas**Certified Medium: **Steam & Air/Gas**Set Pressure Definition: **Initial Audible Discharge**Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
1 NPS	1.5,2 NPS	0.644 sq in	0.906 in	0.277 in	15 - 715 psi	Air	VIII
						Steam	VIII
1.25 - 1.5 NPS	2 NPS	1.024 sq in	1.142 in	0.349 in	15 - 715 psi	Air	VIII
						Steam	VIII
1.5 NPS	2.5,3 NPS	1.667 sq in	1.457 in	0.446 in	15 - 715 psi	Air	VIII
						Steam	VIII
2 NPS	3 NPS	2.576 sq in	1.811 in	0.554 in	15 - 715 psi	Air	VIII
						Steam	VIII
2.5 - 3 NPS	4 NPS	4.383 sq in	2.362 in	0.723 in	15 - 500 psi	Air	VIII
						Steam	VIII
3 NPS	5 NPS	6.666 sq in	2.913 in	0.891 in	15 - 500 psi	Air	VIII
						Steam	VIII
4 NPS	6 NPS	10.304 sq in	3.622 in	1.108 in	15 - 350 psi	Air	VIII
						Steam	VIII
5 NPS	8 NPS	11.692 sq in	3.858 in	1.181 in	15 - 315 psi	Air	VIII
						Steam	VIII
6 NPS	10 NPS	19.021 sq in	4.921 in	1.506 in	15 - 290 psi	Air	VIII
						Steam	VIII
8 NPS	12 NPS	33.143 sq in	6.496 in	1.988 in	15 - 430 psi	Air	VIII
						Steam	VIII
10 NPS	14 NPS	48.695 sq in	7.874 in	2.409 in	15 - 300 psi	Air	VIII
						Steam	VIII
12 NPS	16 NPS	67.229 sq in	9.252 in	2.831 in	15 - 220 psi	Air	VIII
						Steam	VIII
16 NPS	20 NPS	105.94 sq in	11.614 in	3.554 in	15 - 150 psi	Air	VIII
						Steam	VIII

Certification Number: **37055** Design Series or catalog number **441/442/444 liquids**

Type Classification: **Relief Valve**

Capacity Tests: **Sec. VIII Div. 1 at Leser GmbH on September 06, 1996**

Method of Establishing Relieving Capacity: **Flow Capacity, K**

Certified Value: **.521 Unitless**

Test Medium: **Water**

Certified Medium: **Liquid**

Set Pressure Definition: **First Steady Stream**

Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
1 NPS	1.5,2 NPS	0.644 sq in	0.906 in	0.277 in	15 - 715 psi	Water	VIII
1.25 - 1.5 NPS	2 NPS	1.024 sq in	1.142 in	0.349 in	15 - 715 psi	Water	VIII
1.5 NPS	2.5,3 NPS	1.667 sq in	1.457 in	0.446 in	15 - 715 psi	Water	VIII
2 NPS	3 NPS	2.576 sq in	1.811 in	0.554 in	15 - 715 psi	Water	VIII
2.5 - 3 NPS	4 NPS	4.383 sq in	2.362 in	0.723 in	15 - 500 psi	Water	VIII
3 NPS	5 NPS	6.666 sq in	2.913 in	0.891 in	15 - 500 psi	Water	VIII
4 NPS	6 NPS	10.304 sq in	3.622 in	1.108 in	15 - 350 psi	Water	VIII
5 NPS	8 NPS	11.692 sq in	3.858 in	1.181 in	15 - 315 psi	Water	VIII
6 NPS	10 NPS	19.021 sq in	4.921 in	1.506 in	15 - 290 psi	Water	VIII
8 NPS	12 NPS	33.143 sq in	6.496 in	1.988 in	15 - 430 psi	Water	VIII
10 NPS	14 NPS	48.695 sq in	7.874 in	2.409 in	15 - 300 psi	Water	VIII
12 NPS	16 NPS	67.229 sq in	9.252 in	2.831 in	15 - 220 psi	Water	VIII
16 NPS	20 NPS	105.94 sq in	11.614 in	3.554 in	15 - 150 psi	Water	VIII

Certification Number: **37066** Design Series or catalog number **455/456/457/458 Group 1**

Type Classification: **Safety Relief Valve**

Capacity Tests: **Sec. VIII Div. 1 at National Board T L (Worthington) on February 17, 1997**

Method of Establishing Relieving Capacity: **Flow Capacity, K**

Certified Value: **.798 Unitless**

Test Medium: **Steam & Air/Gas**

Certified Medium: **Steam & Air/Gas**

Set Pressure Definition: **Initial Audible Discharge**

Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
1 NPS	2 NPS	0.274 sq in	0.591 in	0.197 in	35 - 1928 psi	Steam	VIII
					35 - 5715 psi	Air	VIII
		0.487 sq in	0.787 in	0.256 in	35 - 2571 psi	Steam	VIII
					35 - 3571 psi	Air	VIII
2 NPS	3 NPS	1.096 sq in	1.181 in	0.354 in	35 - 2392 psi	Steam	VIII
					35 - 3571 psi	Air	VIII
		1.948 sq in	1.575 in	0.551 in	35 - 1630 psi	Air	VIII
						Steam	VIII
3 NPS	4 NPS	1.948 sq in	1.575 in	0.551 in	35 - 2115 psi	Air	VIII
						Steam	VIII
4 NPS	6 NPS	3.043 sq in	1.969 in	0.866 in	35 - 2205 psi	Steam	VIII
					35 - 3290 psi	Air	VIII
		6.666 sq in	2.362 in	0.866 in	35 - 2130 psi	Air	VIII
						Steam	VIII
			2.913 in	0.827 in	35 - 1100 psi	Air	VIII
						Steam	VIII

location: Itzehoe Strasse 63-65, Hohenwestedt 24594 Germany

Certification Number: **37077** Design Series or catalog number **455/456/457/458 Group 1 (Liq)**

Type Classification: Relief Valve

Capacity Tests: Sec. VIII Div. 1 at National Board T L (Worthington) on January 30, 1997

Method of Establishing Relieving Capacity: Flow Capacity, K

Certified Value: .572 Unitless

Test Medium: Water

Certified Medium: Liquid

Set Pressure Definition: First Steady Stream

Blowdown: Fixed

Scope of Nominal Size and Set Pressure Ranges:

Inlet Size	Outlet Size	Flow Area	Orifice [designator] diameter	Lift	Set Pressure Range	Media	Code Section
1 NPS	2 NPS	0.274 sq in	0.591 in	0.197 in	35 - 5715 psi	Water	VIII
		0.487 sq in	0.787 in	0.256 in	35 - 2571 psi	Water	VIII
2 NPS	3 NPS	1.096 sq in	1.181 in	0.654 in	35 - 3571 psi	Water	VIII
		1.948 sq in	1.575 in	0.551 in	35 - 1630 psi	Water	VIII
3 NPS	4 NPS	3.043 sq in	1.969 in	0.709 in	35 - 2115 psi	Water	VIII
4 NPS	6 NPS	3.043 sq in	1.969 in	0.866 in	35 - 3290 psi	Water	VIII
		4.383 sq in	2.362 in	0.866 in	35 - 2130 psi	Water	VIII
		6.666 sq in	2.913 in	0.827 in	35 - 1100 psi	Water	VIII

Certification Number: **37088** Design Series or catalog number **455/456/457/458 Group 2**

Type Classification: Safety Relief Valve

Capacity Tests: Sec. VIII Div. 1 at National Board T L (Worthington) on February 17, 1997

Method of Establishing Relieving Capacity: Flow Capacity, K

Certified Value: .754 Unitless

Test Medium: Steam & Air/Gas

Certified Medium: Steam & Air/Gas

Set Pressure Definition: Initial Audible Discharge

Blowdown: Fixed

Scope of Nominal Size and Set Pressure Ranges:

Inlet Size	Outlet Size	Flow Area	Orifice [designator] diameter	Lift	Set Pressure Range	Media	Code Section
3 NPS	4 NPS	4.383 sq in	2.362 in	0.866 in	35 - 1232 psi	Air	VIII
						Steam	VIII
4 NPS	6 NPS	9.427 sq in	3.465 in	1.299 in	35 - 700 psi	Air	VIII
						Steam	VIII
6 NPS	10 NPS	14.73 sq in	4.331 in	1.22 in	35 - 575 psi	Air	VIII
						Steam	VIII

Certification Number: **37099** Design Series or catalog number **455/456/457/458 Group 2 (Liq)**

Type Classification: Relief Valve

Capacity Tests: Sec. VIII Div. 1 at National Board T L (Worthington) on January 30, 1997

Method of Establishing Relieving Capacity: Flow Capacity, K

Certified Value: .479 Unitless

Test Medium: Water

Certified Medium: Liquid

Set Pressure Definition: First Steady Stream

Blowdown: Fixed

Scope of Nominal Size and Set Pressure Ranges:

Inlet Size	Outlet Size	Flow Area	Orifice [designator] diameter	Lift	Set Pressure Range	Media	Code Section
3 NPS	4 NPS	4.383 sq in	2.362 in	0.866 in	35 - 1232 psi	Water	VIII
4 NPS	6 NPS	9.427 sq in	3.465 in	1.299 in	35 - 700 psi	Water	VIII
6 NPS	10 NPS	14.73 sq in	4.331 in	1.22 in	35 - 575 psi	Water	VIII

Location: Itzehoe Strasse 63-65, Hohenwestedt 24594 Germany

Certification Number: **37101** Design Series or catalog number **459/462 liquids**

Type Classification: **Relief Valve**Capacity Tests: **Sec. VIII Div. 1 at National Board T L (Worthington) on January 29, 1997**Method of Establishing Relieving Capacity: **Flow Capacity, K**Certified Value: **.566 Unitless**Test Medium: **Water**Certified Medium: **Liquid**Set Pressure Definition: **First Steady Stream**Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
0.5 - 1 NPS	1-1.5 NPS	0.0438 sq in	0.236 in	0.043 in	15 - 12325 psi	Water	VIII Div. 1
0.5 - 1.5 NPS	1-1.5 NPS	0.0986 sq in	0.354 in	0.08 in	15 - 6175 psi	Water	VIII Div. 1
0.75 - 1.5 NPS	1-1.5 NPS	0.206 sq in	0.512 in	0.118 in	15 - 2940 psi	Water	VIII Div. 1
1 - 2 NPS	1.5-2 NPS	0.373 sq in	0.689 in	0.159 in	15 - 1470 psi	Water	VIII Div. 1

Certification Number: **37112** Design Series or catalog number **459/462**

Type Classification: **Safety Relief Valve**Capacity Tests: **Sec. VIII Div. 1 at National Board T L (Worthington) on February 17, 1997**Method of Establishing Relieving Capacity: **Flow Capacity, K**Certified Value: **.811 Unitless**Test Medium: **Steam & Air/Gas**Certified Medium: **Steam & Air/Gas**Set Pressure Definition: **Initial Audible Discharge**Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
0.5 - 1 NPS	1-1.5 NPS	0.0438 sq in	0.236 in	0.043 in	15 - 12325 psi	Air	VIII Div. 1
					15 - 2900 psi	Steam	VIII Div. 1
0.5 - 1.5 NPS	1-1.5 NPS	0.0986 sq in	0.354 in	0.08 in	15 - 2068 psi	Steam	VIII Div. 1
					15 - 6175 psi	Air	VIII Div. 1
0.75 - 1.5 NPS	1-1.5 NPS	0.206 sq in	0.512 in	0.118 in	15 - 1965 psi	Steam	VIII Div. 1
					15 - 2940 psi	Air	VIII Div. 1
1 - 2 NPS	1.5 - 2 NPS	0.373 sq in	0.689 in	0.159 in	15 - 1470 psi	Air	VIII Div. 1
						Steam	VIII Div. 1

Certification Number: **37123** Design Series or catalog number **447 Air/Gas**

Type Classification: **Safety Relief Valve**Capacity Tests: **Sec. VIII Div. 1 at National Board T L (Worthington) on May 05, 1997**Method of Establishing Relieving Capacity: **Flow Capacity, K**Certified Value: **.617 Unitless**Test Medium: **Air/Gas**Certified Medium: **Air/Gas**Set Pressure Definition: **Initial Audible Discharge**Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
1 NPS	2 NPS	0.644 sq in	0.905 in	0.19 in	15 - 240 psi	Air	VIII
2 NPS	3 NPS	2.576 sq in	1.811 in	0.39 in	15 - 240 psi	Air	VIII
3 NPS	4 NPS	4.383 sq in	2.362 in	0.52 in	15 - 240 psi	Air	VIII
4 NPS	6 NPS	10.304 sq in	3.622 in	0.91 in	15 - 240 psi		VIII

Location: Itzehoe Strasse 63-65, Hohenwestedt 24594 Germany

Certification Number: **37134** Design Series or catalog number: **447 Liquid**

Type Classification: Relief Valve

Capacity Tests: Sec. VIII Div. 1 at National Board T L (Worthington) on May 05, 1997

Method of Establishing Relieving Capacity: Flow Capacity, K

Certified Value: .431 Unitless

Test Medium: Water

Certified Medium: Liquid

Set Pressure Definition: First Steady Stream

Blowdown: Fixed

Scope of Nominal Size and Set Pressure Ranges:

Inlet Size	Outlet Size	Flow Area	Orifice [designator] diameter	Lift	Set Pressure Range	Media	Code Section
1 NPS	2 NPS	0.644 sq in	0.906 in	0.19 in	15 - 240 psi	Water	VIII
2 NPS	3 NPS	2.576 sq in	1.811 in	0.39 in	15 - 240 psi	Water	VIII
3 NPS	4 NPS	4.383 sq in	2.362 in	0.52 in	15 - 240 psi	Water	VIII
4 NPS	6 NPS	10.304 sq in	3.622 in	0.91 in	15 - 240 psi	Water	VIII

Certification Number: **37145** Design Series or catalog number: **483, 484, 485 (1")**

Type Classification: Safety Relief Valve

Capacity Tests: Sec. VIII Div. 1 at Leser Gmbh on January 04, 2001

Method of Establishing Relieving Capacity: Flow Capacity, Slope

Certified Value: 1.96 SCFM/PSIA

Certified Value (alternate medium): 5.5 PPH/PSIA

Test Medium: Steam & Air/Gas

Certified Medium: Steam & Air/Gas

Special Service: None

Set Pressure Definition: Initial Audible Discharge

Blowdown: Fixed

Scope of Nominal Size and Set Pressure Ranges:

Inlet Size	Outlet Size	Flow Area	Orifice [designator] diameter	Lift	Set Pressure Range	Media	Code Section
1 NPS	1.5 NPS	0.127 sq in	0.512 in	0.079 in	15 - 232 psi	Air	VIII Div. 1
						Steam	VIII Div. 1

Certification Number: **37156** Design Series or catalog number: **483, 484, 485 (1") Liquids**

Type Classification: Relief Valve

Capacity Tests: Sec. VIII Div. 1 at Leser Gmbh on January 08, 2001

Method of Establishing Relieving Capacity: Flow Capacity, Flow Factor

Certified Value: 2.96 GPM/SQ.RT. PSID

Test Medium: Water

Certified Medium: Liquid

Special Service: None

Set Pressure Definition: First Steady Stream

Blowdown: Fixed

Scope of Nominal Size and Set Pressure Ranges:

Inlet Size	Outlet Size	Flow Area	Orifice [designator] diameter	Lift	Set Pressure Range	Media	Code Section
1 NPS	1.5 NPS	0.157 sq in	0.512 in	0.098 in	15 - 232 psi	Water	VIII Div. 1

location: Itzehoe Strasse 63-65, Hohenwestedt 24594 Germany

Certification Number: **37167** Design Series or catalog number **483, 484, 485 (1.5")**

Type Classification: **Safety Relief Valve**Capacity Tests: **Sec. VIII Div. 1 at Leser GmbH on February 01, 2001**Method of Establishing Relieving Capacity: **Flow Capacity, Slope**Certified Value: **4.96 SCFM/PSIA**Certified Value (alternate medium): **13.93 PPH/PSIA**Test Medium: **Steam & Air/Gas**Certified Medium: **Steam & Air/Gas**Special Service: **None**Set Pressure Definition: **Initial Audible Discharge**Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
1.5 NPS	2 NPS	0.427 sq in	0.984 in	0.139 in	15 - 232 psi	Air	VIII Div. 1
						Steam	VIII Div. 1

Certification Number: **37178** Design Series or catalog number **483, 484, 485 (1.5") Liquids**

Type Classification: **Relief Valve**Capacity Tests: **Sec. VIII Div. 1 at Leser GmbH on May 01, 2001**Method of Establishing Relieving Capacity: **Flow Capacity, Flow Factor**Certified Value: **7.46 GPM/SQ.RT. PSID**Test Medium: **Water**Certified Medium: **Liquid**Special Service: **None**Set Pressure Definition: **First Steady Stream**Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
1.5 NPS	2 NPS	0.485 sq in	0.984 in	0.157 in	15 - 232 psi	Water	VIII Div. 1

Certification Number: **37189** Design Series or catalog number **437 (Liquids)**

Type Classification: **Relief Valve**Capacity Tests: **Sec. VIII Div. 1 at Leser GmbH on November 22, 2001**Method of Establishing Relieving Capacity: **Flow Capacity, Flow Factor**Certified Value: **1.54 GPM/SQ.RT. PSID**Test Medium: **Water**Certified Medium: **Liquid**Set Pressure Definition: **First Steady Stream**Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
0.5 - 1 NPS	.5 - 1 NPS	0.082 sq in	0.394 in	0.055 in	15 - 2610 psi	Water	VIII Div. 1

location: Itzehoe Strasse 63-65, Hohenwestedt 24594 Germany

Certification Number: **37190** Design Series or catalog number: **438 Sub Types 481, 439**

Type Classification: **Safety Relief Valve**Capacity Tests: **Sec. VIII Div. 1 at Leser GmbH on November 12, 2001**Method of Establishing Relieving Capacity: **Flow Capacity, Slope**Certified Value: **0.904 SCFM/PSIA**Certified Value (alternate medium): **2.53 PPH/PSIA**Test Medium: **Air/Gas**Certified Medium: **Steam & Air/Gas**Set Pressure Definition: **Initial Audible Discharge**Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
0.375 - 1 NPS	.5 - 1 NPS	0.064 sq in	0.394 in	0.043 in	15 - 2610 psi	Air	VIII Div. 1
						Steam	VIII Div. 1

Certification Number: **37202** Design Series or catalog number: **438 Sub Types 481, 439, Liquids**

Type Classification: **Safety Relief Valve**Capacity Tests: **Sec. VIII Div. 1 at Leser GmbH on November 23, 2001**Method of Establishing Relieving Capacity: **Flow Capacity, Flow Factor**Certified Value: **1.49 GPM/SQ.RT. PSID**Test Medium: **Water**Certified Medium: **Liquid**Set Pressure Definition: **First Steady Stream**Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
0.5 - 1 NPS	0.5-1 NPS	0.064 sq in	0.394 in	0.043 in	15 - 2610 psi	Water	VIII Div. 1

Certification Number: **37213** Design Series or catalog number: **437**

Type Classification: **Safety Relief Valve**Capacity Tests: **Sec. VIII Div. 1 at Leser GmbH on November 08, 2001**Method of Establishing Relieving Capacity: **Flow Capacity, Slope**Certified Value: **1.02 SCFM/PSIA**Certified Value (alternate medium): **2.87 PPH/PSIA**Test Medium: **Steam & Air/Gas**Certified Medium: **Steam & Air/Gas**Set Pressure Definition: **Initial Audible Discharge**Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
0.375 - 1 NPS	.5 - 1 NPS	0.082 sq in	0.394 in	0.055 in	15 - 2610 psi	Air	VIII Div. 1
						Steam	VIII Div. 1

Certification
Number: **37224**Design Series
or catalog number **526**Type Classification: **Safety Relief Valve**Capacity Tests: **Sec. VIII Div. 1 at Leser GmbH on November 22, 2001**Method of Establishing Relieving Capacity: **Flow Capacity, K**Certified Value: **.801 Unitless**Test Medium: **Steam & Air/Gas**Certified Medium: **Steam & Air/Gas**Special Service: **None**Set Pressure Definition: **Initial Audible Discharge**Blowdown: **Adjustable**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
1 - 1.5 NPS	2,3 NPS	0.239 sq in	[E] 0.551 in	0.138 in	15 - 2900 psi	Steam	VIII Div. 1
					15 - 6000 psi	Air	VIII Div. 1
1.5 NPS	2,3 NPS	0.394 sq in	[F] 0.709 in	0.217 in	15 - 2900 psi	Steam	VIII Div. 1
					15 - 5000 psi	Air	VIII Div. 1
1.5 - 2 NPS	3 NPS	0.616 sq in	[G] 0.886 in	0.268 in	15 - 2900 psi	Steam	VIII Div. 1
					15 - 3705 psi	Air	VIII Div. 1
		0.975 sq in	[H] 1.114 in	0.323 in	15 - 2750 psi	Air	VIII Div. 1
						Steam	VIII Div. 1
2 - 3 NPS	3,4 NPS	1.578 sq in	[J] 1.417 in	0.453 in	15 - 2700 psi	Air	VIII Div. 1
						Steam	VIII Div. 1
3 NPS	4,6 NPS	2.251 sq in	[K] 1.693 in	0.532 in	15 - 2900 psi	Steam	VIII Div. 1
					15 - 3700 psi	Air	VIII Div. 1
3 - 4 NPS	4,6 NPS	3.484 sq in	[L] 2.106 in	0.669 in	15 - 1500 psi	Air	VIII Div. 1
						Steam	VIII Div. 1
4 NPS	6 NPS	4.426 sq in	[M] 2.374 in	0.768 in	15 - 1100 psi	Air	VIII Div. 1
						Steam	VIII Div. 1
		5.302 sq in	[N] 2.598 in	0.827 in	15 - 2760 psi	Air	VIII Div. 1
						Steam	VIII Div. 1
		7.79 sq in	[P] 3.15 in	1.036 in	15 - 1000 psi	Air	VIII Div. 1
						Steam	VIII Div. 1
6 NPS	8 NPS	13.548 sq in	[Q] 4.154 in	1.248 in	15 - 1038.5 psi	Air	VIII Div. 1
						Steam	VIII Div. 1
		19.325 sq in	[R] 4.961 in	1.497 in	15 - 100 psi	Air	VIII Div. 1
						Steam	VIII Div. 1
	10 NPS	19.325 sq in	[R] 4.961 in	1.497 in	15 - 913.5 psi	Air	VIII Div. 1
						Steam	VIII Div. 1
8 NPS	10 NPS	31.749 sq in	[T] 6.358 in	1.931 in	15 - 522 psi	Air	VIII Div. 1
						Steam	VIII Div. 1

location: Itzehoe Strasse 63-65, Hohenwestedt 24594 Germany

Certification Number: **37235** Design Series or catalog number **526 (Liquids)**

Type Classification: **Relief Valve**Capacity Tests: **Sec. VIII Div. 1 at Leser GmbH on January 02, 2002**Method of Establishing Relieving Capacity: **Flow Capacity, K**Certified Value: **.579 Unitless**Test Medium: **Water**Certified Medium: **Liquid**Set Pressure Definition: **First Steady Stream**Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
1 - 1.5 NPS	2,3 NPS	0.239 sq in	[E] 0.551 in	0.138 in	15 - 6000 psi	Water	VIII Div. 1
1.5 NPS	2,3 NPS	0.394 sq in	[F] 0.709 in	0.217 in	15 - 5000 psi	Water	VIII Div. 1
1.5 - 2 NPS	3 NPS	0.616 sq in	[G] 0.886 in	0.268 in	15 - 3705 psi	Water	VIII Div. 1
		0.975 sq in	[H] 1.114 in	0.323 in	15 - 2750 psi	Water	VIII Div. 1
2 - 3 NPS	3,4 NPS	1.578 sq in	[J] 1.417 in	0.453 in	15 - 2700 psi	Water	VIII Div. 1
3 NPS	4,6 NPS	2.251 sq in	[K] 1.693 in	0.532 in	15 - 3700 psi	Water	VIII Div. 1
3 - 4 NPS	4,6 NPS	3.484 sq in	[L] 2.106 in	0.6698 in	15 - 1500 psi	Water	VIII Div. 1
4 NPS	6 NPS	4.426 sq in	[M] 2.374 in	0.768 in	15 - 1100 psi	Water	VIII Div. 1
		5.302 sq in	[N] 2.598 in	0.827 in	15 - 2760 psi	Water	VIII Div. 1
		7.79 sq in	[P] 3.15 in	1.036 in	15 - 1000 psi	Water	VIII Div. 1
6 NPS	8 NPS	13.548 sq in	[Q] 4.154 in	1.249 in	15 - 1038.5 psi	Water	VIII Div. 1
		19.325 sq in	[R] 4.961 in	1.497 in	15 - 100 psi	Water	VIII Div. 1
	10 NPS	19.325 sq in	[R] 4.961 in	1.497 in	15 - 914 psi	Water	VIII Div. 1
8 NPS	10 NPS	31.749 sq in	[T] 6.358 in	1.931 in	15 - 522 psi	Water	VIII Div. 1

Certification Number: **37246** Design Series or catalog number **526D**

Type Classification: **Safety Relief Valve**Capacity Tests: **Sec. VIII Div. 1 at Leser GmbH on March 04, 2002**Method of Establishing Relieving Capacity: **Flow Capacity, Slope**Certified Value: **1.99 SCFM/PSIA**Certified Value (alternate medium): **5.59 PPH/PSIA**Test Medium: **Air**Certified Medium: **Steam & Air/Gas**Set Pressure Definition: **Initial Audible Discharge**Blowdown: **Adjustable**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
1 - 1.5 NPS	2,3 NPS	0.121 sq in	[D] 0.551 in	0.0551 in	15 - 2900 psi	Steam	VIII Div. 1
					15 - 7975 psi	Air	VIII Div. 1

Certification Number: **37257** Design Series or catalog number **526D Liquids**

Type Classification: **Relief Valve**Capacity Tests: **Sec. VIII Div. 1 at Leser GmbH on March 04, 2002**Method of Establishing Relieving Capacity: **Flow Capacity, Flow Factor**Certified Value: **3.11 GPM/SQ.RT. PSID**Test Medium: **Water**Certified Medium: **Liquid**Set Pressure Definition: **First Steady Stream**Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
1 - 1.5 NPS	2,3 NPS	0.121 sq in	[D] 0.551 in	0.0551 in	15 - 7975 psi	Water	VIII Div. 1

Certification
Number: **37268**Design Series
or catalog number **820 (liquid) (821)**Type Classification: **Pilot Operated Pressure Relief Valve**Capacity Tests: **Sec. VIII Div. 1 at Leser GmbH on November 06, 2009**Method of Establishing Relieving Capacity: **Flow Capacity, K**Certified Value: **0.689 Unitless**Test Medium: **Water**Certified Medium: **Liquid**Special Service: **None**Set Pressure Definition: **First Steady Stream**Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
1 NPS	2 NPS	0.147 sq in	[D] 0.433 in	0.315 in	15 - 7250 psi	Water	VIII Div. 1
		0.263 sq in	[E] 0.579 in	0.315 in	15 - 7250 psi	Water	VIII Div. 1
		0.412 sq in	[F] 0.724 in	0.315 in	15 - 7250 psi	Water	VIII Div. 1
		0.644 sq in	[FB] 0.906 in	0.453 in	15 - 7250 psi	Water	VIII Div. 1
1.5 NPS	2 NPS	0.147 sq in	[D] 0.433 in	0.394 in	15 - 7250 psi	Water	VIII Div. 1
		0.263 sq in	[E] 0.579 in	0.394 in	15 - 7250 psi	Water	VIII Div. 1
		0.412 sq in	[F] 0.724 in	0.394 in	15 - 7250 psi	Water	VIII Div. 1
	3 NPS	0.678 sq in	[G] 0.929 in	0.472 in	15 - 7250 psi	Water	VIII Div. 1
		1.052 sq in	[H] 1.157 in	0.472 in	15 - 7250 psi	Water	VIII Div. 1
	2 NPS	1.142 sq in	[FB] 1.142 in	0.571 in	15 - 7250 psi	Water	VIII Div. 1
2 NPS	3 NPS	1.552 sq in	[FB] 1.406 in	0.709 in	15 - 7250 psi	Water	VIII Div. 1
		0.678 sq in	[G] 0.929 in	0.591 in	15 - 7250 psi	Water	VIII Div. 1
		1.052 sq in	[H] 1.157 in	0.591 in	15 - 7250 psi	Water	VIII Div. 1
		2.805 sq in	[FB] 1.89 in	0.866 in	15 - 7250 psi	Water	VIII Div. 1
2 - 3 NPS	3, 4 NPS	1.758 sq in	[J] 1.496 in	0.591 in	15 - 7250 psi	Water	VIII Div. 1
3 NPS	4 NPS	2.465 sq in	[K] 1.772 in	0.866 in	15 - 3750 psi	Water	VIII Div. 1
		3.818 sq in	[L] 2.205 in	0.866 in	15 - 3750 psi	Water	VIII Div. 1
		6.848 sq in	[FB] 2.953 in	1.339 in	15 - 3750 psi	Water	VIII Div. 1
4 NPS	6 NPS	3.818 sq in	[L] 2.205 in	0.787 in	15 - 3750 psi	Water	VIII Div. 1
		4.832 sq in	[M] 2.48 in	0.787 in	15 - 3750 psi	Water	VIII Div. 1
		5.796 sq in	[N] 2.717 in	0.787 in	15 - 3750 psi	Water	VIII Div. 1
		8.386 sq in	[P] 3.268 in	1.339 in	15 - 3750 psi	Water	VIII Div. 1
		10.987 sq in	[FB] 3.74 in	1.693 in	15 - 3750 psi	Water	VIII Div. 1
6 NPS	8 NPS	14.73 sq in	[Q] 4.331 in	2.165 in	15 - 1500 psi	Water	VIII Div. 1
		21.534 sq in	[R] 5.236 in	2.165 in	15 - 1500 psi	Water	VIII Div. 1
		24.547 sq in	[FB] 5.591 in	2.559 in	15 - 1500 psi	Water	VIII Div. 1
8 NPS	10 NPS	34.359 sq in	[T] 6.614 in	3.15 in	15 - 1500 psi	Water	VIII Div. 1
		39.443 sq in	[FB] 7.087 in	3.15 in	15 - 1500 psi	Water	VIII Div. 1

Certification Number: **37280** Design Series or catalog number **810/820 (811/821)**

Type Classification: Pilot Operated Pressure Relief Valve

Capacity Tests: Sec. VIII Div. 1 at Leser GmbH on October 31, 2009

Method of Establishing Relieving Capacity: Flow Capacity, K

Certified Value: 0.82 Unitless

Test Medium: Steam & Air/Gas

Certified Medium: Steam & Air/Gas

Special Service: None

Set Pressure Definition: Initial Audible Discharge

Blowdown: Adjustable and Fixed for Mod. Pilot

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
1 NPS	2 NPS	0.263 sq in	[E] 0.579 in	0.315 in	15 - 7250 psi	Air	VIII Div. 1
					15 - 740 psi	Steam	VIII Div. 1
		0.412 sq in	[F] 0.724 in	0.315 in	15 - 7250 psi	Air	VIII Div. 1
					15 - 740 psi	Steam	VIII Div. 1
		0.644 sq in	[FB] 0.906 in	0.453 in	15 - 7250 psi	Air	VIII Div. 1
					15 - 740 psi	Steam	VIII Div. 1
1.5 NPS	2 NPS	0.147 sq in	[D] 0.433 in	0.394 in	15 - 7250 psi	Air	VIII Div. 1
					15 - 740 psi	Steam	VIII Div. 1
		0.263 sq in	[E] 0.579 in	0.394 in	15 - 7250 psi	Air	VIII Div. 1
					15 - 740 psi	Steam	VIII Div. 1
		0.412 sq in	[F] 0.724 in	0.394 in	15 - 7250 psi	Air	VIII Div. 1
					15 - 740 psi	Steam	VIII Div. 1
	3 NPS	0.678 sq in	[G] 0.929 in	0.472 in	15 - 7250 psi	Air	VIII Div. 1
					15 - 740 psi	Steam	VIII Div. 1
	2 NPS	1.024 sq in	[FB] 1.142 in	0.571 in	15 - 7250 psi	Air	VIII Div. 1
					15 - 740 psi	Steam	VIII Div. 1
	3 NPS	1.052 sq in	[H] 1.157 in	0.472 in	15 - 7250 psi	Air	VIII Div. 1
					15 - 740 psi	Steam	VIII Div. 1
2 NPS	3 NPS	1.552 sq in	[FB] 1.406 in	0.709 in	15 - 7250 psi	Air	VIII Div. 1
					15 - 740 psi	Steam	VIII Div. 1
		0.678 sq in	[G] 0.929 in	0.591 in	15 - 7250 psi	Air	VIII Div. 1
					15 - 740 psi	Steam	VIII Div. 1
		1.052 sq in	[H] 1.157 in	0.591 in	15 - 7250 psi	Air	VIII Div. 1
					15 - 740 psi	Steam	VIII Div. 1
		2.805 sq in	[FB] 1.89 in	0.866 in	15 - 7250 psi	Air	VIII Div. 1
					15 - 740 psi	Steam	VIII Div. 1
2 - 3 NPS	3, 4 NPS	1.758 sq in	[J] 1.496 in	0.591 in	15 - 7250 psi	Air	VIII Div. 1
					15 - 740 psi	Steam	VIII Div. 1
3 NPS	4 NPS	2.465 sq in	[K] 1.772 in	0.866 in	15 - 3750 psi	Air	VIII Div. 1
					15 - 740 psi	Steam	VIII Div. 1
		3.818 sq in	[L] 2.205 in	0.866 in	15 - 3750 psi	Air	VIII Div. 1
					15 - 740 psi	Steam	VIII Div. 1
		6.848 sq in	[FB] 2.953 in	1.339 in	15 - 3750 psi	Air	VIII Div. 1
					15 - 740 psi	Steam	VIII Div. 1
4 NPS	6 NPS	3.818 sq in	[L] 2.205 in	0.787 in	15 - 3750 psi	Air	VIII Div. 1
					15 - 740 psi	Steam	VIII Div. 1
		4.832 sq in	[M] 2.48 in	0.787 in	15 - 3750 psi	Air	VIII Div. 1
					15 - 740 psi	Steam	VIII Div. 1
		5.796 sq in	[N] 2.717 in	0.787 in	15 - 3750 psi	Air	VIII Div. 1
					15 - 740 psi	Steam	VIII Div. 1
		8.386 sq in	[P] 3.268 in	1.339 in	15 - 3750 psi	Air	VIII Div. 1
					15 - 740 psi	Steam	VIII Div. 1
		10.987 sq in	[FB] 3.74 in	1.693 in	15 - 3750 psi	Air	VIII Div. 1
					15 - 740 psi	Steam	VIII Div. 1

<i>...Continued</i> Inlet Size	Outlet Size	Flow Area	Orifice [designator] diameter	Lift	Set Pressure Range	Media	Code Section
6 NPS	8 NPS	14.73 sq in	[Q] 4.331 in	2.165 in	15 - 1500 psi	Air	VIII Div. 1
					15 - 740 psi	Steam	VIII Div. 1
		21.534 sq in	[R] 5.236 in	2.165 in	15 - 1500 psi	Air	VIII Div. 1
					15 - 740 psi	Steam	VIII Div. 1
		24.547 sq in	[FB] 5.591 in	2.559 in	15 - 1500 psi	Air	VIII Div. 1
					15 - 740 psi	Steam	VIII Div. 1
8 NPS	10 NPS	34.359 sq in	[T] 6.614 in	3.15 in	15 - 1500 psi	Air	VIII Div. 1
					15 - 740 psi	Steam	VIII Div. 1
		39.443 sq in	[FB] 7.087 in	3.15 in	15 - 1500 psi	Air	VIII Div. 1
					15 - 740 psi	Steam	VIII Div. 1

Certification
Number: **37303**Design Series
or catalog number **526FB (Liquid)**Type Classification: **Safety Relief Valve**Capacity Tests: **Sec. VIII Div. 1 at Leser GmbH on April 14, 2014**Method of Establishing Relieving Capacity: **Flow Capacity, K**Certified Value: **.579 Unitless**Test Medium: **Water**Certified Medium: **Liquid**Special Service: **None**Set Pressure Definition: **First Steady Stream**Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

Inlet Size	Outlet Size	Flow Area	Orifice [designator] diameter	Lift	Set Pressure Range	Media	Code Section
1 - 1.5 in	2, 3 in	0.239 sq in	[E] 0.551 in	0.138 in	15 - 7758 psi	Water	VIII Div. 1
1.5 in	2, 3 in	0.394 sq in	[F] 0.709 in	0.217 in	15 - 9210 psi	Water	VIII Div. 1
1.5 - 2 in	3 in	0.616 sq in	[G] 0.886 in	0.267 in	15 - 3705 psi	Water	VIII Div. 1
		0.975 sq in	[H] 1.114 in	0.323 in	15 - 2750 psi	Water	VIII Div. 1
2 - 3 in	3, 4 in	1.578 sq in	[J] 1.417 in	0.453 in	15 - 2700 psi	Water	VIII Div. 1
3 in	4, 6 in	2.251 sq in	[K] 1.693 in	0.531 in	15 - 2220 psi	Water	VIII Div. 1
3 - 4 in	4, 6 in	3.484 sq in	[L] 2.106 in	0.669 in	15 - 1500 psi	Water	VIII Div. 1
4 in	6 in	4.426 sq in	[M] 2.374 in	0.846 in	15 - 1100 psi	Water	VIII Div. 1
		5.302 sq in	[N] 2.598 in	0.827 in	15 - 2760 psi	Water	VIII Div. 1
		7.79 sq in	[P] 3.15 in	1.035 in	15 - 1000 psi	Water	VIII Div. 1
6 in	8 in	13.548 sq in	[Q] 4.154 in	1.248 in	15 - 914 psi	Water	VIII Div. 1
	8,10 in	19.325 sq in	[R] 4.961 in	1.496 in	15 - 522 psi	Water	VIII Div. 1
	10 in	31.749 sq in	[T] 6.358 in	1.929 in	15 - 522 psi	Water	VIII Div. 1

location: Itzehoe Strasse 63-65, Hohenwestedt 24594 Germany

Certification
Number: **37314**Design Series
or catalog number **526FB**Type Classification: **Safety Relief Valve**Capacity Tests: **Sec. VIII Div. 1 at Leser GmbH on September 05, 2014**Method of Establishing Relieving Capacity: **Flow Capacity, K**Certified Value: **0.801 Unitless**Test Medium: **Air**Certified Medium: **Air/Gas**Special Service: **None**Set Pressure Definition: **Initial Audible Discharge**Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
1 - 1.5 in	2, 3 in	0.239 sq in	[E] 0.551 in	0.138 in	15 - 7758 psi	Air	VIII Div. 1
1.5 in	2, 3 in	0.394 sq in	[F] 0.709 in	0.216 in	15 - 9210 psi	Air	VIII Div. 1
1.5 - 2 in	3 in	0.616 sq in	[G] 0.616 in	0.268 in	15 - 3705 psi	Air	VIII Div. 1
		0.975 sq in	[H] 1.114 in	0.323 in	15 - 2750 psi	Air	VIII Div. 1
2 - 3 in	3, 4 in	1.578 sq in	[J] 1.417 in	0.453 in	15 - 2700 psi	Air	VIII Div. 1
3 in	4, 6 in	2.251 sq in	[K] 1.693 in	0.531 in	15 - 2220 psi	Air	VIII Div. 1
3 - 4 in	4, 6 in	3.484 sq in	[L] 2.106 in	0.669 in	15 - 1500 psi	Air	VIII Div. 1
4 in	6 in	4.426 sq in	[M] 2.374 in	0.846 in	15 - 1100 psi	Air	VIII Div. 1
		5.302 sq in	[N] 2.598 in	0.826 in	15 - 2760 psi	Air	VIII Div. 1
		7.79 sq in	[P] 3.15 in	1.035 in	15 - 1000 psi	Air	VIII Div. 1
6 in	8 in	13.548 sq in	[Q] 4.154 in	1.248 in	15 - 914 psi	Air	VIII Div. 1
	8, 10 in	19.325 sq in	[R] 4.961 in	1.496 in	15 - 522 psi	Air	VIII Div. 1
	10 in	31.749 sq in	[T] 6.358 in	1.929 in	15 - 522 psi	Air	VIII Div. 1

Certification
Number: **37325**Design Series
or catalog number **237, 237IC, 237CC**Type Classification: **Safety Relief Valve**Capacity Tests: **Sec. VIII Div. 1 at Leser GmbH on August 14, 2017**Method of Establishing Relieving Capacity: **Flow Capacity, Slope**Certified Value: **0.987 SCFM/PSIA**Certified Value (alternate medium): **2.773 PPH/PSIA**Test Medium: **Air**Certified Medium: **Steam & Air/Gas**Set Pressure Definition: **Initial Audible Discharge**Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
0.375 - 1 NPS	0.5-1 NPS	0.064 sq in	0.394 in	0.043 in	15 - 2610 psi	Air	VIII Div. 1
						Steam	VIII Div. 1

location: Itzehoer Strasse 63-65, Hohenwestedt 24594 Germany

Certification Number: **37336** Design Series or catalog number: **237, 237IC, 237CC (Liquid)**

Type Classification: **Relief Valve**Capacity Tests: **Sec. VIII Div. 1 at Leser GmbH on August 14, 2017**Method of Establishing Relieving Capacity: **Flow Capacity, Slope**Certified Value: **1.591 GPM/SQ.RT. PSID**Certified Value (alternate medium): **PPH/PSIA**Test Medium: **Air**Certified Medium: **Liquid**Set Pressure Definition: **First Steady Stream**Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
0.5 - 1 NPS	0.5-1 NPS	0.058 sq in	0.394 in	0.039 in	15 - 2610 psi	Water	VIII Div. 1

location: Echterdinger Strasse 57, Filderstadt-Bernhausen 70794 Germany

LORCH Sicherheitsventile GmbH & Co. KG, Member of Herose Group (LRH)

location: Echterdinger Strasse 57, Filderstadt-Bernhausen 70794 Germany

Certification Number: **00707** Design Series or catalog number: **2115**

Type Classification: **Safety Relief Valve**Capacity Tests: **Sec. VIII Div. 1 at National Board T L (Worthington) on December 08, 2016**Method of Establishing Relieving Capacity: **Flow Capacity, Slope**Certified Value: **4.163 SCFM/PSIA**Test Medium: **Air/Gas**Certified Medium: **Air/Gas**Special Service: **None**Set Pressure Definition: **Initial Audible Discharge**Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
0.5 - 0.75 NPS	Side	176.7 sq mm	15 mm	4.8 mm	20 - 435 psi	Air	VIII Div. 1

Certification Number: **00718** Design Series or catalog number: **2125**

Type Classification: **Safety Relief Valve**Capacity Tests: **Sec. VIII Div. 1 at National Board T L (Worthington) on December 09, 2016**Method of Establishing Relieving Capacity: **Flow Capacity, Slope**Certified Value: **8.456 SCFM/PSIA**Test Medium: **Air/Gas**Certified Medium: **Air/Gas**Special Service: **None**Set Pressure Definition: **Initial Audible Discharge**Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
1 - 1.5 NPS	Side	490.9 sq mm	25 mm	8.7 mm	15 - 435 psi	Air	VIII Div. 1

Certification Number: **00729** Design Series or catalog number: **2120**

Type Classification: **Safety Relief Valve**Capacity Tests: **Sec. VIII Div. 1 at National Board T L (Worthington) on September 18, 2015**Method of Establishing Relieving Capacity: **Flow Capacity, Slope**Certified Value: **7.330 SCFM/PSIA**Test Medium: **Air/Gas**Certified Medium: **Air/Gas**Special Service: **None**Set Pressure Definition: **Initial Audible Discharge**Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
1 - 1.25 NPS		314.2 sq mm	20 mm	6.7 mm	19 - 435 psi	Air	VIII Div. 1

Certification Number: **00730** Design Series or catalog number: **2108**

Type Classification: **Safety Relief Valve**

Capacity Tests: **Sec. VIII Div. 1 at National Board T L (Worthington) on December 08, 2016**

Method of Establishing Relieving Capacity: **Flow Capacity, Slope**

Certified Value: **0.911 SCFM/PSIA**

Test Medium: **Air/Gas**

Certified Medium: **Air/Gas**

Special Service: **None**

Set Pressure Definition: **Initial Audible Discharge**

Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
0.25 - 0.5 NPS		42.7 sq mm	8 mm	1.7 mm	15 - 681 psi	Air	VIII Div. 1

Certification Number: **00752** Design Series or catalog number: **2110**

Type Classification: **Safety Relief Valve**

Capacity Tests: **Sec. VIII Div. 1 at National Board T L (Worthington) on September 18, 2015**

Method of Establishing Relieving Capacity: **Flow Capacity, Slope**

Certified Value: **1.415 SCFM/PSIA**

Test Medium: **Air/Gas**

Certified Medium: **Air/Gas**

Special Service: **None**

Set Pressure Definition: **Initial Audible Discharge**

Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
0.375 - 0.75 NPS		62.8 sq mm	10 mm	2 mm	25 - 609 psi	Air	VIII Div. 1

Certification Number: **00774** Design Series or catalog number: **2207**

Type Classification: **Safety Relief Valve**

Capacity Tests: **Sec. VIII Div. 1 at National Board T L (Worthington) on September 18, 2015**

Method of Establishing Relieving Capacity: **Flow Capacity, Slope**

Certified Value: **.727 SCFM/PSIA**

Test Medium: **Air/Gas**

Certified Medium: **Air/Gas**

Special Service: **None**

Set Pressure Definition: **Initial Audible Discharge**

Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
0.25 - 0.5 NPS	1/4-3/4 NPS	38.5 sq mm	7 mm	2.3 mm	30 - 435 psi	Air	VIII Div. 1

Certification Number: **00785** Design Series or catalog number: **2212**

Type Classification: **Safety Relief Valve**

Capacity Tests: **Sec. VIII Div. 1 at National Board T L (Worthington) on December 09, 2016**

Method of Establishing Relieving Capacity: **Flow Capacity, Slope**

Certified Value: **2.018 SCFM/PSIA**

Test Medium: **Air/Gas**

Certified Medium: **Air/Gas**

Special Service: **None**

Set Pressure Definition: **Initial Audible Discharge**

Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
0.375 - 0.5 NPS	1/2-3/4 NPS	113.1 sq mm	12 mm	3.5 mm	35 - 635 psi	Air	VIII Div. 1

Certification Number: **00796** Design Series or catalog number: **2215**

Type Classification: **Safety Relief Valve**

Capacity Tests: **Sec. VIII Div. 1 at National Board T L (Worthington) on December 09, 2016**

Method of Establishing Relieving Capacity: **Flow Capacity, Slope**

Certified Value: **2.214 SCFM/PSIA**

Test Medium: **Air/Gas**

Certified Medium: **Air/Gas**

Special Service: **None**

Set Pressure Definition: **Initial Audible Discharge**

Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
0.5 - 0.75 NPS	3/4-1 1/4 NPS	176.7 sq mm	15 mm	3.5 mm	35 - 435 psi	Air	VIII Div. 1

Luofu Valve Group Co., Ltd (LVG)

NB#: 23038

location: Dongou Industrial Park

Luofu Valve Group Co., Ltd (LVG)

location: Dongou Industrial Park

Certification Number: **23038** Design Series or catalog number: **LFO-0101CB 4M6**

Type Classification: **Safety Valve**Capacity Tests: **Sec. VIII Div. 1 at National Board T L (Worthington) on June 03, 2013**Method of Establishing Relieving Capacity: **Flow Capacity, 3 valve average**Certified Value: **8840 SCFM**Test Medium: **Air**Certified Medium: **Air/Gas**Set Pressure Definition: **Pop**Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
4 NPS	6 NPS	4.026 sq in	[M] 57.5 mm	14 mm	116 psi	Air	VIII Div. 1

Certification Number: **23049** Design Series or catalog number: **LFO-03a01CB 2H3**

Type Classification: **Safety Valve**Capacity Tests: **Sec. VIII Div. 1 at National Board T L (Worthington) on June 03, 2013**Method of Establishing Relieving Capacity: **Flow Capacity, 3 valve average**Certified Value: **3818 SCFM**Test Medium: **Air**Certified Medium: **Air/Gas**Set Pressure Definition: **Pop**Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
2 NPS	3 NPS	0.887 sq in	[H] 27 mm	6.5 mm	232 psi	Air	VIII Div. 1

Mack Valves Pty Ltd. (MAK)

NB#: 00303

location: 30 Burgess Road, Bayswater, Victoria 3153 Australia

Mack Valves Pty Ltd. (MAK)

location: 30 Burgess Road, Bayswater, Victoria 3153 Australia

Certification Number: **00303** Design Series or catalog number: **17 Series (9.5 mm orif.)**

Type Classification: **Safety Valve**Capacity Tests: **Sec. VIII Div. 1 at National Board T L (Worthington) on February 14, 2014**Method of Establishing Relieving Capacity: **Flow Capacity, Slope**Certified Value: **1.55 SCFM/PSIA**Test Medium: **Gas**Certified Medium: **Air/Gas**Set Pressure Definition: **Pop**Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
15 - 20 DN	25 DN	70.88 sq mm	9.5 mm	3 mm	300 - 5000 kPa	Air	VIII Div. 1

Certification Number: **00651** Design Series or catalog number: **17 Series (12.7 mm orif.)**

Type Classification: **Safety Valve**Capacity Tests: **Sec. VIII Div. 1 at National Board T L (Worthington) on May 28, 2015**Method of Establishing Relieving Capacity: **Flow Capacity, Slope**Certified Value: **2.81 SCFM/PSIA**Test Medium: **Air**Certified Medium: **Air/Gas**Set Pressure Definition: **Initial Audible Discharge**Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
25 DN	32 DN	126.67 sq mm	12.7 mm	4 mm	300 - 5000 kPa	Air	VIII Div. 1

Mercer Valve Company, Incorporated (MVC)

NB#: 38001

location: 9609, 9620 N. W. 4th Street, Oklahoma City, OK 73127 United States

Mercer Valve Company, Incorporated (MVC)

location: 9609, 9620 N. W. 4th Street, Oklahoma City, OK 73127 United States

Certification Number: **38001** Design Series or catalog number: **81-100000 Series**

Type Classification: **Safety Relief Valve**Capacity Tests: **Sec. VIII Div. 1 at National Board T L (Picaway) on November 21, 1984**Method of Establishing Relieving Capacity: **Flow Capacity, Slope**Certified Value: **3.1 SCFM/PSIA**Test Medium: **Air/Gas**Certified Medium: **Air/Gas**Special Service: **None**Set Pressure Definition: **Pop**Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
0.75 - 1 NPS	1 - 2 NPS	0.212 sq in	0.52 in	0.19 in	15 - 3500 psi	Air	VIII

Certification Number: **38012** Design Series or catalog number: **81-100000L Liquids**

Type Classification: **Relief Valve**Capacity Tests: **Sec. VIII Div. 1 at National Board T L (Picaway) on July 20, 1990**Method of Establishing Relieving Capacity: **Flow Capacity, Flow Factor**Certified Value: **5.15 GPM/SQ.RT. PSID**Test Medium: **Water**Certified Medium: **Liquid**Special Service: **None**Set Pressure Definition: **Pop**Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
0.75 - 1 NPS	1 NPS	0.212 sq in	0.52 in	0.19 in	15 - 3000 psi	Water	VIII

Certification Number: **38023** Design Series or catalog number: **81-200000 Series**

Type Classification: **Safety Relief Valve**Capacity Tests: **Sec. VIII Div. 1 at National Board T L (Picaway) on February 25, 1985**Method of Establishing Relieving Capacity: **Flow Capacity, Slope**Certified Value: **7.21 SCFM/PSIA**Test Medium: **Air/Gas**Certified Medium: **Air/Gas**Special Service: **None**Set Pressure Definition: **Pop**Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
1.5 - 2 NPS	2 NPS	0.472 sq in	0.775 in	0.3 in	15 - 2500 psi	Air	VIII

Mercer Valve Company, Incorporated (MVC)

NB#: 38034

Location: 9609, 9620 N. W. 4th Street, Oklahoma City, OK 73127 United States

Certification Number: **38034** Design Series or catalog number: **81-200000L Liquids**

Type Classification: Relief Valve

Capacity Tests: Sec. VIII Div. 1 at National Board T L (Picaway) on August 21, 1990

Method of Establishing Relieving Capacity: Flow Capacity, Flow Factor

Certified Value: 12.77 GPM/SQ.RT. PSID

Test Medium: Water

Certified Medium: Liquid

Set Pressure Definition: Pop

Blowdown: Fixed

Scope of Nominal Size and Set Pressure Ranges:

Inlet Size	Outlet Size	Flow Area	Orifice [designator] diameter	Lift	Set Pressure Range	Media	Code Section
1.5 - 2 NPS	2 NPS	0.472 sq in	0.775 in	0.3 in	30 - 4000 psi	Water	VIII Div. 1

Certification Number: **38045** Design Series or catalog number: **87-110000 Series**

Type Classification: Safety Relief Valve

Capacity Tests: Sec. VIII Div. 1 at National Board T L (Picaway) on August 30, 1985

Method of Establishing Relieving Capacity: Flow Capacity, Slope

Certified Value: 1.91 SCFM/PSIA

Test Medium: Air/Gas

Certified Medium: Air/Gas

Set Pressure Definition: Pop

Blowdown: Fixed

Scope of Nominal Size and Set Pressure Ranges:

Inlet Size	Outlet Size	Flow Area	Orifice [designator] diameter	Lift	Set Pressure Range	Media	Code Section
0.5 - 1 NPS	1 NPS	0.122 sq in	0.394 in	0.18 in	15 - 6000 psi	Air	VIII Div. 1

Certification Number: **38056** Design Series or catalog number: **9100**

Type Classification: Safety Relief Valve

Capacity Tests: Sec. VIII Div. 1 at National Board T L (Worthington) on July 19, 1991

Method of Establishing Relieving Capacity: Flow Capacity, K

Certified Value: .818 Unitless

Test Medium: Air/Gas

Certified Medium: Air/Gas

Set Pressure Definition: Pop

Blowdown: Fixed

Scope of Nominal Size and Set Pressure Ranges:

Inlet Size	Outlet Size	Flow Area	Orifice [designator] diameter	Lift	Set Pressure Range	Media	Code Section
0.5 - 1 NPS	1 NPS	0.062 sq in	[C] 0.281 in	0.11 in	15 - 10000 psi	Air	VIII Div. 1
0.5 - 1.5 NPS	1 - 2 NPS	0.122 sq in	[D] 0.394 in	0.17 in	15 - 7500 psi	Air	VIII Div. 1
0.75 - 2 NPS	1 - 3 NPS	0.212 sq in	[E] 0.52 in	0.19 in	15 - 6000 psi	Air	VIII Div. 1
1 - 2 NPS	1-1/2 - 3 NPS	0.337 sq in	[F] 0.655 in	0.27 in	15 - 5000 psi	Air	VIII Div. 1
1.5 - 3 NPS	2 - 3 NPS	0.472 sq in	[G] 0.775 in	0.3 in	15 - 4000 psi	Air	VIII Div. 1
		0.865 sq in	[H] 1.05 in	0.41 in	15 - 2750 psi	Air	VIII Div. 1
2 - 3 NPS	2-1/2, 3, 4 NPS	1.43 sq in	[J] 1.35 in	0.58 in	15 - 2700 psi	Air	VIII Div. 1
3 - 4 NPS	3,4,6 NPS	2.074 sq in	[K] 1.625 in	0.65 in	15 - 2200 psi	Air	VIII Div. 1
	4, 6 NPS	3.205 sq in	[L] 2.02 in	0.8 in	15 - 2000 psi	Air	VIII Div. 1
4 NPS	6 NPS	4.08 sq in	[M] 2.28 in	0.9 in	15 - 2000 psi	Air	VIII Div. 1
		4.909 sq in	[N] 2.5 in	0.985 in	15 - 740 psi	Air	VIII Div. 1
		7.069 sq in	[P] 3 in	1.2 in	15 - 525 psi	Air	VIII Div. 1

Mercer Valve Company, Incorporated (MVC)

NB#: 38067

Location: 9609, 9620 N. W. 4th Street, Oklahoma City, OK 73127 United States

Certification Number: **38067** Design Series or catalog number **9100L (Liquids)**

Type Classification: **Relief Valve**Capacity Tests: **Sec. VIII Div. 1 at National Board T L (Worthington) on June 09, 1995**Method of Establishing Relieving Capacity: **Flow Capacity, K**Certified Value: **.707 Unitless**Test Medium: **Water**Certified Medium: **Liquid**Set Pressure Definition: **Pop**Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
0.5 - 1 NPS	1 NPS	0.062 sq in	[C] 0.281 in	0.11 in	15 - 10000 psi	Water	VIII Div. 1
	1 - 2 NPS	0.122 sq in	[D] 0.394 in	0.17 in	15 - 6500 psi	Water	VIII Div. 1
0.75 - 2 NPS	1 - 2 NPS	0.212 sq in	[E] 0.52 in	0.25 in	15 - 3500 psi	Water	VIII Div. 1
1 - 2 NPS	1.5 - 2.5 NPS	0.337 sq in	[F] 0.655 in	0.32 in	15 - 5000 psi	Water	VIII Div. 1
1.5 - 3 NPS	2 - 3 NPS	0.472 sq in	[G] 0.775 in	0.35 in	15 - 4000 psi	Water	VIII Div. 1
		0.865 sq in	[H] 1.05 in	0.52 in	15 - 2750 psi	Water	VIII Div. 1
2 - 4 NPS	3, 4 NPS	1.43 sq in	[J] 1.35 in	0.62 in	15 - 2700 psi	Water	VIII Div. 1
3 - 4 NPS	3, 4 NPS	2.074 sq in	[K] 1.625 in	0.76 in	15 - 2220 psi	Water	VIII Div. 1
	4, 6 NPS	3.205 sq in	[L] 2.02 in	0.82 in	15 - 2000 psi	Water	VIII Div. 1
4 NPS	6 NPS	4.909 sq in	[N] 2.5 in	0.985 in	15 - 740 psi	Water	VIII Div. 1
		7.069 sq in	[P] 3 in	1.2 in	15 - 525 psi	Water	VIII Div. 1
		4.08 sq in	[M] 2.28 in	0.95 in	15 - 2000 psi	Water	VIII Div. 1

Certification Number: **38078** Design Series or catalog number **9500, S, M, E Pilots**

Type Classification: **Pilot Operated Pressure Relief Valve**Capacity Tests: **Sec. VIII Div. 1 at National Board T L (Worthington) on July 09, 1997**Method of Establishing Relieving Capacity: **Flow Capacity, K**Certified Value: **.870 Unitless**Test Medium: **Air/Gas**Certified Medium: **Air/Gas**Special Service: **None**Set Pressure Definition: **1.Pop 2.Initial Audible Discharge**Blowdown: **Adjustable and Fixed for Mod. Pilot**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
1 - 1.5 NPS	2 NPS	0.151 sq in	[D] 0.439 in	0.2 in	15 - 6170 psi	Air	VIII
		0.223 sq in	[E] 0.533 in	0.25 in	15 - 6170 psi	Air	VIII
		0.371 sq in	[F] 0.687 in	0.325 in	15 - 6170 psi	Air	VIII
1.5 - 2 NPS	3 NPS	0.559 sq in	[G] 0.844 in	0.39 in	15 - 6170 psi	Air	VIII
		0.866 sq in	[H] 1.05 in	0.485 in	15 - 6170 psi	Air	VIII
2 - 3 NPS	3,4 NPS	1.431 sq in	[J] 1.35 in	0.625 in	15 - 6170 psi	Air	VIII
3 NPS	4 NPS	2.074 sq in	[K] 1.625 in	0.75 in	15 - 3705 psi	Air	VIII
3 - 4 NPS	4,6 NPS	3.205 sq in	[L] 2.02 in	0.92 in	15 - 3705 psi	Air	VIII
4 NPS	6 NPS	4.083 sq in	[M] 2.28 in	1.05 in	15 - 3705 psi	Air	VIII
		4.909 sq in	[N] 2.5 in	1.15 in	15 - 3705 psi	Air	VIII
		7.069 sq in	[P] 3 in	1.38 in	15 - 3705 psi	Air	VIII
6 NPS	8 NPS	12.566 sq in	[Q] 4 in	1.84 in	15 - 1480 psi	Air	VIII
		17.721 sq in	[R] 4.75 in	2.185 in	15 - 1480 psi	Air	VIII
8 NPS	10 NPS	25.967 sq in	[T] 5.75 in	2.625 in	15 - 1480 psi	Air	VIII

Mercer Valve Company, Incorporated (MVC)

NB#: 38089

Location: 9609, 9620 N. W. 4th Street, Oklahoma City, OK 73127 United States

Certification Number: **38089** Design Series or catalog number: **9500 (Full Port), S, M, E Pilots**

Type Classification: Pilot Operated Pressure Relief Valve

Capacity Tests: Sec. VIII Div. 1 at National Board T L (Worthington) on July 18, 1997

Method of Establishing Relieving Capacity: Flow Capacity, K

Certified Value: .82 Unitless

Test Medium: Air/Gas

Certified Medium: Air/Gas

Special Service: None

Set Pressure Definition: 1.Pop 2.Initial Audible Discharge

Blowdown: Adjustable and Fixed for Mod. Pilot

Scope of Nominal Size and Set Pressure Ranges:

Inlet Size	Outlet Size	Flow Area	Orifice [designator] diameter	Lift	Set Pressure Range	Media	Code Section
1.5 NPS	2,3 NPS	1.767 sq in	1.5 in	0.65 in	15 - 6170 psi	Air	VIII
2 NPS	3 NPS	2.953 sq in	1.939 in	0.85 in	15 - 3705 psi	Air	VIII
3 NPS	4 NPS	6.605 sq in	2.9 in	1.25 in	15 - 3700 psi	Air	VIII
4 NPS	6 NPS	11.491 sq in	3.825 in	1.675 in	15 - 1530 psi	Air	VIII
6 NPS	8 NPS	26.067 sq in	5.761 in	2.531 in	15 - 1480 psi	Air	VIII
8 NPS	10 NPS	45.664 sq in	7.625 in	3.35 in	15 - 1480 psi	Air	VIII

Certification Number: **38090** Design Series or catalog number: **9500 L Series**

Type Classification: Pilot Operated Pressure Relief Valve

Capacity Tests: Sec. VIII Div. 1 at National Board T L (Worthington) on December 14, 2006

Method of Establishing Relieving Capacity: Flow Capacity, K

Certified Value: .731 Unitless

Test Medium: Water

Certified Medium: Liquid

Special Service: None

Set Pressure Definition: First Steady Stream

Blowdown: Fixed

Scope of Nominal Size and Set Pressure Ranges:

Inlet Size	Outlet Size	Flow Area	Orifice [designator] diameter	Lift	Set Pressure Range	Media	Code Section
1 - 1.5 NPS	2 NPS	0.371 sq in	[f] 0.687 in	0.325 in	15 - 6170 psi	Water	VIII Div. 1
1.5 NPS	3 NPS	0.866 sq in	[h] 1.05 in	0.485 in	15 - 6170 psi	Water	VIII Div. 1
2 NPS	3 NPS	1.431 sq in	[J] 1.35 in	0.625 in	15 - 6170 psi	Water	VIII Div. 1
3 NPS	4 NPS	3.205 sq in	[L] 2.02 in	0.92 in	15 - 3750 psi	Water	VIII Div. 1
4 NPS	6 NPS	4.083 sq in	[M] 2.28 in	1.05 in	15 - 3750 psi	Water	VIII Div. 1
		7.069 sq in	[P] 3 in	1.38 in	15 - 3750 psi	Water	VIII Div. 1
6 NPS	8 NPS	17.721 sq in	[R] 4.75 in	2.185 in	15 - 1480 psi	Water	VIII Div. 1
8 NPS	10 NPS	25.967 sq in	[T] 5.75 in	2.625 in	15 - 1480 psi	Water	VIII Div. 1

Certification Number: **38102** Design Series or catalog number: **8500 Series**

Type Classification: Safety Relief Valve

Capacity Tests: Sec. VIII Div. 1 at National Board T L (Worthington) on February 12, 2013

Method of Establishing Relieving Capacity: Flow Capacity, Slope

Certified Value: 3.37 SCFM/PSIA

Test Medium: Air/Gas

Certified Medium: Air/Gas

Special Service: None

Set Pressure Definition: Pop

Blowdown: Fixed

Scope of Nominal Size and Set Pressure Ranges:

Inlet Size	Outlet Size	Flow Area	Orifice [designator] diameter	Lift	Set Pressure Range	Media	Code Section
0.75 - 2 NPS	1, 2 NPS	0.212 sq in	0.52 in	0.24 in	15 - 2400 psi	Air	VIII Div. 1

Mercer Valve Company, Incorporated (MVC)

NB#: 38113

Location: 9609, 9620 N. W. 4th Street, Oklahoma City, OK 73127 United States

Certification Number: **38113** Design Series or catalog number: **1400 Series**

Type Classification: **Safety Relief Valve**Capacity Tests: **Sec. VIII Div. 1 at National Board T L (Worthington) on January 29, 2015**Method of Establishing Relieving Capacity: **Flow Capacity, Slope**Certified Value: **0.291 SCFM/PSIA**Test Medium: **Gas**Certified Medium: **Air/Gas**Set Pressure Definition: **Pop**Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
0.5 - 1 NPS	.5-1 NPS	0.02	0.16	0.06	150 - 10000 psi	Air	VIII Div. 1

Mercury Manufacturing Company (MMC)

NB#: 78016

location: 1212 Grove Street, Wyandotte, MI 48192 United States

Acceptable Abbrev.: MMC

Mercury Manufacturing Company (MMC)

location: 1212 Grove Street, Wyandotte, MI 48192 United States

Acceptable Abbrev.: MMC

Certification Number: **78016** Design Series or catalog number: **MMC-0453-2**

Type Classification: **Safety Relief Valve**Capacity Tests: **Sec. VIII Div. 1 at Farris (Brecksville OH) on October 05, 2004**Method of Establishing Relieving Capacity: **Flow Capacity, 3 valve average**Certified Value: **1226 SCFM**Test Medium: **Air/Gas**Certified Medium: **Gas**Special Service: **None**Set Pressure Definition: **Bubble**Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
1.625 NPS	Top	0.204 sq in	0.51 in	0.128 in	400 - 400 psi	Air	VIII Div. 1

Certification Number: **78027** Design Series or catalog number: **MMC-0270**

Type Classification: **Safety Relief Valve**Capacity Tests: **Sec. VIII Div. 1 at Farris (Brecksville OH) on November 29, 2005**Method of Establishing Relieving Capacity: **Flow Capacity, 3 valve average**Certified Value: **558 SCFM**Test Medium: **Air/Gas**Certified Medium: **Gas**Set Pressure Definition: **Bubble**Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
0.5 NPS	Top	0.113 sq in	0.38 in	0.095 in	350 - 350 psi	Air	VIII Div. 1

Certification Number: **78038** Design Series or catalog number: **MMC-TV5**

Type Classification: **Safety Relief Valve**Capacity Tests: **Sec. VIII Div. 1 at National Board T L (Worthington) on December 01, 2006**Method of Establishing Relieving Capacity: **Flow Capacity, 3 valve average**Certified Value: **2723 SCFM**Test Medium: **Air**Certified Medium: **Gas**Special Service: **None**Set Pressure Definition: **Bubble**Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
3 NPS	Top	0.739 sq in	0.97 in	0.243 in	235 psi	Air	VIII Div. 1

Mercury Manufacturing Company (MMC)

NB#: 78049

Location: 1212 Grove Street, Wyandotte, MI 48192 United States

Acceptable Abbrev.: MMC

Certification Number: **78049** Design Series or catalog number: **MMC00014, MMC00016**

Type Classification: **Safety Relief Valve**Capacity Tests: **Sec. VIII Div. 1 at National Board T L (Worthington) on February 18, 2009**Method of Establishing Relieving Capacity: **Flow Capacity, 3 valve average**Certified Value: **414 SCFM**Test Medium: **Air**Certified Medium: **Gas**Special Service: **None**Set Pressure Definition: **Bubble**Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
1 NPS	.875 NPS	0.0573 sq in	0.27 in	0.067 in	462.5 - psi	Air	VIII Div. 1

Certification Number: **78061** Design Series or catalog number: **MMC00346**

Type Classification: **Safety Valve**Capacity Tests: **Sec. VIII Div. 1 at National Board T L (Worthington) on January 15, 2013**Method of Establishing Relieving Capacity: **Flow Capacity, 3 valve average**Certified Value: **2359 SCFM**Test Medium: **Air/Gas**Certified Medium: **Gas**Set Pressure Definition: **Bubble**Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
1.875 NPS	1.625 top NPS	0.357 sq in	0.675 in	0.168 in	450 psi	Air	VIII Div. 1

Certification Number: **78072** Design Series or catalog number: **MMC00410, 411, 412, 420**

Type Classification: **Safety Relief Valve**Capacity Tests: **Sec. VIII Div. 1 at National Board T L (Worthington) on January 15, 2013**Method of Establishing Relieving Capacity: **Flow Capacity, Slope**Certified Value: **0.70 SCFM/PSIA**Test Medium: **Air**Certified Medium: **Air**Set Pressure Definition: **Bubble**Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
0.75 NPS	Top	0.058 sq in	0.274 in	0.07 in	960 - 1960 psi	Air	VIII Div. 1

Mercury Manufacturing Company (MMC)

NB#: 78083

Location: 1212 Grove Street, Wyandotte, MI 48192 United States

Acceptable Abbrev.: MMC

Certification Number: **78083** Design Series or catalog number: **MMC01410, MMC01411, MMC01412, MMC01420, MMC01421, MMC00421**

Type Classification: **Safety Relief Valve**Capacity Tests: **Sec. VIII Div. 1 at National Board T L (Worthington) on April 12, 2013**Method of Establishing Relieving Capacity: **Flow Capacity, Slope**Certified Value: **0.708 SCFM**Test Medium: **Air**Certified Medium: **Air**Set Pressure Definition: **Bubble**Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
0.75 NPS		0.044 sq in	0.237 in		960 - 2150 psi	Air	VIII Div. 1

Certification Number: **78296** Design Series or catalog number: **MMC00521, MMC00522**

Type Classification: **Safety Relief Valve**Capacity Tests: **Sec. VIII Div. 1 at National Board T L (Worthington) on July 10, 2017**Method of Establishing Relieving Capacity: **Flow Capacity, Slope**Certified Value: **1.638 SCFM/PSIA**Test Medium: **Gas**Certified Medium: **Gas**Set Pressure Definition: **Bubble**Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
24 mm	Top	0.101 sq in	0.36 in	0.09 in	1305 - 1960 psi	Air	VIII Div. 1

Mersen USA - Salem Branch (COA)

NB#: 90111

location: 540 Branch Drive, Salem, VA 24153 United States

Acceptable Abbrev.: Mersen USA

Mersen USA - Salem Branch (COA)

location: 540 Branch Drive, Salem, VA 24153 United States

Acceptable Abbrev.: Mersen USA

Certification
Number: **90111**Design Series
or catalog number **Series 3**Type Classification: **Rupture Disk Device**Capacity Tests: **Sec. VIII Div. 1 at National Board T L (Worthington) on May 19, 1999**Method of Establishing Relieving Capacity: **Resistance Factor, 3 Size, Krgl**Certified Value: **0.6 Unitless**Test Medium: **Air/Gas & Liquid**Certified Medium: **Air or gases, and liquid (Krgl)**Special Service: **None**Set Pressure Definition: **Burst Pressure**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
1 NPS		0.78 sq in			50 - 400 psi		VIII Div. 1
1.5 NPS		1.77 sq in			15 - 300 psi		VIII Div. 1
2 NPS		3.14 sq in			15 - 250 psi		VIII Div. 1
2.5 NPS		4.78 sq in			15 - 250 psi		VIII Div. 1
3 NPS		7.07 sq in			15 - 200 psi		VIII Div. 1
4 NPS		12.6 sq in			15 - 150 psi		VIII Div. 1
6 NPS		28.3 sq in			15 - 100 psi		VIII Div. 1
8 NPS		50 sq in			15 - 100 psi		VIII Div. 1
10 NPS		78.5 sq in			15 - 100 psi		VIII Div. 1
12 NPS		113 sq in			15 - 100 psi		VIII Div. 1
14 NPS		138 sq in			15 - 75 psi		VIII Div. 1
16 NPS		183 sq in			15 - 75 psi		VIII Div. 1
18 NPS		234 sq in			15 - 50 psi		VIII Div. 1
20 NPS		291 sq in			15 - 30 psi		VIII Div. 1
24 NPS		424.55 sq in			15 - 25 psi		VIII Div. 1

Mersen USA - Salem Branch (COA)

NB#: 90122

location: 540 Branch Drive, Salem, VA 24153 United States

Acceptable Abbrev.: Mersen USA

Certification Number: **90122** Design Series or catalog number **Series 3 w/Bar Vac. Support**

Type Classification: Rupture Disk Device

Capacity Tests: Sec. VIII Div. 1 at National Board T L (Worthington) on January 14, 2003

Method of Establishing Relieving Capacity: Resistance Factor, 3 Size, Krgl

Certified Value: 6.44 Unitless

Test Medium: Air/Gas & Liquid

Certified Medium: Air or gases, and liquid (Krgl)

Special Service: None

Set Pressure Definition: Burst Pressure

Scope of Nominal Size and Set Pressure Ranges:

Inlet Size	Outlet Size	Flow Area	Orifice [designator] diameter	Lift	Set Pressure Range	Media	Code Section
1 NPS		0.405 sq in			15 - 50 psi		VIII Div. 1
1.5 NPS		1.02 sq in			7 - 20 psi		VIII Div. 1
2 NPS		2.14 sq in			3 - 20 psi		VIII Div. 1
2.5 NPS		3.66 sq in			3 - 20 psi		VIII Div. 1
3 NPS		5.57 sq in			2 - 20 psi		VIII Div. 1
4 NPS		8.6 sq in			2 - 20 psi		VIII Div. 1
6 NPS		19.3 sq in			1 - 20 psi		VIII Div. 1
8 NPS		36.3 sq in			1 - 20 psi		VIII Div. 1
10 NPS		58.5 sq in			1 - 20 psi		VIII Div. 1
12 NPS		89 sq in			.5 - 20 psi		VIII Div. 1
14 NPS		110 sq in			.5 - 20 psi		VIII Div. 1
16 NPS		151 sq in			.5 - 20 psi		VIII Div. 1
18 NPS		198 sq in			.5 - 20 psi		VIII Div. 1
20 NPS		251 sq in			.5 - 20 psi		VIII Div. 1
24 NPS		377 sq in			.5 - 20 psi		VIII Div. 1

Certification Number: **90133** Design Series or catalog number **Series 6**

Type Classification: Rupture Disk Device

Capacity Tests: Sec. VIII Div. 1 at National Board T L (Worthington) on January 14, 2003

Method of Establishing Relieving Capacity: Resistance Factor, 3 Size, Krgl

Certified Value: .5 Unitless

Test Medium: Air/Gas & Liquid

Certified Medium: Air or gases, and liquid (Krgl)

Special Service: None

Set Pressure Definition: Burst Pressure

Scope of Nominal Size and Set Pressure Ranges:

Inlet Size	Outlet Size	Flow Area	Orifice [designator] diameter	Lift	Set Pressure Range	Media	Code Section
1 NPS		0.78 sq in			15 - 400 psi		VIII Div. 1
1.5 NPS		1.77 sq in			7 - 300 psi		VIII Div. 1
2 NPS		3.14 sq in			3 - 250 psi		VIII Div. 1
2.5 NPS		4.91 sq in			3 - 250 psi		VIII Div. 1
3 NPS		7.07 sq in			2 - 200 psi		VIII Div. 1
4 NPS		12.6 sq in			2 - 150 psi		VIII Div. 1
6 NPS		28.3 sq in			1 - 100 psi		VIII Div. 1
8 NPS		50.3 sq in			1 - 100 psi		VIII Div. 1
10 NPS		78.5 sq in			1 - 100 psi		VIII Div. 1
12 NPS		113 sq in			.5 - 100 psi		VIII Div. 1
14 NPS		138 sq in			.5 - 75 psi		VIII Div. 1
16 NPS		183 sq in			.5 - 75 psi		VIII Div. 1
18 NPS		234 sq in			.5 - 50 psi		VIII Div. 1
20 NPS		291 sq in			.5 - 30 psi		VIII Div. 1
24 NPS		425 sq in			.5 - 25 psi		VIII Div. 1

Mersen USA - Salem Branch (COA)

NB#: 90144

location: 540 Branch Drive, Salem, VA 24153 United States

Acceptable Abbrev.: Mersen USA

Certification Number: **90144** Design Series or catalog number **Series 3 w. Dial Vac. Support**

Type Classification: **Rupture Disk Device**Capacity Tests: **Sec. VIII Div. 1 at National Board T L (Worthington) on January 14, 2003**Method of Establishing Relieving Capacity: **Resistance Factor, 3 Size, Krgl**Certified Value: **12.5 Unitless**Test Medium: **Air/Gas & Liquid**Certified Medium: **Air or gases, and liquid (Krgl)**Special Service: **None**Set Pressure Definition: **Burst Pressure**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
1 NPS		0.39 sq in			15 - 50 psi		VIII Div. 1
1.5 NPS		0.72 sq in			7 - 20 psi		VIII Div. 1
2 NPS		1.37 sq in			3 - 20 psi		VIII Div. 1
2.5 NPS		2.18 sq in			3 - 20 psi		VIII Div. 1
3 NPS		3.54 sq in			2 - 20 psi		VIII Div. 1
4 NPS		6.45 sq in			2 - 20 psi		VIII Div. 1
6 NPS		12.28 sq in			1 - 20 psi		VIII Div. 1
8 NPS		29.54 sq in			1 - 20 psi		VIII Div. 1
10 NPS		39.41 sq in			1 - 20 psi		VIII Div. 1
12 NPS		57.52 sq in			.5 - 20 psi		VIII Div. 1
14 NPS		70.99 sq in			.5 - 20 psi		VIII Div. 1
16 NPS		105.71 sq in			.5 - 20 psi		VIII Div. 1
18 NPS		119.96 sq in			.5 - 20 psi		VIII Div. 1
20 NPS		156.17 sq in			.5 - 20 psi		VIII Div. 1
24 NPS		278.07 sq in			.5 - 20 psi		VIII Div. 1

Mogas Industries, Incorporated (MII)

NB#: 64101

location: 14330 East Hardy Street, Houston, TX 77039 United States

Mogas Industries, Incorporated (MII)

location: 14330 East Hardy Street, Houston, TX 77039 United States

Certification Number: **64101** Design Series or catalog number: **PORV-UM, PORV-UMC**

Type Classification: **Power Actuated Relief Valve**Capacity Tests: **Sec. I at National Board T L (Worthington) on October 21, 1994**Method of Establishing Relieving Capacity: **Flow Capacity, Slope**Certified Value: **138.3 PPH/PSIA**Test Medium: **Steam**Certified Medium: **Steam**Set Pressure Definition: **Power Actuated**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
3 - 4 NPS	4 - 6 NPS	3.14 sq in	2 in		500 - 5000 psi	Steam	I

Certification Number: **64112** Design Series or catalog number: **PORV-UD**

Type Classification: **Power Actuated Relief Valve**Capacity Tests: **Sec. I at National Board T L (Worthington) on July 05, 1994**Method of Establishing Relieving Capacity: **Flow Capacity, Slope**Certified Value: **94.8 PPH/PSIA**Test Medium: **Steam**Certified Medium: **Steam**Set Pressure Definition: **Power Actuated**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
2.5 - 4 NPS	3 - 4 NPS	2.01 sq in	1.6 in		500 - 4100 psi	Steam	I

Certification Number: **64123** Design Series or catalog number: **PORV-UL**

Type Classification: **Power Actuated Relief Valve**Capacity Tests: **Sec. I at National Board T L (Worthington) on January 10, 1997**Method of Establishing Relieving Capacity: **Flow Capacity, Slope**Certified Value: **57.7 PPH/PSIA**Test Medium: **Steam**Certified Medium: **Steam**Special Service: **None**Set Pressure Definition: **Power Actuated**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
1.5 - 3 NPS	2 - 4 NPS	1.327 sq in	1.3 in		1000 - 5000 psi	Steam	I

location: 14330 East Hardy Street, Houston, TX 77039 United States

Certification Number: **64134** Design Series or catalog number: **PORV-UN**

Type Classification: **Power Actuated Relief Valve**Capacity Tests: **Sec. I at National Board T L (Worthington) on August 22, 1997**Method of Establishing Relieving Capacity: **Flow Capacity, Slope**Certified Value: **155.8 PPH/PSIA**Test Medium: **Steam**Certified Medium: **Steam**Special Service: **None**Set Pressure Definition: **Power Actuated**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
3.5 - 5 in	4 - 6 NPS	3.56 sq in	2.13 in		1000 - 5000 psi	Steam	I

Certification Number: **64145** Design Series or catalog number: **PORV-UK, PORV-UKC**

Type Classification: **Power Actuated Relief Valve**Capacity Tests: **Sec. I at National Board T L (Worthington) on August 07, 1996**Method of Establishing Relieving Capacity: **Flow Capacity, Slope**Certified Value: **112.4 PPH/PSIA**Test Medium: **Steam**Certified Medium: **Steam**Set Pressure Definition: **Power Actuated**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
2.5 - 4 in	4 - 6 NPS	2.57 sq in	1.81 in		1000 - 5000 psi	Steam	I

Motoyama Engineering Works Limited (MTY)

NB#: 40004

location: 5-2, Ohhira Aza Kameoka, Ohhira-Mura, Kurokawa-gun, Miyagi-Ken 981-3967 Japan

Motoyama Engineering Works Limited (MTY)

location: 5-2, Ohhira Aza Kameoka, Ohhira-Mura, Kurokawa-gun, Miyagi-Ken 981-3967 Japan

Certification Number: **40004** Design Series or catalog number: **H (HS,HSA,HC,HCA, HJ)**

Type Classification: **Safety Valve**Capacity Tests: **Sec. I at Crosby Valve & Gage on November 10, 1980**Method of Establishing Relieving Capacity: **Flow Capacity, K**Certified Value: **0.8145 Unitless**Test Medium: **Steam**Certified Medium: **Steam**Special Service: **None**Set Pressure Definition: **Pop**Blowdown: **Adjustable by Dual Ring**

Scope of Nominal Size and Set Pressure Ranges:

Inlet Size	Outlet Size	Flow Area	Orifice [designator] diameter	Lift	Set Pressure Range	Media	Code Section
0.5 - 1.5 NPS	2 - 3 NPS	0.122 sq in	0.394 in	0.098 in	15 - 500 psi	Steam	I
0.75 - 1.5 NPS	2 - 3 NPS	0.216 sq in	0.525 in	0.131 in	15 - 500 psi	Steam	I
1 - 2 NPS	2, 2.5 NPS	0.338 sq in	[F] 0.656 in	0.164 in	15 - 3100 psi	Steam	I
1.5 - 2 NPS	2.5 - 3 NPS	0.554 sq in	[G] 0.84 in	0.21 in	15 - 3100 psi	Steam	I
	3, 4 NPS	0.866 sq in	[H] 1.05 in	0.262 in	15 - 3100 psi	Steam	I
2 - 2.5 NPS	3 - 6 NPS	1.421 sq in	[J] 1.345 in	0.336 in	15 - 3100 psi	Steam	I
2.5 - 3 NPS	4 - 6 NPS	2.031 sq in	[K] 1.608 in	0.402 in	15 - 3100 psi	Steam	I
2.5 - 4 NPS	6 NPS	2.806 sq in	[K2] 1.89 in	0.472 in	15 - 3100 psi	Steam	I
3 NPS	6 NPS	3.965 sq in	[M] 2.247 in	0.561 in	15 - 3100 psi	Steam	I
3 - 4 NPS	6 NPS	3.145 sq in	[L] 2.001 in	0.5 in	15 - 3100 psi	Steam	I
		4.382 sq in	[M2] 2.362 in	0.59 in	15 - 3100 psi	Steam	I
4 NPS	6 NPS	7.031 sq in	[P] 2.992 in	0.748 in	15 - 1500 psi	Steam	I
4 - 6 NPS	6 - 10 NPS	4.788 sq in	[N] 2.469 in	0.617 in	15 - 3100 psi	Steam	I
6 NPS	8 NPS	12.174 sq in	[Q] 3.937 in	0.984 in	15 - 1500 psi	Steam	I
	8, 10 NPS	17.639 sq in	[R] 4.739 in	1.184 in	15 - 1200 psi	Steam	I
8 NPS	10 NPS	28.624 sq in	[T] 6.037 in	1.509 in	15 - 500 psi	Steam	I

Certification Number: **40015** Design Series or catalog number **JLT-JNO, JLT-JNB (Liquids)**

Type Classification: **Relief Valve**

Capacity Tests: **Sec. VIII Div. 1 at Crosby Valve & Gage on August 10, 1987**

Method of Establishing Relieving Capacity: **Flow Capacity, K**

Certified Value: **.6579 Unitless**

Test Medium: **Water**

Certified Medium: **Liquid**

Set Pressure Definition: **First Steady Stream**

Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
0.75 - 1.5 NPS	1 - 3 NPS	0.1244 sq in	[D] 0.398 in	0.151 in	15 - 10000 psi	Water	VIII Div. 1
1 - 1.5 NPS	2 - 3 NPS	0.2214 sq in	[E] 0.531 in	0.205 in	15 - 7500 psi	Water	VIII Div. 1
1.5 NPS	2 - 3 NPS	0.3473 sq in	[F] 0.665 in	0.257 in	15 - 5000 psi	Water	VIII Div. 1
1.5 - 2 NPS	2.5, 3 NPS	0.5674 sq in	[G] 0.85 in	0.328 in	15 - 3600 psi	Water	VIII Div. 1
	3 NPS	0.8874 sq in	[H] 1.063 in	0.41 in	15 - 2750 psi	Water	VIII Div. 1
2 - 3 NPS	3, 4 NPS	1.453 sq in	[J] 1.36 in	0.525 in	15 - 2700 psi	Water	VIII Div. 1
3 NPS	4, 6 NPS	2.076 sq in	[K] 1.626 in	0.628 in	15 - 2160 psi	Water	VIII Div. 1
3 - 4 NPS	4, 6 NPS	3.221 sq in	[L] 2.025 in	0.782 in	15 - 1500 psi	Water	VIII Div. 1
4 NPS	6 NPS	4.065 sq in	[M] 2.275 in	0.878 in	15 - 1100 psi	Water	VIII Div. 1
		4.9 sq in	[N] 2.498 in	0.964 in	15 - 1000 psi	Water	VIII Div. 1
		7.206 sq in	[P] 3.029 in	1.169 in	15 - 1000 psi	Water	VIII Div. 1
6 NPS	8 NPS	12.472 sq in	[Q] 3.985 in	1.539 in	15 - 600 psi	Water	VIII Div. 1
	8, 10 NPS	18.065 sq in	[R] 4.796 in	1.852 in	15 - 300 psi	Water	VIII Div. 1
8 NPS	10 NPS	29.359 sq in	[T] 6.114 in	2.361 in	15 - 120 psi	Water	VIII Div. 1

Certification
Number: **40059**Design Series
or catalog number **JNO/JNB**Type Classification: **Safety Relief Valve**Capacity Tests: **Sec. VIII Div. 1 at Crosby Valve & Gage on August 13, 1982**Method of Establishing Relieving Capacity: **Flow Capacity, K**Certified Value: **.862 Unitless**Test Medium: **Steam & Air/Gas**Certified Medium: **Steam & Air/Gas**Special Service: **None**Set Pressure Definition: **Pop**Blowdown: **Adjustable by Single Ring**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
0.75 - 1.5 NPS	1 - 3 NPS	0.1244 sq in	[D] 0.398 in	0.117 in	15 - 2900 psi	Steam	VIII Div. 1
					15 - 6000 psi	Air	VIII Div. 1
1 - 1.5 NPS	2 - 3 NPS	0.2214 sq in	[E] 0.531 in	0.156 in	15 - 2900 psi	Steam	VIII Div. 1
					15 - 6000 psi	Air	VIII Div. 1
1.5 NPS	2 - 3 NPS	0.347 sq in	[F] 0.665 in	0.196 in	15 - 2900 psi	Steam	VIII Div. 1
					15 - 5000 psi	Air	VIII Div. 1
1.5 - 2 NPS	2.5, 3 NPS	0.5674 sq in	[G] 0.85 in	0.25 in	15 - 2900 psi	Steam	VIII Div. 1
					15 - 3705 psi	Air	VIII Div. 1
	3 NPS	0.887 sq in	[H] 1.063 in	0.313 in	15 - 2900 psi	Air	VIII Div. 1
						Steam	VIII Div. 1
2 - 3 NPS	3, 4 NPS	1.453 sq in	[J] 1.36 in	0.4 in	15 - 2900 psi	Air	VIII Div. 1
						Steam	VIII Div. 1
3 NPS	4, 6 NPS	2.076 sq in	[K] 1.626 in	0.478 in	15 - 2900 psi	Air	VIII Div. 1
						Steam	VIII Div. 1
3 - 4 NPS	4, 6 NPS	3.221 sq in	[L] 2.025 in	0.596 in	15 - 1500 psi	Air	VIII Div. 1
						Steam	VIII Div. 1
4 NPS	6 NPS	4.065 sq in	[M] 2.275 in	0.669 in	15 - 1100 psi	Air	VIII Div. 1
						Steam	VIII Div. 1
		4.9 sq in	[N] 2.498 in	0.735 in	15 - 1000 psi	Air	VIII Div. 1
						Steam	VIII Div. 1
		7.206 sq in	[P] 3.029 in	0.891 in	15 - 1000 psi	Air	VIII Div. 1
						Steam	VIII Div. 1
6 NPS	8 NPS	12.472 sq in	[Q] 3.985 in	1.172 in	15 - 600 psi	Air	VIII Div. 1
						Steam	VIII Div. 1
	8, 10 NPS	18.065 sq in	[R] 4.796 in	1.411 in	15 - 300 psi	Air	VIII Div. 1
						Steam	VIII Div. 1
8 NPS	10 NPS	29.359 sq in	[T] 6.114 in	1.798 in	15 - 300 psi	Air	VIII Div. 1
						Steam	VIII Div. 1
		31.47 sq in	[T2] 6.33 in	1.862 in	15 - 300 psi	Air	VIII Div. 1
						Steam	VIII Div. 1

Certification Number: **40093** Design Series or catalog number: **900 (Air, Gas and Steam)**

Type Classification: **Safety Relief Valve**

Capacity Tests: **Sec. VIII Div. 1 at Crosby Valve & Gage on July 28, 1994**

Method of Establishing Relieving Capacity: **Flow Capacity, K**

Certified Value: **0.878 Unitless**

Test Medium: **Steam**

Certified Medium: **Steam & Air/Gas**

Special Service: **None**

Set Pressure Definition: **Pop**

Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
0.5 - 1 NPS	1 NPS	0.0845 sq in	[#5] 0.328 in	0.106 in	15 - 10000 psi	Air	VIII Div. 1
					15 - 2900 psi	Steam	VIII Div. 1
0.75 - 1 NPS	1, 1.5 NPS	0.1244 sq in	[#6] 0.398 in	0.128 in	15 - 10000 psi	Air	VIII Div. 1
					15 - 2900 psi	Steam	VIII Div. 1
1 - 1.5 NPS	1.5 NPS	0.2198 sq in	[#7] 0.529 in	0.17 in	15 - 2900 psi	Steam	VIII Div. 1
					15 - 5000 psi	Air	VIII Div. 1
1.5 NPS	2.5 NPS	0.5674 sq in	[#9] 0.85 in	0.274 in	15 - 2900 psi	Steam	VIII Div. 1
					15 - 5000 psi	Air	VIII Div. 1
1.5 - 2 NPS	2 NPS	0.3473 sq in	[#8] 0.665 in	0.215 in	15 - 2900 psi	Steam	VIII Div. 1
					15 - 5000 psi	Air	VIII Div. 1

Certification Number: **40105** Design Series or catalog number: **900 (Liquids)**

Type Classification: **Safety Relief Valve**

Capacity Tests: **Sec. VIII Div. 1 at Crosby Valve & Gage on July 28, 1994**

Method of Establishing Relieving Capacity: **Flow Capacity, K**

Certified Value: **.6615 Unitless**

Test Medium: **Water**

Certified Medium: **Liquid**

Special Service: **None**

Set Pressure Definition: **First Steady Stream**

Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
0.5 - 1 NPS	1 NPS	0.0845 sq in	[#5] 0.328 in	0.106 in	15 - 10000 psi	Water	VIII Div. 1
0.75 - 1 NPS	1, 1.5 NPS	0.1244 sq in	[#6] 0.398 in	0.128 in	15 - 10000 psi	Water	VIII Div. 1
1 - 1.5 NPS	1.5 NPS	0.2198 sq in	[#7] 0.529 in	0.17 in	15 - 5000 psi	Water	VIII Div. 1
1.5 NPS	2.5 NPS	0.5674 sq in	[#9] 0.85 in	0.274 in	15 - 5000 psi	Water	VIII Div. 1
1.5 - 2 NPS	2 NPS	0.3473 sq in	[#8] 0.665 in	0.215 in	15 - 5000 psi	Water	VIII Div. 1

Mt. H Control Valves Co., LTD (MHC)

NB#: 00549

location: 296, Noksansaneopjung-ro, Ganseo-gu, Busan 46754 South Korea

Mt. H Control Valves Co., LTD (MHC)

location: 296, Noksansaneopjung-ro, Ganseo-gu, Busan 46754 South Korea

Certification
Number: **00549**Design Series
or catalog number **SC 32**Type Classification: **Safety Relief Valve**Capacity Tests: **Sec. VIII Div. 1 at National Board T L (Worthington) on March 30, 2015**Method of Establishing Relieving Capacity: **Flow Capacity, K**Certified Value: **.851 Unitless**Test Medium: **Steam & Air/Gas**Certified Medium: **Steam & Air/Gas**Set Pressure Definition: **Pop**Blowdown: **Adjustable by Single Ring**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
0.75 - 1.5 NPS	1-3 NPS	0.1368 sq in	[D] 0.4173 in	0.106 in	15 - 2900 psi	Steam	VIII Div. 1
					15 - 6000 psi	Air	VIII Div. 1
1 - 1.5 NPS	2-3 NPS	0.2812 sq in	[E] 0.5984 in	0.15 in	15 - 2900 psi	Steam	VIII Div. 1
					15 - 6000 psi	Air	VIII Div. 1
1.5 - 2 NPS	2-3 NPS	0.3772 sq in	[F] 0.693 in	0.174 in	15 - 2900 psi	Steam	VIII Div. 1
					15 - 5000 psi	Air	VIII Div. 1
	3 NPS	0.5945 sq in	[G] 0.87 in	0.221 in	15 - 2900 psi	Steam	VIII Div. 1
					15 - 3600 psi	Air	VIII Div. 1
		0.9212 sq in	[H] 1.083 in	0.272 in	15 - 2500 psi	Steam	VIII Div. 1
					15 - 3000 psi	Air	VIII Div. 1
2 - 3 NPS	3-4 NPS	1.491 sq in	[J] 1.378 in	0.346 in	15 - 2500 psi	Steam	VIII Div. 1
					15 - 3000 psi	Air	VIII Div. 1
3 NPS	4-6 NPS	2.128 sq in	[K] 1.646 in	0.413 in	15 - 2000 psi	Steam	VIII Div. 1
					15 - 2500 psi	Air	VIII Div. 1
3 - 4 NPS	4-6 NPS	3.317 sq in	[L] 2.055 in	0.517 in	15 - 2000 psi	Air	VIII Div. 1
						Steam	VIII Div. 1
4 NPS	6 NPS	4.165 sq in	[M] 2.303 in	0.579 in	15 - 1500 psi	Air	VIII Div. 1
						Steam	VIII Div. 1
		5.063 sq in	[N] 2.539 in	0.638 in	15 - 1500 psi	Air	VIII Div. 1
						Steam	VIII Div. 1
		7.407 sq in	[P] 2.992 in	0.748 in	15 - 1000 psi	Steam	VIII Div. 1
					15 - 1600 psi	Air	VIII Div. 1
6 NPS	8 NPS	13.042 sq in	[Q] 4.075 in	1.02 in	15 - 600 psi	Air	VIII Div. 1
						Steam	VIII Div. 1
	8-10 NPS	18.505 sq in	[R] 4.488 in	1.122 in	15 - 600 psi	Air	VIII Div. 1
						Steam	VIII Div. 1
8 NPS	10 NPS	29.244 sq in	[T] 5.984 in	1.496 in	15 - 300 psi	Air	VIII Div. 1
						Steam	VIII Div. 1
10 NPS	14 NPS	47.97 sq in	[U] 7.48 in	1.87 in	15 - 500 psi	Air	VIII Div. 1
						Steam	VIII Div. 1
12 NPS	16 NPS	68.96 sq in	[V] 9.055 in	2.264 in	15 - 500 psi	Air	VIII Div. 1
						Steam	VIII Div. 1
14 NPS	18 NPS	94.08 sq in	[W] 10.512 in	2.638 in	15 - 500 psi	Air	VIII Div. 1
						Steam	VIII Div. 1
16 NPS	18 NPS	103.8 sq in	[X] 11.496 in	2.753 in	15 - 500 psi	Air	VIII Div. 1
						Steam	VIII Div. 1
		123.49 sq in	[Y] 12.008 in	3.102 in	15 - 500 psi	Air	VIII Div. 1
						Steam	VIII Div. 1
18 NPS	24 NPS	155.15 sq in	[Z] 13.504 in	3.368 in	15 - 500 psi	Air	VIII Div. 1
						Steam	VIII Div. 1
20 NPS	24 NPS	191.87 sq in	[Z1] 14.961 in	3.74 in	15 - 500 psi	Air	VIII Div. 1
						Steam	VIII Div. 1

Certification Number: **00550** Design Series or catalog number **SC 32 (Liquid)**

Type Classification: **Safety Relief Valve**

Capacity Tests: **Sec. VIII Div. 1 at National Board T L (Worthington) on March 30, 2015**

Method of Establishing Relieving Capacity: **Flow Capacity, K**

Certified Value: **.631 Unitless**

Test Medium: **Water**

Certified Medium: **Liquid**

Set Pressure Definition: **First Steady Stream**

Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
0.75 - 1.5 NPS	1-3 NPS	0.1368 sq in	[D] 0.4173 in	0.106 in	15 - 6000 psi	Water	VIII Div. 1
1 - 1.5 NPS	2-3 NPS	0.2812 sq in	[E] 0.5984 in	0.15 in	15 - 6000 psi	Water	VIII Div. 1
1.5 - 2 NPS	2-3 NPS	0.3772 sq in	[F] 0.693 in	0.174 in	15 - 5000 psi	Water	VIII Div. 1
	3 NPS	0.5945 sq in	[G] 0.87 in	0.221 in	15 - 3600 psi	Water	VIII Div. 1
		0.9212 sq in	[H] 1.083 in	0.272 in	15 - 3000 psi	Water	VIII Div. 1
2 - 3 NPS	3-4 NPS	1.491 sq in	[J] 1.378 in	0.346 in	15 - 3000 psi	Water	VIII Div. 1
3 NPS	4-6 NPS	2.128 sq in	[K] 1.646 in	0.413 in	15 - 2500 psi	Water	VIII Div. 1
3 - 4 NPS	4-6 NPS	3.317 sq in	[L] 2.055 in	0.517 in	15 - 2000 psi	Water	VIII Div. 1
4 NPS	6 NPS	4.165 sq in	[M] 2.303 in	0.579 in	15 - 1500 psi	Water	VIII Div. 1
		5.063 sq in	[N] 2.539 in	0.638 in	15 - 1500 psi	Water	VIII Div. 1
		7.407 sq in	[P] 2.992 in	0.748 in	15 - 1600 psi	Water	VIII Div. 1
6 NPS	8 NPS	13.042 sq in	[Q] 4.075 in	1.02 in	15 - 600 psi	Water	VIII Div. 1
	8-10 NPS	18.505 sq in	[R] 4.488 in	1.122 in	15 - 600 psi	Water	VIII Div. 1
8 NPS	10 NPS	29.244 sq in	[T] 5.984 in	1.496 in	15 - 300 psi	Water	VIII Div. 1
10 NPS	14 NPS	47.97 sq in	[U] 7.48 in	1.87 in	15 - 500 psi	Water	VIII Div. 1
12 NPS	16 NPS	68.96 sq in	[V] 9.055 in	2.264 in	15 - 500 psi	Water	VIII Div. 1
14 NPS	18 NPS	94.08 sq in	[W] 10.512 in	2.638 in	15 - 500 psi	Water	VIII Div. 1

Certification
Number: 00561Design Series
or catalog number SP 32

Type Classification: Pilot Operated Pressure Relief Valve

Capacity Tests: Sec. VIII Div. 1 at National Board T L (Worthington) on October 15, 2014

Method of Establishing Relieving Capacity: Flow Capacity, K

Certified Value: .869 Unitless

Test Medium: Steam & Air/Gas

Certified Medium: Steam & Air/Gas

Special Service: None

Set Pressure Definition: 1.Pop 3.Initial Audible Discharge

Blowdown: Adjustable and Fixed for Mod. Pilot

Scope of Nominal Size and Set Pressure Ranges:

Inlet Size	Outlet Size	Flow Area	Orifice [designator] diameter	Lift	Set Pressure Range	Media	Code Section
1 - 1.5 NPS	2 NPS	0.15 sq in	[D] 0.437 in	0.162 in	15 - 10000 psi	Air	VIII Div. 1
					15 - 1050 psi	Steam	VIII Div. 1
		0.225 sq in	[E] 0.535 in	0.198 in	15 - 10000 psi	Air	VIII Div. 1
					15 - 1050 psi	Steam	VIII Div. 1
1 - 2 NPS	2-3 NPS	0.371 sq in	[F] 0.687 in	0.254 in	15 - 10000 psi	Air	VIII Div. 1
					15 - 1050 psi	Steam	VIII Div. 1
		0.559 sq in	[G] 0.844 in	0.312 in	15 - 1050 psi	Steam	VIII Div. 1
					15 - 7000 psi	Air	VIII Div. 1
1.5 - 2 NPS	2-3 NPS	0.873 sq in	[H] 1.054 in	0.39 in	15 - 1050 psi	Steam	VIII Div. 1
					15 - 6000 psi	Air	VIII Div. 1
1.5 - 3 NPS	2-4 NPS	1.43 sq in	[J] 1.35 in	0.5 in	15 - 1050 psi	Steam	VIII Div. 1
					15 - 6000 psi	Air	VIII Div. 1
2 - 3 NPS	3-4 NPS	2.042 sq in	[K] 1.612 in	0.596 in	15 - 1050 psi	Steam	VIII Div. 1
					15 - 5000 psi	Air	VIII Div. 1
3 - 4 NPS	4, 6 NPS	3.17 sq in	[L] 2.009 in	0.743 in	15 - 1050 psi	Steam	VIII Div. 1
					15 - 4000 psi	Air	VIII Div. 1
		4 sq in	[M] 2.257 in	0.835 in	15 - 1050 psi	Steam	VIII Div. 1
					15 - 4000 psi	Air	VIII Div. 1
4 NPS	6 NPS	4.822 sq in	[N] 2.478 in	0.917 in	15 - 1050 psi	Steam	VIII Div. 1
					15 - 3000 psi	Air	VIII Div. 1
		7.087 sq in	[P] 3.004 in	1.111 in	15 - 1050 psi	Steam	VIII Div. 1
					15 - 2500 psi	Air	VIII Div. 1
6 NPS	8 NPS	12.27 sq in	[Q] 3.952 in	1.462 in	15 - 1050 psi	Steam	VIII Div. 1
					15 - 2000 psi	Air	VIII Div. 1
		15.821 sq in	[R] 4.488 in	1.66 in	15 - 1050 psi	Steam	VIII Div. 1
					15 - 2000 psi	Air	VIII Div. 1
8 NPS	10 NPS	28.126 sq in	[T] 5.984 in	2.214 in	15 - 1050 psi	Steam	VIII Div. 1
					15 - 1480 psi	Air	VIII Div. 1
10 NPS	14 NPS	44.18 sq in	[V] 7.5 in	2.775 in	15 - 500 psi	Air	VIII Div. 1
						Steam	VIII Div. 1
12 NPS	16 NPS	63.62 sq in	[W] 9 in	3.33 in	15 - 500 psi	Air	VIII Div. 1
						Steam	VIII Div. 1
14 NPS	18 NPS	86.785 sq in	[Y] 10.512 in	3.889 in	15 - 500 psi	Air	VIII Div. 1
						Steam	VIII Div. 1
16 NPS	20 NPS	95.38 sq in	[Z] 11.02 in	4.077 in	15 - 500 psi	Air	VIII Div. 1
						Steam	VIII Div. 1
		113.1 sq in	[Z2] 12 in	4.44 in	15 - 500 psi	Air	VIII Div. 1
						Steam	VIII Div. 1
18 NPS	24 NPS	143.1 sq in	[A] 13.498 in	4.994 in	15 - 500 psi	Air	VIII Div. 1
						Steam	VIII Div. 1
20 NPS	24 NPS	176.7 sq in	[B] 15 in	5.55 in	15 - 500 psi	Air	VIII Div. 1
						Steam	VIII Div. 1

Mt. H Control Valves Co., LTD (MHC)

NB#: 00572

location: 296, Noksansaneopjung-ro, Ganseo-gu, Busan 46754 South Korea

Certification Number: **00572** Design Series or catalog number: **SP 32 (Liquid)**

Type Classification: **Pilot Operated Pressure Relief Valve**Capacity Tests: **Sec. VIII Div. 1 at National Board T L (Worthington) on October 14, 2014**Method of Establishing Relieving Capacity: **Flow Capacity, K**Certified Value: **0.782 Unitless**Test Medium: **Water**Certified Medium: **Liquid**Set Pressure Definition: **First Steady Stream**Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
1 - 1.5 NPS	2 NPS	0.15 sq in	[D] 0.437 in	0.162 in	15 - 6170 psi	Water	VIII Div. 1
		0.225 sq in	[E] 0.535 in	0.198 in	15 - 6170 psi	Water	VIII Div. 1
		0.371 sq in	[F] 0.687 in	0.254 in	15 - 6170 psi	Water	VIII Div. 1
1.5 - 2 NPS	2-3 NPS	0.559 sq in	[G] 0.844 in	0.312 in	15 - 6170 psi	Water	VIII Div. 1
		0.873 sq in	[H] 1.054 in	0.39 in	15 - 6170 psi	Water	VIII Div. 1
2 - 3 NPS	3-4 NPS	1.43 sq in	[J] 1.35 in	0.5 in	15 - 6170 psi	Water	VIII Div. 1
3 NPS	4 NPS	2.042 sq in	[K] 1.612 in	0.596 in	15 - 3705 psi	Water	VIII Div. 1
3 - 4 NPS	4,6 NPS	3.17 sq in	[L] 2.009 in	0.743 in	15 - 3705 psi	Water	VIII Div. 1
	4, 6 NPS	4 sq in	[M] 2.257 in	0.835 in	15 - 1480 psi	Water	VIII Div. 1
4 NPS	6 NPS	4.822 sq in	[N] 2.478 in	0.917 in	15 - 1480 psi	Water	VIII Div. 1
		7.087 sq in	[P] 3.004 in	1.111 in	15 - 1480 psi	Water	VIII Div. 1
6 NPS	8 NPS	12.27 sq in	[Q] 3.952 in	1.462 in	15 - 1480 psi	Water	VIII Div. 1
		15.821 sq in	[R] 4.488 in	1.66 in	15 - 1480 psi	Water	VIII Div. 1
8 NPS	10 NPS	28.126 sq in	[T] 5.984 in	2.214 in	15 - 1480 psi	Water	VIII Div. 1
10 NPS	14 NPS	44.18 sq in	[V] 7.5 in	2.775 in	15 - 500 psi	Water	VIII Div. 1
12 NPS	16 NPS	63.62 sq in	[W] 9 in	3.33 in	15 - 500 psi	Water	VIII Div. 1
14 NPS	18 NPS	86.785 sq in	[Y] 10.512 in	3.889 in	15 - 500 psi	Water	VIII Div. 1
16 NPS	20 NPS	95.38 sq in	[Z] 11.02 in	4.077 in	15 - 500 psi	Water	VIII Div. 1
		113.1 sq in	[Z2] 12 in	4.44 in	15 - 500 psi	Water	VIII Div. 1
18 NPS	24 NPS	143.1 sq in	[A] 13.498 in	4.994 in	15 - 500 psi	Water	VIII Div. 1
20 NPS	24 NPS	176.7 sq in	[B] 15 in	5.55 in	15 - 500 psi	Water	VIII Div. 1

Mueller Refrigeration, LLC (MBC)

NB#: 41005

location: 121 Rogers Street, Hartsville, TN 37074 United States

Acceptable Abbrev.: Block style "M"

Mueller Refrigeration, LLC (MBC)

location: 121 Rogers Street, Hartsville, TN 37074 United States

Acceptable Abbrev.: Block style "M"

Certification Number: **41005** Design Series or catalog number **A15501, A15508, A15509, A15511, A18932 & B-34067**

Type Classification: **Safety Relief Valve**Capacity Tests: **Sec. VIII Div. 1 at Phillips Petroleum on January 03, 1956**Method of Establishing Relieving Capacity: **Flow Capacity, Slope**Certified Value: **.206 SCFM/PSIA**Test Medium: **Air/Gas**Certified Medium: **Gas**Special Service: **None**Set Pressure Definition: **Start-to-Leak**Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
0.125 - 0.5 NPS	Top	0.0128 sq in	0.128 in		150 - 450 psi	Air	VIII Div. 1

Certification Number: **41016** Design Series or catalog number **A15502, A15503, A15512, A15513, A17430, A18774, A18933, A18934, A-19108, B33746, B33752, B33753, B33754, B33755 & B34425**

Type Classification: **Safety Relief Valve**Capacity Tests: **Sec. VIII Div. 1 at Phillips Petroleum on January 03, 1956**Method of Establishing Relieving Capacity: **Flow Capacity, Slope**Certified Value: **.4377 SCFM/PSIA**Test Medium: **Air/Gas**Certified Medium: **Gas**Set Pressure Definition: **Start-to-Leak**Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
0.125 - 0.375 NPS	3/8, 1/2 NPS	0.0284 sq in	0.19 in		150 - 700 psi	Air	VIII Div. 1

Certification Number: **41027** Design Series or catalog number **A15504, A15514, A15515, B35413, A18736, A18737 A18762, A18783, A18784, A18935, A19105**

Type Classification: **Safety Relief Valve**Capacity Tests: **Sec. VIII Div. 1 at Phillips Petroleum on January 03, 1956**Method of Establishing Relieving Capacity: **Flow Capacity, Slope**Certified Value: **.9646 SCFM/PSIA**Test Medium: **Gas**Certified Medium: **Gas**Set Pressure Definition: **Start-to-Leak**Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
0.375 - 0.875 NPS	5/8, 3/4 NPS	0.0616 sq in	0.28 in		150 - 700 psi	Air	VIII Div. 1

Mueller Refrigeration, LLC (MBC)

NB#: 41049

location: 121 Rogers Street, Hartsville, TN 37074 United States

Acceptable Abbrev.: Block style "M"

Certification Number: **41049** Design Series or catalog number **A-15506 & B-34444**

Type Classification: **Safety Relief Valve**Capacity Tests: **Sec. VIII Div. 1 at Phillips Petroleum on May 22, 1956**Method of Establishing Relieving Capacity: **Flow Capacity, Slope**Certified Value: **.124 lb/min/psia**Test Medium: **Air/Gas**Certified Medium: **Gas**Set Pressure Definition: **Start-to-Leak**Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
0.75 - 0.875 NPS	.75 Top	0.1134 sq in	0.38 in		150 - 450 psi	Air	VIII Div. 1

Certification Number: **41050** Design Series or catalog number **A-17840, A-18735, & B-34519**

Type Classification: **Safety Relief Valve**Capacity Tests: **Sec. VIII Div. 1 at National Board T L (Worthington) on July 08, 1999**Method of Establishing Relieving Capacity: **Flow Capacity, Slope**Certified Value: **2.69 SCFM/PSIA**Test Medium: **Air/Gas**Certified Medium: **Gas**Set Pressure Definition: **Bubble**Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
0.75 - 1.625 NPS	1 NPS	0.196 sq in	0.5 in		150 - 450 psi	Air	VIII Div. 1

Certification Number: **41061** Design Series or catalog number **A-17834, B-34580, A-18387, A-18473**

Type Classification: **Safety Relief Valve**Capacity Tests: **Sec. VIII Div. 1 at National Board T L (Worthington) on October 29, 1999**Method of Establishing Relieving Capacity: **Flow Capacity, Slope**Certified Value: **4.4 SCFM/PSIA**Test Medium: **Air/Gas**Certified Medium: **Gas**Set Pressure Definition: **Bubble**Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
1 - 1.625 NPS	1, 1.25 NPS	0.4185 sq in	0.73 in	0.183 in	150 - 450 psi	Air	VIII Div. 1

Certification Number: **41072** Design Series or catalog number **A-17970, A-18443**

Type Classification: **Safety Relief Valve**Capacity Tests: **Sec. VIII Div. 1 at National Board T L (Worthington) on October 28, 2002**Method of Establishing Relieving Capacity: **Flow Capacity, Slope**Certified Value: **1.39 SCFM/PSIA**Test Medium: **Air/Gas**Certified Medium: **Gas**Set Pressure Definition: **Bubble**Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
0.375 N/A	1 NPS	0.093 sq in	0.375 in		150 - 450 psi	Air	VIII Div. 1

Mueller Refrigeration, LLC (MBC)

NB#: 41083

location: 121 Rogers Street, Hartsville, TN 37074 United States

Acceptable Abbrev.: Block style "M"

Certification Number: **41083** Design Series or catalog number: **A-18356, A-18357, A-18358, A-18540**

Type Classification: **Safety Relief Valve**Capacity Tests: **Sec. VIII Div. 1 at National Board T L (Worthington) on August 07, 2007**Method of Establishing Relieving Capacity: **Flow Capacity, Slope**Certified Value: **1.87 SCFM/PSIA**Test Medium: **Air**Certified Medium: **Gas**Special Service: **None**Set Pressure Definition: **Start-to-Leak**Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
0.5 - 0.875 NPS	.5, .75 NPS	0.151 sq in	0.438 in	0.109 in	150 - 450 psi	Air	VIII Div. 1

Certification Number: **41106** Design Series or catalog number: **A-18422**

Type Classification: **Relief Valve**Capacity Tests: **Sec. VIII Div. 1 at National Board T L (Worthington) on March 16, 2009**Method of Establishing Relieving Capacity: **Flow Capacity, Slope**Certified Value: **1.73 SCFM/PSIA**Test Medium: **Air**Certified Medium: **Gas**Special Service: **None**Set Pressure Definition: **Start-to-Leak**Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
0.75 NPS	.75 NPS	0.1134 sq in	0.38 in		600 - 700 psi	Air	VIII Div. 1

Certification Number: **41117** Design Series or catalog number: **A-18425, A-18444 (Teflon seat)**

Type Classification: **Safety Relief Valve**Capacity Tests: **Sec. VIII Div. 1 at National Board T L (Worthington) on October 16, 2008**Method of Establishing Relieving Capacity: **Flow Capacity, Slope**Certified Value: **4.33 SCFM/PSIA**Test Medium: **Gas**Certified Medium: **Gas**Special Service: **None**Set Pressure Definition: **Start-to-Leak**Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
1 - 1.25 NPS	1.25 NPS	0.4185 sq in	0.73 in		150 - 450 psi	Air	VIII Div. 1

Mueller Refrigeration, LLC (MBC)

NB#: 41128

location: 121 Rogers Street, Hartsville, TN 37074 United States

Acceptable Abbrev.: Block style "M"

Certification Number: **41128** Design Series or catalog number: **A-18424 (Teflon seat)**

Type Classification: **Safety Relief Valve**Capacity Tests: **Sec. VIII Div. 1 at National Board T L (Worthington) on January 20, 2009**Method of Establishing Relieving Capacity: **Flow Capacity, Slope**Certified Value: **2.906 SCFM/PSIA**Test Medium: **Gas**Certified Medium: **Gas**Special Service: **None**Set Pressure Definition: **Start-to-Leak**Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
1 NPS	1 NPS	0.196 sq in	0.5 in		150 - 450 psi	Air	VIII Div. 1

Certification Number: **41162** Design Series or catalog number: **3080A (3075TR, 5730)**

Type Classification: **Safety Relief Valve**Capacity Tests: **Sec. VIII Div. 1 at National Board T L (Worthington) on November 10, 2016**Method of Establishing Relieving Capacity: **Flow Capacity, Slope**Certified Value: **2.637 SCFM/PSIA**Test Medium: **Gas**Certified Medium: **Gas**Special Service: **None**Set Pressure Definition: **Start-to-Leak**Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
1.25 - 1.625 NPS	Top	0.196 sq in	0.5 in		300 - 450 psi	Air	VIII Div. 1

Certification Number: **41173** Design Series or catalog number: **3000A (3000, 3001, 3001X2, 3002, 3012, 3014, 3015, 3212, 3214, 3215, 5980X1, 3000C, 3001C, 3002C, 3012C, 3014C, 3015C, 3212C, 3214C, 3215C, 3000C-4FFL)**

Type Classification: **Safety Relief Valve**Capacity Tests: **Sec. VIII Div. 1 at National Board T L (Worthington) on November 10, 2016**Method of Establishing Relieving Capacity: **Flow Capacity, Slope**Certified Value: **0.379 SCFM/PSIA**Test Medium: **Gas**Certified Medium: **Gas**Special Service: **None**Set Pressure Definition: **Start-to-Leak**Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
0.125 - 0.375 NPS	3/8, 1/2, Top NPS	0.028 sq in	0.187 in		150 - 800 psi	Air	VIII Div. 1

Mueller Refrigeration, LLC (MBC)

NB#: 41184

Location: 121 Rogers Street, Hartsville, TN 37074 United States

Acceptable Abbrev.: Block style "M"

Certification Number:	41184	Design Series or catalog number	3020A (3016, 3020, 3020X2, 3216, 3220, 5731AX9, 5733, 5733X2, 3016C, 3020C, 3216C, 3220C)
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Type Classification: **Safety Relief Valve**Capacity Tests: **Sec. VIII Div. 1 at National Board T L (Worthington) on November 10, 2016**Method of Establishing Relieving Capacity: **Flow Capacity, Slope**Certified Value: **0.727 SCFM/PSIA**Test Medium: **Gas**Certified Medium: **Gas**Special Service: **None**Set Pressure Definition: **Start-to-Leak**Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
0.375 - 1.125 NPS	1/2, 5/8, Top	0.062 sq in	0.281 in		150 - 800 psi	Air	VIII Div. 1

Certification Number:	41195	Design Series or catalog number	3030A (3030, 3031, 3031X1, 3045, 3045TR, 3045X1)
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Type Classification: **Safety Relief Valve**Capacity Tests: **Sec. VIII Div. 1 at National Board T L (Worthington) on November 10, 2016**Method of Establishing Relieving Capacity: **Flow Capacity, Slope**Certified Value: **1.698 SCFM/PSIA**Test Medium: **Gas**Certified Medium: **Gas**Special Service: **None**Set Pressure Definition: **Start-to-Leak**Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
0.5 - 1 NPS	1/2, 3/4, Top NPS	0.15 sq in	0.437 in		150 - 700 psi	Air	VIII Div. 1

Certification Number:	41207	Design Series or catalog number	3060A (3060, 3060FL, 3060X1, 3060X7, 3061X1, 3070, 3075)
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Type Classification: **Safety Relief Valve**Capacity Tests: **Sec. VIII Div. 1 at National Board T L (Worthington) on November 10, 2016**Method of Establishing Relieving Capacity: **Flow Capacity, Slope**Certified Value: **4.093 SCFM/PSIA**Test Medium: **Gas**Certified Medium: **Gas**Special Service: **None**Set Pressure Definition: **Start-to-Leak**Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
1 - 1.25 NPS	1, 1.25 NPS	0.405 sq in	0.718 in		150 - 350 psi	Air	VIII Div. 1

Mueller Refrigeration, LLC (MBC)

NB#: 41218

location: 121 Rogers Street, Hartsville, TN 37074 United States

Acceptable Abbrev.: Block style "M"

Certification Number: **41218** Design Series or catalog number: **3090**

Type Classification: **Safety Relief Valve**Capacity Tests: **Control Script failed for control txtCoc , Source=**Method of Establishing Relieving Capacity: **Flow Capacity, 3 valve average**Certified Value: **774.1 SCFM**Test Medium: **Gas**Certified Medium: **Gas**Set Pressure Definition: **Start-to-Leak**Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
1.875 in	1.5 NPS	1.227 sq in	1.25 in	0.389 in	50 - 50 psi	Air	VIII Div. 1

Nakakita Seisakusho Company, Limited (NKK)

NB#: 42039

location: 1-1 Fukonominami-Machi, Daito City, Osaka 574-8691 Japan

Acceptable Abbrev.: NAKAKITA SEISAKUSHO

Nakakita Seisakusho Company, Limited (NKK)

location: 1-1 Fukonominami-Machi, Daito City, Osaka 574-8691 Japan

Acceptable Abbrev.: NAKAKITA SEISAKUSHO

Certification
Number: **42039**Design Series
or catalog number **NS255**Type Classification: **Safety Relief Valve**Capacity Tests: **Sec. VIII Div. 1 at National Board T L (Picaway) on April 17, 1978**Method of Establishing Relieving Capacity: **Flow Capacity, K**Certified Value: **.878 Unitless**Test Medium: **Steam & Air/Gas**Certified Medium: **Steam & Air/Gas**Set Pressure Definition: **Pop**Blowdown: **Adjustable by Dual Ring**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
0.75 - 1.5 NPS	1 -2.5 NPS	0.133 sq in	[D] 0.413 in	0.125 in	15 - 2900 psi	Steam	VIII Div. 1
					15 - 3500 psi	Air	VIII Div. 1
	1 - 2.5 NPS	0.221 sq in	[E] 0.531 in	0.161 in	15 - 2900 psi	Steam	VIII Div. 1
					15 - 3500 psi	Air	VIII Div. 1
1 - 1.5 NPS	1.5 - 2.5 NPS	0.351 sq in	[F] 0.669 in	0.2 in	15 - 2900 psi	Steam	VIII Div. 1
					15 - 3500 psi	Air	VIII Div. 1
1.5 - 2 NPS	2 - 3 NPS	0.589 sq in	[G] 0.866 in	0.259 in	15 - 2900 psi	Steam	VIII Div. 1
					15 - 3500 psi	Air	VIII Div. 1
	3 NPS	0.919 sq in	[H] 1.082 in	0.326 in	15 - 2500 psi	Air	VIII Div. 1
						Steam	VIII Div. 1
2 - 3 NPS	3 , 4 NPS	1.448 sq in	[J] 1.358 in	0.409 in	15 - 2500 psi	Air	VIII Div. 1
						Steam	VIII Div. 1
3 NPS	4, 6 NPS	2.094 sq in	[K] 1.633 in	0.452 in	15 - 2000 psi	Air	VIII Div. 1
						Steam	VIII Div. 1
3 - 4 NPS	4, 6 NPS	3.226 sq in	[L] 2.027 in	0.559 in	15 - 1500 psi	Air	VIII Div. 1
						Steam	VIII Div. 1
4 NPS	6 NPS	4.093 sq in	[M] 2.283 in	0.629 in	15 - 1000 psi	Air	VIII Div. 1
						Steam	VIII Div. 1
		4.908 sq in	[N] 2.5 in	0.688 in	15 - 1000 psi	Air	VIII Div. 1
						Steam	VIII Div. 1
		7.215 sq in	[P] 3.031 in	0.834 in	15 - 1000 psi	Air	VIII Div. 1
						Steam	VIII Div. 1
6 NPS	8 NPS	12.541 sq in	[Q] 3.996 in	1.102 in	15 - 600 psi	Air	VIII
						Steam	VIII Div. 1
	8, 10 NPS	18.118 sq in	[R] 4.803 in	1.322 in	15 - 400 psi	Air	VIII Div. 1
						Steam	VIII Div. 1
8 NPS	10 NPS	29.435 sq in	[T] 6.122 in	1.685 in	15 - 300 psi	Air	VIII Div. 1
						Steam	VIII Div. 1
10 NPS	12, 14 NPS	47.722 sq in	[V] 7.795 in	2.145 in	15 - 300 psi	Air	VIII Div. 1
						Steam	VIII Div. 1
12 NPS	14, 16 NPS	68.368 sq in	[W] 9.33 in	2.566 in	15 - 300 psi	Air	VIII Div. 1
						Steam	VIII Div. 1

Nakakita Seisakusho Company, Limited (NKK)

NB#: 42040

Location: 1-1 Fukonominami-Machi, Daito City, Osaka 574-8691 Japan

Acceptable Abbrev.: NAKAKITA SEISAKUSHO

Certification Number: **42040** Design Series or catalog number: **NS255E (Liquids)**

Type Classification: **Relief Valve**Capacity Tests: **Sec. VIII Div. 1 at National Board T L (Picaway) on November 03, 1986**Method of Establishing Relieving Capacity: **Flow Capacity, K**Certified Value: **.67 Unitless**Test Medium: **Water**Certified Medium: **Liquid**Set Pressure Definition: **First Steady Stream**Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
0.75 - 1.5 NPS	.75 - 2.5 NPS	0.11 sq in	0.375 in	0.112 in	15 - 5000 psi	Water	VIII Div. 1
		0.133 sq in	0.413 in	0.125 in	15 - 5000 psi	Water	VIII Div. 1
		0.196 sq in	0.5 in	0.15 in	15 - 5000 psi	Water	VIII Div. 1
	0.75 - 2.5 NPS	0.221 sq in	0.531 in	0.161 in	15 - 5000 psi	Water	VIII Div. 1
1 - 1.5 NPS	1.5 - 2.5 NPS	0.307 sq in	0.625 in	0.19 in	15 - 5000 psi	Water	VIII Div. 1
		0.351 sq in	0.669 in	0.2 in	15 - 5000 psi	Water	VIII Div. 1
1.5 - 2 NPS	2 - 3 NPS	0.503 sq in	0.8 in	0.24 in	15 - 3500 psi	Water	VIII Div. 1
		0.589 sq in	0.866 in	0.259 in	15 - 3500 psi	Water	VIII Div. 1
	3 NPS	0.785 sq in	1 in	0.3 in	15 - 2500 psi	Water	VIII Div. 1
		0.919 sq in	1.082 in	0.326 in	15 - 2500 psi	Water	VIII Div. 1
2 - 3 NPS	3 , 4 NPS	1.287 sq in	1.281 in	0.384 in	15 - 2500 psi	Water	VIII Div. 1
		1.448 sq in	1.358 in	0.409 in	15 - 2500 psi	Water	VIII Div. 1
3 NPS	4 , 6 NPS	1.838 sq in	1.53 in	0.421 in	15 - 2000 psi	Water	VIII Div. 1
	4 , 6 NPS	2.094 sq in	1.633 in	0.452 in	15 - 2000 psi	Water	VIII Div. 1
3 - 4 NPS	4 , 6 NPS	2.853 sq in	1.906 in	0.524 in	15 - 1500 psi	Water	VIII Div. 1
	4 , 6 NPS	3.226 sq in	2.027 in	0.559 in	15 - 1500 psi	Water	VIII Div. 1
4 NPS	6 NPS	3.6 sq in	2.141 in	0.589 in	15 - 1000 psi	Water	VIII Div. 1
		4.093 sq in	2.283 in	0.629 in	15 - 1000 psi	Water	VIII Div. 1
		4.34 sq in	2.351 in	0.646 in	15 - 1000 psi	Water	VIII Div. 1
		4.908 sq in	2.5 in	0.688 in	15 - 1000 psi	Water	VIII Div. 1
		6.38 sq in	2.85 in	0.784 in	15 - 1000 psi	Water	VIII Div. 1
		7.215 sq in	3.031 in	0.834 in	15 - 1000 psi	Water	VIII Div. 1
6 NPS	8 NPS	11.05 sq in	3.75 in	1.031 in	15 - 600 psi	Water	VIII Div. 1
		12.541 sq in	3.996 in	1.102 in	15 - 600 psi	Water	VIII Div. 1
	8, 10 NPS	16 sq in	4.514 in	1.241 in	15 - 400 psi	Water	VIII Div. 1
		18.118 sq in	4.803 in	1.322 in	15 - 400 psi	Water	VIII Div. 1
8 NPS	10 NPS	26 sq in	5.75 in	1.582 in	15 - 300 psi	Water	VIII Div. 1
		29.435 sq in	6.122 in	1.685 in	15 - 300 psi	Water	VIII Div. 1
10 NPS	12, 14 NPS	44.734 sq in	7.547 in	2.075 in	15 - 300 psi	Water	VIII Div. 1
		47.722 sq in	7.795 in	2.145 in	15 - 300 psi	Water	VIII Div. 1
12 NPS	14, 16 NPS	64.397 sq in	9.055 in	2.49 in	15 - 300 psi	Water	VIII Div. 1
		68.368 sq in	9.33 in	2.566 in	15 - 300 psi	Water	VIII Div. 1

Nakakita Seisakusho Company, Limited (NKK)

NB#: 42051

location: 1-1 Fukuonominami-Machi, Daito City, Osaka 574-8691 Japan

Acceptable Abbrev.: NAKAKITA SEISAKUSHO

Certification
Number: **42051**Design Series
or catalog number **NS255F**Type Classification: **Safety Valve**Capacity Tests: **Sec. I & VIII Div. 1 at National Board T L (Picaway) on February 02, 1980**Method of Establishing Relieving Capacity: **Flow Capacity, K**Certified Value: **.866 Unitless**Test Medium: **Steam**Certified Medium: **Steam**Set Pressure Definition: **Pop**Blowdown: **Adjustable**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
1 NPS	1.5, 2 NPS	0.439 sq in	0.748 in	0.187 in	15 - 2200 psi	Steam	I
1.25 NPS	2, 2.5 NPS	0.701 sq in	0.9448 in	0.236 in	15 - 2200 psi	Steam	I
1.5 NPS	2.5 - 4 NPS	1.095 sq in	1.1811 in	0.295 in	15 - 2200 psi	Steam	I
2 NPS	3, 4 NPS	1.757 sq in	1.496 in	0.374 in	15 - 2200 psi	Steam	I
2.5 NPS	4, 5, 6 NPS	2.922 sq in	1.9291 in	0.482 in	15 - 2200 psi	Steam	I
3 NPS	5, 6 NPS	3.955 sq in	2.244 in	0.561 in	15 - 2200 psi	Steam	I
3.5 NPS	6, 7 NPS	5.795 sq in	2.7165 in	0.679 in	15 - 1024 psi	Steam	I
4 NPS	6, 7, 8 NPS	7.031 sq in	2.9921 in	0.748 in	15 - 1024 psi	Steam	I
4.5 NPS	7, 9 NPS	9.427 sq in	3.4645 in	0.866 in	15 - 711 psi	Steam	I
5 NPS	8, 10 NPS	10.986 sq in	3.7401 in	0.935 in	15 - 711 psi	Steam	I
6 NPS	8 NPS	16.099 sq in	4.5275 in	1.312 in	15 - 469 psi	Steam	I
8 NPS	10, 12 NPS	28.126 sq in	5.9842 in	1.496 in	15 - 313 psi	Steam	I

Certification
Number: **42062**Design Series
or catalog number **NS256**Type Classification: **Pilot Operated Pressure Relief Valve**Capacity Tests: **Sec. VIII Div. 1 at National Board T L (Picaway) on June 21, 1979**Method of Establishing Relieving Capacity: **Flow Capacity, K**Certified Value: **.878 Unitless**Test Medium: **Air/Gas**Certified Medium: **Air/Gas**Set Pressure Definition: **Pop**Blowdown: **Adjustable**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
1 - 1.5 NPS	2, 2.5 NPS	0.112 sq in	0.378 in	0.114 in	50 - 2300 psi	Water	VIII
		0.196 sq in	0.5 in	0.154 in	50 - 2300 psi	Air	VIII
1.5 NPS	2, 2.5 NPS	0.307 sq in	0.626 in	0.193 in	50 - 2300 psi	Air	VIII
1.5 - 2 NPS	2.5, 3 NPS	0.506 sq in	0.8031 in	0.24 in	50 - 2300 psi	Air	VIII
	3 NPS	0.785 sq in	1 in	0.303 in	50 - 2300 psi	Air	VIII
2 - 3 NPS	3, 4 NPS	1.293 sq in	1.2835 in	0.386 in	50 - 2300 psi	Air	VIII
3 NPS	4, 6 NPS	1.842 sq in	1.5315 in	0.421 in	50 - 2000 psi	Air	VIII
3 - 4 NPS	4, 6 NPS	2.863 sq in	1.9094 in	0.524 in	50 - 2000 psi	Air	VIII
4 NPS	6 NPS	3.602 sq in	2.1417 in	0.591 in	50 - 2000 psi	Air	VIII
		4.353 sq in	2.3543 in	0.646 in	50 - 2000 psi	Air	VIII
		6.381 sq in	2.8504 in	0.783 in	50 - 1500 psi	Air	VIII
6 NPS	8 NPS	11.056 sq in	3.752 in	1.031 in	50 - 1500 psi	Air	VIII
	8, 10 NPS	16.015 sq in	4.5157 in	1.4 in	50 - 1100 psi	Air	VIII
8 NPS	10, 12 NPS	26.02 sq in	5.7559 in	1.583 in	50 - 1000 psi	Air	VIII

Nakakita Seisakusho Company, Limited (NKK)

NB#: 42073

location: 1-1 Fukonominami-Machi, Daito City, Osaka 574-8691 Japan

Acceptable Abbrev.: NAKAKITA SEISAKUSHO

Certification
Number: **42073**Design Series
or catalog number **NS 200JMR**Type Classification: **Relief Valve**Capacity Tests: **Sec. VIII Div. 1 at National Board T L (Worthington) on May 08, 1997**Method of Establishing Relieving Capacity: **Flow Capacity, K**Certified Value: **.603 Unitless**Test Medium: **Water**Certified Medium: **Liquid**Set Pressure Definition: **First Steady Stream**Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
0.5 - 1 NPS	.5 - 1 NPS	0.1217 sq in	0.3149 in	0.079 in	15 - 3000 psi	Water	VIII
0.75 - 1 NPS	.75 - 1 NPS	0.1217 sq in	0.3937 in	0.098 in	15 - 2000 psi	Water	VIII

Nirmal Industrial Controls Pvt. Ltd. (NIC)

NB#: 00819

location: Survey No. 136/1 (P)

Acceptable Abbrev.: NIRMAL INDIA

Nirmal Industrial Controls Pvt. Ltd. (NIC)

location: Survey No. 136/1 (P)

Acceptable Abbrev.: NIRMAL INDIA

Certification
Number: **00819**Design Series
or catalog number**Securamax SR-07 Series**Type Classification: **Safety Relief Valve**Capacity Tests: **Sec. VIII Div. 1 at National Board T L (Worthington) on March 07, 2016**Method of Establishing Relieving Capacity: **Flow Capacity, K**Certified Value: **0.870 Unitless**Test Medium: **Gas**Certified Medium: **Air/Gas**Special Service: **None**Set Pressure Definition: **Pop**Blowdown: **Adjustable by Single Ring**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
1 - 1.5 NPS	2 NPS	0.124 sq in	[D] 0.398 in	0.134 in	15 - 3697 psi	Air	VIII Div. 1
		0.224 sq in	[E] 0.531 in	0.134 in	15 - 3697 psi	Air	VIII Div. 1
1.5 NPS	2, 3 NPS	0.352 sq in	[F] 0.669 in	0.17 in	15 - 3697 psi	Air	VIII Div. 1
1.5 - 2 NPS	3 NPS	0.567 sq in	[G] 0.85 in	0.213 in	15 - 3697 psi	Air	VIII Div. 1
		0.887 sq in	[H] 1.063 in	0.268 in	15 - 2755 psi	Air	VIII Div. 1
2 - 3 NPS	3, 4 NPS	1.457 sq in	[J] 1.362 in	0.342 in	15 - 2697 psi	Air	VIII Div. 1
3 NPS	4, 6 NPS	2.096 sq in	[K] 1.634 in	0.394 in	15 - 2218 psi	Air	VIII Div. 1
3 - 4 NPS	4, 6 NPS	3.228 sq in	[L] 2.028 in	0.55 in	15 - 1493 psi	Air	VIII Div. 1
4 NPS	6 NPS	3.817 sq in	[M] 2.205 in	0.55 in	15 - 1102 psi	Air	VIII Div. 1
		5.143 sq in	[N] 2.559 in	0.64 in	15 - 1000 psi	Air	VIII Div. 1
		7.027 sq in	[P] 2.992 in	0.76 in	15 - 1000 psi	Air	VIII Div. 1
6 NPS	8 NPS	12.915 sq in	[Q] 4.055 in	1.02 in	15 - 609 psi	Air	VIII Div. 1
	8, 10 NPS	15.882 sq in	[R] 4.488 in	1.2 in	15 - 304 psi	Air	VIII Div. 1
8 NPS	10 NPS	27.92 sq in	[T] 5.965 in	1.54 in	15 - 304 psi	Air	VIII Div. 1

Norriseal Wellmark Inc. (NWK)

NB#: 66057

location: 11122 West Little York, Houston, TX 77041 United States

Acceptable Abbrev.: Norriseal Wellmark

Norriseal Wellmark Inc. (NWK)

location: 11122 West Little York, Houston, TX 77041 United States

Acceptable Abbrev.: Norriseal Wellmark

Certification Number: **66057** Design Series or catalog number: **W9503**

Type Classification: **Safety Relief Valve**Capacity Tests: **Sec. VIII Div. 1 at National Board T L (Worthington) on June 16, 1999**Method of Establishing Relieving Capacity: **Flow Capacity, Slope**Certified Value: **36.12 SCFM/PSIA**Test Medium: **Air/Gas**Certified Medium: **Air/Gas**Set Pressure Definition: **Pop**Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
3 NPS	3 NPS	3.142 sq in	2 in		15 - 125 psi	Air	VIII Div. 1

Certification Number: **66068** Design Series or catalog number: **2600 Series**

Type Classification: **Safety Relief Valve**Capacity Tests: **Sec. VIII Div. 1 at National Board T L (Worthington) on March 05, 2007**Method of Establishing Relieving Capacity: **Flow Capacity, K**Certified Value: **0.859 Unitless**Test Medium: **Air**Certified Medium: **Air/Gas**Set Pressure Definition: **Pop**Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
0.5 - 1 NPS	1 - 2 NPS	0.068 sq in	[C] 0.295 in		15 - 2500 psi	Air	VIII Div. 1
0.5 - 1.5 NPS	1 - 2 NPS	0.125 sq in	[D] 0.4 in		15 - 2500 psi	Air	VIII Div. 1
0.75 - 2 NPS	1 - 3 NPS	0.223 sq in	[E] 0.534 in		15 - 2500 psi	Air	VIII Div. 1
1.5 - 2 NPS	1.5 - 3 NPS	0.354 sq in	[F] 0.672 in		15 - 2500 psi	Air	VIII Div. 1
		0.576 sq in	[G] 0.857 in		75 - 2500 psi	Air	VIII Div. 1

Certification Number: **66079** Design Series or catalog number: **2600 (Liquid)**

Type Classification: **Safety Relief Valve**Capacity Tests: **Sec. VIII Div. 1 at National Board T L (Worthington) on May 04, 2015**Method of Establishing Relieving Capacity: **Flow Capacity, K**Certified Value: **0.628 Unitless**Test Medium: **Water**Certified Medium: **Liquid**Set Pressure Definition: **First Steady Stream**Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
0.5 - 1.5 NPS	1-2 NPS	0.125 sq in	[D] 0.4 in	0.224 in	15 - 2500 psi	Water	VIII Div. 1
0.75 - 2 NPS	1-3 NPS	0.223 sq in	[E] 0.534 in	0.246 in	15 - 2500 psi	Water	VIII Div. 1
1.5 - 2 NPS	1.5-3 NPS	0.354 sq in	[F] 0.672 in	0.301 in	15 - 2500 psi	Water	VIII Div. 1
		0.576 sq in	[G] 0.857 in	0.363 in	75 - 2500 psi	Water	VIII Div. 1

NUOVA GENERAL INSTRUMENTS S.r.l. (NGI)

NB#: 32500

location: Localita Campasso, Pianello Val Tidone (PC) 29010 Italy

Acceptable Abbrev.: Logo: Letter "I" encircled by "G"

NUOVA GENERAL INSTRUMENTS S.r.l. (NGI)

location: Localita Campasso, Pianello Val Tidone (PC) 29010 Italy

Acceptable Abbrev.: Logo: Letter "I" encircled by "G"

Certification
Number: **32500**Design Series
or catalog number **A001**Type Classification: **Safety Valve**Capacity Tests: **Sec. VIII Div. 1 at National Board T L (Worthington) on May 20, 2005**Method of Establishing Relieving Capacity: **Flow Capacity, K**Certified Value: **0.712 Unitless**Test Medium: **Steam & Air/Gas**Certified Medium: **Steam & Air/Gas**Set Pressure Definition: **Initial Audible Discharge**Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
0.25 - 0.375 NPS	Side	38.5 sq mm	7 mm	2.1 mm	15 - 240 psi	Steam	VIII Div. 1
					15 - 580 psi	Air	VIII Div. 1
0.375 - 0.75 NPS	Side	78.5 sq mm	10 mm	3 mm	15 - 1537 psi	Air	VIII Div. 1
					15 - 240 psi	Steam	VIII Div. 1
0.5 NPS	Side	113 sq mm	12 mm	3.6 mm	15 - 240 psi	Steam	VIII Div. 1
					15 - 435 psi	Air	VIII Div. 1
0.5 - 1 NPS	Side	154 sq mm	14 mm	4.2 mm	15 - 1160 psi	Air	VIII Div. 1
					15 - 240 psi	Steam	VIII Div. 1
1 NPS	Side	254 sq mm	18 mm	5.4 mm	15 - 240 psi	Steam	VIII Div. 1
					15 - 304 psi	Air	VIII Div. 1
		314 sq mm	20 mm	6 mm	15 - 240 psi	Steam	VIII Div. 1
1 - 1.5 NPS	Side	491 sq mm	25 mm	7.5 mm	15 - 240 psi	Steam	VIII Div. 1
					15 - 435 psi	Air	VIII Div. 1
1.5 NPS	Side	804 sq mm	32 mm	9.6 mm	15 - 177 psi	Air	VIII Div. 1
						Steam	VIII Div. 1
1.5 - 2 NPS	Side	1134 sq mm	38 mm	11.4 mm	15 - 240 psi	Steam	VIII Div. 1
					15 - 435 psi	Air	VIII Div. 1
		1257 sq mm	40 mm	12 mm	15 - 240 psi	Steam	VIII Div. 1
					15 - 435 psi	Air	VIII Div. 1

Location: Localita Campasso, Pianello Val Tidone (PC) 29010 Italy

Acceptable Abbrev.: Logo: Letter "I" encircled by "G"

Certification
Number: **32511**Design Series
or catalog number **A002**Type Classification: **Safety Valve**Capacity Tests: **Sec. VIII Div. 1 at National Board T L (Worthington) on October 18, 2005**Method of Establishing Relieving Capacity: **Flow Capacity, K**Certified Value: **0.622 Unitless**Test Medium: **Steam & Air/Gas**Certified Medium: **Steam & Air/Gas**Set Pressure Definition: **Initial Audible Discharge**Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
0.25 - 0.375 NPS	.5 NPS	38.5 sq mm	7 mm	2.1 mm	15 - 240 psi	Steam	VIII Div. 1
					15 - 580 psi	Air	VIII Div. 1
0.375 - 1 NPS	.75, 1 NPS	78.5 sq mm	10 mm	3 mm	15 - 1537 psi	Air	VIII Div. 1
					15 - 240 psi	Steam	VIII Div. 1
0.5 - 1 NPS	1 NPS	143 sq mm	13.5 mm	4.1 mm	15 - 240 psi	Steam	VIII Div. 1
					15 - 870 psi	Air	VIII Div. 1
0.5 - 1.25 NPS	1, 1.25 NPS	154 sq mm	14 mm	4.2 mm	15 - 1160 psi	Air	VIII Div. 1
					15 - 240 psi	Steam	VIII Div. 1
1 - 1.25 NPS	1.25 NPS	314 sq mm	20 mm	6 mm	15 - 240 psi	Steam	VIII Div. 1
					15 - 797 psi	Air	VIII Div. 1
1 - 1.5 NPS	1.5 NPS	491 sq mm	25 mm	7.4 mm	15 - 240 psi	Steam	VIII Div. 1
					15 - 435 psi	Air	VIII Div. 1
1.5 NPS	1.5 NPS	804 sq mm	32 mm	9.6 mm	15 - 177 psi	Air	VIII Div. 1
						Steam	VIII Div. 1
1.5 - 2 NPS	2 NPS	1134 sq mm	38 mm	11.4 mm	15 - 240 psi	Steam	VIII Div. 1
					15 - 435 psi	Air	VIII Div. 1
		1257 sq mm	40 mm	12 mm	15 - 203 psi	Air	VIII Div. 1
						Steam	VIII Div. 1

Oklahoma Safety Equipment Company, Inc. (OSECO) (OSE)

NB#: 00011

location: 1701 and 1705 West Tacoma, Broken Arrow, OK 74012 United States

Acceptable Abbrev.: OSECO

Oklahoma Safety Equipment Company, Inc. (OSECO) (OSE)

location: 1701 and 1705 West Tacoma, Broken Arrow, OK 74012 United States

Acceptable Abbrev.: OSECO

Certification
Number: 00011Design Series
or catalog number FAS, WDA/FAS

Holder Designation: FRDI, Safety Cartridge

Type Classification: Rupture Disk Device

Capacity Tests: Sec. VIII Div. 1 at National Board T L (Worthington) on November 11, 1998

Method of Establishing Relieving Capacity: Resistance Factor, 3 Size, Krg

Certified Value: .223 Unitless

Test Medium: Air/Gas

Certified Medium: Air or gases (Krg)

Set Pressure Definition: Burst Pressure

Scope of Nominal Size and Set Pressure Ranges:

Inlet Size	Outlet Size	Flow Area	Orifice [designator] diameter	Lift	Set Pressure Range	Media	Code Section
1 NPS		0.864 sq in			70 - 6500 psi		VIII Div. 1
1.5 NPS		2.036 sq in			50 - 6500 psi		VIII Div. 1
2 NPS		3.355 sq in			40 - 5500 psi		VIII Div. 1
3 NPS		7.393 sq in			25 - 5000 psi		VIII Div. 1
4 NPS		12.73 sq in			25 - 2000 psi		VIII Div. 1
6 NPS		28.89 sq in			25 - 1800 psi		VIII Div. 1
8 NPS		50 sq in			30 - 1500 psi		VIII Div. 1
10 NPS		78.9 sq in			35 - 1500 psi		VIII Div. 1
12 NPS		113.1 sq in			35 - 1300 psi		VIII Div. 1
14 NPS		137.9 sq in			40 - 1000 psi		VIII Div. 1
16 NPS		176.7 sq in			45 - 900 psi		VIII Div. 1
18 NPS		233.7 sq in			50 - 800 psi		VIII Div. 1
24 NPS		424.6 sq in			40 - 600 psi		VIII Div. 1

Certification
Number: 00022Design Series
or catalog number STDV

Holder Designation: RDI

Type Classification: Rupture Disk Device

Capacity Tests: Sec. VIII Div. 1 at National Board T L (Worthington) on December 18, 1998

Method of Establishing Relieving Capacity: Resistance Factor, 3 Size, Krgl

Certified Value: 1.98 Unitless

Test Medium: Air/Gas & Liquid

Certified Medium: Air or gases, and liquid (Krgl)

Set Pressure Definition: Burst Pressure

Scope of Nominal Size and Set Pressure Ranges:

Inlet Size	Outlet Size	Flow Area	Orifice [designator] diameter	Lift	Set Pressure Range	Media	Code Section
1 NPS		0.6 sq in			145 - 12000 psi		VIII Div. 1
1.5 NPS		1.48 sq in			95 - 6000 psi		VIII Div. 1
2 NPS		2.85 sq in			55 - 6000 psi		VIII Div. 1
3 NPS		5.41 sq in			41 - 6000 psi		VIII Div. 1
4 NPS		10.3 sq in			31 - 6000 psi		VIII Div. 1
6 NPS		22.6 sq in			23 - 3600 psi		VIII Div. 1
8 NPS		45.6 sq in			18 - 2100 psi		VIII Div. 1
10 NPS		72.7 sq in			14 - 1400 psi		VIII Div. 1
12 NPS		101 sq in			12 - 1000 psi		VIII Div. 1
14 NPS		135 sq in			11 - 750 psi		VIII Div. 1
16 NPS		176 sq in			9 - 500 psi		VIII Div. 1
18 NPS		230 sq in			8 - 475 psi		VIII Div. 1
20 NPS		279 sq in			8 - 450 psi		VIII Div. 1
24 NPS		415 sq in			37 - 450 psi		VIII Div. 1

Oklahoma Safety Equipment Company, Inc. (OSECO) (OSE)

NB#: 00033

Location: 1701 and 1705 West Tacoma, Broken Arrow, OK 74012 United States

Acceptable Abbrev.: OSECO

Certification
Number: 00033Design Series
or catalog number (F) COV

Holder Designation: FRDI

Type Classification: Rupture Disk Device

Capacity Tests: Sec. VIII Div. 1 at National Board T L (Worthington) on July 01, 1998

Method of Establishing Relieving Capacity: Resistance Factor, 3 Size, Krgl

Certified Value: 2.37 Unitless

Test Medium: Air/Gas & Liquid

Certified Medium: Air or gases, and liquid (Krgl)

Set Pressure Definition: Burst Pressure

Scope of Nominal Size and Set Pressure Ranges:

Inlet Size	Outlet Size	Flow Area	Orifice [designator] diameter	Lift	Set Pressure Range	Media	Code Section
1 NPS		0.6 sq in			44 - 2000 psi		VIII Div. 1
1.5 NPS		1.48 sq in			31 - 1400 psi		VIII Div. 1
2 NPS		2.85 sq in			15 - 1100 psi		VIII Div. 1
3 NPS		5.41 sq in			11 - 900 psi		VIII Div. 1
4 NPS		10.3 sq in			8 - 830 psi		VIII Div. 1
6 NPS		22.6 sq in			6 - 640 psi		VIII Div. 1
8 NPS		45.6 sq in			5 - 590 psi		VIII Div. 1
10 NPS		72.7 sq in			4 - 480 psi		VIII Div. 1
12 NPS		101 sq in			3 - 400 psi		VIII Div. 1
14 NPS		135 sq in			3 - 350 psi		VIII Div. 1
16 NPS		176 sq in			3 - 300 psi		VIII Div. 1
18 NPS		230 sq in			3 - 270 psi		VIII Div. 1
20 NPS		279 sq in			3 - 240 psi		VIII Div. 1
24 NPS		415 sq in			3 - 200 psi		VIII Div. 1
28 NPS		562 sq in			3 - 185 psi		VIII Div. 1
30 NPS		650 sq in			3 - 175 psi		VIII Div. 1
32 NPS		754 sq in			3 - 165 psi		VIII Div. 1
34 NPS		855 sq in			3 - 158 psi		VIII Div. 1
36 NPS		955 sq in			3 - 150 psi		VIII Div. 1
40 NPS		1194 sq in			3 - 143 psi		VIII Div. 1
42 NPS		1320 sq in			3 - 150 psi		VIII Div. 1

Certification
Number: 00055Design Series
or catalog number PCR, PCRL

Holder Designation: PRDI, Safety Cartridge

Type Classification: Rupture Disk Device

Capacity Tests: Sec. VIII Div. 1 at National Board T L (Worthington) on November 11, 1998

Method of Establishing Relieving Capacity: Resistance Factor, 3 Size, Krg

Certified Value: 2.17 Unitless

Test Medium: Air/Gas

Certified Medium: Air or gases (Krg)

Set Pressure Definition: Burst Pressure

Scope of Nominal Size and Set Pressure Ranges:

Inlet Size	Outlet Size	Flow Area	Orifice [designator] diameter	Lift	Set Pressure Range	Media	Code Section
0.75 NPS		0.39 sq in			85 - 750 psi		VIII Div. 1
1 NPS		0.6 sq in			95 - 1250 psi		VIII Div. 1
1.5 NPS		1.3 sq in			70 - 2500 psi		VIII Div. 1
2 NPS		2.5 sq in			45 - 1000 psi		VIII Div. 1
3 NPS		4.8 sq in			35 - 1000 psi		VIII Div. 1
4 NPS		8 sq in			30 - 870 psi		VIII Div. 1
6 NPS		18 sq in			25 - 800 psi		VIII Div. 1
8 NPS		32 sq in			35 - 700 psi		VIII Div. 1
10 NPS		51.25 sq in			30 - 700 psi		VIII Div. 1
12 NPS		73.4 sq in			25 - 500 psi		VIII Div. 1

Oklahoma Safety Equipment Company, Inc. (OSECO) (OSE)

NB#: 00077

location: 1701 and 1705 West Tacoma, Broken Arrow, OK 74012 United States

Acceptable Abbrev.: OSECO

Certification Number: **00077** Design Series or catalog number: **PSR, PSRL, SSR, SSRL**

Holder Designation: **PRDI**Type Classification: **Rupture Disk Device**Capacity Tests: **Sec. VIII Div. 1 at National Board T L (Worthington) on March 31, 1999**Method of Establishing Relieving Capacity: **Resistance Factor, 3 Size, Krgl**Certified Value: **2.13 Unitless**Test Medium: **Air/Gas**Certified Medium: **Air or gases, and liquid (Krgl)**Set Pressure Definition: **Burst Pressure**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
1 NPS		0.6 sq in			40 - 225 psi		VIII Div. 1
1.5 NPS		1.3 sq in			25 - 200 psi		VIII Div. 1
2 NPS		2.5 sq in			19 - 100 psi		VIII Div. 1
3 NPS		4.8 sq in			15 - 75 psi		VIII Div. 1
4 NPS		8 sq in			15 - 75 psi		VIII Div. 1
6 NPS		18 sq in			15 - 50 psi		VIII Div. 1
8 NPS		32 sq in			15 - 50 psi		VIII Div. 1
10 NPS		51.25 sq in			15 - 100 psi		VIII Div. 1
12 NPS		73.4 sq in			15 - 100 psi		VIII Div. 1

Certification Number: **00190** Design Series or catalog number: **CO (F) Flat Seat**

Holder Designation: **FRDI**Type Classification: **Rupture Disk Device**Capacity Tests: **Sec. VIII Div. 1 at National Board T L (Worthington) on October 26, 2000**Method of Establishing Relieving Capacity: **Resistance Factor, 3 Size, Krgl**Certified Value: **0.50 Unitless**Test Medium: **Air/Gas & Liquid**Certified Medium: **Air or gases, and liquid (Krgl)**Set Pressure Definition: **Burst Pressure**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
1 NPS		0.864 sq in			43 - 2000 psi		VIII Div. 1
1.5 NPS		2.036 sq in			31 - 1400 psi		VIII Div. 1
2 NPS		3.355 sq in			15 - 1100 psi		VIII Div. 1
3 NPS		7.393 sq in			11 - 900 psi		VIII Div. 1
4 NPS		12.73 sq in			8 - 830 psi		VIII Div. 1
6 NPS		28.89 sq in			6 - 640 psi		VIII
8 NPS		50 sq in			5 - 590 psi		VIII Div. 1
10 NPS		75.74 sq in			4 - 480 psi		VIII Div. 1
12 NPS		107.8 sq in			3 - 400 psi		VIII Div. 1
14 NPS		137.8 sq in			3 - 350 psi		VIII Div. 1
16 NPS		180.1 sq in			3 - 300 psi		VIII Div. 1
18 NPS		233.7 sq in			3 - 270 psi		VIII Div. 1
20 NPS		281.7 sq in			3 - 240 psi		VIII Div. 1
24 NPS		405.9 sq in			3 - 200 psi		VIII Div. 1
28 NPS		522.7 sq in			3 - 185 psi		VIII Div. 1
30 NPS		634.7 sq in			3 - 175 psi		VIII Div. 1
32 NPS		722.2 sq in			3 - 165 psi		VIII Div. 1
36 NPS		914.3 sq in			3 - 150 psi		VIII Div. 1
42 NPS		1244.9 sq in			3 - 135 psi		VIII Div. 1

Oklahoma Safety Equipment Company, Inc. (OSECO) (OSE)

NB#: 00202

location: 1701 and 1705 West Tacoma, Broken Arrow, OK 74012 United States

Acceptable Abbrev.: OSECO

Certification
Number: 00202Design Series
or catalog number FAS (Liquid)

Holder Designation: FRDI, Safety Cartridge

Type Classification: Rupture Disk Device

Capacity Tests: Sec. VIII Div. 1 at National Board T L (Worthington) on August 24, 2000

Method of Establishing Relieving Capacity: Resistance Factor, 3 Size, Krl

Certified Value: .19 Unitless

Test Medium: Air/Gas & Liquid

Certified Medium: Liquid (Krl)

Set Pressure Definition: Burst Pressure

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
1 NPS		0.864 sq in			70 - 6500 psi		VIII Div. 1
1.5 NPS		2.036 sq in			50 - 6500 psi		VIII Div. 1
2 NPS		3.355 sq in			40 - 5500 psi		VIII Div. 1
3 NPS		7.393 sq in			25 - 5000 psi		VIII Div. 1
4 NPS		12.73 sq in			25 - 2000 psi		VIII Div. 1
6 NPS		28.89 sq in			25 - 1800 psi		VIII Div. 1
8 NPS		50 sq in			30 - 1500 psi		VIII Div. 1
10 NPS		78.9 sq in			35 - 1500 psi		VIII Div. 1
12 NPS		113.1 sq in			35 - 1300 psi		VIII Div. 1
14 NPS		137.9 sq in			40 - 1000 psi		VIII Div. 1
16 NPS		176.7 sq in			45 - 900 psi		VIII Div. 1
18 NPS		233.7 sq in			50 - 800 psi		VIII Div. 1
24 NPS		424.6 sq in			40 - 600 psi		VIII Div. 1

Certification
Number: 00235Design Series
or catalog number PROS

Type Classification: Rupture Disk Device

Capacity Tests: Sec. VIII Div. 1 at National Board T L (Worthington) on November 19, 2001

Method of Establishing Relieving Capacity: Resistance Factor, 3 Size, Krgl

Certified Value: 5.07 Unitless

Test Medium: Air/Gas & Liquid

Certified Medium: Air or gases, and liquid (Krgl)

Set Pressure Definition: Burst Pressure

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
1 NPS		0.441 sq in			38 - 150 psi		VIII Div. 1
1.5 NPS		1.227 sq in			32 - 120 psi		VIII Div. 1
2 NPS		2.405 sq in			27 - 115 psi		VIII Div. 1
3 NPS		5.939 sq in			20 - 75 psi		VIII Div. 1
4 NPS		10.78 sq in			16 - 70 psi		VIII Div. 1

Oklahoma Safety Equipment Company, Inc. (OSECO) (OSE)

NB#: 00246

Location: 1701 and 1705 West Tacoma, Broken Arrow, OK 74012 United States

Acceptable Abbrev.: OSECO

Certification
Number: **00246**Design Series
or catalog number: **GR, GRO**Type Classification: **Rupture Disk Device**Capacity Tests: **Sec. VIII Div. 1 at National Board T L (Worthington) on September 20, 2001**Method of Establishing Relieving Capacity: **Resistance Factor, 3 Size, Krgl**Certified Value: **1.22 Unitless**Test Medium: **Air/Gas & Liquid**Certified Medium: **Air or gases, and liquid (Krgl)**Set Pressure Definition: **Burst Pressure**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
1 NPS		0.714 sq in			20 - 150 psi		VIII Div. 1
1.5 NPS		1.606 sq in			13 - 150 psi		VIII Div. 1
2 NPS		2.856 sq in			10 - 150 psi		VIII Div. 1
3 NPS		6.426 sq in			7 - 150 psi		VIII Div. 1
4 NPS		11.42 sq in			5 - 150 psi		VIII Div. 1
6 NPS		25.7 sq in			3 - 150 psi		VIII Div. 1
8 NPS		45.7 sq in			2.5 - 150 psi		VIII Div. 1
10 NPS		71.4 sq in			2.5 - 150 psi		VIII Div. 1

Certification
Number: **00257**Design Series
or catalog number: **FST, FSTL, SST, SSTL**Holder Designation: **FRDI**Type Classification: **Rupture Disk Device**Capacity Tests: **Sec. VIII Div. 1 at National Board T L (Worthington) on October 06, 1999**Method of Establishing Relieving Capacity: **Resistance Factor, 3 Size, Krgl**Certified Value: **2.29 Unitless**Test Medium: **Air/Gas & Liquid**Certified Medium: **Air or gases, and liquid (Krgl)**Set Pressure Definition: **Burst Pressure**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
0.5 NPS		0.304 sq in			95 - 400 psi		VIII Div. 1
1 NPS		0.864 sq in			55 - 400 psi		VIII Div. 1
1.5 NPS		2.036 sq in			45 - 400 psi		VIII Div. 1
2 NPS		3.355 sq in			40 - 400 psi		VIII Div. 1
3 NPS		7.393 sq in			35 - 400 psi		VIII Div. 1
4 NPS		12.73 sq in			30 - 400 psi		VIII Div. 1
6 NPS		28.94 sq in			25 - 400 psi		VIII Div. 1
8 NPS		50 sq in			25 - 400 psi		VIII Div. 1

Oklahoma Safety Equipment Company, Inc. (OSECO) (OSE)

NB#: 00268

Location: 1701 and 1705 West Tacoma, Broken Arrow, OK 74012 United States

Acceptable Abbrev.: OSECO

Certification
Number: **00268**Design Series
or catalog number **STD**Holder Designation: **RDI**Type Classification: **Rupture Disk Device**Capacity Tests: **Sec. VIII Div. 1 at National Board T L (Worthington) on May 11, 1999**Method of Establishing Relieving Capacity: **Resistance Factor, 3 Size, Krgl**Certified Value: **.88 Unitless**Test Medium: **Air/Gas & Liquid**Certified Medium: **Air or gases, and liquid (Krgl)**Set Pressure Definition: **Burst Pressure**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
0.25 NPS		0.049 sq in			160 - 70000 psi		VIII Div. 1
0.5 NPS		0.19 sq in			80 - 30000 psi		VIII Div. 1
0.75 NPS		0.44 sq in			70 - 3000 psi		VIII Div. 1
1 NPS		0.6 sq in			40 - 12000 psi		VIII Div. 1
1.5 NPS		1.48 sq in			26 - 6000 psi		VIII Div. 1
2 NPS		2.85 sq in			16 - 6000 psi		VIII Div. 1
3 NPS		5.41 sq in			12 - 6000 psi		VIII Div. 1
4 NPS		10.3 sq in			9 - 6000 psi		VIII Div. 1
6 NPS		22.3 sq in			7 - 3600 psi		VIII Div. 1
8 NPS		45.6 sq in			5 - 2100 psi		VIII Div. 1
10 NPS		72.7 sq in			4 - 1400 psi		VIII Div. 1
12 NPS		101 sq in			4 - 1000 psi		VIII Div. 1
14 NPS		135 sq in			3 - 750 psi		VIII Div. 1
16 NPS		176 sq in			3 - 500 psi		VIII Div. 1
18 NPS		230 sq in			3 - 475 psi		VIII Div. 1
20 NPS		279 sq in			2 - 450 psi		VIII Div. 1
24 NPS		415 sq in			2 - 450 psi		VIII Div. 1

Certification
Number: **00279**Design Series
or catalog number **(F) STD-OTU**Holder Designation: **OTU Body**Type Classification: **Rupture Disk Device**Capacity Tests: **Sec. VIII Div. 1 at National Board T L (Worthington) on July 09, 2002**Method of Establishing Relieving Capacity: **Resistance Factor, 3 Size, Krgl**Certified Value: **2.87 Unitless**Test Medium: **Air/Gas & Liquid**Certified Medium: **Air or gases, and liquid (Krgl)**Set Pressure Definition: **Burst Pressure**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
0.5 NPS		0.196 sq in	0.5 in		200 - 8200 psi		VIII Div. 1
0.75 NPS		0.441 sq in	0.75 in		200 - 5200 psi		VIII Div. 1
1 NPS		0.785 sq in	1 in		200 - 3800 psi		VIII Div. 1

Oklahoma Safety Equipment Company, Inc. (OSECO) (OSE)

NB#: 00381

location: 1701 and 1705 West Tacoma, Broken Arrow, OK 74012 United States

Acceptable Abbrev.: OSECO

Certification Number: **00381** Design Series or catalog number: **PRO +, PRO+L, RPRO+, RPRO+L (air/gas)**

Holder Designation: **PRDI**Type Classification: **Rupture Disk Device**Capacity Tests: **Sec. VIII Div. 1 at National Board T L (Worthington) on October 07, 2005**Method of Establishing Relieving Capacity: **Resistance Factor, 3 Size, Krg**Certified Value: **0.29 Unitless**Test Medium: **Air/Gas**Certified Medium: **Air or gases (Krg)**Set Pressure Definition: **Burst Pressure**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
1 NPS		0.864 sq in			21 - 1000 psi		VIII Div. 1
1.5 NPS		2.036 sq in			14 - 1000 psi		VIII Div. 1
2 NPS		3.355 sq in			8 - 750 psi		VIII Div. 1
3 NPS		7.393 sq in			8 - 500 psi		VIII Div. 1
4 NPS		12.73 sq in			8 - 500 psi		VIII Div. 1
6 NPS		28.89 sq in			6 - 300 psi		VIII Div. 1
8 NPS		50 sq in			6 - 250 psi	Air	VIII Div. 1
10 NPS		78.9 sq in			4 - 250 psi	Air	VIII Div. 1

Certification Number: **00426** Design Series or catalog number: **OPFTK+**

Holder Designation: **OPK**Type Classification: **Rupture Disk Device**Capacity Tests: **Sec. VIII Div. 1 at National Board T L (Worthington) on February 19, 2010**Method of Establishing Relieving Capacity: **Resistance Factor, 3 Size, Krgl**Certified Value: **2.77 Unitless**Test Medium: **Air/Gas & Liquid**Certified Medium: **Air or gases, and liquid (Krgl)**Set Pressure Definition: **Burst Pressure**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
1 NPS		0.792 sq in			100 - 1160 psi		VIII Div. 1
1.5 NPS		1.709 sq in			100 - 1087 psi		VIII Div. 1
2 NPS		2.899 sq in			100 - 1015 psi		VIII Div. 1
3 NPS		7.029 sq in			100 - 600 psi		VIII Div. 1
4 NPS		11.17 sq in			100 - 363 psi		VIII Div. 1
6 NPS		24.18 sq in			75 - 320 psi		VIII Div. 1
8 NPS		45.46 sq in			50 - 300 psi		VIII Div. 1
10 NPS		67.64 sq in			50 - 274 psi		VIII Div. 1
12 NPS		99.28 sq in			50 - 250 psi		VIII Div. 1

Oklahoma Safety Equipment Company, Inc. (OSECO) (OSE)

NB#: 00437

location: 1701 and 1705 West Tacoma, Broken Arrow, OK 74012 United States

Acceptable Abbrev.: OSECO

Certification
Number: **00437**Design Series
or catalog number **OPFTR+**Holder Designation: **OPR**Type Classification: **Rupture Disk Device**Capacity Tests: **Sec. VIII Div. 1 at National Board T L (Worthington) on February 03, 2010**Method of Establishing Relieving Capacity: **Resistance Factor, 3 Size, Krgl**Certified Value: **1.7 Unitless**Test Medium: **Air/Gas & Liquid**Certified Medium: **Air or gases, and liquid (Krgl)**Set Pressure Definition: **Burst Pressure**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
1 NPS		0.792 sq in			100 - 1160 psi		VIII Div. 1
1.5 NPS		1.709 sq in			100 - 1087 psi		VIII Div. 1
2 NPS		2.899 sq in			100 - 1015 psi		VIII Div. 1
3 NPS		7.029 sq in			100 - 600 psi		VIII Div. 1
4 NPS		11.17 sq in			100 - 363 psi		VIII Div. 1
6 NPS		24.18 sq in			75 - 320 psi		VIII Div. 1
8 NPS		45.46 sq in			50 - 300 psi		VIII Div. 1
10 NPS		67.67 sq in			50 - 274 psi		VIII Div. 1
12 NPS		99.28 sq in			50 - 250 psi		VIII Div. 1

Certification
Number: **00448**Design Series
or catalog number **OPR+**Holder Designation: **OPR, Safety Cartridge**Type Classification: **Rupture Disk Device**Capacity Tests: **Sec. VIII Div. 1 at National Board T L (Worthington) on October 30, 2009**Method of Establishing Relieving Capacity: **Resistance Factor, 3 Size, Krgl**Certified Value: **0.78 Unitless**Test Medium: **Air/Gas & Liquid**Certified Medium: **Air or gases, and liquid (Krgl)**Set Pressure Definition: **Burst Pressure**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
1 NPS		0.775 sq in			47 - 250 psi		VIII Div. 1
1.5 NPS		1.693 sq in			25 - 250 psi		VIII Div. 1
2 NPS		2.843 sq in			15 - 250 psi		VIII Div. 1
3 NPS		6.809 sq in			8 - 200 psi		VIII Div. 1
4 NPS		10.96 sq in			5 - 175 psi		VIII Div. 1
6 NPS		23.38 sq in			13 - 100 psi		VIII Div. 1
8 NPS		44.18 sq in			13 - 100 psi		VIII Div. 1
10 NPS		65.05 sq in			13 - 100 psi		VIII Div. 1
12 NPS		94.87 sq in			13 - 100 psi		VIII Div. 1

Oklahoma Safety Equipment Company, Inc. (OSECO) (OSE)

NB#: 00459

Location: 1701 and 1705 West Tacoma, Broken Arrow, OK 74012 United States

Acceptable Abbrev.: OSECO

Certification
Number: **00459**Design Series
or catalog number **OPK+**Holder Designation: **OPK, Safety Cartridge**Type Classification: **Rupture Disk Device**Capacity Tests: **Sec. VIII Div. 1 at National Board T L (Worthington) on February 03, 2010**Method of Establishing Relieving Capacity: **Resistance Factor, 3 Size, Krgl**Certified Value: **1.5 Unitless**Test Medium: **Air/Gas & Liquid**Certified Medium: **Air or gases, and liquid (Krgl)**Set Pressure Definition: **Burst Pressure**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
1 NPS		0.792 sq in			100 - 1160 psi		VIII Div. 1
1.5 NPS		1.709 sq in			100 - 1087 psi		VIII Div. 1
2 NPS		2.899 sq in			100 - 1015 psi		VIII Div. 1
3 NPS		7.029 sq in			100 - 507 psi		VIII Div. 1
4 NPS		11.17 sq in			100 - 363 psi		VIII Div. 1
6 NPS		24.18 sq in			75 - 320 psi		VIII Div. 1
8 NPS		45.46 sq in			50 - 300 psi		VIII Div. 1
10 NPS		67.64 sq in			50 - 274 psi		VIII Div. 1
12 NPS		99.28 sq in			50 - 250 psi		VIII Div. 1

Certification
Number: **00460**Design Series
or catalog number **PRO+KRGL, PRO+KRGL-L**Holder Designation: **PRDI, Safety Cartridge**Type Classification: **Rupture Disk Device**Capacity Tests: **Sec. VIII Div. 1 at National Board T L (Worthington) on October 22, 2010**Method of Establishing Relieving Capacity: **Resistance Factor, 3 Size, Krgl**Certified Value: **0.69 Unitless**Test Medium: **Air/Gas & Liquid**Certified Medium: **Air or gases, and liquid (Krgl)**Set Pressure Definition: **Burst Pressure**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
1 NPS		0.864 sq in			21 - 1000 psi	Water	VIII Div. 1
1.5 NPS		2.036 sq in			14 - 1000 psi		VIII Div. 1
2 NPS		3.355 sq in			8 - 1000 psi		VIII Div. 1
3 NPS		7.393 sq in			8 - 900 psi		VIII Div. 1
4 NPS		12.73 sq in			8 - 800 psi		VIII Div. 1
6 NPS		28.89 sq in			6 - 750 psi		VIII Div. 1
8 NPS		50 sq in			6 - 500 psi	Water	VIII Div. 1
10 NPS		78.9 sq in			4 - 250 psi	Water	VIII Div. 1

Certification
Number: **01472**Design Series
or catalog number **HPSR Welded Assembly**Type Classification: **Rupture Disk Device**Capacity Tests: **Sec. VIII Div. 1 at Oseco, Inc. on December 21, 2016**Method of Establishing Relieving Capacity: **Resistance Factor, 1 Size, Krgl**Certified Value: **25.97 Unitless**Test Medium: **Air**Certified Medium: **Air/Gas & Liquid**Set Pressure Definition: **Burst Pressure**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
1 NPS		0.3 sq in			3150 - 3400 psi		VIII Div. 1

PARCOL S.p.A. (PCL)

NB#: 00493

location: Via Isonzo 2, Canegrate (MI) 20010 Italy

Acceptable Abbrev.: PARCOL

PARCOL S.p.A. (PCL)

location: Via Isonzo 2, Canegrate (MI) 20010 Italy

Acceptable Abbrev.: PARCOL

Certification
Number: **00493**Design Series
or catalog number **3-5403**Type Classification: **Safety Valve**Capacity Tests: **Sec. VIII Div. 1 at National Board T L (Worthington) on July 08, 2014**Method of Establishing Relieving Capacity: **Flow Capacity, K**Certified Value: **0.878 Unitless**Test Medium: **Steam & Air/Gas**Certified Medium: **Air/Gas**Set Pressure Definition: **Initial Audible Discharge**Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
1.5 - 2 NPS	2.5, 3 NPS	0.673 sq in	[G] 0.925 in	0.406 in	15 - 3292 psi	Air	VIII Div. 1
		0.935 sq in	[H] 1.091 in	0.492 in	15 - 2596 psi	Air	VIII Div. 1
2 - 3 NPS	3, 4 NPS	1.604 sq in	[J] 1.429 in	0.634 in	15 - 2465 psi	Air	VIII Div. 1
3 NPS	4, 6 NPS	2.117 sq in	[K] 1.642 in	0.728 in	15 - 1580 psi	Air	VIII Div. 1
3 - 4 NPS	4, 6 NPS	3.28 sq in	[L] 2.043 in	0.906 in	15 - 1247 psi	Air	VIII Div. 1
4 NPS	6 NPS	4.124 sq in	[M] 2.291 in	1.016 in	15 - 1073 psi	Air	VIII Div. 1
		4.971 sq in	[N] 2.516 in	1.114 in	15 - 986 psi	Air	VIII Div. 1
		7.332 sq in	[P] 3 in	1.35 in	15 - 812 psi	Air	VIII Div. 1
6 NPS	8 NPS	12.666 sq in	[Q] 4.016 in	1.78 in	15 - 595 psi	Air	VIII Div. 1
	8, 10 NPS	18.414 sq in	[R] 4.5 in	2.15 in	15 - 493 psi	Air	VIII Div. 1
8 NPS	10, 12 NPS	30.008 sq in	[T] 6 in	2.74 in	15 - 377 psi	Air	VIII Div. 1
10 NPS	12 NPS	37.282 sq in	[U] 6.89 in	3.055 in	15 - 334 psi	Air	VIII Div. 1

Certification
Number: **00505**Design Series
or catalog number **3-5403 (Liquid)**Type Classification: **Safety Relief Valve**Capacity Tests: **Sec. VIII Div. 1 at National Board T L (Worthington) on July 08, 2014**Method of Establishing Relieving Capacity: **Flow Capacity, K**Certified Value: **0.695 Unitless**Test Medium: **Water**Certified Medium: **Liquid**Set Pressure Definition: **First Steady Stream**Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
1.5 - 2 NPS	2.5, 3 NPS	0.673 sq in	[G] 0.925 in	0.406 in	15 - 3292 psi	Water	VIII Div. 1
		0.935 sq in	[H] 1.091 in	0.492 in	15 - 2596 psi	Water	VIII Div. 1
2 - 3 NPS	3, 4 NPS	1.604 sq in	[J] 1.429 in	0.634 in	15 - 1914 psi	Water	VIII Div. 1
3 NPS	4, 6 NPS	2.117 sq in	[K] 1.642 in	0.728 in	15 - 1580 psi	Water	VIII Div. 1
3 - 4 NPS	4, 6 NPS	3.28 sq in	[L] 2.043 in	0.906 in	15 - 1247 psi	Water	VIII Div. 1
4 NPS	6 NPS	4.124 sq in	[M] 2.291 in	1.016 in	15 - 1073 psi	Water	VIII Div. 1
		4.971 sq in	[N] 2.516 in	1.114 in	15 - 986 psi	Water	VIII Div. 1
		7.332 sq in	[P] 3 in	1.35 in	15 - 812 psi	Water	VIII Div. 1
6 NPS	8 NPS	12.666 sq in	[Q] 4.016 in	1.78 in	15 - 595 psi	Water	VIII Div. 1
	8, 10 NPS	18.414 sq in	[R] 4.5 in	2.15 in	15 - 493 psi	Water	VIII Div. 1
8 NPS	10, 12 NPS	30.008 sq in	[T] 6 in	2.74 in	15 - 377 psi	Water	VIII Div. 1
10 NPS	12 NPS	37.282 sq in	[U] 6.89 in	3.055 in	15 - 334 psi	Water	VIII Div. 1

Parker Hannifin Corporation (RSP)

NB#: 45009

location: 1040 Parker Drive, Mauston, WI 53948 United States

Acceptable Abbrev.: Parker

Parker Hannifin Corporation (RSP)

location: 1040 Parker Drive, Mauston, WI 53948 United States

Acceptable Abbrev.: Parker

Certification
Number: **45009**Design Series
or catalog number **H-2**Type Classification: **Safety Relief Valve**Capacity Tests: **Sec. VIII Div. 1 at National Board T L (Picaway) on May 04, 1983**Method of Establishing Relieving Capacity: **Flow Capacity, Slope**Certified Value: **4.34 SCFM/PSIA**Test Medium: **Air/Gas**Certified Medium: **Gas**Set Pressure Definition: **Initial Audible Discharge**Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
0.5 NPS	1 NPS	0.3068 sq in	0.625 in	0.152 in	50 - 300 psi	Air	VIII Div. 1

Certification
Number: **45010**Design Series
or catalog number **H-3**Type Classification: **Safety Relief Valve**Capacity Tests: **Sec. VIII Div. 1 at National Board T L (Picaway) on May 04, 1983**Method of Establishing Relieving Capacity: **Flow Capacity, Slope**Certified Value: **7.14 SCFM/PSIA**Test Medium: **Air/Gas**Certified Medium: **Gas**Special Service: **None**Set Pressure Definition: **Initial Audible Discharge**Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
0.75 NPS	1.25 NPS	0.5384 sq in	0.828 in	0.186 in	50 - 300 psi	Air	VIII Div. 1

Certification
Number: **45021**Design Series
or catalog number **H-4**Type Classification: **Safety Relief Valve**Capacity Tests: **Sec. VIII Div. 1 at National Board T L (Picaway) on March 16, 1983**Method of Establishing Relieving Capacity: **Flow Capacity, Slope**Certified Value: **10.67 SCFM/PSIA**Test Medium: **Air/Gas**Certified Medium: **Gas**Special Service: **None**Set Pressure Definition: **Initial Audible Discharge**Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
1 NPS	1.5 NPS	0.8348 sq in	1.031 in	0.247 in	50 - 300 psi	Air	VIII Div. 1

Parker Hannifin Corporation (RSP)

NB#: 45032

Location: 1040 Parker Drive, Mauston, WI 53948 United States

Acceptable Abbrev.: Parker

Certification
Number: **45032**Design Series
or catalog number **H-5**Type Classification: **Safety Relief Valve**Capacity Tests: **Sec. VIII Div. 1 at National Board T L (Picaway) on March 16, 1983**Method of Establishing Relieving Capacity: **Flow Capacity, Slope**Certified Value: **17.82 SCFM/PSIA**Test Medium: **Air/Gas**Certified Medium: **Gas**Set Pressure Definition: **Initial Audible Discharge**Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
1.25 NPS	2 NPS	1.4849 sq in	1.375 in	0.31 in	50 - 300 psi	Air	VIII Div. 1

Certification
Number: **45043**Design Series
or catalog number **SR1, CSR1**Type Classification: **Safety Relief Valve**Capacity Tests: **Sec. VIII Div. 1 at National Board T L (Worthington) on August 20, 2002**Method of Establishing Relieving Capacity: **Flow Capacity, Slope**Certified Value: **.725 SCFM/PSIA**Test Medium: **Air/Gas**Certified Medium: **Gas**Special Service: **None**Set Pressure Definition: **Bubble**Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
0.5 NPS	.75 NPS	0.088 sq in	0.5 in	0.055 in	100 - 400 psi	Air	VIII Div. 1

Certification
Number: **45054**Design Series
or catalog number **SR2, CSR2**Type Classification: **Safety Relief Valve**Capacity Tests: **Sec. VIII Div. 1 at National Board T L (Worthington) on August 20, 2002**Method of Establishing Relieving Capacity: **Flow Capacity, Slope**Certified Value: **1.37 SCFM/PSIA**Test Medium: **Air/Gas**Certified Medium: **Gas**Special Service: **None**Set Pressure Definition: **Bubble**Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
0.5 NPS	1 NPS	0.0731 sq in	0.305 in	0.055 in	150 - 400 psi	Air	VIII Div. 1

Parker Hannifin Corporation (RSP)

NB#: 45065

Location: 1040 Parker Drive, Mauston, WI 53948 United States

Acceptable Abbrev.: Parker

Certification Number: **45065** Design Series or catalog number: **SR3, CSR3**

Type Classification: **Safety Relief Valve**Capacity Tests: **Sec. VIII Div. 1 at National Board T L (Worthington) on June 24, 2002**Method of Establishing Relieving Capacity: **Flow Capacity, Slope**Certified Value: **2.1 SCFM/PSIA**Test Medium: **Air/Gas**Certified Medium: **Gas**Special Service: **None**Set Pressure Definition: **Start-to-Leak**Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
0.75 NPS	1.25 NPS	0.1314 sq in	0.409 in	0.103 in	150 - 400 psi	Air	VIII Div. 1

Certification Number: **45076** Design Series or catalog number: **SR4, CSR4**

Type Classification: **Safety Relief Valve**Capacity Tests: **Sec. VIII Div. 1 at National Board T L (Worthington) on March 05, 2002**Method of Establishing Relieving Capacity: **Flow Capacity, Slope**Certified Value: **2.729 SCFM/PSIA**Test Medium: **Air/Gas**Certified Medium: **Gas**Special Service: **None**Set Pressure Definition: **Start-to-Leak**Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
0.75 NPS	1.5 NPS	0.1794 sq in	0.478 in	0.103 in	150 - 400 psi	Air	VIII Div. 1

Certification Number: **45087** Design Series or catalog number: **SRH1, SRH2, SRH3, CSRH1, CSRH2, CSRH3**

Type Classification: **Safety Relief Valve**Capacity Tests: **Sec. VIII Div. 1 at National Board T L (Worthington) on March 04, 2002**Method of Establishing Relieving Capacity: **Flow Capacity, Slope**Certified Value: **2.58 SCFM/PSIA**Test Medium: **Air/Gas**Certified Medium: **Gas**Special Service: **None**Set Pressure Definition: **Bubble**Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
0.5 - 0.75 NPS	.75, 1 NPS	0.196 sq in	0.5 in	0.186 in	150 - 400 psi	Air	VIII Div. 1

Parker Hannifin Corporation (RSP)

NB#: 45098

Location: 1040 Parker Drive, Mauston, WI 53948 United States

Acceptable Abbrev.: Parker

Certification Number: **45098** Design Series or catalog number: **SRH5, CSRH5**

Type Classification: **Safety Relief Valve**Capacity Tests: **Sec. VIII Div. 1 at National Board T L (Worthington) on February 27, 2003**Method of Establishing Relieving Capacity: **Flow Capacity, Slope**Certified Value: **5.36 SCFM/PSIA**Test Medium: **Air/Gas**Certified Medium: **Gas**Set Pressure Definition: **Start-to-Leak**Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
1.25 NPS	1.5 NPS	0.4418 sq in	0.75 in	0.348 in	150 - 350 psi	Air	VIII Div. 1

Certification Number: **45100** Design Series or catalog number: **SRH4, CSRH4**

Type Classification: **Safety Relief Valve**Capacity Tests: **Sec. VIII Div. 1 at National Board T L (Worthington) on February 27, 2003**Method of Establishing Relieving Capacity: **Flow Capacity, Slope**Certified Value: **4.44 SCFM/PSIA**Test Medium: **Air/Gas**Certified Medium: **Gas**Set Pressure Definition: **Start-to-Leak**Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
1 NPS	1.25 NPS	0.3367 sq in	0.75 in	0.223 in	150 - 350 psi	Air	VIII Div. 1

Certification Number: **45111** Design Series or catalog number: **SR Series (1/2 in. Liquid)**

Type Classification: **Safety Relief Valve**Capacity Tests: **Sec. VIII Div. 1 at National Board T L (Worthington) on October 25, 2011**Method of Establishing Relieving Capacity: **Flow Capacity, Flow Factor**Certified Value: **1.24 GPM/SQ.RT. PSID**Test Medium: **Water**Certified Medium: **Liquid**Special Service: **None**Set Pressure Definition: **First Steady Stream**Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
0.5 NPS	.75 NPS	0.0412 sq in	0.229 in	0.056 in	50 - 100 psi	Water	VIII Div. 1

Parker Hannifin Corporation (RSP)

NB#: 45122

Location: 1040 Parker Drive, Mauston, WI 53948 United States

Acceptable Abbrev.: Parker

Certification Number: **45122** Design Series or catalog number: **SR Series (3/4 in. Liquid)**

Type Classification: **Safety Relief Valve**Capacity Tests: **Sec. VIII Div. 1 at National Board T L (Worthington) on October 25, 2011**Method of Establishing Relieving Capacity: **Flow Capacity, Flow Factor**Certified Value: **2.06 GPM/SQ.RT. PSID**Test Medium: **Water**Certified Medium: **Liquid**Special Service: **None**Set Pressure Definition: **First Steady Stream**Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
0.75 NPS	1 NPS	0.0731 sq in	0.305 in	0.056 in	50 - 100 psi	Water	VIII Div. 1

Certification Number: **45133** Design Series or catalog number: **SR1R**

Type Classification: **Safety Relief Valve**Capacity Tests: **Sec. VIII Div. 1 at National Board T L (Worthington) on January 29, 2016**Method of Establishing Relieving Capacity: **Flow Capacity, Slope**Certified Value: **0.329 SCFM/PSIA**Test Medium: **Gas**Certified Medium: **Gas**Special Service: **None**Set Pressure Definition: **Bubble**Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
0.5 NPS	.75 NPS	0.088 sq in	0.5 in	0.056 in	150 - 400 psi	Air	VIII Div. 1

Parker Hannifin Corporation PGI Division (FVC)

NB#: 24006

location: 16101 Vallen Drive, Houston, TX 77041 United States

Acceptable Abbrev.: Parker PGI

Parker Hannifin Corporation PGI Division (FVC)

location: 16101 Vallen Drive, Houston, TX 77041 United States

Acceptable Abbrev.: Parker PGI

Certification Number: **24006** Design Series or catalog number **AA1301A**

Type Classification: Safety Relief Valve

Capacity Tests: Sec. VIII Div. 1 at National Board T L (Picaway) on August 15, 1977

Method of Establishing Relieving Capacity: Flow Capacity, 3 valve average

Certified Value: 1884 SCFM

Certification Provisions: Cert. @ 20% OP

Test Medium: Air/Gas

Certified Medium: Gas

Special Service: Non-refrigerated liquified compressed gases

Set Pressure Definition: Start-to-Leak

Blowdown: Fixed

Scope of Nominal Size and Set Pressure Ranges:

Inlet Size	Outlet Size	Flow Area	Orifice [designator] diameter	Lift	Set Pressure Range	Media	Code Section
0.75 NPS	Top	0.446 sq in	0.753 in		250 - psi	Air	VIII

Certification Number: **24017** Design Series or catalog number **AA1301B**

Type Classification: Safety Relief Valve

Capacity Tests: Sec. VIII Div. 1 at Louisiana State University on October 27, 1977

Method of Establishing Relieving Capacity: Flow Capacity, 3 valve average

Certified Value: 1937 SCFM

Certification Provisions: Cert. @ 20% OP

Test Medium: Air/Gas

Certified Medium: Gas

Special Service: Non-refrigerated liquified compressed gases

Set Pressure Definition: Start-to-Leak

Blowdown: Fixed

Scope of Nominal Size and Set Pressure Ranges:

Inlet Size	Outlet Size	Flow Area	Orifice [designator] diameter	Lift	Set Pressure Range	Media	Code Section
0.75 NPS	Top	0.446 sq in	0.7533 in		265 - psi	Air	VIII

Certification Number: **24028** Design Series or catalog number **AA1310A**

Type Classification: Safety Relief Valve

Capacity Tests: Sec. VIII Div. 1 at National Board T L (Picaway) on August 16, 1977

Method of Establishing Relieving Capacity: Flow Capacity, 3 valve average

Certified Value: 5367 SCFM

Certification Provisions: Cert. @ 20% OP

Test Medium: Air/Gas

Certified Medium: Gas

Special Service: Non-refrigerated liquified compressed gases

Set Pressure Definition: Start-to-Leak

Blowdown: Fixed

Scope of Nominal Size and Set Pressure Ranges:

Inlet Size	Outlet Size	Flow Area	Orifice [designator] diameter	Lift	Set Pressure Range	Media	Code Section
1.25 NPS	Top	1.009 sq in	1.134 in		250 - 250 psi	Air	VIII

Parker Hannifin Corporation PGI Division (FVC)

NB#: 24039

location: 16101 Vallen Drive, Houston, TX 77041 United States

Acceptable Abbrev.: Parker PGI

Certification
Number: **24039**Design Series
or catalog number **AA1310B**Type Classification: **Safety Relief Valve**Capacity Tests: **Sec. VIII Div. 1 at National Board T L (Picaway) on April 03, 1979**Method of Establishing Relieving Capacity: **Flow Capacity, 3 valve average**Certified Value: **5924 SCFM**Certification Provisions: **Cert. @ 20% OP**Test Medium: **Air/Gas**Certified Medium: **Gas**Special Service: **Non-refrigerated liquified compressed gases**Set Pressure Definition: **Start-to-Leak**Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
1.25 NPS	Top	1.009 sq in	1.134 in		265 - 265 psi	Air	VIII

Perlick Corporation (PKC)

NB#: 16209

location: 8300 West Good Hope Road, Milwaukee, WI 53223 United States

Perlick Corporation (PKC)

location: 8300 West Good Hope Road, Milwaukee, WI 53223 United States

Certification
Number: **16209**Design Series
or catalog number **F1715**Type Classification: **Breaking Bar Non-reclosing Device**Capacity Tests: **Sec. VIII Div. 1 at National Board T L (Worthington) on November 03, 2004**Method of Establishing Relieving Capacity: **Flow Capacity, Slope**Certified Value: **76.4 SCFM/PSIA**Test Medium: **Air/Gas**Certified Medium: **Air/Gas**Set Pressure Definition: **Breaking Pressure**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
3 NPS	Top		2.945 in		15 - 35 psi	Air	VIII Div. 1

R. Conrader Company (RCC)

NB#: 13509

location: 749 East 18th St, Erie, PA 16503 United States

Acceptable Abbrev.: R. Conrader

R. Conrader Company (RCC)

location: 749 East 18th St, Erie, PA 16503 United States

Acceptable Abbrev.: R. Conrader

Certification Number: **13509** Design Series or catalog number **SRV 187**

Type Classification: Safety Relief Valve

Capacity Tests: Sec. VIII Div. 1 at National Board T L (Worthington) on January 28, 2003

Method of Establishing Relieving Capacity: Flow Capacity, Slope

Certified Value: .41 SCFM/PSIA

Test Medium: Air/Gas

Certified Medium: Air/Gas

Set Pressure Definition: Pop

Blowdown: Fixed

Scope of Nominal Size and Set Pressure Ranges:

Inlet Size	Outlet Size	Flow Area	Orifice [designator] diameter	Lift	Set Pressure Range	Media	Code Section
0.125 - 0.25 NPS	Side	0.027 sq in	0.187 in	0.08 in	25 - 250 psi	Air	VIII Div. 1

Certification Number: **13510** Design Series or catalog number **SRV 250**

Type Classification: Safety Relief Valve

Capacity Tests: Sec. VIII Div. 1 at National Board T L (Worthington) on January 28, 2003

Method of Establishing Relieving Capacity: Flow Capacity, Slope

Certified Value: .737 SCFM/PSIA

Test Medium: Air/Gas

Certified Medium: Air/Gas

Set Pressure Definition: Pop

Blowdown: Fixed

Scope of Nominal Size and Set Pressure Ranges:

Inlet Size	Outlet Size	Flow Area	Orifice [designator] diameter	Lift	Set Pressure Range	Media	Code Section
0.125 - 0.25 NPS	Side	0.049 sq in	0.25 in	0.14 in	25 - 450 psi	Air	VIII Div. 1

Certification Number: **13521** Design Series or catalog number **SRV 390**

Type Classification: Safety Relief Valve

Capacity Tests: Sec. VIII Div. 1 at National Board T L (Worthington) on January 28, 2003

Method of Establishing Relieving Capacity: Flow Capacity, Slope

Certified Value: 1.55 SCFM/PSIA

Test Medium: Air/Gas

Certified Medium: Air/Gas

Set Pressure Definition: Pop

Blowdown: Fixed

Scope of Nominal Size and Set Pressure Ranges:

Inlet Size	Outlet Size	Flow Area	Orifice [designator] diameter	Lift	Set Pressure Range	Media	Code Section
0.5 NPS	Side	0.119 sq in	0.39 in	0.12 in	25 - 300 psi	Air	VIII Div. 1

R. Conrader Company (RCC)

NB#: 13532

Location: 749 East 18th St, Erie, PA 16503 United States

Acceptable Abbrev.: R. Conrader

Certification Number: **13532** Design Series or catalog number: **SRV 530**

Type Classification: **Safety Relief Valve**Capacity Tests: **Sec. VIII Div. 1 at National Board T L (Worthington) on April 29, 2003**Method of Establishing Relieving Capacity: **Flow Capacity, Slope**Certified Value: **3.35 SCFM/PSIA**Test Medium: **Air/Gas**Certified Medium: **Air/Gas**Set Pressure Definition: **Pop**Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
0.75 NPS	Side	0.221 sq in	0.53 in	0.2 in	25 - 300 psi	Air	VIII Div. 1

Certification Number: **13543** Design Series or catalog number: **SRV 765**

Type Classification: **Safety Relief Valve**Capacity Tests: **Sec. VIII Div. 1 at National Board T L (Worthington) on April 29, 2003**Method of Establishing Relieving Capacity: **Flow Capacity, Slope**Certified Value: **7.13 SCFM/PSIA**Test Medium: **Air/Gas**Certified Medium: **Air/Gas**Set Pressure Definition: **Pop**Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
1 NPS	Side	0.46 sq in	0.765 in	0.225 in	25 - 300 psi	Air	VIII Div. 1

Certification Number: **13576** Design Series or catalog number: **SRH 580**

Type Classification: **Safety Relief Valve**Capacity Tests: **Sec. VIII Div. 1 at National Board T L (Worthington) on March 11, 2005**Method of Establishing Relieving Capacity: **Flow Capacity, Slope**Certified Value: **3.33 SCFM/PSIA**Test Medium: **Air/Gas**Certified Medium: **Air/Gas**Set Pressure Definition: **Pop**Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
0.75 - 1 NPS	Side	0.262 sq in	0.578 in	0.144 in	25 - 300 psi	Air	VIII Div. 1

Certification Number: **13598** Design Series or catalog number: **SRH 250**

Type Classification: **Safety Relief Valve**Capacity Tests: **Sec. VIII Div. 1 at National Board T L (Worthington) on March 11, 2005**Method of Establishing Relieving Capacity: **Flow Capacity, Slope**Certified Value: **0.72 SCFM/PSIA**Test Medium: **Air/Gas**Certified Medium: **Air/Gas**Set Pressure Definition: **Pop**Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
0.25 NPS	Side	0.049 sq in	0.25 in	0.138 in	25 - 350 psi	Air	VIII Div. 1

R. Conrader Company (RCC)

NB#: 13600

location: 749 East 18th St, Erie, PA 16503 United States

Acceptable Abbrev.: R. Conrader

Certification Number: **13600** Design Series or catalog number: **SRH 375**

Type Classification: **Safety Relief Valve**Capacity Tests: **Sec. VIII Div. 1 at National Board T L (Worthington) on March 11, 2005**Method of Establishing Relieving Capacity: **Flow Capacity, Slope**Certified Value: **1.67 SCFM/PSIA**Test Medium: **Air/Gas**Certified Medium: **Air/Gas**Set Pressure Definition: **Pop**Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
0.5 NPS	Side	0.11 sq in	0.375 in	0.15 in	50 - 350 psi	Air	VIII Div. 1

Certification Number: **13611** Design Series or catalog number: **SRS250**

Type Classification: **Safety Relief Valve**Capacity Tests: **Sec. VIII Div. 1 at National Board T L (Worthington) on February 10, 2017**Certified Value: **2.206 PPH/PSIA**Test Medium: **Steam**Certified Medium: **Steam**Special Service: **None**Set Pressure Definition: **Pop**Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
0.125 - 0.375 NPS	Side	0.049 sq in	[N/A] 0.25 in	0.14 in	25 - 60 psi	Steam	VIII Div. 1

Rego Cryo - Flow Products (CFP)

NB#: 46325

location: 3181 Lear Drive, Burlington, NC 27215 United States

Acceptable Abbrev.: RegO

Rego Cryo - Flow Products (CFP)

location: 3181 Lear Drive, Burlington, NC 27215 United States

Acceptable Abbrev.: RegO

Certification Number:	46325	Design Series or catalog number	B-19434B350-375 & C-19434B350-375
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Type Classification: **Safety Relief Valve**Capacity Tests: **Sec. VIII Div. 1 at Engineered Controls on November 27, 2001**Method of Establishing Relieving Capacity: **Flow Capacity, Slope**Certified Value: **1.778 SCFM/PSIA**Test Medium: **Gas**Certified Medium: **Gas**Set Pressure Definition: **Start-to-Leak**Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
0.5 NPS	Top	0.118 sq in	0.387 in		325 - 375 psi	Air	VIII Div. 1

REMBE® GmbH Safety + Control (REM)

NB#: 84002

location: Gallbergweg 21, Brilon 59929 Germany

Acceptable Abbrev.: REMBE

REMBE® GmbH Safety + Control (REM)

location: Gallbergweg 21, Brilon 59929 Germany

Acceptable Abbrev.: REMBE

Certification
Number: **84002**Design Series
or catalog number **KUB**

Holder Designation: IG-KUB(-S), IG-KUB-PTU(-S), G-KUB(-S)

Type Classification: Rupture Disk Device

Capacity Tests: Sec. VIII Div. 1 at National Board T L (Worthington) on July 24, 2000

Method of Establishing Relieving Capacity: Resistance Factor, 3 Size, Krg

Certified Value: 0.70 Unitless

Test Medium: Air/Gas

Certified Medium: Air/Gas

Set Pressure Definition: Burst Pressure

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
0.75 NPS		0.418 sq in			116 - 2175 psi		VIII Div. 1
1 NPS		0.698 sq in			94.3 - 2175 psi		VIII Div. 1
1.25 NPS		1.32 sq in			72.5 - 2030 psi		VIII Div. 1
1.5 NPS		1.7 sq in			58 - 1885 psi		VIII Div. 1
2 NPS		3.29 sq in			43.5 - 1885 psi		VIII Div. 1
2.5 NPS		4.72 sq in			29 - 1740 psi		VIII Div. 1
3 NPS		7.33 sq in			21.8 - 1740 psi		VIII Div. 1
4 NPS		12.4 sq in			8.7 - 1595 psi		VIII Div. 1
5 NPS		18.6 sq in			8.7 - 1450 psi		VIII Div. 1
6 NPS		27.9 sq in			7.3 - 1160 psi		VIII Div. 1
8 NPS		43.4 sq in			7.3 - 870 psi		VIII Div. 1
10 NPS		68.2 sq in			5.8 - 725 psi		VIII Div. 1
12 NPS		100.7 sq in			2.9 - 435 psi		VIII Div. 1
14 NPS		133 sq in			2.9 - 363 psi		VIII Div. 1
16 NPS		171 sq in			2.9 - 363 psi		VIII Div. 1
18 NPS		230 sq in			1.5 - 363 psi		VIII Div. 1
20 NPS		288 sq in			1.5 - 290 psi		VIII Div. 1
24 NPS		420 sq in			.7 - 290 psi		VIII Div. 1
26 NPS		480 sq in			.7 - 247 psi		VIII Div. 1
28 NPS		570 sq in			.7 - 218 psi		VIII Div. 1
30 NPS		657 sq in			.7 - 174 psi		VIII Div. 1
32 NPS		752 sq in			.7 - 145 psi		VIII Div. 1

location: Gallbergweg 21, Brilon 59929 Germany

Acceptable Abbrev.: REMBE

Certification
Number: **84013**Design Series
or catalog number **ODV**Holder Designation: **IG(-S)**Type Classification: **Rupture Disk Device**Capacity Tests: **Sec. VIII Div. 1 at National Board T L (Worthington) on June 06, 2000**Method of Establishing Relieving Capacity: **Resistance Factor, 3 Size, Krg**Certified Value: **0.90 Unitless**Test Medium: **Air/Gas**Certified Medium: **Air/Gas**Set Pressure Definition: **Burst Pressure**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
0.5 NPS		0.139 sq in			116 - 2900 psi		VIII Div. 1
0.75 NPS		0.418 sq in			87 - 2900 psi		VIII Div. 1
1 NPS		0.698 sq in			72.5 - 2610 psi		VIII Div. 1
1.25 NPS		1.32 sq in			72.5 - 2320 psi		VIII Div. 1
1.5 NPS		1.55 sq in			58 - 2175 psi		VIII Div. 1
2 NPS		2.94 sq in			43.5 - 2175 psi		VIII Div. 1
2.5 NPS		4.72 sq in			29 - 2175 psi		VIII Div. 1
3 NPS		7.33 sq in			14.5 - 2175 psi		VIII Div. 1
4 NPS		12.4 sq in			5.8 - 2175 psi		VIII Div. 1
5 NPS		18.6 sq in			5.8 - 2175 psi		VIII Div. 1
6 NPS		24.8 sq in			4.4 - 1885 psi		VIII Div. 1
8 NPS		43.4 sq in			2.2 - 1740 psi		VIII Div. 1
10 NPS		68.2 sq in			1.5 - 1740 psi		VIII Div. 1
12 NPS		100.7 sq in			1.5 - 1450 psi		VIII Div. 1
14 NPS		137 sq in			1.5 - 1450 psi		VIII Div. 1
16 NPS		175 sq in			1.5 - 1160 psi		VIII Div. 1
18 NPS		234 sq in			1.5 - 1015 psi		VIII Div. 1
20 NPS		279 sq in			1.5 - 870 psi		VIII Div. 1
24 NPS		407 sq in			0.7 - 870 psi		VIII Div. 1
26 NPS		473 sq in			0.7 - 725 psi		VIII Div. 1
28 NPS		570 sq in			0.7 - 725 psi		VIII Div. 1
30 NPS		651 sq in			0.7 - 580 psi		VIII Div. 1
32 NPS		752 sq in			0.7 - 580 psi		VIII Div. 1

location: Gallbergweg 21, Brilon 59929 Germany

Acceptable Abbrev.: REMBE

Certification
Number: **84024**Design Series
or catalog number **IKB**

Holder Designation: IG-KUB(-S), IG-KUB-PTU(-S), G-KUB(-S)

Type Classification: Rupture Disk Device

Capacity Tests: Sec. VIII Div. 1 at National Board T L (Worthington) on December 08, 2010

Method of Establishing Relieving Capacity: Resistance Factor, 3 Size, Krg

Certified Value: 0.97 Unitless

Test Medium: Air/Gas

Certified Medium: Air or gases (Krg)

Special Service: None

Set Pressure Definition: Burst Pressure

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
0.75 NPS		0.53 sq in			116 - 1450 psi		VIII Div. 1
1 NPS		0.85 sq in			50.8 - 1450 psi		VIII Div. 1
1.25 NPS		1.47 sq in			43.5 - 1450 psi		VIII Div. 1
1.5 NPS		2.02 sq in			29 - 928 psi		VIII Div. 1
2 NPS		3.33 sq in			21.8 - 928 psi		VIII Div. 1
2.5 NPS		4.73 sq in			18.9 - 928 psi		VIII Div. 1
3 NPS		7.36 sq in			14.5 - 928 psi		VIII Div. 1
4 NPS		12.71 sq in			11.6 - 928 psi		VIII Div. 1
5 NPS		19.84 sq in			10.2 - 580 psi		VIII Div. 1
6 NPS		28.68 sq in			7.3 - 580 psi		VIII Div. 1
8 NPS		49.6 sq in			7.3 - 580 psi		VIII Div. 1
10 NPS		78.28 sq in			7.3 - 580 psi		VIII Div. 1
12 NPS		111.6 sq in			7.3 - 580 psi		VIII Div. 1

Certification
Number: **84035**Design Series
or catalog number **IG-UKB-LS-1**

Type Classification: Rupture Disk Device

Capacity Tests: Sec. VIII Div. 1 at National Board T L (Worthington) on August 13, 2013

Method of Establishing Relieving Capacity: Resistance Factor, 1 Size, Krg

Certified Value: 2.80 N/A

Test Medium: Air or gases (Krg)

Certified Medium: Air or gases (Krg)

Special Service: None

Set Pressure Definition: Burst Pressure

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
1 NPS		0.7 sq in			55 - 1450 psi	Air	VIII Div. 1

location: Gallbergweg 21, Brilon 59929 Germany

Acceptable Abbrev.: REMBE

Certification Number: **84057** Design Series or catalog number: **KUB (Liquid)**

Holder Designation: IG-KUB (-S)

Type Classification: Rupture Disk Device

Capacity Tests: Sec. VIII Div. 1 at National Board T L (Worthington) on November 24, 2014

Method of Establishing Relieving Capacity: Resistance Factor, 3 Size, Krl

Certified Value: 3.51 Unitless

Test Medium: Gas

Certified Medium: Liquid (Krl)

Set Pressure Definition: Burst Pressure

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
0.75 NPS		0.418 sq in			116 - 2175 psi	Water	VIII Div. 1
1 NPS		0.698 sq in			94 - 2175 psi	Water	VIII Div. 1
1.25 NPS		1.32 sq in			72.5 - 2030 psi	Water	VIII Div. 1
1.5 NPS		1.7 sq in			58.0 - 1885 psi	Water	VIII Div. 1
2 NPS		3.29 sq in			43.5 - 1885 psi	Water	VIII Div. 1
2.5 NPS		4.72 sq in			29.0 - 1740 psi	Water	VIII Div. 1
3 NPS		7.33 sq in			21.8 - 1740 psi	Water	VIII Div. 1
4 NPS		12.4 sq in			8.7 - 1595 psi	Water	VIII Div. 1
5 NPS		18.6 sq in			8.7 - 1450 psi	Water	VIII Div. 1
6 NPS		27.9 sq in			7.3 - 1160 psi	Water	VIII Div. 1
8 NPS		43.4 sq in			7.3 - 1160 psi	Water	VIII Div. 1
10 NPS		68.2 sq in			5.8 - 725 psi	Water	VIII Div. 1
12 NPS		100.7 sq in			2.9 - 435 psi	Water	VIII Div. 1
14 NPS		133 sq in			2.9 - 363 psi	Water	VIII Div. 1
16 NPS		171 sq in			2.9 - 363 psi	Water	VIII Div. 1
18 NPS		230 sq in			1.5 - 363 psi	Water	VIII Div. 1
20 NPS		288 sq in			1.5 - 290 psi	Water	VIII Div. 1
24 NPS		420 sq in			0.7 - 290 psi	Water	VIII Div. 1
26 NPS		480 sq in			0.7 - 247 psi	Water	VIII Div. 1
28 NPS		570 sq in			0.7 - 218 psi	Water	VIII Div. 1
30 NPS		657 sq in			0.7 - 174 psi	Water	VIII Div. 1
32 NPS		752 sq in			0.7 - 145 psi	Water	VIII Div. 1

location: Gallbergweg 21, Brilon 59929 Germany

Acceptable Abbrev.: REMBE

Certification
Number: **84068**Design Series
or catalog number **STAR-HL (HP)**

Holder Designation: IG-HL (HP)

Type Classification: Rupture Disk Device

Capacity Tests: Sec. VIII Div. 1 at National Board T L (Worthington) on October 25, 2016

Method of Establishing Relieving Capacity: Resistance Factor, 3 Size, Krgl

Certified Value: 2.0 Unitless

Test Medium: Gas

Certified Medium: Air or gases, and liquid (Krgl)

Set Pressure Definition: Burst Pressure

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
0.75 NPS		0.48 sq in			43.5 - 6250 psi		VIII Div. 1
1 NPS		0.81 sq in			36.3 - 6250 psi		VIII Div. 1
1.25 NPS		1.47 sq in			36.3 - 6250 psi		VIII Div. 1
1.5 NPS		1.75 sq in			29 - 6250 psi		VIII Div. 1
2 NPS		3.26 sq in			14.5 - 6250 psi		VIII Div. 1
2.5 NPS		4.73 sq in			14.5 - 6250 psi		VIII Div. 1
3 NPS		7.38 sq in			8.7 - 6250 psi		VIII Div. 1
4 NPS		12.71 sq in			7.3 - 6250 psi		VIII Div. 1
5 NPS		20 sq in			5.8 - 6250 psi		VIII Div. 1
6 N/A		24.8 sq in			5.8 - 6250 psi		VIII Div. 1
6 NPS		28.91 sq in			5.8 - 6250 psi		VIII Div. 1
8 N/A		43.4 sq in			2.9 - 6250 psi		VIII Div. 1
8 NPS		49.99 sq in			2.9 - 6250 psi		VIII Div. 1
10 N/A		68.2 sq in			2.9 - 6250 psi		VIII Div. 1
10 NPS		78.74 sq in			2.9 - 6250 psi		VIII Div. 1
12 N/A		100.75 sq in			2.2 - 6250 psi		VIII Div. 1
12 NPS		113 sq in			2.2 - 6250 psi		VIII Div. 1
14 NPS		137.8 sq in			2.2 - 3750 psi		VIII Div. 1
16 NPS		182.59 sq in			1.5 - 3750 psi		VIII Div. 1
18 NPS		233.59 sq in			1.5 - 1500 psi		VIII Div. 1
20 NPS		290.94 sq in			1.5 - 1500 psi		VIII Div. 1
22 NPS		354.49 sq in			1.5 - 1500 psi		VIII Div. 1
24 NPS		418.04 sq in			1.5 - 1500 psi		VIII Div. 1
26 NPS		500.65 sq in			0.7 - 1500 psi		VIII Div. 1
28 NPS		574.59 sq in			0.6 - 1500 psi		VIII Div. 1
30 NPS		671.77 sq in			0.6 - 1500 psi		VIII Div. 1
32 NPS		757.8 sq in			0.4 - 1500 psi		VIII Div. 1
34 NPS		868 sq in			0.4 - 750 psi		VIII Div. 1
36 NPS		964.26 sq in			0.4 - 750 psi		VIII Div. 1
38 NPS		1089.65 sq in			0.4 - 290 psi		VIII Div. 1
40 NPS		1209.78 sq in			0.4 - 232 psi		VIII Div. 1
42 NPS		1336.1 sq in			0.4 - 145 psi		VIII Div. 1
44 NPS		1468.94 sq in			0.4 - 145 psi		VIII Div. 1
46 NPS		1606.89 sq in			0.4 - 145 psi		VIII Div. 1
48 NPS		1749.95 sq in			0.4 - 87 psi		VIII Div. 1
50 NPS		1883.87 sq in			0.4 - 87 psi		VIII Div. 1
52 NPS		2035.15 sq in			0.4 - 87 psi		VIII Div. 1
56 NPS		2352.75 sq in			0.4 - 87 psi		VIII Div. 1

Richter Chemie-Technik GmbH (IRC)

NB#: 14500

location: Otto-Schott-Strasse-2, Kempen D-47906 Germany

Acceptable Abbrev.: Richter

Richter Chemie-Technik GmbH (IRC)

location: Otto-Schott-Strasse-2, Kempen D-47906 Germany

Acceptable Abbrev.: Richter

Certification Number: **14500** Design Series or catalog number **KSEA Series (restricted lift liquid)**

Type Classification: **Safety Relief Valve**Capacity Tests: **Sec. VIII Div. 1 at Continental Disc. Corp. on October 07, 2004**Method of Establishing Relieving Capacity: **Flow Capacity, K**Certified Value: **0.542 Unitless**Test Medium: **Water**Certified Medium: **Liquid**Set Pressure Definition: **First Steady Stream**Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
2 NPS	3 NPS	1.948 sq in	1.575 in	0.153 in	15 - 188 psi	Water	VIII Div. 1
3 NPS	4 NPS	3.045 sq in	1.969 in	0.189 in	15 - 145 psi	Water	VIII Div. 1
4 NPS	6 NPS	7.793 sq in	3.15 in	0.307 in	15 - 145 psi	Water	VIII Div. 1

Certification Number: **14511** Design Series or catalog number **KSEA Series (liquid)**

Type Classification: **Safety Relief Valve**Capacity Tests: **Sec. VIII Div. 1 at Continental Disc. Corp. on October 07, 2004**Method of Establishing Relieving Capacity: **Flow Capacity, K**Certified Value: **.542 Unitless**Test Medium: **Water**Certified Medium: **Liquid**Set Pressure Definition: **First Steady Stream**Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
2 NPS	3 NPS	1.948 sq in	1.575 in	0.512 in	15 - 188 psi	Water	VIII Div. 1
3 NPS	4 NPS	3.045 sq in	1.969 in	0.63 in	15 - 145 psi	Water	VIII Div. 1
4 NPS	6 NPS	7.793 sq in	3.15 in	1.024 in	15 - 145 psi	Water	VIII Div. 1

Certification Number: **14522** Design Series or catalog number **KSEA Series (restricted lift)**

Type Classification: **Safety Relief Valve**Capacity Tests: **Sec. VIII Div. 1 at Continental Disc. Corp. on October 07, 2004**Method of Establishing Relieving Capacity: **Flow Capacity, K**Certified Value: **0.841 Unitless**Test Medium: **Air/Gas**Certified Medium: **Air/Gas**Set Pressure Definition: **Pop**Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
1 NPS	2 NPS	0.589 sq in	0.866 in	0.118 in	15 - 188 psi	Air	VIII Div. 1
2 NPS	3 NPS	1.948 sq in	1.575 in	0.153 in	15 - 188 psi	Air	VIII Div. 1
3 NPS	4 NPS	3.045 sq in	1.969 in	0.189 in	15 - 145 psi	Air	VIII Div. 1
4 NPS	6 NPS	7.793 sq in	3.15 in	0.307 in	15 - 145 psi	Air	VIII Div. 1

location: Otto-Schott-Strasse-2, Kempen D-47906 Germany

Acceptable Abbrev.: Richter

Certification
Number: **14533**Design Series
or catalog number **KSEA Series**Type Classification: **Safety Relief Valve**Capacity Tests: **Sec. VIII Div. 1 at Continental Disc. Corp. on October 07, 2004**Method of Establishing Relieving Capacity: **Flow Capacity, K**Certified Value: **.841 Unitless**Test Medium: **Air/Gas**Certified Medium: **Air/Gas**Set Pressure Definition: **Pop**Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
1 NPS	2 NPS	0.589 sq in	0.866 in	0.276 in	15 - 188 psi	Air	VIII Div. 1
2 NPS	3 NPS	1.948 sq in	1.575 in	0.512 in	15 - 188 psi	Air	VIII Div. 1
3 NPS	4 NPS	3.045 sq in	1.969 in	0.63 in	15 - 145 psi	Air	VIII Div. 1
4 NPS	6 NPS	7.793 sq in	3.15 in	1.024 in	15 - 145 psi	Air	VIII Div. 1

Certification
Number: **14544**Design Series
or catalog number **KSEA Series (1" Liq.)**Type Classification: **Safety Relief Valve**Capacity Tests: **Sec. VIII Div. 1 at Continental Disc. Corp. on June 08, 2004**Method of Establishing Relieving Capacity: **Flow Capacity, Flow Factor**Certified Value: **12.6 GPM/SQ.RT. PSID**Test Medium: **Water**Certified Medium: **Liquid**Set Pressure Definition: **First Steady Stream**Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
1 NPS	2 NPS	0.589 sq in	0.866 in	0.276 in	15 - 188 psi	Water	VIII Div. 1

Certification
Number: **14555**Design Series
or catalog number **KSEA Series (1" Liq. RL)**Type Classification: **Safety Relief Valve**Capacity Tests: **Sec. VIII Div. 1 at Continental Disc. Corp. on June 08, 2004**Method of Establishing Relieving Capacity: **Flow Capacity, Flow Factor**Certified Value: **12.6 GPM/SQ.RT. PSID**Test Medium: **Water**Certified Medium: **Liquid**Set Pressure Definition: **First Steady Stream**Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
1 NPS	2 NPS	0.589 sq in	0.866 in	0.118 in	15 - 188 psi	Water	VIII Div. 1

Rupture Pin Technology Inc. (RPT)

NB#: 56630

location: 8230 SW 8th St, Oklahoma City, OK 73128 United States

Acceptable Abbrev.: RPT

Rupture Pin Technology Inc. (RPT)

location: 8230 SW 8th St, Oklahoma City, OK 73128 United States

Acceptable Abbrev.: RPT

Certification Number: **56630** Design Series or catalog number **Model C- Rupture Pin Relief Valve**

Type Classification: Buckling Pin Non-reclosing Device

Capacity Tests: Sec. VIII Div. 1 at National Board T L (Worthington) on October 16, 2013

Method of Establishing Relieving Capacity: Flow Capacity, K

Certified Value: .712 N/A

Test Medium: Air

Certified Medium: Air/Gas

Set Pressure Definition: Buckling Pressure

Scope of Nominal Size and Set Pressure Ranges:

Inlet Size	Outlet Size	Flow Area	Orifice [designator] diameter	Lift	Set Pressure Range	Media	Code Section
1.5 NPS	2 NPS	1.77 sq in	1.5 in	0.85 in	30 - 1480 psi	Air	VIII Div. 1
2 NPS	3 NPS	2.95 sq in	1.94 in	0.9 in	15 - 1480 psi	Air	VIII Div. 1
3 NPS	4 NPS	6.6 sq in	2.9 in	1.48 in	15 - 1480 psi	Air	VIII Div. 1
4 NPS	6 NPS	11.49 sq in	3.826 in	1.71 in	15 - 1480 psi	Air	VIII Div. 1
6 NPS	8 NPS	26.05 sq in	5.761 in	2.19 in	15 - 1480 psi	Air	VIII Div. 1
8 NPS	10 NPS	45.64 sq in	7.625 in	2.66 in	15 - 1480 psi	Air	VIII Div. 1
10 NPS	12 NPS	74.62 sq in	9.75 in	3.19 in	15 - 1480 psi	Air	VIII Div. 1
12 NPS	14 NPS	108.38 sq in	11.75 in	3.69 in	15 - 1480 psi	Air	VIII Div. 1
14 NPS	16 NPS	132.67 sq in	13 in	4 in	15 - 740 psi	Air	VIII Div. 1
16 NPS	18 NPS	176.63 sq in	15 in	4.5 in	15 - 740 psi	Air	VIII Div. 1
18 NPS	20 NPS	226.87 sq in	17 in	5 in	15 - 740 psi	Air	VIII Div. 1
20 NPS	24 NPS	283.39 sq in	19 in	5.5 in	15 - 285 psi	Air	VIII Div. 1
24 NPS	30 NPS	415.27 sq in	23 in	6.5 in	15 - 285 psi	Air	VIII Div. 1
30 NPS	36 NPS	660.19 sq in	29 in	8 in	15 - 285 psi	Air	VIII Div. 1

Certification Number: **56641** Design Series or catalog number **Model C- Rupture Pin Relief Valve (Liquid)**

Type Classification: Buckling Pin Non-reclosing Device

Capacity Tests: Sec. VIII Div. 1 at National Board T L (Worthington) on October 15, 2013

Method of Establishing Relieving Capacity: Flow Capacity, K

Certified Value: .595 N/A

Test Medium: Water

Certified Medium: Liquid

Set Pressure Definition: Buckling Pressure

Scope of Nominal Size and Set Pressure Ranges:

Inlet Size	Outlet Size	Flow Area	Orifice [designator] diameter	Lift	Set Pressure Range	Media	Code Section
1.5 NPS	2 NPS	1.77 sq in	1.5 in	0.85 in	30 - 1480 psi	Water	VIII Div. 1
2 NPS	3 NPS	2.95 sq in	1.94 in	0.9 in	15 - 1480 psi	Water	VIII Div. 1
3 NPS	4 NPS	6.6 sq in	2.9 in	1.48 in	15 - 1480 psi	Water	VIII Div. 1
4 NPS	6 NPS	11.49 sq in	3.826 in	1.71 in	15 - 1480 psi	Water	VIII Div. 1
6 NPS	8 NPS	26.05 sq in	5.761 in	2.19 in	15 - 1480 psi	Water	VIII Div. 1
8 NPS	10 NPS	45.64 sq in	7.625 in	2.66 in	15 - 1480 psi	Water	VIII Div. 1
10 NPS	12 NPS	74.62 sq in	9.75 in	3.19 in	15 - 1480 psi	Water	VIII Div. 1
12 NPS	14 NPS	108.38 sq in	11.75 in	3.69 in	15 - 1480 psi	Water	VIII Div. 1
14 NPS	16 NPS	132.67 sq in	13 in	4 in	15 - 740 psi	Water	VIII Div. 1
16 NPS	18 NPS	176.63 sq in	15 in	4.5 in	15 - 740 psi	Water	VIII Div. 1
18 NPS	20 NPS	226.87 sq in	17 in	5 in	15 - 740 psi	Water	VIII Div. 1
20 NPS	24 NPS	283.39 sq in	19 in	5.5 in	15 - 285 psi	Water	VIII Div. 1
24 NPS	30 NPS	415.27 sq in	23 in	6.5 in	15 - 285 psi	Water	VIII Div. 1
30 NPS	36 NPS	660.19 sq in	29 in	8 in	15 - 285 psi	Water	VIII Div. 1

S V C Inc. (SVK)

NB#: 94159

location: 57, Seungga-ro 58beon-gil, Gimpo-si, Gyeonggi-Do 10117 South Korea

Acceptable Abbrev.: SVC

S V C Inc. (SVK)

location: 57, Seungga-ro 58beon-gil, Gimpo-si, Gyeonggi-Do 10117 South Korea

Acceptable Abbrev.: SVC

Certification Number: **94159** Design Series or catalog number: **SSR-S8000, SSR-S8000-B**

Type Classification: **Safety Relief Valve**Capacity Tests: **Sec. VIII Div. 1 at National Board T L (Worthington) on June 05, 2003**Method of Establishing Relieving Capacity: **Flow Capacity, K**Certified Value: **.855 Unitless**Test Medium: **Steam & Air/Gas**Certified Medium: **Steam & Air/Gas**Set Pressure Definition: **Pop**Blowdown: **Adjustable**

Scope of Nominal Size and Set Pressure Ranges:

Inlet Size	Outlet Size	Flow Area	Orifice [designator] diameter	Lift	Set Pressure Range	Media	Code Section
0.5 - 1 NPS	1 - 2.5 NPS	0.11 sq in	[D] 0.374 in	0.094 in	15 - 2885 psi	Steam	III NC
					15 - 6000 psi	Air	III NC
1 - 1.5 NPS	2 - 2.5 NPS	0.196 sq in	[E] 0.5 in	0.125 in	15 - 2885 psi	Steam	III NC
					15 - 6000 psi	Air	III NC
1.5 - 2 NPS	2, 2.5 NPS	0.307 sq in	[F] 0.625 in	0.157 in	15 - 2885 psi	Steam	III NC
					15 - 5000 psi	Air	III NC
	2.5, 3 NPS	0.503 sq in	[G] 0.803 in	0.201 in	15 - 2885 psi	Steam	III NC
					15 - 3700 psi	Air	III NC
	3 NPS	0.785 sq in	[H] 1 in	0.25 in	15 - 2060 psi	Steam	III NC
					15 - 2750 psi	Air	III NC
2 - 3 NPS	3, 4 NPS	1.287 sq in	[J] 1.283 in	0.321 in	15 - 2060 psi	Steam	III NC
					15 - 2700 psi	Air	III NC
3 NPS	4, 6 NPS	1.838 sq in	[K] 1.531 in	0.383 in	15 - 2060 psi	Steam	III NC
					15 - 2220 psi	Air	III NC
3 - 4 NPS	4, 6 NPS	2.853 sq in	[L] 1.909 in	0.478 in	15 - 1500 psi	Air	III NC
						Steam	III NC
4 NPS	6 NPS	3.6 sq in	[M] 2.142 in	0.536 in	15 - 1100 psi	Air	III NC
						Steam	III NC
		4.34 sq in	[N] 2.35 in	0.588 in	15 - 1000 psi	Air	III NC
						Steam	III NC
		6.38 sq in	[P] 2.85 in	0.713 in	15 - 1000 psi	Air	III NC
						Steam	III NC
6 NPS	6 NPS	11.05 sq in	[Q] 3.752 in	0.938 in	15 - 600 psi	Air	III NC
						Steam	III NC
	8, 10 NPS	16 sq in	[R] 4.516 in	1.129 in	15 - 300 psi	Air	III NC
						Steam	III NC
8 NPS	10 NPS	26 sq in	[T] 5.756 in	1.439 in	15 - 300 psi	Air	III NC
						Steam	III NC

S V C Inc. (SVK)

NB#: 94160

location: 57, Seungga-ro 58beon-gil, Gimpo-si, Gyeonggi-Do 10117 South Korea

Acceptable Abbrev.: SVC

Certification Number: **94160** Design Series or catalog number **SSRW-S8000, SSRW-S8000-B**

Type Classification: **Relief Valve**Capacity Tests: **Sec. III NC at National Board T L (Worthington) on June 05, 2003**Method of Establishing Relieving Capacity: **Flow Capacity, K**Certified Value: **.668 Unitless**Test Medium: **Water**Certified Medium: **Liquid**Set Pressure Definition: **Start-to-Leak**Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

Inlet Size	Outlet Size	Flow Area	Orifice [designator] diameter	Lift	Set Pressure Range	Media	Code Section
0.5 - 1 NPS	1 - 2.5 NPS	0.11 sq in	[D] 0.374 in	0.112 in	3 - 6000 psi	Water	III NC
1 - 1.5 NPS	2 - 2.5 NPS	0.196 sq in	[E] 0.5 in	0.148 in	3 - 6000 psi	Water	III NC
1.5 NPS	2, 2.5 NPS	0.307 sq in	[F] 0.626 in	0.187 in	3 - 5000 psi	Water	III NC
1.5 - 2 NPS	2.5, 3 NPS	0.503 sq in	[G] 0.803 in	0.236 in	3 - 3700 psi	Water	III NC
	3 NPS	0.785 sq in	[H] 1 in	0.296 in	3 - 2750 psi	Water	III NC
2 - 3 NPS	3, 4 NPS	1.287 sq in	[J] 1.283 in	0.374 in	3 - 2700 psi	Water	III NC
3 NPS	4, 6 NPS	1.838 sq in	[K] 1.531 in	0.443 in	3 - 2220 psi	Water	III NC
3 - 4 NPS	4, 6 NPS	2.853 sq in	[L] 1.909 in	0.552 in	3 - 1500 psi	Water	III NC
4 NPS	6 NPS	3.6 sq in	[M] 2.142 in	0.62 in	3 - 1100 psi	Water	III NC
		4.34 sq in	[N] 2.35 in	0.68 in	3 - 1000 psi	Water	III NC
		6.38 sq in	[P] 2.85 in	0.827 in	3 - 1000 psi	Water	III NC
6 NPS	8 NPS	11.05 sq in	[Q] 3.752 in	1.083 in	3 - 600 psi	Water	III NC
		16 sq in	[R] 4.516 in	1.3 in	3 - 300 psi	Water	III NC
8 NPS	10 NPS	26 sq in	[T] 5.756 in	1.664 in	3 - 300 psi	Water	III NC

Certification Number: **94216** Design Series or catalog number **SSR-S1000**

Type Classification: **Safety Valve**Capacity Tests: **Sec. I at National Board T L (Worthington) on December 18, 2007**Method of Establishing Relieving Capacity: **Flow Capacity, K**Certified Value: **.856 Unitless**Test Medium: **Steam**Certified Medium: **Steam**Special Service: **None**Set Pressure Definition: **Pop**Blowdown: **Adjustable**

Scope of Nominal Size and Set Pressure Ranges:

Inlet Size	Outlet Size	Flow Area	Orifice [designator] diameter	Lift	Set Pressure Range	Media	Code Section
0.75 - 1 NPS	1 - 2 NPS	0.122 sq in	[D] 0.394 in	0.099 in	15 - 3100 psi	Steam	I
1 - 1.5 NPS	2 - 3 NPS	0.217 sq in	[E] 0.526 in	0.132 in	15 - 3100 psi	Steam	I
		0.34 sq in	[F] 0.658 in	0.165 in	15 - 3100 psi	Steam	I
1.5 - 2 NPS	2.5, 3 NPS	0.556 sq in	[G] 0.841 in	0.21 in	15 - 3100 psi	Steam	I
	3, 4 NPS	0.868 sq in	[H] 1.051 in	0.263 in	15 - 3100 psi	Steam	I
2 - 3 NPS	3 - 6 NPS	1.423 sq in	[J] 1.346 in	0.337 in	15 - 3100 psi	Steam	I
2.5 - 3 NPS	4, 6 NPS	2.031 sq in	[K] 1.608 in	0.402 in	15 - 3100 psi	Steam	I
3 - 4 NPS	4, 6 NPS	3.153 sq in	[L] 2.004 in	0.501 in	15 - 3100 psi	Steam	I
	4 - 8 NPS	3.98 sq in	[M] 2.251 in	0.563 in	15 - 3100 psi	Steam	I
4 NPS	6, 8 NPS	4.8 sq in	[N] 2.472 in	0.618 in	15 - 3100 psi	Steam	I
		7.05 sq in	[P] 2.996 in	0.749 in	15 - 3100 psi	Steam	I
6 NPS	8, 10 NPS	12.21 sq in	[Q] 4.499 in	0.986 in	15 - 2000 psi	Steam	I
		15.9 sq in	[R] 4.499 in	1.125 in	15 - 2000 psi	Steam	I
8 NPS	10, 12 NPS	28.3 sq in	[T] 6 in	1.5 in	15 - 1500 psi	Steam	I

S V C Inc. (SVK)

NB#: 94227

location: 57, Seungga-ro 58beon-gil, Gimpo-si, Gyeonggi-Do 10117 South Korea

Acceptable Abbrev.: SVC

Certification
Number: **94227**Design Series
or catalog number **SSR-S1100**Type Classification: **Safety Valve**Capacity Tests: **Sec. I at National Board T L (Worthington) on January 21, 2011**Method of Establishing Relieving Capacity: **Flow Capacity, K**Certified Value: **.861 Unitless**Test Medium: **Steam**Certified Medium: **Steam**Set Pressure Definition: **Pop**Blowdown: **Adjustable by Dual Ring**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
1 - 1.5 NPS	2 - 3 NPS	0.442 sq in	[F1] 0.75 in	0.188 in	50 - 3100 psi	Steam	N/A
1.5 - 2 NPS	2.5, 3 NPS	0.556 sq in	[G] 0.841 in	0.21 in	50 - 3100 psi	Steam	N/A
1.5 - 2.5 NPS	3, 4 NPS	0.994 sq in	[H1] 1.125 in	0.281 in	50 - 5020 psi	Steam	N/A
2 - 3 NPS	3 - 6 NPS	1.423 sq in	[J] 1.346 in	0.337 in	50 - 3100 psi	Steam	N/A
2.5 NPS	6 NPS	2.853 sq in	[K2] 2.906 in	0.477 in	50 - 2575 psi	Steam	N/A
2.5 - 3 NPS	4 - 6 NPS	2.545 sq in	[K1] 1.8 in	0.45 in	50 - 5020 psi	Steam	N/A
3 - 4 NPS	4 - 6 NPS	3.341 sq in	[L1] 2.062 in	0.516 in	50 - 5020 psi	Steam	N/A
	6 - 8 NPS	3.98 sq in	[M] 2.251 in	0.563 in	50 - 3100 psi	Steam	N/A
4 NPS	6 - 8 NPS	4.8 sq in	[N] 2.472 in	0.618 in	50 - 3100 psi	Steam	N/A
		7.05 sq in	[P] 2.996 in	0.749 in	50 - 3100 psi	Steam	N/A
6 NPS	8 NPS	12.21 sq in	[Q] 3.943 in	0.986 in	50 - 2000 psi	Steam	N/A
		14.18 sq in	[Q1] 4.25 in	1.063 in	50 - 2000 psi	Steam	N/A
6 - 8 NPS	8 - 10 NPS	16 sq in	[R1] 4.515 in	1.129 in	50 - 2000 psi	Steam	N/A
		19.29 sq in	[R2] 4.956 in	1.239 in	50 - 1500 psi	Steam	N/A

S V C Inc. (SVK)

NB#: 94238

location: 57, Seungga-ro 58beon-gil, Gimpo-si, Gyeonggi-Do 10117 South Korea

Acceptable Abbrev.: SVC

Certification
Number: **94238**Design Series
or catalog number **SSR-S8100, SSR-S8100-B**Type Classification: **Safety Relief Valve**Capacity Tests: **Sec. VIII Div. 1 at National Board T L (Worthington) on October 14, 2010**Method of Establishing Relieving Capacity: **Flow Capacity, K**Certified Value: **.859 Unitless**Test Medium: **Steam & Air/Gas**Certified Medium: **Steam & Air/Gas**Set Pressure Definition: **Pop**Blowdown: **Adjustable by Single Ring**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
0.5 - 1.5 NPS	.75-3 NPS	0.137 sq in	[D] 0.418 in	0.105 in	15 - 2885 psi	Steam	III & VIII Div.1
					15 - 6000 psi	Air	III & VIII Div.1
0.75 - 1.5 NPS	1-3 NPS	0.281 sq in	[E] 0.598 in	0.15 in	15 - 2885 psi	Steam	III & VIII Div.1
					15 - 6000 psi	Air	III & VIII Div.1
1 - 2 NPS	2-3 NPS	0.377 sq in	[F] 0.693 in	0.173 in	15 - 2885 psi	Steam	III & VIII Div.1
					15 - 5000 psi	Air	III & VIII Div.1
1.5 - 2 NPS	2-3 NPS	0.595 sq in	[G] 0.87 in	0.218 in	15 - 2885 psi	Steam	III & VIII Div.1
					15 - 3700 psi	Air	III & VIII Div.1
		0.921 sq in	[H] 1.083 in	0.271 in	15 - 2060 psi	Steam	III & VIII Div.1
					15 - 2750 psi	Air	III & VIII Div.1
2 - 3 NPS	3-4 NPS	1.5 sq in	[J] 1.382 in	0.346 in	15 - 2060 psi	Steam	III & VIII Div.1
					15 - 2700 psi	Air	III & VIII Div.1
3 NPS	4-6 NPS	2.138 sq in	[K] 1.65 in	0.413 in	15 - 2060 psi	Steam	III & VIII Div.1
					15 - 2220 psi	Air	III & VIII Div.1
3 - 4 NPS	4-6 NPS	3.317 sq in	[L] 2.055 in	0.514 in	15 - 1500 psi	Air	III & VIII Div.1
						Steam	III & VIII Div.1
4 NPS	6 NPS	4.19 sq in	[M] 2.31 in	0.578 in	15 - 1500 psi	Air	III & VIII Div.1
						Steam	III & VIII Div.1
		5.06 sq in	[N] 2.538 in	0.635 in	15 - 1500 psi	Air	III & VIII Div.1
						Steam	III & VIII Div.1
		7.42 sq in	[P] 3.074 in	0.769 in	15 - 1500 psi	Air	III & VIII Div.1
						Steam	III & VIII Div.1
6 NPS	8 NPS	13.05 sq in	[Q] 4.076 in	1.019 in	15 - 1000 psi	Air	III & VIII Div.1
						Steam	III & VIII Div.1
	8-10 NPS	18.6 sq in	[R] 4.866 in	1.217 in	15 - 1000 psi	Air	III & VIII Div.1
						Steam	III & VIII Div.1
8 NPS	10 NPS	31 sq in	[T] 6.283 in	1.571 in	15 - 1000 psi	Air	III & VIII Div.1
						Steam	III & VIII Div.1
10 NPS	14 NPS	47.74 sq in	[V] 7.796 in	1.949 in	15 - 500 psi	Air	III & VIII Div.1
						Steam	III & VIII Div.1
12 NPS	16 NPS	74 sq in	[W1] 9.707 in	2.427 in	15 - 500 psi	Air	III & VIII Div.1
						Steam	III & VIII Div.1
14 NPS	18 NPS	90.7 sq in	[W2] 10.746 in	2.687 in	15 - 500 psi	Air	III & VIII Div.1
						Steam	III & VIII Div.1
16 NPS	18-20 NPS	114.7 sq in	[W3] 12.085 in	3.021 in	15 - 500 psi	Air	III & VIII Div.1
						Steam	III & VIII Div.1
18 NPS	24 NPS	140.7 sq in	[Y] 13.384 in	3.346 in	15 - 500 psi	Air	III & VIII Div.1
						Steam	III & VIII Div.1
		156 sq in	[Y2] 14.094 in	3.524 in	15 - 500 psi	Air	III & VIII Div.1
						Steam	III & VIII Div.1
20 NPS	24 NPS	180.4 sq in	[Z] 15.156 in	3.789 in	15 - 500 psi	Air	III & VIII Div.1
						Steam	III & VIII Div.1
		192.1 sq in	[Z2] 15.641 in	3.91 in	15 - 500 psi	Air	III & VIII Div.1
						Steam	III & VIII Div.1

S V C Inc. (SVK)

NB#: 94249

location: 57, Seungga-ro 58beon-gil, Gimpo-si, Gyeonggi-Do 10117 South Korea

Acceptable Abbrev.: SVC

Certification Number: **94249** Design Series or catalog number: **SSRW-S8100, SSRW-S8100-B**

Type Classification: **Relief Valve**Capacity Tests: **Sec. VIII Div. 1 at National Board T L (Worthington) on October 14, 2010**Method of Establishing Relieving Capacity: **Flow Capacity, K**Certified Value: **.700 Unitless**Test Medium: **Water**Certified Medium: **Liquid**Set Pressure Definition: **First Steady Stream**Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
0.5 - 1.5 NPS	.75-3 NPS	0.137 sq in	[D] 0.418 in	0.125 in	3 - 6000 psi	Water	III & VIII Div.1
0.75 - 1.5 NPS	1-3 NPS	0.281 sq in	[E] 0.598 in	0.179 in	3 - 6000 psi	Water	III & VIII Div.1
1 - 2 NPS	2,3 NPS	0.377 sq in	[F] 0.693 in	0.208 in	3 - 5000 psi	Water	III & VIII Div.1
1.5 - 2 NPS	2,3 NPS	0.595 sq in	[G] 0.87 in	0.261 in	3 - 3700 psi	Water	III & VIII Div.1
		0.921 sq in	[H] 1.083 in	0.325 in	3 - 2750 psi	Water	III & VIII Div.1
2 - 3 NPS	3,4 NPS	1.5 sq in	[J] 1.382 in	0.415 in	3 - 2700 psi	Water	III & VIII Div.1
3 NPS	4,6 NPS	2.138 sq in	[K] 1.65 in	0.495 in	3 - 2220 psi	Water	III & VIII Div.1
3 - 4 NPS	4,6 NPS	3.317 sq in	[L] 2.055 in	0.617 in	3 - 1500 psi	Water	III & VIII Div.1
4 NPS	6 NPS	4.19 sq in	[M] 2.31 in	0.693 in	3 - 1500 psi	Water	III & VIII Div.1
		5.06 sq in	[N] 2.538 in	0.761 in	3 - 1500 psi	Water	III & VIII Div.1
		7.42 sq in	[P] 3.074 in	0.922 in	3 - 1500 psi	Water	III & VIII Div.1
6 NPS	8 NPS	13.05 sq in	[Q] 4.076 in	1.223 in	3 - 1000 psi	Water	III & VIII Div.1
	8, 10 NPS	18.6 sq in	[R] 4.866 in	1.46 in	3 - 1000 psi	Water	III & VIII Div.1
8 NPS	10 NPS	31 sq in	[T] 6.283 in	1.885 in	3 - 1000 psi	Water	III & VIII Div.1
10 NPS	14 NPS	47.74 sq in	[V] 7.796 in	2.339 in	3 - 500 psi	Water	III & VIII Div.1
12 NPS	16 NPS	74 sq in	[W1] 9.707 in	2.912 in	3 - 500 psi	Water	III & VIII Div.1
14 NPS	18 NPS	90.7 sq in	[W2] 10.746 in	3.224 in	3 - 500 psi	Water	III & VIII Div.1
16 NPS	18, 20 NPS	114.7 sq in	[W3] 12.085 in	3.626 in	3 - 500 psi	Water	III & VIII Div.1
18 NPS	24 NPS	140.7 sq in	[Y] 13.384 in	4.015 in	3 - 500 psi	Water	III & VIII Div.1
		156 sq in	[Y2] 14.094 in	4.228 in	3 - 500 psi	Water	III & VIII Div.1
20 NPS	24 NPS	192.1 sq in	[Z2] 15.641 in	4.692 in	3 - 500 psi	Water	III & VIII Div.1
		180.4 sq in	[Z] 15.156 in	4.547 in	3 - 500 psi	Water	III & VIII Div.1

Certification Number: **94250** Design Series or catalog number: **SVR-20(SVR-01)**

Type Classification: **Vacuum Relief Valve**Capacity Tests: **Sec. III NC at National Board T L (Worthington) on March 20, 2013**Method of Establishing Relieving Capacity: **Flow Capacity, 1 valve method**Certified Value: **256 SCFM**Test Medium: **Air**Certified Medium: **Air**Set Pressure Definition: **Start-to-Leak**Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
3 NPS	3 NPS	3.713 sq in	2.174 in		-0.3 - -0.3 psi	Air	III NC

S V C Inc. (SVK)

NB#: 94261

location: 57, Seungga-ro 58beon-gil, Gimpo-si, Gyeonggi-Do 10117 South Korea

Acceptable Abbrev.: SVC

Certification Number: **94261** Design Series or catalog number **SVR-30(SVR-02)**

Type Classification: Vacuum Relief Valve

Capacity Tests: Sec. III NC at National Board T L (Worthington) on March 20, 2013

Method of Establishing Relieving Capacity: Flow Capacity, 1 valve method

Certified Value: 491 SCFM

Test Medium: Air

Certified Medium: Air

Set Pressure Definition: Start-to-Leak

Blowdown: Fixed

Scope of Nominal Size and Set Pressure Ranges:

Inlet Size	Outlet Size	Flow Area	Orifice [designator] diameter	Lift	Set Pressure Range	Media	Code Section
4 NPS	4 NPS	10.5 sq in	3.656 in		0.3 - 0.3 psi	Air	III NC

Certification Number: **94272** Design Series or catalog number **SVR-30(SVR-03)**

Type Classification: Vacuum Relief Valve

Capacity Tests: Sec. III NC at National Board T L (Worthington) on March 20, 2013

Method of Establishing Relieving Capacity: Flow Capacity, 1 valve method

Certified Value: 524 SCFM

Test Medium: Air

Certified Medium: Air

Set Pressure Definition: Start-to-Leak

Blowdown: Fixed

Scope of Nominal Size and Set Pressure Ranges:

Inlet Size	Outlet Size	Flow Area	Orifice [designator] diameter	Lift	Set Pressure Range	Media	Code Section
4 NPS	4 NPS	10.5 sq in	3.656 in		-0.2 - -0.2 psi	Air	III NC

Certification Number: **94283** Design Series or catalog number **SVR-30(SVR-04)**

Type Classification: Vacuum Relief Valve

Capacity Tests: Sec. III NC at National Board T L (Worthington) on March 20, 2013

Method of Establishing Relieving Capacity: Flow Capacity, 1 valve method

Certified Value: 540 SCFM

Test Medium: Air

Certified Medium: Air

Set Pressure Definition: Start-to-Leak

Blowdown: Fixed

Scope of Nominal Size and Set Pressure Ranges:

Inlet Size	Outlet Size	Flow Area	Orifice [designator] diameter	Lift	Set Pressure Range	Media	Code Section
4 NPS	4 NPS	10.5 sq in	3.656 in		-0.3 - -0.3 psi	Air	III NC

Certification Number: **94294** Design Series or catalog number **SVR-30(SVR-05)**

Type Classification: Vacuum Relief Valve

Capacity Tests: Sec. III NC at National Board T L (Worthington) on March 20, 2013

Method of Establishing Relieving Capacity: Flow Capacity, 1 valve method

Certified Value: 533 SCFM

Test Medium: Air

Certified Medium: Air

Set Pressure Definition: Start-to-Leak

Blowdown: Fixed

Scope of Nominal Size and Set Pressure Ranges:

Inlet Size	Outlet Size	Flow Area	Orifice [designator] diameter	Lift	Set Pressure Range	Media	Code Section
4 NPS	4 NPS	10.5 sq in	3.656 in		-0.25 - -0.25 psi	Air	III NC

S V C Inc. (SVK)

NB#: 94306

location: 57, Seungga-ro 58beon-gil, Gimpo-si, Gyeonggi-Do 10117 South Korea

Acceptable Abbrev.: SVC

Certification Number: **94306** Design Series or catalog number: **SVR-30 (SVR-06)**

Type Classification: Vacuum Relief Valve

Capacity Tests: Control Script failed for control txtCoc , Source=

Method of Establishing Relieving Capacity: Flow Capacity, 1 valve method

Certified Value: 963 SCFM

Test Medium: Air

Certified Medium: Air

Set Pressure Definition: Start-to-Leak

Blowdown: Fixed

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
4 in	4 in	12.7 sq in	4.022 in	0.787 in	-.3 psi	Air	III NC

Seetru Ltd (SEE)

NB#: 06501

location: Albion Dockside Works, Hanover Place, Bristol BS1 6UT United Kingdom

Seetru Ltd (SEE)

location: Albion Dockside Works, Hanover Place, Bristol BS1 6UT United Kingdom

Certification Number: **06501** Design Series or catalog number **81106,81706,84106,84706,81108,81708,81188,81788,84188,84788**

Type Classification: **Safety Relief Valve**Capacity Tests: **Sec. VIII Div. 1 at National Board T L (Worthington) on August 18, 2005**Method of Establishing Relieving Capacity: **Flow Capacity, K**Certified Value: **0.748 Unitless**Test Medium: **Air/Gas**Certified Medium: **Air/Gas**Special Service: **None**Set Pressure Definition: **Initial Audible Discharge**Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
0.25 - 0.5 NPS	Side	28.3 sq mm	6 mm		40.6 - 522 psi	Air	VIII Div. 1
		50.27 sq mm	8 mm	1.4 mm	43.5 - 319 psi	Air	VIII Div. 1

Certification Number: **06523** Design Series or catalog number **63110, 64110, 65110, 63710, 64710, 65710**

Type Classification: **Safety Relief Valve**Capacity Tests: **Sec. VIII Div. 1 at National Board T L (Worthington) on August 17, 2005**Method of Establishing Relieving Capacity: **Flow Capacity, Slope**Certified Value: **1.71 SCFM/PSIA**Test Medium: **Air/Gas**Certified Medium: **Air/Gas**Special Service: **None**Set Pressure Definition: **Initial Audible Discharge**Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
0.375 - 0.75 NPS	.75 NPS	70.9 sq mm	9.5 mm	3.5 mm	22.5 - 800 psi	Air	VIII Div. 1

Certification Number: **06545** Design Series or catalog number **63113, 64113, 65113, 63713, 64713, 65713**

Type Classification: **Safety Relief Valve**Capacity Tests: **Sec. VIII Div. 1 at National Board T L (Worthington) on May 13, 2005**Method of Establishing Relieving Capacity: **Flow Capacity, Slope**Certified Value: **3.47 SCFM/PSIA**Test Medium: **Air/Gas**Certified Medium: **Air/Gas**Special Service: **None**Set Pressure Definition: **Initial Audible Discharge**Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
0.5 - 1 NPS	1 NPS	147.4 sq mm	13.7 mm	5.7 mm	20 - 710 psi	Air	VIII Div. 1

Location: Albion Dockside Works, Hanover Place, Bristol BS1 6UT United Kingdom

Certification Number: **06556** Design Series or catalog number: **63118, 64118, 65118, 65718**

Type Classification: **Safety Relief Valve**Capacity Tests: **Sec. VIII Div. 1 at National Board T L (Worthington) on August 17, 2005**Method of Establishing Relieving Capacity: **Flow Capacity, Slope**Certified Value: **5.60 SCFM/PSIA**Test Medium: **Air/Gas**Certified Medium: **Air/Gas**Special Service: **None**Set Pressure Definition: **Initial Audible Discharge**Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
1 - 1.5 NPS	1.5 NPS	227 sq mm	17 mm		34.8 - 507 psi	Air	VIII Div. 1

Certification Number: **06567** Design Series or catalog number: **63120, 64120, 65120, 63720, 64720, 65720**

Type Classification: **Safety Relief Valve**Capacity Tests: **Sec. VIII Div. 1 at National Board T L (Worthington) on May 12, 2005**Method of Establishing Relieving Capacity: **Flow Capacity, Slope**Certified Value: **7.77 SCFM/PSIA**Test Medium: **Air/Gas**Certified Medium: **Air/Gas**Special Service: **None**Set Pressure Definition: **Initial Audible Discharge**Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
1.25 - 1.5 NPS	2 NPS	314 sq mm	20 mm	5 mm	43 - 507.5 psi	Air	VIII Div. 1

Certification Number: **06578** Design Series or catalog number: **63125, 64125, 65125, 63725, 64725, 65725**

Type Classification: **Safety Relief Valve**Capacity Tests: **Sec. VIII Div. 1 at National Board T L (Worthington) on May 12, 2005**Method of Establishing Relieving Capacity: **Flow Capacity, Slope**Certified Value: **12.26 SCFM/PSIA**Test Medium: **Air/Gas**Certified Medium: **Air/Gas**Set Pressure Definition: **Initial Audible Discharge**Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
1.25 - 2 NPS	2 NPS	490.4 sq mm	25 mm	9.5 mm	82 - 435 psi	Air	VIII Div. 1

Location: Albion Dockside Works, Hanover Place, Bristol BS1 6UT United Kingdom

Certification Number: **06590** Design Series or catalog number: **319 (In Line Type)**

Type Classification: **Safety Relief Valve**Capacity Tests: **Sec. VIII Div. 1 at National Board T L (Worthington) on May 17, 2005**Method of Establishing Relieving Capacity: **Flow Capacity, Slope**Certified Value: **1.04 SCFM/PSIA**Test Medium: **Air/Gas**Certified Medium: **Gas**Special Service: **None**Set Pressure Definition: **Initial Audible Discharge**Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
0.375 - 0.5 NPS	Top	71 sq mm	0.373 in		195 - 725 psi	Air	VIII Div. 1

Certification Number: **06602** Design Series or catalog number: **81113, 84113, 81713, 84713**

Type Classification: **Safety Relief Valve**Capacity Tests: **Sec. VIII Div. 1 at National Board T L (Worthington) on August 17, 2005**Method of Establishing Relieving Capacity: **Flow Capacity, Slope**Certified Value: **2.94 SCFM/PSIA**Test Medium: **Air/Gas**Certified Medium: **Air/Gas**Set Pressure Definition: **Initial Audible Discharge**Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
0.5 - 0.75 NPS	Side	132.7 sq mm	13 mm	2.73 mm	40.6 - 304.5 psi	Air	VIII Div. 1

Certification Number: **06613** Design Series or catalog number: **81110, 84110, 81710, 84710**

Type Classification: **Safety Relief Valve**Capacity Tests: **Sec. VIII Div. 1 at National Board T L (Worthington) on October 18, 2005**Method of Establishing Relieving Capacity: **Flow Capacity, Slope**Certified Value: **1.66 SCFM/PSIA**Test Medium: **Air/Gas**Certified Medium: **Air/Gas**Special Service: **None**Set Pressure Definition: **Initial Audible Discharge**Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
0.5 - 0.75 NPS	Side	78.54 sq mm	10 mm	2.1 mm	34.9 - 667 psi	Air	VIII Div. 1

location: Albion Dockside Works, Hanover Place, Bristol BS1 6UT United Kingdom

Certification Number: **06646** Design Series or catalog number: **61118, 61718, 62118, 62718**

Type Classification: **Safety Relief Valve**Capacity Tests: **Sec. VIII Div. 1 at National Board T L (Worthington) on November 18, 2010**Method of Establishing Relieving Capacity: **Flow Capacity, Slope**Certified Value: **6.04 SCFM/PSIA**Test Medium: **Air**Certified Medium: **Gas**Special Service: **None**Set Pressure Definition: **Initial Audible Discharge**Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
1 - 1.5 NPS	Side	254.5 sq mm	18 mm		2.1 - 36 bar	Air	VIII Div. 1

Certification Number: **06657** Design Series or catalog number: **61120, 61720, 62120, 62720**

Type Classification: **Safety Relief Valve**Capacity Tests: **Sec. VIII Div. 1 at National Board T L (Worthington) on November 18, 2010**Method of Establishing Relieving Capacity: **Flow Capacity, Slope**Certified Value: **7.32 SCFM/PSIA**Test Medium: **Air**Certified Medium: **Gas**Special Service: **None**Set Pressure Definition: **Initial Audible Discharge**Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
1 - 2 NPS	Side	314.1 sq mm	20 mm		28 - 256 psi	Air	VIII Div. 1

Certification Number: **06679** Design Series or catalog number: **10125, 10725**

Type Classification: **Safety Relief Valve**Capacity Tests: **Sec. VIII Div. 1 at National Board T L (Worthington) on November 18, 2010**Method of Establishing Relieving Capacity: **Flow Capacity, Slope**Certified Value: **11.3 SCFM/PSIA**Test Medium: **Air**Certified Medium: **Air/Gas**Special Service: **None**Set Pressure Definition: **Initial Audible Discharge**Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
1 - 2.5 NPS	Side	490 sq mm	25 mm		1.1 - 12 bar	Air	VIII Div. 1

Location: Albion Dockside Works, Hanover Place, Bristol BS1 6UT United Kingdom

Certification Number: **06680** Design Series or catalog number: **81115, 81715, 84115, 84715**

Type Classification: **Safety Valve**Capacity Tests: **Sec. VIII Div. 1 at National Board T L (Worthington) on November 18, 2010**Method of Establishing Relieving Capacity: **Flow Capacity, Slope**Certified Value: **4.0 SCFM/PSIA**Test Medium: **Air**Certified Medium: **Gas**Set Pressure Definition: **Initial Audible Discharge**Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
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Certification Number: **06691** Design Series or catalog number: **359**

Type Classification: **Safety Relief Valve**Capacity Tests: **Sec. VIII Div. 1 at National Board T L (Worthington) on November 17, 2010**Method of Establishing Relieving Capacity: **Flow Capacity, Slope**Certified Value: **0.34 SCFM/PSIA**Test Medium: **Air**Certified Medium: **Gas**Set Pressure Definition: **Initial Audible Discharge**Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
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Certification Number: **06703** Design Series or catalog number: **319000488**

Type Classification: **Safety Valve**Capacity Tests: **Sec. VIII Div. 1 at National Board T L (Worthington) on March 29, 2012**Method of Establishing Relieving Capacity: **Flow Capacity, Slope**Certified Value: **2.23 SCFM/PSIA**Test Medium: **Air**Certified Medium: **Gas**Special Service: **None**Set Pressure Definition: **Initial Audible Discharge**Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
0.75 - 1 NPS	.75, 1 NPS	133.6 sq mm	13.04 mm		16.2 - 26.8 bar	Air	VIII Div. 1

location: Albion Dockside Works, Hanover Place, Bristol BS1 6UT United Kingdom

Certification
Number: **06714**

Design Series
or catalog number **32931**

Type Classification: **Safety Valve**Capacity Tests: **Sec. VIII Div. 1 at National Board T L (Worthington) on November 18, 2010**Method of Establishing Relieving Capacity: **Flow Capacity, Slope**Certified Value: **0.7 SCFM/PSIA**Test Medium: **Air**Certified Medium: **Gas**Set Pressure Definition: **Initial Audible Discharge**Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
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Sempell GmbH (SML)

NB#: 64000

location: Werner-Von-Siemens-Strasse, Korschenbroich D-41352 Germany

Acceptable Abbrev.: Sempell

Sempell GmbH (SML)

location: Werner-Von-Siemens-Strasse, Korschenbroich D-41352 Germany

Acceptable Abbrev.: Sempell

Certification
Number: **64000**Design Series
or catalog number **SO, SC & SB**Type Classification: **Safety Relief Valve**Capacity Tests: **Sec. VIII Div. 1 at National Board T L (Worthington) on March 12, 1992**Method of Establishing Relieving Capacity: **Flow Capacity, K**Certified Value: **.827 Unitless**Test Medium: **Steam & Air/Gas**Certified Medium: **Steam & Air/Gas**Set Pressure Definition: **Initial Audible Discharge**Blowdown: **Adjustable by Single Ring**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
1 - 1.5 NPS	2 - 3 NPS	0.134 sq in	[D] 0.413 in	0.124 in	15 - 6000 psi	Air	VIII
		0.239 sq in	[E] 0.551 in	0.165 in	15 - 6000 psi	Air	VIII
1.5 NPS	2 - 3 NPS	0.373 sq in	[F] 0.689 in	0.207 in	15 - 6000 psi	Air	VIII
1.5 - 2 NPS	2.5, 3 NPS	0.616 sq in	[G] 0.886 in	0.266 in	15 - 5000 psi	Air	VIII
	3, 4 NPS	0.954 sq in	[H] 1.102 in	0.331 in	15 - 5000 psi	Air	VIII
2 - 3 NPS	3, 4 NPS	1.578 sq in	[J] 1.417 in	0.425 in	15 - 5000 psi	Air	VIII
3 NPS	4, 6 NPS	2.251 sq in	[K] 1.693 in	0.508 in	15 - 5000 psi	Air	VIII
3 - 4 NPS	4, 6 NPS	3.42 sq in	[L] 2.087 in	0.626 in	15 - 5000 psi	Air	VIII
4 NPS	6 NPS	4.382 sq in	[M] 2.362 in	0.709 in	15 - 3705 psi	Air	VIII
		5.303 sq in	[N] 2.598 in	0.78 in	15 - 3705 psi	Air	VIII
		7.598 sq in	[P] 3.11 in	0.933 in	15 - 3190 psi	Air	VIII
6 NPS	8 NPS	13.167 sq in	[Q] 4.094 in	1.228 in	15 - 3190 psi	Air	VIII
	8, 10 NPS	19.021 sq in	[R] 4.921 in	1.476 in	15 - 2470 psi	Air	VIII
8 NPS	10 NPS	31.165 sq in	[T] 6.299 in	1.89 in	15 - 1455 psi	Air	VIII
10 - 12 NPS	12, 14 NPS	41.664 sq in	[T1] 7.283 in	2.185 in	15 - 1455 psi	Air	VIII Div. 1
10 - 14 NPS	14, 16 NPS	51.66 sq in	[U] 8.11 in	2.433 in	15 - 1160 psi	Air	VIII Div. 1
12 - 14 NPS	16, 20 NPS	64.399 sq in	[V] 9.055 in	2.717 in	15 - 1160 psi	Air	VIII Div. 1
14 - 16 NPS	20, 24 NPS	88.746 sq in	[W] 10.63 in	3.189 in	15 - 915 psi	Air	VIII Div. 1
16 - 20 NPS	20, 24 NPS	127.007 sq in	[X] 12.717 in	3.815 in	15 - 290 psi	Air	VIII Div. 1
20 - 24 NPS	24, 28 NPS	172.107 sq in	[Y] 14.803 in	4.441 in	15 - 290 psi	Air	VIII Div. 1
24 - 28 NPS	28, 32 NPS	233.545 sq in	[Z] 17.244 in	5.173 in	15 - 235 psi	Air	VIII Div. 1

Sempell GmbH (SML)

NB#: 64011

Location: Werner-Von-Siemens-Strasse, Korschenbroich D-41352 Germany

Acceptable Abbrev.: Sempell

Certification Number: **64011** Design Series or catalog number **SC & SB (Liquids)**

Type Classification: **Relief Valve**Capacity Tests: **Sec. VIII Div. 1 at National Board T L (Worthington) on March 12, 1992**Method of Establishing Relieving Capacity: **Flow Capacity, K**Certified Value: **.576 Unitless**Test Medium: **Water**Certified Medium: **Liquid**Set Pressure Definition: **First Steady Stream**Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

Inlet Size	Outlet Size	Flow Area	Orifice [designator] diameter	Lift	Set Pressure Range	Media	Code Section
1 - 1.5 NPS	2 NPS	0.134 sq in	[D] 0.413 in	0.124 in	15 - 6000 psi	Water	VIII
		0.239 sq in	[E] 0.551 in	0.165 in	15 - 6000 psi	Water	VIII
1.5 NPS	2 NPS	0.373 sq in	[F] 0.689 in	0.207 in	15 - 6000 psi	Water	VIII
1.5 - 2 NPS	2.5 NPS	0.616 sq in	[G] 0.886 in	0.266 in	15 - 5000 psi	Water	VIII
	3 NPS	0.954 sq in	[H] 1.102 in	0.331 in	15 - 5000 psi	Water	VIII
2 - 3 NPS	3 NPS	1.578 sq in	[J] 1.417 in	0.425 in	15 - 5000 psi	Water	VIII
3 NPS	4 NPS	2.251 sq in	[K] 1.693 in	0.508 in	15 - 5000 psi	Water	VIII
3 - 4 NPS	4 NPS	3.42 sq in	[L] 2.087 in	0.626 in	15 - 5000 psi	Water	VIII
4 NPS	6 NPS	4.382 sq in	[M] 2.362 in	0.709 in	15 - 3705 psi	Water	VIII
		5.303 sq in	[N] 2.598 in	0.78 in	15 - 3705 psi	Water	VIII
		7.598 sq in	[P] 3.11 in	0.993 in	15 - 3190 psi	Water	VIII
6 NPS	8 NPS	13.167 sq in	[Q] 4.094 in	1.228 in	15 - 3190 psi	Water	VIII
		19.021 sq in	[R] 4.921 in	1.476 in	15 - 2470 psi	Water	VIII
8 NPS	10 NPS	31.165 sq in	[T] 6.299 in	1.89 in	15 - 1455 psi	Water	VIII
10 - 12 NPS	12, 14 NPS	41.664 sq in	[T1] 7.283 in	2.185 in	15 - 1455 psi	Water	VIII Div. 1
10 - 14 NPS	14, 16 NPS	51.66 sq in	[U] 8.11 in	2.433 in	15 - 1160 psi	Water	VIII Div. 1
12 - 14 NPS	16, 20 NPS	64.399 sq in	[V] 9.055 in	2.717 in	15 - 1160 psi	Water	VIII Div. 1
14 - 16 NPS	20, 24 NPS	88.746 sq in	[W] 10.63 in	3.189 in	15 - 915 psi	Water	VIII Div. 1
16 - 20 NPS	20, 24 NPS	127.007 sq in	[X] 12.717 in	3.815 in	15 - 290 psi	Water	VIII Div. 1
20 - 24 NPS	24, 28 NPS	172.107 sq in	[Y] 14.803 in	4.441 in	15 - 290 psi	Water	VIII Div. 1
24 - 28 NPS	28, 32 NPS	233.545 sq in	[Z] 17.244 in	5.173 in	15 - 235 psi	Water	VIII Div. 1

Certification Number: **64022** Design Series or catalog number **SM (14 MM)**

Type Classification: **Safety Relief Valve**Capacity Tests: **Sec. VIII Div. 1 at National Board T L (Worthington) on January 14, 1997**Method of Establishing Relieving Capacity: **Flow Capacity, Slope**Certified Value: **2.36 SCFM/PSIA**Certified Value (alternate medium): **6.62 PPH/PSIA**Test Medium: **Steam & Air/Gas**Certified Medium: **Steam & Air/Gas**Set Pressure Definition: **Initial Audible Discharge**Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

Inlet Size	Outlet Size	Flow Area	Orifice [designator] diameter	Lift	Set Pressure Range	Media	Code Section
0.5 - 1 NPS	1 NPS	0.176 sq in	0.551 in	0.098 in	15 - 800 psi	Air	VIII
						Steam	VIII Div. 1

Sempell GmbH (SML)

NB#: 64033

Location: Werner-Von-Siemens-Strasse, Korschenbroich D-41352 Germany

Acceptable Abbrev.: Sempell

Certification Number: **64033** Design Series or catalog number **SM (14 MM) (Liquids)**

Type Classification: Relief Valve

Capacity Tests: Sec. VIII Div. 1 at National Board T L (Worthington) on June 25, 1996

Method of Establishing Relieving Capacity: Flow Capacity, Flow Factor

Certified Value: 3.3 GPM/SQ.RT. PSID

Test Medium: Water

Certified Medium: Liquid

Set Pressure Definition: 1.Initial Audible Discharge 2.First Steady Stream

Blowdown: Fixed

Scope of Nominal Size and Set Pressure Ranges:

Inlet Size	Outlet Size	Flow Area	Orifice [designator] diameter	Lift	Set Pressure Range	Media	Code Section
0.5 - 1 NPS	1 NPS	0.176 sq in	0.551 in	0.098 in	15 - 800 psi	Water	VIII Div. 1

Certification Number: **64066** Design Series or catalog number **VS99**

Type Classification: Pilot Operated Pressure Relief Valve

Capacity Tests: Sec. III NB at National Board T L (Worthington) on December 01, 2009

Method of Establishing Relieving Capacity: Flow Capacity, K

Certified Value: .743 Unitless

Test Medium: Steam

Certified Medium: Steam

Set Pressure Definition: Pop

Blowdown: Adjustable by Single Ring

Scope of Nominal Size and Set Pressure Ranges:

Inlet Size	Outlet Size	Flow Area	Orifice [designator] diameter	Lift	Set Pressure Range	Media	Code Section
7 NPS	7 NPS	3.292 sq in	[K52] 2.047 in	30 mm	2320 - 2828 psi	Steam	III
		3.42 sq in	[K53] 2.087 in	30 mm	2320 - 2828 psi	Steam	III
		3.55 sq in	[K54] 2.126 in	30 mm	2320 - 2828 psi	Steam	III
		3.683 sq in	[K55] 2.165 in	30 mm	2320 - 2828 psi	Steam	III
		3.818 sq in	[K56] 2.205 in	30 mm	2320 - 2828 psi	Steam	III
		3.955 sq in	[K57] 2.244 in	30 mm	2320 - 2828 psi	Steam	III
		4.095 sq in	[K58] 2.283 in	30 mm	2320 - 2828 psi	Steam	III
		4.238 sq in	[K59] 2.323 in	30 mm	2320 - 2828 psi	Steam	III
		4.383 sq in	[K60] 2.362 in	30 mm	2320 - 2828 psi	Steam	III
8 NPS	8 NPS	4.383 sq in	[L60] 2.362 in	35 mm	2320 - 2828 psi	Steam	III
		4.53 sq in	[L61] 2.402 in	35 mm	2320 - 2828 psi	Steam	III
		4.68 sq in	[L62] 2.441 in	35 mm	2320 - 2828 psi	Steam	III
		4.832 sq in	[L63] 2.48 in	35 mm	2320 - 2828 psi	Steam	III
		4.986 sq in	[L64] 2.52 in	35 mm	2320 - 2828 psi	Steam	III
		5.143 sq in	[L65] 2.559 in	35 mm	2320 - 2828 psi	Steam	III
		5.303 sq in	[L66] 2.598 in	35 mm	2320 - 2828 psi	Steam	III
		5.465 sq in	[L67] 2.638 in	35 mm	2320 - 2828 psi	Steam	III
		5.629 sq in	[L68] 2.677 in	35 mm	2320 - 2828 psi	Steam	III
		5.796 sq in	[L69] 2.717 in	35 mm	2320 - 2828 psi	Steam	III
		5.965 sq in	[L70] 2.756 in	35 mm	2320 - 2828 psi	Steam	III

Sempell GmbH (SML)

NB#: 64077

location: Werner-Von-Siemens-Strasse, Korschenbroich D-41352 Germany

Acceptable Abbrev.: Sempell

Certification
Number: **64077**Design Series
or catalog number **SEP**Type Classification: **Power Actuated Relief Valve**Capacity Tests: **Sec. I at National Board T L (Worthington) on April 15, 2013**Method of Establishing Relieving Capacity: **Flow Capacity, K**Certified Value: **0.878 Unitless**Test Medium: **Steam**Certified Medium: **Steam**Set Pressure Definition: **Power Actuated**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
2.5 - 4 NPS	4, 6 NPS	1.758 sq in	[J1] 1.496 in	0.524 in	15 - 6000 psi	Steam	I
	4,6 NPS	2.465 sq in	[K1] 1.772 in	0.62 in	15 - 6000 psi	Steam	I
	4, 6 NPS	3.42 sq in	[L] 2.087 in	0.73 in	15 - 6000 psi	Steam	I

Shanghai Kaite Valve Manufacture Co., Ltd. (SKV)

NB#: 00594

Location: No. 99, Zhongchuan Road, Anting, Shanghai 201814 Peoples Republic Of China

Acceptable Abbrev.: SHKT

Shanghai Kaite Valve Manufacture Co., Ltd. (SKV)

Location: No. 99, Zhongchuan Road, Anting, Shanghai 201814 Peoples Republic Of China

Acceptable Abbrev.: SHKT

Certification Number: **00594** Design Series or catalog number: **11IG14xxxx**

Type Classification: **Safety Relief Valve**Capacity Tests: **Sec. VIII Div. 1 at National Board T L (Worthington) on June 23, 2015**Method of Establishing Relieving Capacity: **Flow Capacity, Slope**Certified Value: **3.739 SCFM/PSIA**Test Medium: **Air**Certified Medium: **Gas**Set Pressure Definition: **Start-to-Leak**Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
1.3125 in	1 in	160.38 sq mm	14.29 mm	3.573 mm	150 - 300 psi		VIII Div. 1

Certification Number: **00617** Design Series or catalog number: **11FH13xxxx**

Type Classification: **Safety Relief Valve**Capacity Tests: **Sec. VIII Div. 1 at National Board T L (Worthington) on March 10, 2015**Method of Establishing Relieving Capacity: **Flow Capacity, Slope**Certified Value: **2.93 SCFM/PSIA**Test Medium: **Gas**Certified Medium: **Gas**Set Pressure Definition: **Start-to-Leak**Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
0.875 in	1.25 in	126.68 sq mm	12.7 mm	3.175 mm	150 - 300 psi		VIII Div. 1

Certification Number: **00628** Design Series or catalog number: **11KH19xxxx**

Type Classification: **Safety Relief Valve**Capacity Tests: **Sec. VIII Div. 1 at National Board T L (Worthington) on March 10, 2015**Method of Establishing Relieving Capacity: **Flow Capacity, Slope**Certified Value: **6.43 SCFM/PSIA**Test Medium: **Gas**Certified Medium: **Gas**Set Pressure Definition: **Start-to-Leak**Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
1.625 in	1.25 in	285.02 sq mm	19.05 mm	4.763 mm	50 - 300 psi		VIII Div. 1

Sherwood Valve (SPR)

NB#: 52063

location: 2200 N. Main Street, Washington, PA 15301 United States

d.b.a. SUPERIOR Refrigeration Products

Sherwood Valve (SPR)

location: 2200 N. Main Street, Washington, PA 15301 United States

d.b.a. SUPERIOR Refrigeration Products

Certification Number: **52063** Design Series or catalog number: **3080A (3075TR, 5730)**

Type Classification: **Safety Relief Valve**Capacity Tests: **Sec. VIII Div. 1 at National Board T L (Worthington) on December 10, 1999**Method of Establishing Relieving Capacity: **Flow Capacity, Slope**Certified Value: **2.60 SCFM/PSIA**Test Medium: **Air**Certified Medium: **Gas**Set Pressure Definition: **Start-to-Leak**Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

Inlet Size	Outlet Size	Flow Area	Orifice [designator] diameter	Lift	Set Pressure Range	Media	Code Section
1.25 - 1.625 NPS	Top	0.196 sq in	0.5 in		300 - 450 psi	Air	VIII Div. 1

Certification Number: **54009** Design Series or catalog number: **3000A (3000, 3001, 3001X2, 3002, 3012, 3014, 3015, 3212, 3214, 3215, 5980X1, 3000C, 3001C, 3002C, 3012C, 3014C, 3015C, 3212C, 3214C, 3215C, 3000C-4FFL)**

Type Classification: **Safety Relief Valve**Capacity Tests: **Sec. VIII Div. 1 at National Board T L (Picaway) on March 25, 1977**Method of Establishing Relieving Capacity: **Flow Capacity, Slope**Certified Value: **.388 SCFM/PSIA**Test Medium: **Air/Gas**Certified Medium: **Gas**Special Service: **None**Set Pressure Definition: **Start-to-Leak**Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

Inlet Size	Outlet Size	Flow Area	Orifice [designator] diameter	Lift	Set Pressure Range	Media	Code Section
0.125 - 0.375 NPS	3/8, 1/2, top NPS	0.0275 sq in	0.187 in		150 - 800 psi	Air	VIII Div. 1

Certification Number: **54010** Design Series or catalog number: **3020A (3016, 3020, 3020X2, 3216, 3220, 5731AX9, 5733, 5733X2, 3016C, 3020C, 3216C, 3220C)**

Type Classification: **Safety Relief Valve**Capacity Tests: **Sec. VIII Div. 1 at National Board T L (Picaway) on March 21, 1988**Method of Establishing Relieving Capacity: **Flow Capacity, Slope**Certified Value: **.774 SCFM/PSIA**Test Medium: **Air/Gas**Certified Medium: **Gas**Special Service: **None**Set Pressure Definition: **Start-to-Leak**Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

Inlet Size	Outlet Size	Flow Area	Orifice [designator] diameter	Lift	Set Pressure Range	Media	Code Section
0.375 - 1.125 NPS	1/2, 5/8, Top	0.062 sq in	0.281 in		150 - 800 psi	Air	VIII Div. 1

Sherwood Valve (SPR)

NB#: 54021

location: 2200 N. Main Street, Washington, PA 15301 United States

d.b.a. SUPERIOR Refrigeration Products

Certification Number: **54021** Design Series or catalog number: **3030A (3030, 3031, 3031X1, 3045, 3045TR, 3045X1)**

Type Classification: **Safety Relief Valve**Capacity Tests: **Sec. VIII Div. 1 at National Board T L (Picaway) on March 14, 1977**Method of Establishing Relieving Capacity: **Flow Capacity, Slope**Certified Value: **1.77 SCFM/PSIA**Test Medium: **Air/Gas**Certified Medium: **Gas**Special Service: **None**Set Pressure Definition: **Start-to-Leak**Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
0.5 - 1 NPS	1/2, 3/4, Top NPS	0.1499867 sq in	0.437 in		150 - 700 psi	Air	VIII Div. 1

Certification Number: **54032** Design Series or catalog number: **3060A (3060, 3060FL, 3060X1, 3060X7, 3061X1, 3070, 3075)**

Type Classification: **Safety Relief Valve**Capacity Tests: **Sec. VIII Div. 1 at National Board T L (Picaway) on February 28, 1977**Method of Establishing Relieving Capacity: **Flow Capacity, Slope**Certified Value: **4.22 SCFM/PSIA**Test Medium: **Air/Gas**Certified Medium: **Gas**Special Service: **None**Set Pressure Definition: **Start-to-Leak**Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
1 - 1.25 NPS	1 - 1.25 NPS	0.405 sq in	0.718 in		150 - 450 psi	Air	VIII Div. 1

Spence Engineering Company, Incorporated (SEC)

NB#: 47001

location: 150 Coldenham Road, Walden, NY 12586 United States

Acceptable Abbrev.: Spence Eng. Co.

Spence Engineering Company, Incorporated (SEC)

location: 150 Coldenham Road, Walden, NY 12586 United States

Acceptable Abbrev.: Spence Eng. Co.

Certification
Number: **47001**Design Series
or catalog number **RXSO and RXSO-S**Type Classification: **Safety Relief Valve**Capacity Tests: **Sec. VIII Div. 1 at Louisiana State University on April 17, 1980**Method of Establishing Relieving Capacity: **Flow Capacity, K**Certified Value: **.604 Unitless**Test Medium: **Air/Gas**Certified Medium: **Air/Gas**Special Service: **None**Set Pressure Definition: **Pop**Blowdown: **Adjustable by Single Ring**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
0.5 - 0.75 NPS	.75, 1 NPS	0.059 sq in	0.75 in	0.025 in	15 - 300 psi	Air	VIII Div. 1
		0.118 sq in	0.75 in	0.05 in	15 - 400 psi	Air	VIII Div. 1
0.5 - 1 NPS	1, 1.25 NPS	0.204 sq in	1 in	0.065 in	15 - 400 psi	Air	VIII Div. 1
0.75 - 1.25 NPS	1.25, 1.5 NPS	0.326 sq in	1.25 in	0.083 in	15 - 400 psi	Air	VIII Div. 1
1 - 1.5 NPS	1.5, 2 NPS	0.424 sq in	1.5 in	0.09 in	15 - 400 psi	Air	VIII Div. 1
1.25 - 2 NPS	2, 2.5 NPS	0.628 sq in	2 in	0.1 in	15 - 400 psi	Air	VIII Div. 1
2.5 NPS	3 NPS	0.864 sq in	2.5 in	0.11 in	15 - 400 psi	Air	VIII Div. 1
3 NPS	3, 4 NPS	1.131 sq in	3 in	0.12 in	15 - 400 psi	Air	VIII Div. 1

Certification
Number: **65001**Design Series
or catalog number **Fig 10**Type Classification: **Safety Valve**Capacity Tests: **Sec. IV at Ohio State University (Robinson Laboratory) on August 20, 1972**Method of Establishing Relieving Capacity: **Flow Capacity, K**Certified Value: **.800 Unitless**Test Medium: **Steam**Certified Medium: **Steam**Set Pressure Definition: **Pop**Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
0.75 NPS	1 NPS	0.276 sq in	0.593 in	0.28 in	15 - 15 psi	Steam	IV
1 NPS	1.25 NPS	0.49 sq in	0.79 in	0.37 in	15 - 15 psi	Steam	IV
1.25 NPS	1.5 NPS	0.765 sq in	0.987 in	0.5 in	15 - 15 psi	Steam	IV
1.5 NPS	2 NPS	1.107 sq in	1.187 in	0.6 in	15 - 15 psi	Steam	IV
2 NPS	2.5 NPS	1.961 sq in	1.58 in	0.85 in	15 - 15 psi	Steam	IV
2.5 NPS	2.5 NPS	3.063 sq in	1.975 in	1.07 in	15 - 15 psi	Steam	IV
3 NPS	3 NPS	4.43 sq in	2.375 in	1.3 in	15 - 15 psi	Steam	IV

Spence Engineering Company, Incorporated (SEC)

NB#: 65045

Location: 150 Coldenham Road, Walden, NY 12586 United States

Acceptable Abbrev.: Spence Eng. Co.

Certification
Number: **65045**Design Series
or catalog number **Fig 31, 41, 41A**Type Classification: **Safety Valve**Capacity Tests: **Sec. I at Crosby Valve & Gage on April 04, 1981**Method of Establishing Relieving Capacity: **Flow Capacity, K**Certified Value: **.878 Unitless**Test Medium: **Steam**Certified Medium: **Steam & Air/Gas**Set Pressure Definition: **Pop**Blowdown: **Adjustable**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
0.5 - 0.75 NPS	.75, Top NPS	0.1188 sq in	[D] 0.389 in	0.098 in	15 - 300 psi	Air	VIII Div. 1
						Steam	I VIII Div. 1
0.75 - 1 NPS	1, Top NPS	0.2116 sq in	[E] 0.519 in	0.13 in	15 - 300 psi	Air	VIII Div. 1
						Steam	I VIII Div. 1
1 - 1.25 NPS	1.25, Top NPS	0.3318 sq in	[F] 0.65 in	0.163 in	15 - 300 psi	Air	VIII Div. 1
						Steam	I VIII Div. 1
1.25 - 1.5 NPS	1.5, Top NPS	0.5424 sq in	[G] 0.831 in	0.208 in	15 - 300 psi	Air	VIII Div. 1
						Steam	I VIII Div. 1
1.5 - 2 NPS	2, Top NPS	0.8479 sq in	[H] 1.039 in	0.26 in	15 - 300 psi	Air	VIII Div. 1
						Steam	I VIII Div. 1
1.5 - 2.5 NPS	2.5, Top NPS	1.391 sq in	[J] 1.331 in	0.333 in	15 - 300 psi	Air	VIII Div. 1
						Steam	I VIII Div. 1
2 - 3 NPS	3, 4 NPS	1.892 sq in	[K] 1.552 in	0.388 in	15 - 250 psi	Air	VIII Div. 1
						Steam	I VIII Div. 1
2.5 - 3 NPS	4 NPS	2.935 sq in	[L] 1.933 in	0.483 in	15 - 250 psi	Air	VIII Div. 1
						Steam	I VIII Div. 1
3 NPS	4 NPS	3.715 sq in	[M] 2.175 in	0.544 in	15 - 250 psi	Air	VIII Div. 1
						Steam	I VIII Div. 1
4 NPS	6 NPS	4.467 sq in	[N] 2.385 in	0.596 in	15 - 250 psi	Air	VIII Div. 1
						Steam	I VIII Div. 1
		6.564 sq in	[P] 2.891 in	0.723 in	15 - 250 psi	Air	VIII Div. 1
						Steam	I VIII Div. 1
6 NPS	8 NPS	11.365 sq in	[Q] 3.804 in	0.951 in	15 - 250 psi	Air	VIII
						Steam	I VIII Div. 1
		16.475 sq in	[R] 4.58 in	1.145 in	15 - 250 psi	Air	VIII Div. 1
						Steam	I VIII Div. 1

Spence Engineering Company, Incorporated (SEC)

NB#: 65089

location: 150 Coldenham Road, Walden, NY 12586 United States

Acceptable Abbrev.: Spence Eng. Co.

Certification
Number: **65089**Design Series
or catalog number **Figure 800**Type Classification: **Safety Relief Valve**Capacity Tests: **Sec. VIII Div. 1 at National Board T L (Worthington) on November 18, 1998**Method of Establishing Relieving Capacity: **Flow Capacity, K**Certified Value: **.878 Unitless**Test Medium: **Steam & Air/Gas**Certified Medium: **Steam & Air/Gas**Special Service: **None**Set Pressure Definition: **Pop**Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
0.5 NPS	1 NPS	0.1188 sq in	[D] 0.389 in	0.098 in	15 - 300 psi	Steam	VIII
					15 - 900 psi	Air	VIII
0.75 NPS	1.25 NPS	0.2116 sq in	[E] 0.519 in	0.13 in	15 - 300 psi	Steam	VIII
					15 - 900 psi	Air	VIII
1 NPS	1.5 NPS	0.3318 sq in	[F] 0.65 in	0.163 in	15 - 300 psi	Steam	VIII
					15 - 600 psi	Air	VIII
1.25 NPS	2 NPS	0.5424 sq in	[G] 0.831 in	0.208 in	15 - 300 psi	Steam	VIII
					15 - 600 psi	Air	VIII
1.5 NPS	2.5 NPS	0.8479 sq in	[H] 1.039 in	0.26 in	15 - 300 psi	Steam	VIII
					15 - 500 psi	Air	VIII

Spirax Sarco Ind. Com. Ltda. (SSB)

NB#: 48103

location: Av. Manuel Lages do Chao, 268, Cotia, SP 06705-050 Brazil

Acceptable Abbrev.: Spirax Sarco-SXS

Spirax Sarco Ind. Com. Ltda. (SSB)

location: Av. Manuel Lages do Chao, 268, Cotia, SP 06705-050 Brazil

Acceptable Abbrev.: Spirax Sarco-SXS

Certification
Number: **48103**Design Series
or catalog number **SV80H**Type Classification: **Safety Relief Valve**Capacity Tests: **Sec. VIII Div. 1 at National Board T L (Worthington) on April 11, 2011**Method of Establishing Relieving Capacity: **Flow Capacity, K**Certified Value: **0.870 Unitless**Test Medium: **Steam & Air/Gas**Certified Medium: **Steam & Air/Gas**Special Service: **None**Set Pressure Definition: **Pop**Blowdown: **Adjustable by Single Ring**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
1 - 1.5 NPS	2, 3 NPS	0.155 sq in	[D] 0.445 in	0.11 in	15 - 2900 psi	Steam	VIII Div. 1
					15 - 6000 psi	Air	VIII Div. 1
		0.263 sq in	[E] 0.579 in	0.145 in	15 - 2900 psi	Steam	VIII Div. 1
					15 - 6000 psi	Air	VIII Div. 1
1.5 NPS	2, 3 NPS	0.373 sq in	[F] 0.689 in	0.173 in	15 - 2900 psi	Steam	VIII Div. 1
					15 - 5000 psi	Air	VIII Div. 1
1.5 - 2 NPS	3 NPS	0.537 sq in	[G] 0.827 in	0.208 in	15 - 2900 psi	Steam	VIII Div. 1
					15 - 3705 psi	Air	VIII Div. 1
		0.842 sq in	[H] 1.035 in	0.271 in	15 - 2750 psi	Air	VIII Div. 1
						Steam	VIII Div. 1
2 - 3 NPS	3, 4 NPS	1.374 sq in	[J] 1.323 in	0.35 in	15 - 2700 psi	Air	VIII Div. 1
						Steam	VIII Div. 1
3 NPS	4, 6 NPS	1.967 sq in	[K] 1.583 in	0.421 in	15 - 2220 psi	Air	VIII Div. 1
						Steam	VIII Div. 1
3 - 4 NPS	4, 6 NPS	3.056 sq in	[L] 1.972 in	0.523 in	15 - 1500 psi	Air	VIII Div. 1
						Steam	VIII Div. 1
4 NPS	6 NPS	3.845 sq in	[M] 2.213 in	0.586 in	15 - 1100 psi	Air	VIII Div. 1
						Steam	VIII Div. 1
		4.634 sq in	[N] 2.429 in	0.645 in	15 - 1000 psi	Air	VIII Div. 1
						Steam	VIII Div. 1
		6.829 sq in	[P] 2.949 in	0.783 in	15 - 1000 psi	Air	VIII Div. 1
						Steam	VIII Div. 1
6 NPS	8 NPS	11.811 sq in	[Q] 3.878 in	1.027 in	15 - 600 psi	Air	VIII Div. 1
						Steam	VIII Div. 1
	8, 10 NPS	17.066 sq in	[R] 4.661 in	1.259 in	15 - 300 psi	Air	VIII Div. 1
						Steam	VIII Div. 1
8 NPS	10 NPS	27.721 sq in	[T] 5.941 in	1.574 in	15 - 300 psi	Air	VIII Div. 1
						Steam	VIII Div. 1
		29.816 sq in	[T2] 6.161 in	1.632 in	15 - 300 psi	Air	VIII Div. 1
						Steam	VIII Div. 1
10 NPS	14 NPS	45.346 sq in	[V] 7.598 in	2.055 in	15 - 180 psi	Air	VIII Div. 1
						Steam	VIII Div. 1
12 NPS	12, 16 NPS	67.918 sq in	[W] 9.299 in	2.511 in	15 - 150 psi	Air	VIII Div. 1
						Steam	VIII Div. 1

Spirax Sarco Ind. Com. Ltda. (SSB)

NB#: 48114

Location: Av. Manuel Lages do Chao, 268, Cotia, SP 06705-050 Brazil

Acceptable Abbrev.: Spirax Sarco-SXS

Certification Number: **48114** Design Series or catalog number **SV80H (liquid)**

Type Classification: **Safety Relief Valve**Capacity Tests: **Sec. VIII Div. 1 at National Board T L (Worthington) on April 12, 2011**Method of Establishing Relieving Capacity: **Flow Capacity, K**Certified Value: **.648 Unitless**Test Medium: **Water**Certified Medium: **Liquid**Special Service: **None**Set Pressure Definition: **First Steady Stream**Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
1 - 1.5 NPS	2, 3 NPS	0.155 sq in	[D] 0.445 in	0.11 in	15 - 6000 psi	Water	VIII Div. 1
		0.263 sq in	[E] 0.579 in	0.145 in	15 - 6000 psi	Water	VIII Div. 1
1.5 NPS	2, 3 NPS	0.373 sq in	[F] 0.689 in	0.173 in	15 - 5000 psi	Water	VIII Div. 1
1.5 - 2 NPS	3 NPS	0.537 sq in	[G] 0.827 in	0.208 in	15 - 3705 psi	Water	VIII Div. 1
		0.842 sq in	[H] 1.035 in	0.271 in	15 - 2750 psi	Water	VIII Div. 1
2 - 3 NPS	3, 4 NPS	1.374 sq in	[J] 1.323 in	0.35 in	15 - 2700 psi	Water	VIII Div. 1
3 NPS	4, 6 NPS	1.967 sq in	[K] 1.583 in	0.421 in	15 - 2220 psi	Water	VIII Div. 1
3 - 4 NPS	4, 6 NPS	3.056 sq in	[L] 1.972 in	0.523 in	15 - 1500 psi	Water	VIII Div. 1
4 NPS	6 NPS	3.845 sq in	[M] 2.213 in	0.586 in	15 - 1100 psi	Water	VIII Div. 1
		4.634 sq in	[N] 2.429 in	0.645 in	15 - 1000 psi	Water	VIII Div. 1
		6.829 sq in	[P] 2.949 in	0.783 in	15 - 1000 psi	Water	VIII Div. 1
6 NPS	8 NPS	11.811 sq in	[Q] 3.878 in	1.027 in	15 - 600 psi	Water	VIII Div. 1
	8, 10 NPS	17.066 sq in	[R] 4.661 in	1.259 in	15 - 300 psi	Water	VIII Div. 1
8 NPS	10 NPS	27.721 sq in	[T] 5.941 in	1.574 in	15 - 300 psi	Water	VIII Div. 1
		29.816 sq in	[T2] 6.161 in	1.632 in	15 - 300 psi	Water	VIII Div. 1
10 NPS	14 NPS	45.346 sq in	[V] 7.598 in	2.055 in	15 - 180 psi	Water	VIII Div. 1
12 NPS	12(2), 16 NPS	67.918 sq in	[W] 9.299 in	2.511 in	15 - 150 psi	Water	VIII Div. 1

Certification Number: **48125** Design Series or catalog number **SV81H**

Type Classification: **Safety Relief Valve**Capacity Tests: **Sec. VIII Div. 1 at National Board T L (Worthington) on January 13, 2011**Method of Establishing Relieving Capacity: **Flow Capacity, K**Certified Value: **.872 Unitless**Test Medium: **Steam & Air/Gas**Certified Medium: **Steam & Air/Gas**Set Pressure Definition: **Pop**Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
0.5 - 1 NPS	1 NPS	0.086 sq in	[#1] 0.331 in	0.091 in	15 - 1500 psi	Steam	VIII Div. 1
					15 - 3000 psi	Air	VIII Div. 1
		0.13 sq in	[#2] 0.407 in	0.11 in	15 - 1500 psi	Steam	VIII Div. 1
					15 - 3000 psi	Air	VIII Div. 1
1 - 1.5 NPS	1.5 NPS	0.228 sq in	[#3] 0.539 in	0.146 in	15 - 1500 psi	Steam	VIII Div. 1
					15 - 2540 psi	Air	VIII Div. 1
1.5 - 2 NPS	2 NPS	0.36 sq in	[#4] 0.677 in	0.185 in	15 - 1500 psi	Air	VIII Div. 1
						Steam	VIII Div. 1
	2.5 NPS	0.568 sq in	[#5] 0.85 in	0.232 in	15 - 1140 psi	Air	VIII Div. 1
						Steam	VIII Div. 1

Spirax Sarco Ind. Com. Ltda. (SSB)

NB#: 48136

location: Av. Manuel Lages do Chao, 268, Cotia, SP 06705-050 Brazil

Acceptable Abbrev.: Spirax Sarco-SXS

Certification Number: **48136** Design Series or catalog number: **SV81H (liquid)**

Type Classification: **Safety Relief Valve**Capacity Tests: **Sec. VIII Div. 1 at National Board T L (Worthington) on January 14, 2011**Method of Establishing Relieving Capacity: **Flow Capacity, K**Certified Value: **.646 Unitless**Test Medium: **Water**Certified Medium: **Liquid**Set Pressure Definition: **First Steady Stream**Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
0.5 - 1 NPS	1 NPS	0.086 sq in	[#1] 0.331 in	0.091 in	15 - 3000 psi	Water	VIII Div. 1
		0.13 sq in	[#2] 0.407 in	0.11 in	15 - 3000 psi	Water	VIII Div. 1
1 - 1.5 NPS	1.5 NPS	0.228 sq in	[#3] 0.539 in	0.146 in	15 - 2540 psi	Water	VIII Div. 1
1.5 - 2 NPS	2 NPS	0.36 sq in	[#4] 0.677 in	0.185 in	15 - 1500 psi	Water	VIII Div. 1
	2.5 NPS	0.568 sq in	[#5] 0.85 in	0.232 in	15 - 1140 psi	Water	VIII Div. 1

Spirax Sarco Limited (SSL)

NB#: 71020

location: Runnings Rd, Kingsditch Trading Est., Cheltenham, Gloucestershire GL51 9NQ United Kingdom

Acceptable Abbrev.: Spirax Sarco

Spirax Sarco Limited (SSL)

location: Runnings Rd, Kingsditch Trading Est., Cheltenham, Gloucestershire GL51 9NQ United Kingdom

Acceptable Abbrev.: Spirax Sarco

Certification
Number: **71020**Design Series
or catalog number **SV7**Type Classification: **Safety Valve**Capacity Tests: **Sec. I at National Board T L (Worthington) on July 30, 1997**Method of Establishing Relieving Capacity: **Flow Capacity, K**Certified Value: **.859 Unitless**Test Medium: **Steam**Certified Medium: **Steam & Air/Gas**Set Pressure Definition: **Pop**Blowdown: **Adjustable**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
1.5 NPS		0.328 sq in	[F] 0.646 in	0.161 in	15 - 300 psi	Steam	I VIII
		0.537 sq in	[G] 0.827 in	0.207 in	15 - 300 psi	Steam	I VIII
		0.841 sq in	[H] 1.035 in	0.259 in	15 - 300 psi	Steam	I VIII
1.5 - 2 NPS		1.374 sq in	[J] 1.323 in	0.33 in	15 - 300 psi	Steam	I VIII
2 - 2.5 NPS		1.968 sq in	[K] 1.583 in	0.395 in	15 - 300 psi	Steam	I VIII
2.5 - 3 NPS		3.054 sq in	[L] 1.972 in	0.493 in	15 - 300 psi	Steam	I VIII
3 NPS		3.846 sq in	[M] 2.213 in	0.553 in	15 - 300 psi	Steam	I VIII
4 NPS		4.633 sq in	[N] 2.429 in	0.607 in	15 - 300 psi	Steam	I VIII
		6.83 sq in	[P] 2.949 in	0.737 in	15 - 300 psi	Steam	I VIII
6 NPS		11.811 sq in	[Q] 3.878 in	0.969 in	15 - 300 psi	Steam	I VIII
		17.121 sq in	[R] 4.669 in	1.167 in	15 - 250 psi	Steam	I
					15 - 300 psi	Steam	VIII

TAI Milano SpA (TAI)

NB#: 45515

location: Via Delle Industrie, 6, Guardamiglio (Lodi) 26862 Italy

TAI Milano SpA (TAI)

location: Via Delle Industrie, 6, Guardamiglio (Lodi) 26862 Italy

Certification Number: **45515** Design Series or catalog number: **Series 3000A**

Type Classification: **Safety Valve**Capacity Tests: **Sec. VIII Div. 1 at National Board T L (Worthington) on December 16, 2009**Method of Establishing Relieving Capacity: **Flow Capacity, K**Certified Value: **.875 Unitless**Test Medium: **Air**Certified Medium: **Steam & Air/Gas**Special Service: **None**Set Pressure Definition: **Initial Audible Discharge**Blowdown: **Adjustable by Single Ring**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
1 - 1.5 NPS	2,3 NPS	78.5 sq mm	[D] 10 mm	1.7 mm	15 - 2900 psi	Steam	VIII Div. 1
					15 - 6170 psi	Air	VIII Div. 1
		143 sq mm	[E] 13.5 mm	3.4 mm	15 - 2900 psi	Steam	VIII Div. 1
					15 - 6170 psi	Air	VIII Div. 1
1.5 NPS	2,3 NPS	254 sq mm	[F] 18 mm	4.5 mm	15 - 2900 psi	Steam	VIII Div. 1
					15 - 5713 psi	Air	VIII Div. 1
1.5 - 2 NPS	3 NPS	380 sq mm	[G] 22 mm	5.5 mm	15 - 2900 psi	Steam	VIII Div. 1
					15 - 3903 psi	Air	VIII Div. 1
		594 sq mm	[H] 27.5 mm	6.9 mm	15 - 2764 psi	Air	VIII Div. 1
						Steam	VIII Div. 1
2 - 3 NPS	3,4 NPS	908 sq mm	[J] 34 mm	8.5 mm	15 - 2700 psi	Air	VIII Div. 1
						Steam	VIII Div. 1
3 NPS	4,6 NPS	1320 sq mm	[K] 41 mm	10.3 mm	15 - 2221 psi	Air	VIII Div. 1
						Steam	VIII Div. 1
3 - 4 NPS	4,6 NPS	1660 sq mm	[K2] 46 mm	11.5 mm	15 - 1562 psi	Air	VIII Div. 1
						Steam	VIII Div. 1
		2120 sq mm	[L] 52 mm	13 mm	15 - 1499 psi	Air	VIII Div. 1
						Steam	VIII Div. 1
4 NPS	6 NPS	2550 sq mm	[M] 57 mm	14.3 mm	15 - 1100 psi	Air	VIII Div. 1
						Steam	VIII Div. 1
		3110 sq mm	[N] 63 mm	15.8 mm	15 - 1580 psi	Air	VIII Div. 1
						Steam	VIII Div. 1
		4530 sq mm	[P] 76 mm	19 mm	15 - 1400 psi	Air	VIII Div. 1
						Steam	VIII Div. 1
6 NPS	8 NPS	6360 sq mm	[P3] 90 mm	22.5 mm	15 - 805 psi	Air	VIII Div. 1
						Steam	VIII Div. 1
		7850 sq mm	[Q] 100 mm	25 mm	15 - 600 psi	Air	VIII Div. 1
						Steam	VIII Div. 1
	8,10 NPS	10315 sq mm	[R1] 114.6 mm	28.7 mm	15 - 300 psi	Air	VIII Div. 1
						Steam	VIII Div. 1
8 NPS	10 NPS	16765 sq mm	[T1] 146.1 mm	36.5 mm	15 - 300 psi	Air	VIII Div. 1
						Steam	VIII Div. 1

TAI Milano SpA (TAI)

NB#: 45526

Location: Via Delle Industrie, 6, Guardamiglio (Lodi) 26862 Italy

Certification
Number: **45526**Design Series
or catalog number **Series 3000W**Type Classification: **Safety Relief Valve**Capacity Tests: **Sec. VIII Div. 1 at National Board T L (Worthington) on December 16, 2009**Method of Establishing Relieving Capacity: **Flow Capacity, K**Certified Value: **.788 Unitless**Test Medium: **Water**Certified Medium: **Liquid**Special Service: **None**Set Pressure Definition: **First Steady Stream**Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
1 - 1.5 NPS	2, 3 NPS	78.5 sq mm	[D] 10 mm	1.75 mm	1 - 425.5 bar	Water	VIII Div. 1
		143 sq mm	[E] 13.5 mm	3.4 mm	1 - 425.5 bar	Water	VIII Div. 1
1.5 NPS	2, 3 NPS	254 sq mm	[F] 18 mm	4.5 mm	1 - 394 bar	Water	VIII Div. 1
1.5 - 2 NPS	3 NPS	380 sq mm	[G] 22 mm	5.5 mm	1 - 269.2 bar	Water	VIII Div. 1
		594 sq mm	[H] 27.5 mm	6.9 mm	1 - 190.6 bar	Water	VIII Div. 1
2 - 3 NPS	3, 4 NPS	908 sq mm	[J] 34 mm	8.5 mm	1 - 186.2 bar	Water	VIII Div. 1
3 NPS	4, 6 NPS	1320 sq mm	[K] 41 mm	10.3 mm	1 - 153.2 bar	Water	VIII Div. 1
		1660 sq mm	[K2] 46 mm	11.5 mm	1 - 107.7 bar	Water	VIII Div. 1
3 - 4 NPS	4, 6 NPS	2120 sq mm	[L] 52 mm	13 mm	1 - 103.4 bar	Water	VIII Div. 1
4 NPS	6 NPS	2550 sq mm	[M] 57 mm	14.3 mm	1 - 75.9 bar	Water	VIII Div. 1
		3110 sq mm	[N] 63 mm	15.8 mm	1 - 109 bar	Water	VIII Div. 1
		4530 sq mm	[P] 76 mm	19 mm	1 - 69 bar	Water	VIII Div. 1
6 NPS	8 NPS	6360 sq mm	[P3] 90 mm	22.5 mm	1 - 55.5 bar	Water	VIII Div. 1
		7850 sq mm	[Q] 100 mm	25 mm	1 - 41.4 bar	Water	VIII Div. 1
	8,10 NPS	10315 sq mm	[R1] 114.6 mm	28.7 mm	1 - 20.7 psi	Water	VIII Div. 1
8 NPS	10 NPS	16764 sq mm	[T1] 146.1 mm	36.5 mm	1 - 20.7 bar	Water	VIII Div. 1

Certification
Number: **45537**Design Series
or catalog number **Series 4000**Type Classification: **Safety Valve**Capacity Tests: **Sec. VIII Div. 1 at National Board T L (Worthington) on December 16, 2009**Method of Establishing Relieving Capacity: **Flow Capacity, Slope**Certified Value: **1.96 SCFM/PSIA**Test Medium: **Air/Gas**Certified Medium: **Air/Gas**Special Service: **None**Set Pressure Definition: **Initial Audible Discharge**Blowdown: **Adjustable by Single Ring**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
0.5 - 1 NPS	1, 1.5 NPS	78.5 sq mm	[D] 10 mm	2.5 mm	15 - 5176 psi	Air	VIII Div. 1

location: Via Delle Industrie, 6, Guardamiglio (Lodi) 26862 Italy

Certification
Number: **45548**Design Series
or catalog number **Series 4000W**Type Classification: **Safety Relief Valve**Capacity Tests: **Sec. VIII Div. 1 at National Board T L (Worthington) on April 14, 2010**Method of Establishing Relieving Capacity: **Flow Capacity, Flow Factor**Certified Value: **3.39 GPM/SQ.RT. PSID**Test Medium: **Water**Certified Medium: **Liquid**Special Service: **None**Set Pressure Definition: **First Steady Stream**Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
0.75 - 1 NPS	1 NPS	78.5 sq mm	[D] 10 mm	1.75 mm	15 - 2552 psi	Water	VIII Div. 1

Certification
Number: **45559**Design Series
or catalog number **Series 9000 / 60, 70, 90 pilots Air/Gas**Type Classification: **Pilot Operated Pressure Relief Valve**Capacity Tests: **Sec. VIII Div. 1 at National Board T L (Worthington) on April 13, 2010**Method of Establishing Relieving Capacity: **Flow Capacity, K**Certified Value: **.843 Unitless**Test Medium: **Air/Gas**Certified Medium: **Air/Gas**Special Service: **None**Set Pressure Definition: **Initial Audible Discharge**Blowdown: **Adjustable and Fixed for Mod. Pilot**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
1 - 1.5 NPS	2 NPS	254 sq mm	[F] 18 mm		1 - 425 bar	Air	VIII Div. 1
1.5 - 2 NPS	2, 3 NPS	380 sq mm	[G] 22 mm		5 - 255 bar	Air	VIII Div. 1
		594 sq mm	[H] 27.5 mm		4 - 425 bar	Air	VIII Div. 1
	3 NPS	908 sq mm	[J] 34 mm		1 - 274 bar	Air	VIII Div. 1
2 - 3 NPS	3 NPS	1660 sq mm	[K2] 46 mm		1 - 51 bar	Air	VIII Div. 1
3 NPS	4 NPS	1660 sq mm	[K2] 46 mm		1 - 255 bar	Air	VIII Div. 1
		2550 sq mm	[M] 57 mm		1 - 166 bar	Air	VIII Div. 1
4 NPS	6 NPS	2550 sq mm	[M] 57 mm		155 - 380 bar	Air	VIII Div. 1
		3110 sq mm	[N] 63 mm		155 - 310 bar	Air	VIII Div. 1
		4530 sq mm	[P] 76 mm		1 - 212 bar	Air	VIII Div. 1
		7090 sq mm	[Q1] 95 mm		1 - 135 bar	Air	VIII Div. 1
6 NPS	8 NPS	11300 sq mm	[R] 120 mm		1 - 148 bar	Air	VIII Div. 1
		14100 sq mm	[R3] 134 mm		1 - 118 bar	Air	VIII Div. 1
8 NPS	10 NPS	22700 sq mm	[T2] 170 mm		1 - 102 bar	Air	VIII Div. 1
10 NPS	14 NPS	38000 sq mm	[V] 220 mm		1 - 70 bar	Air	VIII Div. 1

location: Via Delle Industrie, 6, Guardamiglio (Lodi) 26862 Italy

Certification Number: **45560** Design Series or catalog number **Series 9000 / 70, 603,701, 703 Pilots (Liquids)**

Type Classification: **Pilot Operated Pressure Relief Valve**Capacity Tests: **Sec. VIII Div. 1 at National Board T L (Worthington) on April 16, 2010**Method of Establishing Relieving Capacity: **Flow Capacity, K**Certified Value: **.655 Unitless**Test Medium: **Water**Certified Medium: **Liquid**Special Service: **None**Set Pressure Definition: **First Steady Stream**Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
1 - 1.5 NPS	2 NPS	254 sq mm	[F] 18 mm	5.9 mm	1 - 425 bar	Water	VIII Div. 1
1.5 NPS	2 NPS	380 sq mm	[G] 22 mm	7.2 mm	5 - 255 bar	Water	VIII Div. 1
	3 NPS	908 sq mm	[J] 34 mm	11.1 mm	1 - 102 bar	Water	VIII Div. 1
1.5 - 2 NPS	3 NPS	380 sq mm	[G] 22 mm	7.2 mm	5 - 255 bar	Water	VIII Div. 1
		594 sq mm	[H] 27.5 mm	9 mm	4 - 425 bar	Water	VIII Div. 1
2 NPS	3 NPS	908 sq mm	[J] 34 mm	11.1 mm	1 - 274 bar	Water	VIII Div. 1
		1660 sq mm	[K2] 46 mm	15.1 mm	1 - 51 bar	Water	VIII Div. 1
3 NPS	4 NPS	1660 sq mm	[K2] 46 mm	15.1 mm	1 - 255 bar	Water	VIII Div. 1
		2550 sq mm	[M] 57 mm	18.7 mm	1 - 166 bar	Water	VIII Div. 1
4 NPS	6 NPS	2550 sq mm	[M] 57 mm	18.7 mm	155 - 380 bar	Water	VIII Div. 1
		3110 sq mm	[N] 63 mm	20.7 mm	155 - 310 bar	Water	VIII Div. 1
		4530 sq mm	[P] 76 mm	24.9 mm	1 - 212 bar	Water	VIII Div. 1
		7090 sq mm	[Q1] 95 mm	31.2 mm	1 - 135 bar	Water	VIII Div. 1
6 NPS	8 NPS	11300 sq mm	[R] 120 mm	39.4 mm	1 - 148 bar	Water	VIII Div. 1
		14100 sq mm	[R3] 134 mm	44 mm	1 - 118 bar	Water	VIII Div. 1
8 NPS	10 NPS	22700 sq mm	[T2] 170 mm	55.8 mm	1 - 102 bar	Water	VIII Div. 1
10 NPS	14 NPS	38000 sq mm	[V] 220 mm	72.2 mm	1 - 70 bar	Water	VIII Div. 1

location: Via Delle Industrie, 6, Guardamiglio (Lodi) 26862 Italy

Certification Number: **45582** Design Series or catalog number **Series 9000 R / 60, 70, 90 pilots, Air/Gas**

Type Classification: **Pilot Operated Pressure Relief Valve**Capacity Tests: **Sec. VIII Div. 1 at National Board T L (Worthington) on April 15, 2010**Method of Establishing Relieving Capacity: **Flow Capacity, K**Certified Value: **.86 Unitless**Test Medium: **Air**Certified Medium: **Air/Gas**Special Service: **None**Set Pressure Definition: **Initial Audible Discharge**Blowdown: **Adjustable and Fixed for Mod. Pilot**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
1 - 1.5 NPS	2 NPS	78.5 sq mm	[D] 18 mm	2.2 mm	1 - 425 bar	Air	VIII Div. 1
		143 sq mm	[E] 18 mm	4 mm	1 - 425 bar	Air	VIII Div. 1
1.5 NPS	3 NPS	380 sq mm	[G] 27.5 mm	5.7 mm	1 - 255 bar	Air	VIII Div. 1
		594 sq mm	[H] 34 mm	8.7 mm	1 - 102 bar	Air	VIII Div. 1
1.5 - 2 NPS	3 NPS	380 sq mm	[G] 34 mm	6.6 mm	1 - 255 bar	Air	VIII Div. 1
2 NPS	3 NPS	594 sq mm	[H] 34 mm	8.7 mm	1 - 255 bar	Air	VIII Div. 1
		1320 sq mm	[K] 46 mm	13.9 mm	1 - 51 bar	Air	VIII Div. 1
3 NPS	4 NPS	908 sq mm	[J] 46 mm	9.9 mm	1 - 425 bar	Air	VIII Div. 1
			[J] 57 mm	13.9 mm	2.5 - 102 bar	Air	VIII Div. 1
		1320 sq mm	[K] 46 mm	13.9 mm	1 - 320 bar	Air	VIII Div. 1
			[K] 57 mm	11.2 mm	2.5 - 102 bar	Air	VIII Div. 1
		1660 sq mm	[K2] 57 mm	13.9 mm	2.5 - 102 bar	Air	VIII Div. 1
		2120 sq mm	[L] 57 mm	17.7 mm	1 - 200 bar	Air	VIII Div. 1
4 NPS	6 NPS	2120 sq mm	[L] 57 mm	17.7 mm	155 - 425 bar	Air	VIII Div. 1
			[L] 76 mm	14.2 mm	1 - 255 bar	Air	VIII Div. 1
		2550 sq mm	[M] 76 mm	17 mm	1 - 255 bar	Air	VIII Div. 1
		3110 sq mm	[N] 76 mm	20.3 mm	1 - 310 bar	Air	VIII Div. 1
		5670 sq mm	[P2] 95 mm	28.9 mm	1 - 153 bar	Air	VIII Div. 1
6 NPS	8 NPS	7850 sq mm	[Q] 120 mm	30.7 mm	1 - 153 bar	Air	VIII Div. 1
		9160 sq mm	[Q2] 120 mm	34.8 mm	1 - 153 bar	Air	VIII Div. 1
8 NPS	10 NPS	18400 sq mm	[T] 170 mm	52 mm	1 - 102 bar	Air	VIII Div. 1
10 NPS	14 NPS	31400 sq mm	[U] 220 mm	68.2 mm	1 - 70 bar	Air	VIII Div. 1

location: Via Delle Industrie, 6, Guardamiglio (Lodi) 26862 Italy

Certification Number: **45593** Design Series or catalog number **Series 9000 R / 70, 603, 701, 703 Pilots (Liquid)**

Type Classification: **Pilot Operated Pressure Relief Valve**Capacity Tests: **Sec. VIII Div. 1 at National Board T L (Worthington) on November 22, 2010**Method of Establishing Relieving Capacity: **Flow Capacity, K**Certified Value: **0.654 Unitless**Test Medium: **Water**Certified Medium: **Liquid**Special Service: **None**Set Pressure Definition: **First Steady Stream**Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
1 - 1.5 NPS	2 NPS	78.5 sq mm	[D] 18 mm	2.1 mm	1 - 425 bar	Water	VIII Div. 1
		143 sq mm	[E] 18 mm	3.8 mm	1 - 425 bar	Water	VIII Div. 1
1.5 NPS	3 NPS	380 sq mm	[G] 27.5 mm	6.6 mm	1 - 255 bar	Water	VIII Div. 1
			[G] 34 mm	5.4 mm	1 - 102 bar	Water	VIII Div. 1
		594 sq mm	[H] 34 mm	8.3 mm	1 - 102 bar	Water	VIII Div. 1
2 NPS	3 NPS	380 sq mm	[G] 34 mm	5.4 mm	1 - 255 bar	Water	VIII Div. 1
		594 sq mm	[H] 34 mm	8.3 mm	1 - 255 bar	Water	VIII Div. 1
		1320 sq mm	[K] 46 mm	13.3 mm	1 - 51 bar	Water	VIII Div. 1
3 NPS	4 NPS	908 sq mm	[J] 46 mm	9.5 mm	1 - 425 bar	Water	VIII Div. 1
			[J] 57 mm	7.8 mm	2.5 - 102 bar	Water	VIII Div. 1
		1320 sq mm	[K] 46 mm	13.3 mm	1 - 320 bar	Water	VIII Div. 1
			[K] 57 mm	11.2 mm	2.5 - 102 bar	Water	VIII Div. 1
		1660 sq mm	[K2] 57 mm	13.9 mm	2.5 - 102 bar	Water	VIII Div. 1
		2120 sq mm	[L] 57 mm	17 mm	1 - 200 bar	Water	VIII Div. 1
4 NPS	6 NPS	2120 sq mm	[L] 57 mm	17 mm	155 - 425 bar	Water	VIII Div. 1
			[L] 76 mm	13.6 mm	1 - 255 bar	Water	VIII Div. 1
		2550 sq mm	[M] 76 mm	16.3 mm	1 - 255 bar	Water	VIII Div. 1
		3110 sq mm	[N] 76 mm	19.5 mm	1 - 310 bar	Water	VIII Div. 1
		5670 sq mm	[P2] 95 mm	27.7 mm	1 - 153 bar	Water	VIII Div. 1
6 NPS	8 NPS	7850 sq mm	[Q] 120 mm	29.4 mm	1 - 153 bar	Water	VIII Div. 1
		9160 sq mm	[Q2] 120 mm	33.3 mm	1 - 153 bar	Water	VIII
8 NPS	10 NPS	18400 sq mm	[T] 170 mm	49.9 mm	1 - 102 bar	Water	VIII Div. 1
10 NPS	14 NPS	31400 sq mm	[U] 220 mm	65.5 mm	1 - 70 bar	Water	VIII Div. 1

location: Via Delle Industrie, 6, Guardamiglio (Lodi) 26862 Italy

Certification Number: **45616** Design Series or catalog number **3000W (Steam & Air/Gas)**

Type Classification: **Safety Relief Valve**Capacity Tests: **Sec. VIII Div. 1 at National Board T L (Worthington) on December 17, 2009**Method of Establishing Relieving Capacity: **Flow Capacity, K**Certified Value: **0.872 Unitless**Test Medium: **Air**Certified Medium: **Steam & Air/Gas**Set Pressure Definition: **Initial Audible Discharge**Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
1 - 1.5 NPS	2, 3 NPS	78.5 sq mm	[D] 10 mm	1.75 mm	15 - 2900 psi	Steam	VIII Div. 1
					15 - 6170 psi	Air	VIII Div. 1
		143 sq mm	[E] 13.5 mm	3.4 mm	15 - 2900 psi	Steam	VIII Div. 1
					15 - 6170 psi	Air	VIII Div. 1
1.5 NPS	2, 3 NPS	254 sq mm	[F] 18 mm	4.5 mm	15 - 2900 psi	Steam	VIII Div. 1
					15 - 5713 psi	Air	VIII Div. 1
1.5 - 2 NPS	3 NPS	380 sq mm	[G] 22 mm	5.5 mm	15 - 2900 psi	Steam	VIII Div. 1
					15 - 3903 psi	Air	VIII Div. 1
		594 sq mm	[H] 27.5 mm	6.9 mm	15 - 2764 psi	Air	VIII Div. 1
						Steam	VIII Div. 1
2 - 3 NPS	3, 4 NPS	908 sq mm	[J] 34 mm	8.5 mm	15 - 2700 psi	Air	VIII Div. 1
						Steam	VIII Div. 1
3 NPS	4, 6 NPS	1320 sq mm	[K] 41 mm	10.3 mm	15 - 2221 psi	Air	VIII Div. 1
						Steam	VIII Div. 1
		1660 sq mm	[K2] 46 mm	11.5 mm	15 - 1562 psi	Air	VIII Div. 1
						Steam	VIII Div. 1
3 - 4 NPS	4, 6 NPS	2120 sq mm	[L] 52 mm	13 mm	15 - 1500 psi	Air	VIII Div. 1
						Steam	VIII Div. 1
4 NPS	6 NPS	2550 sq mm	[M] 57 mm	14.3 mm	15 - 1100 psi	Air	VIII Div. 1
						Steam	VIII Div. 1
		3110 sq mm	[N] 63 mm	15.8 mm	15 - 1580 psi	Air	VIII Div. 1
						Steam	VIII Div. 1
		4530 sq mm	[P] 76 mm	19 mm	15 - 1000 psi	Air	VIII Div. 1
						Steam	VIII Div. 1
6 NPS	8, 10 NPS	1032 sq mm	[R1] 114.6 mm	28.7 mm	15 - 300 psi	Air	VIII Div. 1
						Steam	VIII Div. 1
	8 NPS	6360 sq mm	[P3] 90 mm	22.5 mm	15 - 805 psi	Air	VIII Div. 1
						Steam	VIII Div. 1
		7850 sq mm	[Q] 100 mm	25 mm	15 - 600 psi	Air	VIII Div. 1
						Steam	VIII Div. 1
8 NPS	10 NPS	1677 sq mm	[T1] 146.1 mm	36.5 mm	15 - 300 psi	Air	VIII Div. 1
						Steam	VIII Div. 1

Taizhou Luqiao Jia Ben Pump Casting Factory (CBM)

NB#: 00673

location: No. 73 Industrial Zone,

Acceptable Abbrev.: Jiaben

Taizhou Luqiao Jia Ben Pump Casting Factory (CBM)

location: No. 73 Industrial Zone,

Acceptable Abbrev.: Jiaben

Certification
Number: **00673**Design Series
or catalog number **V100**Type Classification: **Safety Relief Valve**Capacity Tests: **Sec. VIII Div. 1 at National Board T L (Worthington) on September 01, 2015**Method of Establishing Relieving Capacity: **Flow Capacity, Slope**Certified Value: **0.279 SCFM/PSIA**Test Medium: **Gas**Certified Medium: **Air/Gas**Set Pressure Definition: **Pop**Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
0.25 NPS	Side	0.0191 sq in	0.156 in	0.066 in	75 - 200 psi	Air	VIII Div. 1

Target Rock Corporation (TRC)

NB#: 55099

location: 1966 E Broadhollow Road, East Farmingdale, NY 11735 United States

Target Rock Corporation (TRC)

location: 1966 E Broadhollow Road, East Farmingdale, NY 11735 United States

Certification Number: **55099** Design Series or catalog number: **6AB (Class 1,2 & 3)**

Type Classification: **Safety Valve**Capacity Tests: **Sec. III at National Board T L (Picaway) on October 22, 1981**Method of Establishing Relieving Capacity: **Flow Capacity, K**Certified Value: **.769 Unitless**Test Medium: **Steam**Certified Medium: **Steam**Special Service: **None**Set Pressure Definition: **Pop**Blowdown: **Adjustable**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
6 NPS	10 NPS	17.34 sq in	4.7 in	1.45 in	900 - 1400 psi	Steam	III
	8 NPS	18.19 sq in	4.812 in	1.444 in	900 - 1400 psi	Steam	III

Certification Number: **55101** Design Series or catalog number: **6AC (Class 1,2 & 3)**

Type Classification: **Safety Valve**Capacity Tests: **Sec. III at National Board T L (Picaway) on October 22, 1981**Method of Establishing Relieving Capacity: **Flow Capacity, Slope**Certified Value: **4.732 PPH/PSIA**Certified Value (alternate medium): **1.6843 SCFM/PSIA**Test Medium: **Steam**Certified Medium: **Steam & Air/Gas**Special Service: **None**Set Pressure Definition: **Pop**Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
0.75 - 3 NPS	1 - 4 NPS	0.11 sq in	0.375 in	0.118 in	15 - 2900 psi	Air	III
						Steam	III

Certification Number: **55123** Design Series or catalog number: **6BH**

Type Classification: **Vacuum Relief Valve**Capacity Tests: **Sec. III NC at National Board T L (Worthington) on July 14, 2014**Method of Establishing Relieving Capacity: **Flow Capacity, 1 valve method**Certified Value: **632 SCFM**Test Medium: **Air/Gas**Certified Medium: **Air/Gas**Special Service: **None**Set Pressure Definition: **Initial Audible Discharge**Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
	4 in	5.5 sq in	4.25 in	0.7 in	-.3 psi	Air	III NC

Target Rock Corporation (TRC)

NB#: 55134

Location: 1966 E Broadhollow Road, East Farmingdale, NY 11735 United States

Certification Number: **55134** Design Series or catalog number: **6-AF-1 (Class 1,2 & 3)**

Type Classification: **Safety Relief Valve**Capacity Tests: **Sec. III at National Board T L (Picaway) on June 04, 1982**Method of Establishing Relieving Capacity: **Flow Capacity, Slope**Certified Value: **2.01 PPH/PSIA**Certified Value (alternate medium): **.72 SCFM/PSIA**Test Medium: **Steam**Certified Medium: **Steam & Air/Gas**Special Service: **None**Set Pressure Definition: **Pop**Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
1 NPS		0.0429 sq in	0.375 in	0.031 in	60 - 100 psi	Steam	III
					60 - 3000 psi	Air	III

Certification Number: **55156** Design Series or catalog number: **6AH (Class 2 & 3)**

Type Classification: **Safety Relief Valve**Capacity Tests: **Sec. III at National Board T L (Picaway) on June 17, 1982**Method of Establishing Relieving Capacity: **Flow Capacity, Slope**Certified Value: **6.67 PPH/PSIA**Certified Value (alternate medium): **2.37 SCFM/PSIA**Test Medium: **Steam**Certified Medium: **Steam & Air/Gas**Special Service: **None**Set Pressure Definition: **Pop**Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
0.75 NPS	1 NPS	0.2485 sq in	0.5625 in	0.178 in	100 - 160 psi	Air	III
						Steam	III

Certification Number: **55167** Design Series or catalog number: **6AK (78D016 Class 1, 2 & 3)**

Type Classification: **Safety Relief Valve**Capacity Tests: **Sec. III at National Board T L (Picaway) on October 06, 1982**Method of Establishing Relieving Capacity: **Flow Capacity, 3 valve average**Certified Value: **1475 SCFM**Test Medium: **Air/Gas**Certified Medium: **Air/Gas**Special Service: **None**Set Pressure Definition: **Pop**Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
1.5 NPS	2 NPS	0.502 sq in	0.8 in	0.21 in	275 - 275 psi	Air	III

Target Rock Corporation (TRC)

NB#: 55213

Location: 1966 E Broadhollow Road, East Farmingdale, NY 11735 United States

Certification
Number: **55213**Design Series
or catalog number **67F**Type Classification: **Pilot Operated Pressure Relief Valve**Capacity Tests: **Sec. III at Ohio State University (Robinson Laboratory) on November 20, 1967**Method of Establishing Relieving Capacity: **Flow Capacity, K**Certified Value: **.72 Unitless**Test Medium: **Steam**Certified Medium: **Steam**Special Service: **None**Set Pressure Definition: **Pop**Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
6 NPS	10 NPS	12.56 sq in	4 in	2.05 in	800 - 1200 psi	Steam	III
		18.89 sq in	4.905 in	2.52 in	800 - 1200 psi	Steam	III
		18.93 sq in	4.91 in	2.58 in	1000 - 1200 psi	Steam	III
		19.16 sq in	4.94 in	2.58 in	1000 - 1200 psi	Steam	III
		19.87 sq in	5.03 in	2.58 in	1000 - 1200 psi	Steam	III
		20.62 sq in	5.125 in	2.78 in	1000 - 1200 psi	Steam	III

Certification
Number: **55224**Design Series
or catalog number **69C**Type Classification: **Pilot Operated Pressure Relief Valve**Capacity Tests: **Sec. III at Ohio State University (Robinson Laboratory) on August 17, 1969**Method of Establishing Relieving Capacity: **Flow Capacity, K**Certified Value: **.742 Unitless**Test Medium: **Steam**Certified Medium: **Steam**Set Pressure Definition: **Pop**Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
6 NPS	6 NPS	3.51 sq in	2.443 in	0.98 in	2250 - 2485 psi	Steam	III

Certification
Number: **55235**Design Series
or catalog number **76A**Type Classification: **Safety Valve**Capacity Tests: **Sec. III at National Board T L (Picaway) on June 23, 1977**Method of Establishing Relieving Capacity: **Flow Capacity, K**Certified Value: **.778 Unitless**Test Medium: **Steam**Certified Medium: **Steam**Special Service: **None**Set Pressure Definition: **Pop**Blowdown: **Adjustable**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
3 NPS	4 NPS	2.048 sq in	1.615 in	0.53 in	50 - 1600 psi	Steam	III
4 NPS	6 NPS	3.464 sq in	2.1 in	0.69 in	50 - 1600 psi	Steam	III
6 NPS	10 NPS	15.904 sq in	4.5 in	1.475 in	50 - 1600 psi	Steam	III

Target Rock Corporation (TRC)

NB#: 55246

Location: 1966 E Broadhollow Road, East Farmingdale, NY 11735 United States

Certification Number: **55246** Design Series or catalog number: **7567F**

Type Classification: Pilot Operated Pressure Relief Valve

Capacity Tests: Sec. III at Ohio State University (Robinson Laboratory) on November 20, 1967

Method of Establishing Relieving Capacity: Flow Capacity, K

Certified Value: .720 Unitless

Test Medium: Steam

Certified Medium: Steam

Special Service: None

Set Pressure Definition: Pop

Blowdown: Fixed

Scope of Nominal Size and Set Pressure Ranges:

Inlet Size	Outlet Size	Flow Area	Orifice [designator] diameter	Lift	Set Pressure Range	Media	Code Section
6 NPS	10 NPS	12.56 sq in	4 in	2.05 in	800 - 1200 psi	Steam	III
		18.89 sq in	4.905 in	2.52 in	800 - 1200 psi	Steam	III
		18.93 sq in	4.91 in	2.58 in	1000 - 1200 psi	Steam	III
		19.16 sq in	4.94 in	2.58 in	1000 - 1200 psi	Steam	III
		19.87 sq in	5.03 in	2.58 in	1000 - 1200 psi	Steam	III
		20.62 sq in	5.125 in	2.78 in	1000 - 1200 psi	Steam	III

Certification Number: **55280** Design Series or catalog number: **2VRES-S-1**

Type Classification: Vacuum Relief Valve

Capacity Tests: Sec. III at National Board T L (Worthington) on August 24, 1993

Method of Establishing Relieving Capacity: Flow Capacity, 1 valve method

Certified Value: 61 SCFM

Test Medium: Air/Gas

Certified Medium: Air/Gas

Special Service: None

Blowdown: Fixed

Scope of Nominal Size and Set Pressure Ranges:

Inlet Size	Outlet Size	Flow Area	Orifice [designator] diameter	Lift	Set Pressure Range	Media	Code Section
2 NPS	Top	0.478 sq in	1.75 in		1 - psi	Air	III

Certification Number: **55291** Design Series or catalog number: **6AD, Liquids**

Type Classification: Safety Relief Valve

Capacity Tests: Sec. III at National Board T L (Picaway) on June 22, 1983

Method of Establishing Relieving Capacity: Flow Capacity, Flow Factor

Certified Value: 3.08 GPM/SQ.RT. PSID

Test Medium: Water

Certified Medium: Liquid

Special Service: None

Set Pressure Definition: First Steady Stream

Blowdown: Fixed

Scope of Nominal Size and Set Pressure Ranges:

Inlet Size	Outlet Size	Flow Area	Orifice [designator] diameter	Lift	Set Pressure Range	Media	Code Section
0.75 - 1 NPS	1 NPS	0.11 sq in	0.375 in	0.125 in	50 - 3000 psi	Water	III VIII

Target Rock Corporation (TRC)

NB#: 55303

Location: 1966 E Broadhollow Road, East Farmingdale, NY 11735 United States

Certification
Number: **55303**Design Series
or catalog number **6AR**Type Classification: **Safety Relief Valve**Capacity Tests: **Sec. III at National Board T L (Picaway) on August 29, 1994**Method of Establishing Relieving Capacity: **Flow Capacity, K**Certified Value: **.431 Unitless**Test Medium: **Water**Certified Medium: **Liquid**Special Service: **None**Set Pressure Definition: **First Steady Stream**Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
6 NPS	8 NPS	9.32 sq in	4.3 in	0.69 in	30 - 150 psi	Water	III

Certification
Number: **55314**Design Series
or catalog number **6AS**Type Classification: **Safety Relief Valve**Capacity Tests: **Sec. III at National Board T L (Worthington) on August 29, 1994**Method of Establishing Relieving Capacity: **Flow Capacity, K**Certified Value: **.445 Unitless**Test Medium: **Water**Certified Medium: **Liquid**Special Service: **None**Set Pressure Definition: **First Steady Stream**Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
3 NPS	4 NPS	3.768 sq in	2.438 in	0.49 in	50 - 150 psi	Water	III

Certification
Number: **55325**Design Series
or catalog number **6AO, 93R-024**Type Classification: **Safety Relief Valve**Capacity Tests: **Sec. III at National Board T L (Worthington) on June 21, 1995**Method of Establishing Relieving Capacity: **Flow Capacity, K**Certified Value: **.422 Unitless**Test Medium: **Water**Certified Medium: **Liquid**Special Service: **None**Set Pressure Definition: **First Steady Stream**Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
6 NPS	10 NPS	18.67 sq in	4.876 in	1.125 in	30 - 3000 psi	Water	III

Target Rock Corporation (TRC)

NB#: 55347

Location: 1966 E Broadhollow Road, East Farmingdale, NY 11735 United States

Certification
Number: **55347**Design Series
or catalog number **6AM**Type Classification: **Safety Relief Valve**Capacity Tests: **Sec. III at National Board T L (Worthington) on June 21, 1995**Method of Establishing Relieving Capacity: **Flow Capacity, K**Certified Value: **.725 Unitless**Test Medium: **Water**Certified Medium: **Liquid**Special Service: **None**Set Pressure Definition: **First Steady Stream**Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
1 - 2 NPS	2 - 3 NPS	0.307 sq in	0.625 in	0.21 in	60 - 3000 psi	Water	III

Certification
Number: **55369**Design Series
or catalog number **6AN**Type Classification: **Safety Relief Valve**Capacity Tests: **Sec. III at National Board T L (Worthington) on June 20, 1995**Method of Establishing Relieving Capacity: **Flow Capacity, K**Certified Value: **.609 Unitless**Test Medium: **Water**Certified Medium: **Liquid**Special Service: **None**Set Pressure Definition: **First Steady Stream**Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
1.5 - 3 NPS	2 - 4 NPS	0.785 sq in	1 in	0.33 in	40 - 3000 psi	Water	III

Certification
Number: **55370**Design Series
or catalog number **93R-022A**Type Classification: **Safety Relief Valve**Capacity Tests: **Sec. III at National Board T L (Worthington) on December 05, 1995**Method of Establishing Relieving Capacity: **Flow Capacity, Flow Factor**Certified Value: **7.54 GPM/SQ.RT. PSID**Test Medium: **Water**Certified Medium: **Liquid**Special Service: **None**Set Pressure Definition: **First Steady Stream**Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
2 NPS	3 NPS	0.607 sq in	1.33 in	0.145 in	15 - 1000 psi	Water	III

Target Rock Corporation (TRC)

NB#: 55381

Location: 1966 E Broadhollow Road, East Farmingdale, NY 11735 United States

Certification
Number: **55381**Design Series
or catalog number **6AU**Type Classification: **Relief Valve**Capacity Tests: **Sec. III NB at National Board T L (Worthington) on December 01, 1999**Method of Establishing Relieving Capacity: **Flow Capacity, Flow Factor**Certified Value: **1.41 GPM/SQ.RT. PSID**Test Medium: **Water**Certified Medium: **Liquid**Special Service: **None**Set Pressure Definition: **First Steady Stream**Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
0.5 - 1 NPS	.75 - 2.5 NPS	0.049 in ²	0.25 in	0.09 NPS	50 - 3000 psi	Water	III VIII Div. 1

Certification
Number: **55392**Design Series
or catalog number **6AV**Type Classification: **Safety Relief Valve**Capacity Tests: **Sec. III NB at National Board T L (Worthington) on March 09, 2000**Method of Establishing Relieving Capacity: **Flow Capacity, K**Certified Value: **.791 Unitless**Test Medium: **Steam**Certified Medium: **Steam**Set Pressure Definition: **Pop**Blowdown: **Adjustable by Dual Ring**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
8 NPS	10 NPS	18.47 sq in	4.85 in	1.45 in	1100 - 1250 psi	Steam	III

Certification
Number: **55415**Design Series
or catalog number **6AW (98V-005-3)**Type Classification: **Safety Relief Valve**Capacity Tests: **Sec. III ND at National Board T L (Worthington) on June 09, 2000**Method of Establishing Relieving Capacity: **Flow Capacity, 1 valve method**Certified Value: **.617 Unitless**Test Medium: **Water**Certified Medium: **Liquid**Set Pressure Definition: **First Steady Stream**Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
1 NPS	2 NPS	0.196 sq in	0.5 in	0.199 in	1544 - 1544 psi	Water	III ND

Target Rock Corporation (TRC)

NB#: 55426

Location: 1966 E Broadhollow Road, East Farmingdale, NY 11735 United States

Certification Number: **55426** Design Series or catalog number: **6AX (98V-005-2)**

Type Classification: Safety Relief Valve

Capacity Tests: Sec. III at National Board T L (Worthington) on June 09, 2000

Method of Establishing Relieving Capacity: Flow Capacity, 1 valve method

Certified Value: 794 SCFM

Test Medium: Air/Gas

Certified Medium: Air/Gas

Set Pressure Definition: Pop

Blowdown: Fixed

Scope of Nominal Size and Set Pressure Ranges:

Inlet Size	Outlet Size	Flow Area	Orifice [designator] diameter	Lift	Set Pressure Range	Media	Code Section
2 NPS	2.5 NPS	0.196 sq in	0.5 in	0.166 in	219 - 219 psi	Air	III

Certification Number: **55437** Design Series or catalog number: **6AY (97N-006)**

Type Classification: Safety Relief Valve

Capacity Tests: Sec. III ND at National Board T L (Worthington) on June 09, 2000

Method of Establishing Relieving Capacity: Flow Capacity, 1 valve method

Certified Value: 257 GPM

Test Medium: Water

Certified Medium: Liquid

Set Pressure Definition: First Steady Stream

Blowdown: Fixed

Scope of Nominal Size and Set Pressure Ranges:

Inlet Size	Outlet Size	Flow Area	Orifice [designator] diameter	Lift	Set Pressure Range	Media	Code Section
4 NPS	6 NPS	4.987 sq in	2.52 in	0.8 in	3 - psi	Water	III

Certification Number: **55493** Design Series or catalog number: **6BA (97N-016)**

Type Classification: Vacuum Relief Valve

Capacity Tests: Sec. III NB, NC, ND at National Board T L (Worthington) on November 03, 2000

Method of Establishing Relieving Capacity: Flow Capacity, 1 valve method

Certified Value: 1155 SCFM

Test Medium: Air/Gas

Certified Medium: Air/Gas

Set Pressure Definition: Initial Audible Discharge

Blowdown: Fixed

Scope of Nominal Size and Set Pressure Ranges:

Inlet Size	Outlet Size	Flow Area	Orifice [designator] diameter	Lift	Set Pressure Range	Media	Code Section
4 NPS	4 NPS	12.75 sq in	4.25 in	1.5 in	.25 - psi	Air	III

Certification Number: **55505** Design Series or catalog number: **6AZ (97N-014)**

Type Classification: Safety Relief Valve

Capacity Tests: Sec. III NB, NC, ND at National Board T L (Worthington) on July 14, 2000

Method of Establishing Relieving Capacity: Flow Capacity, 1 valve method

Certified Value: 673 SCFM

Test Medium: Air/Gas

Certified Medium: Air/Gas

Set Pressure Definition: Pop

Blowdown: Fixed

Scope of Nominal Size and Set Pressure Ranges:

Inlet Size	Outlet Size	Flow Area	Orifice [designator] diameter	Lift	Set Pressure Range	Media	Code Section
2 NPS	2 NPS	2.4 sq in	1.75 in	0.685 in	8 - psi	Air	III

Target Rock Corporation (TRC)

NB#: 55516

Location: 1966 E Broadhollow Road, East Farmingdale, NY 11735 United States

Certification
Number: **55516**Design Series
or catalog number **6BB**

Type Classification: Vacuum Relief Valve

Capacity Tests: Sec. III at National Board T L (Worthington) on January 30, 2001

Method of Establishing Relieving Capacity: Flow Capacity, 1 valve method

Certified Value: 516 SCFM

Test Medium: Air/Gas

Certified Medium: Air/Gas

Special Service: None

Set Pressure Definition: Initial Audible Discharge

Blowdown: Fixed

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
4 NPS	4 NPS	11.04 sq in	3.75 in		0.2 - psi	Air	III

Certification
Number: **55527**Design Series
or catalog number **6BC**

Type Classification: Safety Relief Valve

Capacity Tests: Sec. III ND at National Board T L (Worthington) on October 31, 2003

Method of Establishing Relieving Capacity: Flow Capacity, Slope

Certified Value: .782 SCFM/PSIA

Certified Value (alternate medium): 2.197 PPH/PSIA

Test Medium: Steam & Air/Gas

Certified Medium: Steam & Air/Gas

Set Pressure Definition: Pop

Blowdown: Fixed

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
0.75 NPS	1 NPS	0.049 sq in	0.25 in	0.083 in	25 - 1500 psi	Steam	III
					25 - 3000 psi	Air	III

Certification
Number: **55538**Design Series
or catalog number **6BD**

Type Classification: Safety Valve

Capacity Tests: Sec. III NB at National Board T L (Worthington) on February 20, 2009

Method of Establishing Relieving Capacity: Flow Capacity, K

Certified Value: 0.722 Unitless

Test Medium: Steam

Certified Medium: Steam

Set Pressure Definition: Pop

Blowdown: Adjustable

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
6 NPS	10 NPS	17.34 sq in	4.7 in	1.18 in	1100 - 1350 psi	Steam	III NB, NC, ND

Location: 1966 E Broadhollow Road, East Farmingdale, NY 11735 United States

Certification Number: **55549** Design Series or catalog number: **6BE (08U-007)**

Type Classification: Vacuum Relief Valve

Capacity Tests: Sec. III ND at National Board T L (Worthington) on May 27, 2011

Method of Establishing Relieving Capacity: Flow Capacity, 1 valve method

Certified Value: 91 SCFM

Test Medium: Air

Certified Medium: Air

Special Service: None

Set Pressure Definition: Initial Audible Discharge

Blowdown: Fixed

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
1.5 NPS	1.5 NPS	1.41 sq in	1.34 in	0.37 in	-0.3 psi	Air	III

Certification Number: **55550** Design Series or catalog number: **6BF (08U-017)**

Type Classification: Vacuum Relief Valve

Capacity Tests: Sec. III ND at National Board T L (Worthington) on May 05, 2011

Method of Establishing Relieving Capacity: Flow Capacity, 1 valve method

Certified Value: 151 SCFM

Test Medium: Air

Certified Medium: Air

Special Service: None

Set Pressure Definition: Initial Audible Discharge

Blowdown: Fixed

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
2 NPS	2 NPS	1.227 sq in	1.75 in	0.51 in	-3 psi	Air	III

Certification Number: **55561** Design Series or catalog number: **6BG (08U-011)**

Type Classification: Vacuum Relief Valve

Capacity Tests: Sec. III ND at National Board T L (Worthington) on July 08, 2011

Method of Establishing Relieving Capacity: Flow Capacity, 1 valve method

Certified Value: 1051 SCFM

Test Medium: Air

Certified Medium: Air/Gas

Special Service: None

Set Pressure Definition: Initial Audible Discharge

Blowdown: Fixed

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
4 NPS		12.7 sq in	4.03 in	1.5 in	-0.3 psi	Air	III

Taylor Valve Technology, Incorporated (TTS)

NB#: 56146

location: 8300 SW 8th Street, Oklahoma City, OK 73128 United States

Taylor Valve Technology, Incorporated (TTS)

location: 8300 SW 8th Street, Oklahoma City, OK 73128 United States

Certification Number: **56146** Design Series or catalog number: **82-025000, 82-035000**

Type Classification: **Safety Relief Valve**Capacity Tests: **Sec. VIII Div. 1 at National Board T L (Worthington) on July 14, 1992**Method of Establishing Relieving Capacity: **Flow Capacity, Slope**Certified Value: **3.24 SCFM/PSIA**Test Medium: **Air/Gas**Certified Medium: **Air/Gas**Special Service: **None**Set Pressure Definition: **Pop**Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
0.75 - 1 NPS		0.212 sq in	0.52 in	0.19 in	15 - 2500 psi	Air	VIII

Certification Number: **56157** Design Series or catalog number: **82-025000, 82-035000 (Liquids)**

Type Classification: **Relief Valve**Capacity Tests: **Sec. VIII Div. 1 at National Board T L (Worthington) on July 13, 1992**Method of Establishing Relieving Capacity: **Flow Capacity, Flow Factor**Certified Value: **5.29 GPM/SQ.RT. PSID**Test Medium: **Water**Certified Medium: **Liquid**Special Service: **None**Set Pressure Definition: **First Steady Stream**Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
0.5 - 1 NPS	1 NPS	0.212 sq in	0.52 in	0.19 in	15 - 2500 psi	Water	VIII

Certification Number: **56168** Design Series or catalog number: **82-055000, 82-065000**

Type Classification: **Safety Relief Valve**Capacity Tests: **Sec. VIII Div. 1 at National Board T L (Worthington) on July 13, 1992**Method of Establishing Relieving Capacity: **Flow Capacity, Slope**Certified Value: **6.8 SCFM/PSIA**Test Medium: **Air/Gas**Certified Medium: **Air/Gas**Special Service: **None**Set Pressure Definition: **Pop**Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
1.25 - 2 NPS		0.472 sq in	0.775 in	0.3 in	15 - 2000 psi	Air	VIII

Certification Number: **56179** Design Series or catalog number: **82-055000, 82-065000 (Liquids)**

Type Classification: **Relief Valve**

Capacity Tests: **Sec. VIII Div. 1 at National Board T L (Worthington) on July 14, 1992**

Method of Establishing Relieving Capacity: **Flow Capacity, Slope**

Certified Value: **10.54 GPM/SQ.RT. PSID**

Test Medium: **Water**

Certified Medium: **Liquid**

Special Service: **None**

Set Pressure Definition: **First Steady Stream**

Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
1.25 - 2 NPS	2 NPS	0.472 sq in	0.775 in	0.3 in	15 - 2000 psi	Water	VIII

Certification Number: **56180** Design Series or catalog number: **82-005000**

Type Classification: **Safety Relief Valve**

Capacity Tests: **Sec. VIII Div. 1 at National Board T L (Worthington) on June 23, 1993**

Method of Establishing Relieving Capacity: **Flow Capacity, Slope**

Certified Value: **3.08 SCFM/PSIA**

Test Medium: **Air/Gas**

Certified Medium: **Air/Gas**

Special Service: **None**

Set Pressure Definition: **Pop**

Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
0.5 NPS	1, 1.5 NPS	0.212 sq in	0.52 in	0.19 in	15 - 2500 psi	Air	VIII Div. 1

Certification Number: **56191** Design Series or catalog number: **83-001000 (Liquids)**

Type Classification: **Safety Relief Valve**

Capacity Tests: **Sec. VIII Div. 1 at National Board T L (Worthington) on July 28, 1993**

Method of Establishing Relieving Capacity: **Flow Capacity, Flow Factor**

Certified Value: **34.62 GPM/SQ.RT. PSID**

Test Medium: **Water**

Certified Medium: **Liquid**

Special Service: **None**

Set Pressure Definition: **First Steady Stream**

Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
2 - 3 NPS	3 NPS	1.43 sq in	1.35 in	0.58 in	15 - 1500 psi	Water	VIII Div. 1

Certification Number: **56203** Design Series or catalog number: **83-001000 (Air and Gas)**

Type Classification: **Safety Relief Valve**

Capacity Tests: **Sec. VIII Div. 1 at National Board T L (Worthington) on July 27, 1993**

Method of Establishing Relieving Capacity: **Flow Capacity, Slope**

Certified Value: **21.2 SCFM/PSIA**

Test Medium: **Air/Gas**

Certified Medium: **Air/Gas**

Special Service: **None**

Set Pressure Definition: **Pop**

Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
2.5 - 3 NPS	3 NPS	1.431 sq in	1.35 in	0.58 in	15 - 1500 psi	Air	VIII

Certification Number: **56214** Design Series or catalog number: **83-002000 (Air and Gas)**

Type Classification: **Safety Relief Valve**

Capacity Tests: **Sec. VIII Div. 1 at National Board T L (Worthington) on October 07, 1993**

Method of Establishing Relieving Capacity: **Flow Capacity, Slope**

Certified Value: **29.03 SCFM/PSIA**

Test Medium: **Air/Gas**

Certified Medium: **Air/Gas**

Special Service: **None**

Set Pressure Definition: **Pop**

Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
2.5 - 3 NPS	3 NPS	2.138 sq in	1.65 in	0.65 in	15 - 1000 psi	Air	VIII

Certification Number: **56225** Design Series or catalog number: **82-004000**

Type Classification: **Safety Relief Valve**

Capacity Tests: **Sec. VIII Div. 1 at National Board T L (Worthington) on August 19, 1997**

Method of Establishing Relieving Capacity: **Flow Capacity, Slope**

Certified Value: **1.967 SCFM/PSIA**

Test Medium: **Air/Gas**

Certified Medium: **Air/Gas**

Special Service: **None**

Set Pressure Definition: **Pop**

Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
0.5 - 1 NPS	1 NPS	0.128 sq in	0.404 in	0.17 in	15 - 6500 psi	Air	VIII

Certification Number: **56247** Design Series or catalog number: **82-007000**

Type Classification: **Safety Relief Valve**

Capacity Tests: **Sec. VIII Div. 1 at National Board T L (Worthington) on August 19, 1997**

Method of Establishing Relieving Capacity: **Flow Capacity, Slope**

Certified Value: **14.0 SCFM/PSIA**

Test Medium: **Air/Gas**

Certified Medium: **Air/Gas**

Special Service: **None**

Set Pressure Definition: **Pop**

Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
1.25 - 2 NPS	2 NPS	0.913 sq in	1.078 in	0.41 in	15 - 2000 psi	Air	VIII Div. 1

Certification Number: **56269** Design Series or catalog number: **82-006000**

Type Classification: **Safety Relief Valve**

Capacity Tests: **Sec. VIII Div. 1 at National Board T L (Worthington) on August 19, 1997**

Method of Establishing Relieving Capacity: **Flow Capacity, Slope**

Certified Value: **5.465 SCFM/PSIA**

Test Medium: **Air/Gas**

Certified Medium: **Air/Gas**

Special Service: **None**

Set Pressure Definition: **Pop**

Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
0.75 - 1 NPS	1 NPS	0.357 sq in	0.674 in	0.27 in	15 - 2500 psi	Air	VIII

Certification Number: **56304** Design Series or catalog number: **632 Series (Liquids)**

Type Classification: **Relief Valve**

Capacity Tests: **Sec. VIII Div. 1 at National Board T L (Worthington) on January 20, 2000**

Method of Establishing Relieving Capacity: **Flow Capacity, K**

Certified Value: **.800 Unitless**

Test Medium: **Water**

Certified Medium: **Liquid**

Set Pressure Definition: **First Steady Stream**

Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
0.5 - 0.75 NPS	.75 NPS	0.121 sq in	[D] 0.393 in	0.098 in	15 - 250 psi	Water	VIII Div. 1
0.75 - 1 NPS	1 NPS	0.216 sq in	[E] 0.524 in	0.131 in	15 - 250 psi	Water	VIII Div. 1
1 - 1.25 NPS	1.25 NPS	0.337 sq in	[F] 0.655 in	0.164 in	15 - 250 psi	Water	VIII Div. 1
1.25 - 1.5 NPS	1.5 NPS	0.552 sq in	[G] 0.838 in	0.21 in	15 - 250 psi	Water	VIII Div. 1
1.5 - 2 NPS	2 NPS	0.866 sq in	[H] 1.05 in	0.263 in	15 - 250 psi	Water	VIII Div. 1

Certification Number: **56315** Design Series or catalog number **9300, 9300M & 9300S**

Type Classification: **Pilot Operated Pressure Relief Valve**

Capacity Tests: **Sec. VIII Div. 1 at National Board T L (Worthington) on April 23, 2002**

Method of Establishing Relieving Capacity: **Flow Capacity, K**

Certified Value: **.878 Unitless**

Test Medium: **Steam & Air/Gas**

Certified Medium: **Steam & Air/Gas**

Special Service: **None**

Set Pressure Definition: **1.Pop 2.Initial Audible Discharge**

Blowdown: **Adjustable and Fixed for Mod. Pilot**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
1 - 1.5 NPS	2 NPS	0.128 sq in	[D] 0.404 in	0.202 in	15 - 3705 psi	Air	VIII Div. 1
		0.212 sq in	[E] 0.52 in	0.26 in	15 - 3705 psi	Air	VIII Div. 1
		0.357 sq in	[F] 0.674 in	0.337 in	15 - 3705 psi	Air	VIII Div. 1
1.5 - 2 NPS	3 NPS	0.472 sq in	[G] 0.775 in	0.388 in	15 - 3705 psi	Air	VIII Div. 1
		0.913 sq in	[H] 1.078 in	0.539 in	15 - 3705 psi	Air	VIII Div. 1
2 - 3 NPS	3, 4 NPS	1.431 sq in	[J] 1.35 in	0.675 in	15 - 2000 psi	Air	VIII Div. 1
3 NPS	4 NPS	2.138 sq in	[K] 1.65 in	0.825 in	15 - 2000 psi	Air	VIII Div. 1
3 - 4 NPS	4, 6 NPS	3.205 sq in	[L] 2.02 in	1.01 in	15 - 2000 psi	Air	VIII Div. 1
4 NPS	6 NPS	4.083 sq in	[M] 2.28 in	1.14 in	15 - 2000 psi	Air	VIII Div. 1
		4.909 sq in	[N] 2.5 in	1.25 in	15 - 2000 psi	Air	VIII Div. 1
		7.069 sq in	[P] 3 in	1.5 in	15 - 1480 psi	Air	VIII Div. 1
6 NPS	8 NPS	12.566 sq in	[Q] 4 in	2 in	15 - 1480 psi	Air	VIII Div. 1
		17.721 sq in	[R] 4.75 in	2.375 in	15 - 1480 psi	Air	VIII Div. 1
8 NPS	10 NPS	25.967 sq in	[T] 5.75 in	2.875 in	15 - 1480 psi	Air	VIII Div. 1

Certification Number: **56326** Design Series or catalog number **9300FB**

Type Classification: **Pilot Operated Pressure Relief Valve**

Capacity Tests: **Sec. VIII Div. 1 at National Board T L (Worthington) on July 31, 2002**

Method of Establishing Relieving Capacity: **Flow Capacity, K**

Certified Value: **.774 Unitless**

Test Medium: **Air/Gas**

Certified Medium: **Air/Gas**

Special Service: **None**

Set Pressure Definition: **Pop**

Blowdown: **Adjustable by Other means**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
1.5 NPS	2, 3 NPS	1.767 sq in	1.5 in	0.75 in	15 - 2000 psi	Air	VIII Div. 1
2 NPS	3 NPS	2.953 sq in	1.939 in	0.97 in	15 - 2000 psi	Air	VIII Div. 1
3 NPS	4 NPS	6.605 sq in	2.9 in	1.45 in	15 - 1480 psi	Air	VIII Div. 1
4 NPS	6 NPS	11.491 sq in	3.825 in	1.915 in	15 - 1480 psi	Air	VIII Div. 1
6 NPS	8 NPS	26.067 sq in	5.761 in	2.88 in	15 - 1480 psi	Air	VIII Div. 1
8 NPS	10 NPS	45.664 sq in	7.625 in	3.812 in	15 - 1480 psi	Air	VIII Div. 1

Certification
Number: **56371**Design Series
or catalog number **9300M**Type Classification: **Pilot Operated Pressure Relief Valve**Capacity Tests: **Sec. VIII Div. 1 at National Board T L (Worthington) on September 15, 2011**Method of Establishing Relieving Capacity: **Flow Capacity, K**Certified Value: **.829 Unitless**Test Medium: **Water**Certified Medium: **Liquid**Set Pressure Definition: **First Steady Stream**Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
1 - 1.5 NPS	2 NPS	0.128 sq in	[D] 0.404 in	0.202 in	15 - 3705 psi	Water	VIII Div. 1
		0.212 sq in	[E] 0.52 in	0.26 in	15 - 3705 psi	Water	VIII Div. 1
		0.357 sq in	[F] 0.674 in	0.337 in	15 - 3705 psi	Water	VIII Div. 1
1.5 - 2 NPS	3 NPS	0.472 sq in	[G] 0.775 in	0.388 in	15 - 3705 psi	Water	VIII Div. 1
		0.913 sq in	[H] 1.078 in	0.539 in	15 - 3705 psi	Water	VIII Div. 1
2 - 3 NPS	3, 4 NPS	1.431 sq in	[J] 1.35 in	0.675 in	15 - 2000 psi	Water	VIII Div. 1
3 NPS	4 NPS	2.138 sq in	[K] 1.65 in	0.825 in	15 - 2000 psi	Water	VIII Div. 1
3 - 4 NPS	4, 6 NPS	3.205 sq in	[L] 2.02 in	1.01 in	15 - 2000 psi	Water	VIII Div. 1
4 NPS	6 NPS	4.083 sq in	[M] 2.28 in	1.145 in	15 - 2000 psi	Water	VIII Div. 1
		4.909 sq in	[N] 2.5 in	1.25 in	15 - 2000 psi	Water	VIII Div. 1
		7.069 sq in	[P] 3 in	1.5 in	15 - 1480 psi	Water	VIII Div. 1
6 NPS	8 NPS	12.566 sq in	[Q] 4 in	2 in	15 - 1480 psi	Water	VIII Div. 1
		17.721 sq in	[R] 4.75 in	2.375 in	15 - 1480 psi	Water	VIII Div. 1
8 NPS	10 NPS	25.967 sq in	[T] 5.75 in	2.875 in	15 - 1480 psi	Water	VIII Div. 1

Technical S.R.L. (TCI)

NB#: 74135

location: Via Toscana, 9, Vignate, Milano 20060 Italy

Technical S.R.L. (TCI)

location: Via Toscana, 9, Vignate, Milano 20060 Italy

Certification Number: **74135** Design Series or catalog number: **Series 10000**

Type Classification: **Safety Relief Valve**Capacity Tests: **Sec. VIII Div. 1 at National Board T L (Worthington) on December 13, 2010**Method of Establishing Relieving Capacity: **Flow Capacity, K**Certified Value: **.875 Unitless**Test Medium: **Steam & Air/Gas**Certified Medium: **Steam & Air/Gas**Set Pressure Definition: **Initial Audible Discharge**Blowdown: **Adjustable by Single Ring**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
0.75 - 1 NPS	1 - 2 NPS	0.121 sq in	[D] 10 mm		1 - 413 bar	Air	VIII Div. 1
0.75 - 2 NPS	1.5, 2 NPS	0.221 sq in	[E] 13.5 mm		1 - 413 bar	Air	VIII Div. 1
1 - 2 NPS	1.5, 2 NPS	0.372 sq in	[F] 17.5 mm		1 - 350 bar	Air	VIII Div. 1
1.5 - 2 NPS	2 NPS	0.562 sq in	[G] 21.5 mm		1 - 330 bar	Air	VIII Div. 1
		0.887 sq in	[H] 27 mm		1 - 40 bar	Air	VIII Div. 1

Certification Number: **74146** Design Series or catalog number: **Series 20000**

Type Classification: **Safety Relief Valve**Capacity Tests: **Sec. VIII Div. 1 at National Board T L (Worthington) on December 13, 2010**Method of Establishing Relieving Capacity: **Flow Capacity, Slope**Certified Value: **1.703 SCFM/PSIA**Certified Value (alternate medium): **4.784 PPH/PSIA**Test Medium: **Steam & Air/Gas**Certified Medium: **Steam & Air/Gas**Set Pressure Definition: **Initial Audible Discharge**Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
0.5 - 1 NPS	1 NPS	0.11 sq in	[D] 0.375 in		1 - 700 bar	Air	VIII Div. 1

location: Via Toscana, 9, Vignate, Milano 20060 Italy

Certification Number: **74157** Design Series or catalog number **Series 30000**

Type Classification: **Safety Relief Valve**Capacity Tests: **Sec. VIII Div. 1 at National Board T L (Worthington) on May 04, 2010**Method of Establishing Relieving Capacity: **Flow Capacity, K**Certified Value: **.856 Unitless**Test Medium: **Steam & Air/Gas**Certified Medium: **Steam & Air/Gas**Set Pressure Definition: **Initial Audible Discharge**Blowdown: **Adjustable by Single Ring**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
1 - 1.5 NPS	2, 3 NPS	0.121 sq in	[D] 10 mm		1 - 413 bar	Air	VIII Div. 1
		0.215 sq in	[E] 13.3 mm		1 - 413 bar	Air	VIII Div. 1
1.5 NPS	2, 3 NPS	0.335 sq in	[F] 16.6 mm		1 - 344 bar	Air	VIII Div. 1
1.5 - 2 NPS	3 NPS	0.547 sq in	[G] 21.2 mm		1 - 255 bar	Air	VIII Div. 1
		0.854 sq in	[H] 26.5 mm		1 - 189 bar	Air	VIII Div. 1
2 - 3 NPS	3, 4 NPS	1.407 sq in	[J] 34 mm		1 - 186 bar	Air	VIII Div. 1
3 NPS	4, 6 NPS	2.006 sq in	[K] 40.6 mm		1 - 153 bar	Air	VIII Div. 1
3 - 4 NPS	4, 6 NPS	3.116 sq in	[L] 50.6 mm		1 - 103 bar	Air	VIII Div. 1
4 NPS	6 NPS	3.116 sq in	[M] 56.8 mm		1 - 75 bar	Air	VIII Div. 1
		4.74 sq in	[N] 62.4 mm		1 - 68 bar	Air	VIII Div. 1
		6.976 sq in	[P] 75.7 mm		1 - 68 bar	Air	VIII Div. 1
6 NPS	8 NPS	12.07 sq in	[Q] 99.6 mm		1 - 41 bar	Air	VIII Div. 1
	8, 10 NPS	17.47 sq in	[R] 119.8 mm		1 - 20 bar	Air	VIII Div. 1
8 NPS	10 NPS	28.42 sq in	[T] 152.8 mm		1 - 20 bar	Air	VIII Div. 1
10 NPS	12 NPS	39.43 sq in	[U] 180 mm		1 - 12 bar	Air	VIII Div. 1

Certification Number: **74179** Design Series or catalog number **Series 30000 (Liquid)**

Type Classification: **Safety Relief Valve**Capacity Tests: **Sec. VIII Div. 1 at National Board T L (Worthington) on September 24, 2010**Method of Establishing Relieving Capacity: **Flow Capacity, K**Certified Value: **.72 Unitless**Test Medium: **Water**Certified Medium: **Liquid**Set Pressure Definition: **Start-to-Leak**Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
1 - 1.5 NPS	2, 3 NPS	0.121 sq in	[D] 10 mm		1 - 413 bar	Water	VIII Div. 1
		0.215 sq in	[E] 13.3 mm		1 - 413 bar	Water	VIII Div. 1
1.5 NPS	2, 3 NPS	0.335 sq in	[F] 16.6 mm		1 - 344 bar	Water	VIII Div. 1
1.5 - 2 NPS	3 NPS	0.547 sq in	[G] 21.2 mm		1 - 255 bar	Water	VIII Div. 1
		0.854 sq in	[H] 26.5 mm		1 - 189 bar	Water	VIII Div. 1
2 - 3 NPS	3, 4 NPS	1.407 sq in	[J] 34 mm		1 - 186 bar	Water	VIII Div. 1
3 NPS	4, 6 NPS	2.006 sq in	[K] 40.6 mm		1 - 153 bar	Water	VIII Div. 1
3 - 4 NPS	4, 6 NPS	3.116 sq in	[L] 50.6 mm		1 - 103 bar	Water	VIII Div. 1
4 NPS	6 NPS	3.927 sq in	[M] 56.8 mm		1 - 75 bar	Water	VIII Div. 1
		4.74 sq in	[N] 62.4 mm		1 - 68 bar	Water	VIII Div. 1
		6.976 sq in	[P] 75.7 mm		1 - 68 bar	Water	VIII Div. 1
6 NPS	8 NPS	12.07 sq in	[Q] 99.6 mm		1 - 41 bar	Water	VIII Div. 1
	8, 10 NPS	17.47 sq in	[R] 119.8 mm		1 - 20 bar	Water	VIII Div. 1
8 NPS	10 NPS	28.42 sq in	[T] 152.8 mm		1 - 20 bar	Water	VIII Div. 1
10 NPS	12 NPS	39.43 sq in	[U] 180 mm		1 - 12 bar	Water	VIII Div. 1

TOA Valve Engineering Inc. (TOA)

NB#: 01450

location: 5-12-1, Nishitachibana-cho, Amagasaki-shi, Hyogo 660-0054 Japan

Acceptable Abbrev.: TVE

TOA Valve Engineering Inc. (TOA)

location: 5-12-1, Nishitachibana-cho, Amagasaki-shi, Hyogo 660-0054 Japan

Acceptable Abbrev.: TVE

Certification Number: **01450** Design Series or catalog number: **A1700**

Type Classification: **Safety Valve**Capacity Tests: **Sec. I at National Board T L (Worthington) on June 21, 2017**Method of Establishing Relieving Capacity: **Flow Capacity, K**Certified Value: **0.864 Unitless**Test Medium: **Steam**Certified Medium: **Steam**Special Service: **None**Set Pressure Definition: **Pop**Blowdown: **Adjustable by Dual Ring**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
1.25 - 1.5 NPS	2.0, 3.0 NPS	0.638 sq in	0.9016 in	0.229 in	70 - 2872 psi	Steam	I & VIII Div. 1
		0.689 sq in	0.9371 in	0.237 in	70 - 2872 psi	Steam	I & VIII Div. 1
		0.701 sq in	0.9449 in	0.237 in	70 - 2872 psi	Steam	I & VIII Div. 1
1.5 - 2 NPS	2.5, 4.0 NPS	0.995 sq in	1.126 in	0.284 in	70 - 3191 psi	Steam	I & VIII Div. 1
		1.095 sq in	1.1812 in	0.296 in	70 - 3191 psi	Steam	I & VIII Div. 1
		1.188 sq in	1.23 in	0.308 in	70 - 3191 psi	Steam	I & VIII Div. 1
2 - 2.5 NPS	3.0, 4.0 NPS	1.711 sq in	1.4764 in	0.371 in	70 - 3191 psi	Steam	I & VIII Div. 1
		1.767 sq in	1.5 in	0.378 in	70 - 3191 psi	Steam	I & VIII Div. 1
		1.957 sq in	1.5788 in	0.398 in	70 - 3191 psi	Steam	I & VIII Div. 1
2.5 - 3 NPS	4.0-8.0 NPS	2.758 sq in	1.8741 in	0.469 in	70 - 6223 psi	Steam	I & VIII Div. 1
		2.899 sq in	1.9213 in	0.481 in	70 - 6223 psi	Steam	I & VIII Div. 1
	6.0, 8.0 NPS	3.031 sq in	1.9646 in	0.493 in	727 - 6223 psi	Steam	I & VIII Div. 1
3 - 3.5 NPS	4.0-6.0 NPS	3.458 sq in	2.0985 in	0.528 in	70 - 3191 psi	Steam	I & VIII Div. 1
	5.0-8.0 NPS	3.858 sq in	2.2166 in	0.556 in	70 - 6223 psi	Steam	I & VIII Div. 1
		3.983 sq in	2.252 in	0.563 in	70 - 6223 psi	Steam	I & VIII Div. 1
	8.0 NPS	4.166 sq in	2.3032 in	0.579 in	727 - 6223 psi	Steam	I & VIII Div. 1
	5.0-8.0 NPS	4.382 sq in	2.3623 in	0.591 in	70 - 6223 psi	Steam	I & VIII Div. 1
		4.664 sq in	2.4371 in	0.611 in	70 - 3191 psi	Steam	I & VIII Div. 1
3.5 - 4 NPS	6.0 NPS	5.415 sq in	2.626 in	0.658 in	70 - 2234 psi	Steam	I & VIII Div. 1
		5.546 sq in	2.6575 in	0.666 in	70 - 2234 psi	Steam	I & VIII Div. 1
		5.931 sq in	2.7481 in	0.689 in	70 - 2234 psi	Steam	I & VIII Div. 1
4 - 5 NPS	6.0-8.0 NPS	6.847 sq in	2.9528 in	0.741 in	70 - 1755 psi	Steam	I & VIII Div. 1
		7.068 sq in	3 in	0.752 in	70 - 1755 psi	Steam	I & VIII Div. 1
		7.559 sq in	3.1024 in	0.776 in	70 - 1755 psi	Steam	I & VIII Div. 1
		8.145 sq in	3.2205 in	0.808 in	70 - 1755 psi	Steam	I & VIII Div. 1
		10.711 sq in	3.693 in	0.926 in	70 - 1755 psi	Steam	I & VIII Div. 1
		11.056 sq in	3.752 in	0.941 in	70 - 1755 psi	Steam	I & VIII Div. 1
5 - 6 NPS	8.0-10.0 NPS	12.393 sq in	3.9725 in	0.997 in	70 - 1755 psi	Steam	I & VIII Div. 1
		15.407 sq in	4.4292 in	1.111 in	70 - 1755 psi	Steam	I & VIII Div. 1
		15.903 sq in	4.5 in	1.126 in	70 - 1755 psi	Steam	I & VIII Div. 1
6 - 8 NPS	10.0-12.0 NPS	17.094 sq in	4.6654 in	1.17 in	70 - 1755 psi	Steam	I & VIII Div. 1
		19.295 sq in	4.9567 in	1.241 in	70 - 1755 psi	Steam	I & VIII Div. 1
		27.39 sq in	5.9056 in	1.477 in	70 - 320 psi	Steam	I & VIII Div. 1
8 - 10 NPS	12.0, 14.0 NPS	28.273 sq in	6 in	1.5 in	70 - 320 psi	Steam	I & VIII Div. 1
		28.646 sq in	6.0394 in	1.512 in	70 - 320 psi	Steam	I & VIII Div. 1

TOA Valve Engineering Inc. (TOA)

NB#: 01461

location: 5-12-1, Nishitachibana-cho, Amagasaki-shi, Hyogo 660-0054 Japan

Acceptable Abbrev.: TVE

Certification
Number: **01461**Design Series
or catalog number **A1900**Type Classification: **Power Actuated Relief Valve**Capacity Tests: **Sec. I at National Board T L (Worthington) on December 14, 2016**Method of Establishing Relieving Capacity: **Flow Capacity, Slope**Certified Value: **115.6 PPH/PSIA**Test Medium: **Steam**Certified Medium: **Steam**Special Service: **None**Set Pressure Definition: **Power Actuated**Blowdown: **Adjustable**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
2.5 NPS	4 NPS	3.291 sq in	2.0473 in	0.985 in	15 - 6223 psi	Steam	I

Total Valve Systems (TVO)

NB#: 00606

location: 1300 East Memphis, Broken Arrow, OK 74012 United States

Acceptable Abbrev.: TVS

Total Valve Systems (TVO)

location: 1300 East Memphis, Broken Arrow, OK 74012 United States

Acceptable Abbrev.: TVS

Certification
Number: 00606Design Series
or catalog number TRV 6820

Capacity Tests: Sec. VIII Div. 1 at Oseco, Inc. on June 25, 2014

Method of Establishing Relieving Capacity: Resistance Factor, 3 Size, Krg

Certified Value: 9.53 Unitless

Test Medium: Air or gases (Krg)

Certified Medium: Air or gases (Krg)

Set Pressure Definition: Pop

Scope of Nominal Size and Set Pressure Ranges:

Inlet Size	Outlet Size	Flow Area	Orifice [designator] diameter	Lift	Set Pressure Range	Media	Code Section
6 NPS		9.8 sq in			15 - 1480 psi	Air	VIII Div. 1
		12.8 sq in			15 - 740 psi	Air	VIII Div. 1
		15.5 sq in			15 - 285 psi	Air	VIII Div. 1
8 NPS		23.2 sq in			15 - 1480 psi	Air	VIII Div. 1
		27.8 sq in			15 - 740 psi	Air	VIII Div. 1
		29.2 sq in			15 - 285 psi	Air	VIII Div. 1
10 NPS		41.6 sq in			15 - 1480 psi	Air	VIII Div. 1
		46.6 sq in			15 - 740 psi	Air	VIII Div. 1
		49 sq in			15 - 285 psi	Air	VIII Div. 1
12 NPS		60.5 sq in			15 - 1480 psi	Air	VIII Div. 1
		66.8 sq in			15 - 740 psi	Air	VIII Div. 1
		75.5 sq in			15 - 285 psi	Air	VIII Div. 1
14 NPS		87.6 sq in			15 - 1480 psi	Air	VIII Div. 1
		93.5 sq in			15 - 740 psi	Air	VIII Div. 1
		97.6 sq in			15 - 285 psi	Air	VIII Div. 1
16 NPS		116.7 sq in			15 - 1480 psi	Air	VIII Div. 1
		123.9 sq in			15 - 740 psi	Air	VIII Div. 1
		128.6 sq in			15 - 285 psi	Air	VIII Div. 1
18 NPS		152.4 sq in			15 - 1480 psi	Air	VIII Div. 1
		158.8 sq in			15 - 740 psi	Air	VIII Div. 1
		164.2 sq in			15 - 285 psi	Air	VIII Div. 1
20 NPS		194.4 sq in			15 - 1480 psi	Air	VIII Div. 1
		204.5 sq in			15 - 740 psi	Air	VIII Div. 1
		210.6 sq in			15 - 285 psi	Air	VIII Div. 1
24 NPS		286.2 sq in			15 - 1480 psi	Air	VIII Div. 1
		307 sq in			15 - 740 psi	Air	VIII Div. 1
		324.7 sq in			15 - 285 psi	Air	VIII Div. 1
36 NPS		762.9 sq in			15 - 740 psi	Air	VIII Div. 1
		787.7 sq in			15 - 285 psi	Air	VIII Div. 1
48 NPS		1358.2 sq in			15 - 740 psi	Air	VIII Div. 1
		1425.5 sq in			15 - 285 psi	Air	VIII Div. 1

V TEX Corporation (VTX)

NB#: 00471

location: 1263 Tarazaki, Hitachinaka-City, Ibaraki 312-0003 Japan

Acceptable Abbrev.: VTEX

V TEX Corporation (VTX)

location: 1263 Tarazaki, Hitachinaka-City, Ibaraki 312-0003 Japan

Acceptable Abbrev.: VTEX

Certification
Number: 00471Design Series
or catalog number FB Series

Holder Designation: FBF, FBS

Type Classification: Rupture Disk Device

Capacity Tests: Sec. VIII Div. 1 at National Board T L (Worthington) on June 10, 2014

Method of Establishing Relieving Capacity: Flow Capacity, K

Certified Value: 1.00 Unitless

Test Medium: Air/Gas

Certified Medium: Air or gases (Krg)

Special Service: None

Set Pressure Definition: Burst Pressure

Scope of Nominal Size and Set Pressure Ranges:

Inlet Size	Outlet Size	Flow Area	Orifice [designator] diameter	Lift	Set Pressure Range	Media	Code Section
1 NPS	1 NPS	0.773 sq in			49 - 1450 psi	Air	VIII Div. 1
1.5 NPS	1.5 NPS	1.87 sq in			35 - 1160 psi	Air	VIII Div. 1
2 NPS	2.0 NPS	3.35 sq in			28 - 1160 psi	Air	VIII Div. 1
3 NPS	3 NPS	7.39 sq in			25 - 1015 psi	Air	VIII Div. 1
4 NPS	4 NPS	12.7 sq in			22 - 1015 psi	Air	VIII Div. 1
6 NPS	6 NPS	28.8 sq in			20 - 800 psi	Air	VIII Div. 1
8 NPS	8 NPS	50 sq in			15 - 580 psi	Air	VIII Div. 1
10 NPS	10 NPS	78.5 sq in			15 - 435 psi	Air	VIII Div. 1
12 NPS	12 NPS	111 sq in			12 - 290 psi	Air	VIII Div. 1
14 NPS	14 NPS	137 sq in			12 - 290 psi	Air	VIII Div. 1
16 NPS	16 NPS	182 sq in			12 - 290 psi	Air	VIII Div. 1
18 NPS	18 NPS	233 sq in			12 - 290 psi	Air	VIII Div. 1
20 NPS	20 NPS	291 sq in			12 - 290 psi	Air	VIII Div. 1
24 NPS	24 NPS	424 sq in			10 - 145 psi	Air	VIII Div. 1
26 NPS	26 NPS	499 sq in			10 - 145 psi	Air	VIII Div. 1
28 NPS	28 NPS	580 sq in			10 - 145 psi	Air	VIII Div. 1
30 NPS	30 NPS	667 sq in			10 - 145 psi	Air	VIII Div. 1
32 NPS	32 NPS	760 sq in			10 - 145 psi	Air	VIII Div. 1
34 NPS	34 NPS	851 sq in			10 - 145 psi	Air	VIII Div. 1
36 NPS	36 NPS	956 sq in			10 - 145 psi	Air	VIII Div. 1

V TEX Corporation (VTX)

NB#: 01584

location: 1263 Tarazaki, Hitachinaka-City, Ibaraki 312-0003 Japan

Acceptable Abbrev.: VTEX

Certification
Number: **01584**Design Series
or catalog number **FMB Series**Type Classification: **Rupture Disk Device**Capacity Tests: **Control Script failed for control txtCoc , Source=**Method of Establishing Relieving Capacity: **Resistance Factor, 3 Size, Krg**Certified Value: **0.90 Unitless**Test Medium: **Air/Gas**Certified Medium: **Air/Gas**Special Service: **None**Set Pressure Definition: **Burst Pressure**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
1 NPS		0.821 sq in			79 - 2030 psi	Air	VIII Div. 1
1.5 NPS		1.94 sq in			60 - 2030 psi	Air	VIII Div. 1
2 NPS		3.35 sq in			55 - 2030 psi	Air	VIII Div. 1
3 NPS		7.39 sq in			48 - 1885 psi	Air	VIII Div. 1
		8.89 sq in			45 - 1885 psi	Air	VIII Div. 1
4 NPS		12.7 sq in			40 - 1450 psi	Air	VIII Div. 1
6 NPS		28.8 sq in			30 - 800 psi	Air	VIII Div. 1
8 NPS		50 sq in			35 - 580 psi	Air	VIII Div. 1
10 NPS		78.8 sq in			26 - 435 psi	Air	VIII Div. 1
12 NPS		113 sq in			22 - 290 psi	Air	VIII Div. 1
14 NPS		138 sq in			26 - 290 psi	Air	VIII Div. 1
16 NPS		187 sq in			22 - 290 psi	Air	VIII Div. 1
18 NPS		233 sq in			18 - 290 psi	Air	VIII Div. 1
20 NPS		291 sq in			15 - 290 psi	Air	VIII Div. 1

ValvTechnologies, Incorporated (VLC)

NB#: 59015

location: 5904 Bingle Road, Houston, TX 77092 United States

ValvTechnologies, Incorporated (VLC)

location: 5904 Bingle Road, Houston, TX 77092 United States

Certification Number: **59015** Design Series or catalog number: **E*L114**

Type Classification: **Power Actuated Relief Valve**Capacity Tests: **Sec. I at National Board T L (Worthington) on September 09, 1993**Method of Establishing Relieving Capacity: **Flow Capacity, Slope**Certified Value: **73.7 PPH/PSIA**Test Medium: **Steam**Certified Medium: **Steam**Set Pressure Definition: **Power Actuated**Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
2.5 NPS	4 NPS	1.767 sq in	1.5 in		15 - 5000 psi	Steam	I

Certification Number: **59026** Design Series or catalog number: **E*L111**

Type Classification: **Power Actuated Relief Valve**Capacity Tests: **Sec. I at National Board T L (Worthington) on September 09, 1993**Method of Establishing Relieving Capacity: **Flow Capacity, Slope**Certified Value: **32.4 PPH/PSIA**Test Medium: **Steam**Certified Medium: **Steam**Set Pressure Definition: **Power Actuated**Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
2.5 NPS	4 NPS	0.886 sq in	1.062 in		15 - 5000 psi	Steam	I

Certification Number: **59037** Design Series or catalog number: **ERV 3 1/16" Bore**

Type Classification: **Power Actuated Relief Valve**Capacity Tests: **Sec. I at National Board T L (Worthington) on June 09, 1997**Method of Establishing Relieving Capacity: **Flow Capacity, Slope**Certified Value: **312.2 PPH/PSIA**Test Medium: **Steam**Certified Medium: **Steam**Set Pressure Definition: **Power Actuated**Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
3 NPS	3 NPS	7.366 sq in	3.063 in		15 - 1440 psi	Steam	I

Certification Number: **59059** Design Series or catalog number: **Z***-05*****_****_*****

Type Classification: **Power Actuated Relief Valve**

Capacity Tests: **Control Script failed for control txtCoc , Source=**

Method of Establishing Relieving Capacity: **Flow Capacity, Slope**

Certified Value: **11.0 PPH/PSIA**

Test Medium: **Steam**

Certified Medium: **Steam**

Set Pressure Definition: **Power Actuated**

Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
0.75 NPS	1.5 NPS	0.307 sq in	0.625 in		15 - 5000 psi	Steam	I

Certification Number: **59060** Design Series or catalog number: **E*9121**

Type Classification: **Power Actuated Relief Valve**

Capacity Tests: **Sec. I at National Board T L (Worthington) on June 16, 1992**

Method of Establishing Relieving Capacity: **Flow Capacity, Slope**

Certified Value: **143.2 PPH/PSIA**

Test Medium: **Steam**

Certified Medium: **Steam**

Set Pressure Definition: **Power Actuated**

Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
2.5 NPS	4 NPS	3.547 sq in	2.125 in		15 - 5000 psi	Steam	I

Certification Number: **59082** Design Series or catalog number: **EOL121NRA*P1-MK1H**

Type Classification: **Power Actuated Relief Valve**

Capacity Tests: **Sec. I at National Board T L (Worthington) on December 04, 2002**

Method of Establishing Relieving Capacity: **Flow Capacity, Slope**

Certified Value: **109.2 PPH/PSIA**

Test Medium: **Steam**

Certified Medium: **Steam**

Set Pressure Definition: **Power Actuated**

Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
2.5 NPS	4 NPS	2.48 sq in	1.777 in		55 - 5000 psi	Steam	I

Certification Number: **59105** Design Series or catalog number: **Z***-105***8***

Type Classification: **Power Actuated Relief Valve**

Capacity Tests: **Sec. I at National Board T L (Worthington) on June 24, 2010**

Method of Establishing Relieving Capacity: **Flow Capacity, Slope**

Certified Value: **38.1 PPH/PSIA**

Test Medium: **Steam**

Certified Medium: **Steam**

Special Service: **None**

Set Pressure Definition: **Power Actuated**

Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
1.5 NPS	3 NPS	0.887 sq in	1.062 in		75 - 5000 psi	Steam	I

Certification Number: **59127** Design Series or catalog number: **Z***1135R55P1 (1.06" Bore)**

Type Classification: **Power Actuated Relief Valve**

Capacity Tests: **Sec. I at National Board T L (Worthington) on May 09, 2014**

Method of Establishing Relieving Capacity: **Flow Capacity, Slope**

Certified Value: **33.7 PPH/PSIA**

Test Medium: **Steam**

Certified Medium: **Steam**

Set Pressure Definition: **Power Actuated**

Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
1 NPS	1.5 NPS	0.882 sq in	1.06 in		15 - 1500 psi	Steam	I

Valvulas Nacional S. A. (VNS)

NB#: 96016

Location: C/ Compositor Chopin, 2-4 (Pol. Ind. "Can Jordi"), Rubi (Barcelona) 08191 Spain

Acceptable Abbrev.: Nacional Safety Valves

Valvulas Nacional S. A. (VNS)

Location: C/ Compositor Chopin, 2-4 (Pol. Ind. "Can Jordi"), Rubi (Barcelona) 08191 Spain

Acceptable Abbrev.: Nacional Safety Valves

Certification Number: **96016** Design Series or catalog number: **6400**

Type Classification: **Safety Relief Valve**Capacity Tests: **Sec. VIII Div. 1 at National Board T L (Worthington) on October 01, 2013**Method of Establishing Relieving Capacity: **Flow Capacity, K**Certified Value: **.873 Unitless**Test Medium: **Gas**Certified Medium: **Air/Gas**Set Pressure Definition: **Initial Audible Discharge**Blowdown: **Adjustable by Single Ring**

Scope of Nominal Size and Set Pressure Ranges:

Inlet Size	Outlet Size	Flow Area	Orifice [designator] diameter	Lift	Set Pressure Range	Media	Code Section
1 - 1.5 NPS	2, 3 NPS	0.122 sq in	[D] 0.394 in	0.157 in	15 - 6004 psi	Air	VIII Div. 1
		0.222 sq in	[E] 0.531 in	0.157 in	15 - 6004 psi	Air	VIII Div. 1
1.5 NPS	2, 3 NPS	0.352 sq in	[F] 0.669 in	0.276 in	15 - 5003 psi	Air	VIII Div. 1
1.5 - 2 NPS	3 NPS	0.563 sq in	[G] 0.846 in	0.354 in	15 - 3698 psi	Air	VIII Div. 1
		0.887 sq in	[H] 1.063 in	0.433 in	15 - 2755 psi	Air	VIII Div. 1
2 - 3 NPS	3, 4 NPS	1.407 sq in	[J] 1.339 in	0.512 in	15 - 2697 psi	Air	VIII Div. 1
3 NPS	4, 6 NPS	2.046 sq in	[K] 1.614 in	0.551 in	15 - 2219 psi	Air	VIII Div. 1
3 - 4 NPS	4, 6 NPS	3.166 sq in	[L] 2.008 in	0.63 in	15 - 1494 psi	Air	VIII Div. 1
4 NPS	6 NPS	4.025 sq in	[M] 2.264 in	0.748 in	15 - 1102 psi	Air	VIII Div. 1
		4.986 sq in	[N] 2.52 in	0.787 in	15 - 1001 psi	Air	VIII Div. 1
		7.218 sq in	[P] 3.031 in	0.945 in	15 - 1001 psi	Air	VIII Div. 1
6 NPS	8 NPS	12.174 sq in	[Q] 3.937 in	1.181 in	15 - 595 psi	Air	VIII Div. 1
	8, 10 NPS	17.53 sq in	[R] 4.724 in	1.339 in	15 - 305 psi	Air	VIII Div. 1
8 NPS	10 NPS	28.497 sq in	[T] 6.024 in	1.654 in	15 - 305 psi	Air	VIII Div. 1

Certification Number: **96027** Design Series or catalog number: **6400 (Liquid)**

Type Classification: **Safety Relief Valve**Capacity Tests: **Sec. VIII Div. 1 at National Board T L (Worthington) on October 01, 2013**Method of Establishing Relieving Capacity: **Flow Capacity, K**Certified Value: **0.72 Unitless**Test Medium: **Water**Certified Medium: **Liquid**Special Service: **None**Set Pressure Definition: **First Steady Stream**Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

Inlet Size	Outlet Size	Flow Area	Orifice [designator] diameter	Lift	Set Pressure Range	Media	Code Section
1 - 1.5 NPS	2, 3 NPS	0.122 sq in	[D] 0.394 in	0.071 in	15 - 6004 psi	Water	VIII Div. 1
		0.222 sq in	[E] 0.531 in	0.209 in	15 - 6004 psi	Water	VIII Div. 1
1.5 NPS	2, 3 NPS	0.352 sq in	[F] 0.669 in	0.26 in	15 - 5003 psi	Water	VIII Div. 1
1.5 - 2 NPS	3 NPS	0.563 sq in	[G] 0.846 in	0.394 in	15 - 3698 psi	Water	VIII Div. 1
		0.887 sq in	[H] 1.063 in	0.512 in	15 - 2755 psi	Water	VIII Div. 1
2 - 3 NPS	3, 4 NPS	1.407 sq in	[J] 1.339 in	0.551 in	15 - 2697 psi	Water	VIII Div. 1
3 NPS	4, 6 NPS	2.046 sq in	[K] 1.614 in	0.63 in	15 - 2219 psi	Water	VIII Div. 1
3 - 4 NPS	4, 6 NPS	3.166 sq in	[L] 2.008 in	0.787 in	15 - 1494 psi	Water	VIII Div. 1
4 NPS	6 NPS	4.025 sq in	[M] 2.264 in	0.866 in	15 - 1102 psi	Water	VIII Div. 1
		4.986 sq in	[N] 2.52 in	0.906 in	15 - 1001 psi	Water	VIII Div. 1
		7.218 sq in	[P] 3.031 in	1.102 in	15 - 1001 psi	Water	VIII Div. 1
6 NPS	8 NPS	12.174 sq in	[Q] 3.937 in	1.22 in	15 - 595 psi	Water	VIII Div. 1
	8, 10 NPS	17.53 sq in	[R] 4.724 in	1.535 in	15 - 305 psi	Water	VIII Div. 1
8 NPS	10 NPS	28.497 sq in	[T] 6.024 in	1.929 in	15 - 305 psi	Water	VIII Div. 1

Watts Regulator Company (WWF)

NB#: 63009

location: 583 South Main Street, Franklin, NH 03235 United States

Acceptable Abbrev.: Watts

Watts Regulator Company (WWF)

NB#: 63009

location: 583 South Main Street, Franklin, NH 03235 United States

Acceptable Abbrev.: Watts

Watts Regulator Company (WWF)

location: 583 South Main Street, Franklin, NH 03235 United States

Acceptable Abbrev.: Watts

Certification Number: **63009** Design Series or catalog number: **3L, 10L, (F, SL, L, LL, LLL, RL) 100XL Mod. M7 (LF prefix also)**

Type Classification: Temperature Actuated Pressure Relief Valve

Capacity Tests: Sec. IV at National Board T L (Picaway) on September 23, 1982

Method of Establishing Relieving Capacity: Flow Capacity, Slope

Certified Value: 2.06 PPH/PSIA

Test Medium: Steam

Certified Medium: Saturated Water

Special Service: None

Set Pressure Definition: 40 CC Method

Blowdown: Fixed

Scope of Nominal Size and Set Pressure Ranges:

Inlet Size	Outlet Size	Flow Area	Orifice [designator] diameter	Lift	Set Pressure Range	Media	Code Section
0.75 NPS	.75 NPS	0.172 sq in	0.468 in	0.062 in	75 - 150 psi	Steam	IV

Certification Number: **63021** Design Series or catalog number: **3/4" 40L, (LL, LLL) 40XL, 140S, 140X, (Z2) Mod. M15 (LF prefix also)**

Type Classification: Temperature Actuated Pressure Relief Valve

Capacity Tests: Sec. IV at Ohio State University (Robinson Laboratory) on March 06, 1973

Method of Establishing Relieving Capacity: Flow Capacity, Slope

Certified Value: 8.00 PPH/PSIA

Test Medium: Steam

Certified Medium: Saturated Water

Special Service: None

Set Pressure Definition: 40 CC Method

Blowdown: Fixed

Scope of Nominal Size and Set Pressure Ranges:

Inlet Size	Outlet Size	Flow Area	Orifice [designator] diameter	Lift	Set Pressure Range	Media	Code Section
0.75 NPS	.75 NPS	0.442 sq in	0.75 in	0.265 in	75 - 150 psi	Steam	IV

Certification Number: **63032** Design Series or catalog number: **1" 40L (LL) 40XL (Z2) , Mod 15 (LF prefix also)**

Type Classification: Temperature Actuated Pressure Relief Valve

Capacity Tests: Sec. IV at Ohio State University (Robinson Laboratory) on March 06, 1971

Method of Establishing Relieving Capacity: Flow Capacity, Slope

Certified Value: 11.88 PPH/PSIA

Test Medium: Steam

Certified Medium: Saturated Water

Set Pressure Definition: 40 CC Method

Blowdown: Fixed

Scope of Nominal Size and Set Pressure Ranges:

Inlet Size	Outlet Size	Flow Area	Orifice [designator] diameter	Lift	Set Pressure Range	Media	Code Section
1 NPS	1 NPS	0.442 sq in	0.75 in	0.265 in	75 - 150 psi	Steam	IV

Watts Regulator Company (WWF)

NB#: 63043

Location: 583 South Main Street, Franklin, NH 03235 United States

Acceptable Abbrev.: Watts

Certification Number: **63043** Design Series or catalog number **1" 140S, 140X (Mod. M15) (LF prefix also)**

Type Classification: Temperature Actuated Pressure Relief Valve

Capacity Tests: Sec. IV at Ohio State University (Robinson Laboratory) on March 07, 1971

Method of Establishing Relieving Capacity: Flow Capacity, Slope

Certified Value: 17.16 PPH/PSIA

Test Medium: Steam

Certified Medium: Saturated Water

Set Pressure Definition: 40 CC Method

Blowdown: Fixed

Scope of Nominal Size and Set Pressure Ranges:

Inlet Size	Outlet Size	Flow Area	Orifice [designator] diameter	Lift	Set Pressure Range	Media	Code Section
1 NPS	1 NPS	0.601 sq in	0.875 in	0.265 in	75 - 150 psi	Steam	IV

Certification Number: **63054** Design Series or catalog number **174A M3, 474A M2, M474-M2 (3/4")(also LF prefix)**

Type Classification: Safety Relief Valve

Capacity Tests: Sec. IV at Ohio State University (Robinson Laboratory) on June 03, 1973

Method of Establishing Relieving Capacity: Flow Capacity, Slope

Certified Value: 13.61 PPH/PSIA

Test Medium: Steam

Certified Medium: Saturated Water

Special Service: None

Set Pressure Definition: Pop

Blowdown: Fixed

Scope of Nominal Size and Set Pressure Ranges:

Inlet Size	Outlet Size	Flow Area	Orifice [designator] diameter	Lift	Set Pressure Range	Media	Code Section
0.75 NPS	.75 NPS	0.442 sq in	0.75 in	0.265 in	30 - 150 psi	Steam	IV

Certification Number: **63065** Design Series or catalog number **174A Model M1 (1")(also LF prefix)**

Type Classification: Safety Relief Valve

Capacity Tests: Sec. IV at Ohio State University (Robinson Laboratory) on February 07, 1957

Method of Establishing Relieving Capacity: Flow Capacity, Slope

Certified Value: 21.204 PPH/PSIA

Test Medium: Steam

Certified Medium: Saturated Water

Set Pressure Definition: Pop

Blowdown: Fixed

Scope of Nominal Size and Set Pressure Ranges:

Inlet Size	Outlet Size	Flow Area	Orifice [designator] diameter	Lift	Set Pressure Range	Media	Code Section
1 NPS	1 NPS	0.601 sq in	0.875 in	0.265 in	30 - 150 psi	Steam	IV

Watts Regulator Company (WWF)

NB#: 63076

Location: 583 South Main Street, Franklin, NH 03235 United States

Acceptable Abbrev.: Watts

Certification Number: **63076** Design Series or catalog number: **174A, LF174A M1 (1-1/4")**

Type Classification: **Safety Relief Valve**Capacity Tests: **Sec. IV at Ohio State University (Robinson Laboratory) on March 23, 1976**Method of Establishing Relieving Capacity: **Flow Capacity, Slope**Certified Value: **35.36 PPH/PSIA**Test Medium: **Steam**Certified Medium: **Saturated Water**Set Pressure Definition: **Pop**Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
1.25 NPS	1.25 NPS	1.227 sq in	1.255 in	0.375 in	30 - 150 psi	Steam	IV

Certification Number: **63087** Design Series or catalog number: **174A, LF174A Model M (1-1/2")**

Type Classification: **Safety Relief Valve**Capacity Tests: **Sec. IV at Ohio State University (Robinson Laboratory) on February 07, 1957**Method of Establishing Relieving Capacity: **Flow Capacity, Slope**Certified Value: **42.45 PPH/PSIA**Test Medium: **Steam**Certified Medium: **Saturated Water**Special Service: **None**Set Pressure Definition: **Pop**Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
1.5 NPS	1.5 NPS	1.767 sq in	1.5 in	0.361 in	30 - 150 psi	Steam	IV

Certification Number: **63098** Design Series or catalog number: **174A, LF174A Model M (2")**

Type Classification: **Safety Relief Valve**Capacity Tests: **Sec. IV at Ohio State University (Robinson Laboratory) on February 07, 1957**Method of Establishing Relieving Capacity: **Flow Capacity, Slope**Certified Value: **80.00 PPH/PSIA**Test Medium: **Steam**Certified Medium: **Saturated Water**Special Service: **None**Set Pressure Definition: **Pop**Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
2 NPS	2 NPS	3.14 sq in	2 in	0.375 in	30 - 150 psi	Steam	IV

Watts Regulator Company (WWF)

NB#: 63100

Location: 583 South Main Street, Franklin, NH 03235 United States

Acceptable Abbrev.: Watts

Certification Number: **63100** Design Series or catalog number **1" N240X(-6,-9), 1-1/4 N241X(-5,-8) Mod. M15 (LF prefix also)**

Type Classification: Temperature Actuated Pressure Relief Valve

Capacity Tests: Sec. IV at Ohio State University (Robinson Laboratory) on January 16, 1971

Method of Establishing Relieving Capacity: Flow Capacity, Slope

Certified Value: 22.59 PPH/PSIA

Test Medium: Steam

Certified Medium: Saturated Water

Special Service: None

Set Pressure Definition: 40 CC Method

Blowdown: Fixed

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
1 - 1.25 NPS	1 NPS	0.785 sq in	1 in	0.245 in	75 - 150 psi	Steam	IV

Certification Number: **63122** Design Series or catalog number **340-3, 340X-8 M15, 342-3, 342X-8 M15 (T & P) (LF prefix also)**

Type Classification: Temperature Actuated Pressure Relief Valve

Capacity Tests: Sec. IV at Ohio State University (Robinson Laboratory) on January 17, 1971

Method of Establishing Relieving Capacity: Flow Capacity, Slope

Certified Value: 35.50 PPH/PSIA

Test Medium: Steam

Certified Medium: Saturated Water

Special Service: None

Set Pressure Definition: 40 CC Method

Blowdown: Fixed

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
1.5 - 2 NPS	1.5 NPS	1.227 sq in	1.25 in	0.312 in	75 - 150 psi	Steam	IV

Certification Number: **63144** Design Series or catalog number **374A & M374 Model M & TACO Inc. 333-1(also LF prefix)**

Type Classification: Safety Relief Valve

Capacity Tests: Sec. IV at Ohio State University (Robinson Laboratory) on February 16, 1960

Method of Establishing Relieving Capacity: Flow Capacity, Slope

Certified Value: 11.43 PPH/PSIA

Test Medium: Steam

Certified Medium: Saturated Water

Set Pressure Definition: Pop

Blowdown: Fixed

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
0.75 NPS	.75 NPS	0.442 sq in	0.75 in	0.218 in	30 - 50 psi	Steam	IV

Watts Regulator Company (WWF)

NB#: 63177

location: 583 South Main Street, Franklin, NH 03235 United States

Acceptable Abbrev.: Watts

Certification Number: **63177** Design Series or catalog number **740 Model M1 (3/4")**

Type Classification: **Safety Relief Valve**Capacity Tests: **Sec. IV at Ohio State University (Robinson Laboratory) on February 10, 1973**Method of Establishing Relieving Capacity: **Flow Capacity, Slope**Certified Value: **19.40 PPH/PSIA**Test Medium: **Steam**Certified Medium: **Saturated Water**Set Pressure Definition: **Pop**Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
0.75 NPS	1 NPS	0.559 sq in	0.844 in	0.265 in	30 - 75 psi	Steam	IV

Certification Number: **63188** Design Series or catalog number **740 Model M (1")**

Type Classification: **Safety Relief Valve**Capacity Tests: **Sec. IV at Ohio State University (Robinson Laboratory) on February 10, 1973**Method of Establishing Relieving Capacity: **Flow Capacity, Slope**Certified Value: **27.25 PPH/PSIA**Test Medium: **Steam**Certified Medium: **Saturated Water**Set Pressure Definition: **Pop**Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
1 NPS	1.25 NPS	0.785 sq in	1 in	0.302 in	30 - 75 psi	Steam	IV

Certification Number: **63199** Design Series or catalog number **740 Model M (1 1/4")**

Type Classification: **Safety Relief Valve**Capacity Tests: **Sec. IV at Ohio State University (Robinson Laboratory) on December 28, 1956**Method of Establishing Relieving Capacity: **Flow Capacity, Slope**Certified Value: **44.1 PPH/PSIA**Test Medium: **Steam**Certified Medium: **Saturated Water**Set Pressure Definition: **Pop**Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
1.25 NPS	1.5 NPS	1.227 sq in	1.255 in	0.37 in	30 - 75 psi	Steam	IV

Certification Number: **63201** Design Series or catalog number **740 Model M (1 1/2")**

Type Classification: **Safety Relief Valve**Capacity Tests: **Sec. IV at Ohio State University (Robinson Laboratory) on March 24, 1973**Method of Establishing Relieving Capacity: **Flow Capacity, Slope**Certified Value: **60.8 PPH/PSIA**Test Medium: **Steam**Certified Medium: **Saturated Water**Set Pressure Definition: **Pop**Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
1.5 NPS	2 NPS		1.5 in	0.437 in	30 - 75 psi	Steam	IV

Watts Regulator Company (WWF)

NB#: 63212

Location: 583 South Main Street, Franklin, NH 03235 United States

Acceptable Abbrev.: Watts

Certification Number: **63212** Design Series or catalog number: **740 Model M (2")**

Type Classification: **Safety Relief Valve**Capacity Tests: **Sec. IV at Ohio State University (Robinson Laboratory) on January 17, 1957**Method of Establishing Relieving Capacity: **Flow Capacity, Slope**Certified Value: **110.07 PPH/PSIA**Test Medium: **Steam**Certified Medium: **Saturated Water**Set Pressure Definition: **Pop**Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
2 NPS	2.5 NPS	3.142 sq in	2 in	0.585 in	30 - 75 psi	Steam	IV

Certification Number: **63223** Design Series or catalog number: **(L) 315 Mod. M1 and M2**

Type Classification: **Safety Valve**Capacity Tests: **Sec. IV at National Board T L (Worthington) on September 19, 1995**Method of Establishing Relieving Capacity: **Flow Capacity, 3 valve average**Certified Value: **379 PPH**Test Medium: **Steam**Certified Medium: **Steam**Set Pressure Definition: **Pop**Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
0.75 NPS	.75 NPS	0.307 sq in	0.625 in		15 - psi	Steam	IV

Certification Number: **63245** Design Series or catalog number: **415 M1 (3/4")**

Type Classification: **Safety Valve**Capacity Tests: **Sec. IV at National Board T L (Worthington) on August 16, 1996**Method of Establishing Relieving Capacity: **Flow Capacity, 3 valve average**Certified Value: **450 PPH**Test Medium: **Steam**Certified Medium: **Steam**Set Pressure Definition: **Pop**Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
0.75 NPS	.75 NPS				15 - 15 psi	Steam	IV

Certification Number: **63256** Design Series or catalog number: **(LF, M) 335 Mod. M1 & M2**

Type Classification: **Safety Relief Valve**Capacity Tests: **Sec. IV at National Board T L (Worthington) on June 22, 1995**Method of Establishing Relieving Capacity: **Flow Capacity, 3 valve average**Certified Value: **529 PPH**Test Medium: **Steam**Certified Medium: **Saturated Water**Set Pressure Definition: **Pop**Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
0.75 NPS	.75 NPS	0.307 sq in	0.625 in		30 - 30 psi	Steam	IV

Watts Regulator Company (WWF)

NB#: 63267

location: 583 South Main Street, Franklin, NH 03235 United States

Acceptable Abbrev.: Watts

Certification Number: **63267** Design Series or catalog number: **330-M1 & M330-M1**

Type Classification: **Safety Relief Valve**Capacity Tests: **Sec. IV at National Board T L (Worthington) on December 01, 1997**Method of Establishing Relieving Capacity: **Flow Capacity, 3 valve average**Certified Value: **381 PPH**Test Medium: **Steam**Certified Medium: **Saturated Water**Set Pressure Definition: **Pop**Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
0.75 NPS	.75 NPS	0.273 sq in	0.59 in		30 - 30 psi	Steam	IV

Certification Number: **63278** Design Series or catalog number: **415 Model M (1 1/4")**

Type Classification: **Safety Valve**Capacity Tests: **Sec. IV at National Board T L (Worthington) on January 10, 2000**Method of Establishing Relieving Capacity: **Flow Capacity, 3 valve average**Certified Value: **1232 PPH**Test Medium: **Steam**Certified Medium: **Steam**Set Pressure Definition: **Pop**Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
1.25 NPS	1.5 NPS	0.785 sq in	1 in		15 - psi	Steam	IV

Certification Number: **63289** Design Series or catalog number: **415 Model M (1 1/2")**

Type Classification: **Safety Valve**Capacity Tests: **Sec. IV at National Board T L (Worthington) on January 10, 2000**Method of Establishing Relieving Capacity: **Flow Capacity, 3 valve average**Certified Value: **1862 PPH**Test Medium: **Steam**Certified Medium: **Steam**Set Pressure Definition: **Pop**Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
1.5 NPS	2 NPS	1.227 sq in	1.25 in		15 - psi	Steam	IV

Certification Number: **63302** Design Series or catalog number: **375-M1 & M375-M1**

Type Classification: **Safety Relief Valve**Capacity Tests: **Sec. IV at National Board T L (Worthington) on May 15, 2000**Method of Establishing Relieving Capacity: **Flow Capacity, 3 valve average**Certified Value: **783 PPH**Test Medium: **Steam**Certified Medium: **Saturated Water**Set Pressure Definition: **Pop**Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
0.75 NPS	.75 NPS	0.3068 sq in	0.625 in	0.125 in	75 - 75 psi	Steam	IV

Watts Regulator Company (WWF)

NB#: 63324

Location: 583 South Main Street, Franklin, NH 03235 United States

Acceptable Abbrev.: Watts

Certification Number: **63324** Design Series or catalog number: **415-M1 (1")**

Type Classification: **Safety Valve**Capacity Tests: **Sec. IV at National Board T L (Worthington) on October 31, 1996**Method of Establishing Relieving Capacity: **Flow Capacity, 3 valve average**Certified Value: **679 PPH**Test Medium: **Steam**Certified Medium: **Steam**Set Pressure Definition: **Pop**Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
1 NPS	1 NPS	0.46 sq in	0.765 in	0.25 in	15 - 15 psi	Steam	IV

Certification Number: **63335** Design Series or catalog number: **4L, LF4L, M7 (3/4")**

Type Classification: **Safety Relief Valve**Capacity Tests: **Sec. IV at National Board T L (Worthington) on November 30, 2011**Method of Establishing Relieving Capacity: **Flow Capacity, 3 valve average**Certified Value: **648 PPH**Test Medium: **Steam**Certified Medium: **Saturated Water**Special Service: **None**Set Pressure Definition: **40 CC Method**Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
0.75 NPS	.75 NPS	0.17 sq in	0.468 in	0.12 in	150 psi	Steam	IV

Certification Number: **63403** Design Series or catalog number: **3/4" (M)354A**

Type Classification: **Safety Relief Valve**Capacity Tests: **Sec. IV at National Board T L (Worthington) on August 29, 2001**Method of Establishing Relieving Capacity: **Flow Capacity, 3 valve average**Certified Value: **555 PPH**Test Medium: **Steam**Certified Medium: **Saturated Water**Set Pressure Definition: **Pop**Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
0.75 NPS	.75 NPS	0.307 sq in	0.625 in		30 - psi	Steam	IV

Weir Power & Industrial - France (SAR)
 location: Rue Jean Baptiste Grison

NB#: 44019

Weir Power & Industrial - France (SAR)

location: Rue Jean Baptiste Grison

Certification Number: **44019** Design Series or catalog number: **9 Series**

Type Classification: **Safety Relief Valve**

Capacity Tests: **Sec. VIII Div. 1 at National Board T L (Worthington) on July 24, 1997**

Method of Establishing Relieving Capacity: **Flow Capacity, K**

Certified Value: **.823 Unitless**

Test Medium: **Air/Gas**

Certified Medium: **Steam & Air/Gas**

Set Pressure Definition: **Initial Audible Discharge**

Blowdown: **Adjustable by Single Ring**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
0.5 - 1 NPS	1 NPS	0.124 sq in	0.398 in	0.1 in	14.5 - 2900 psi	Steam	VIII Div. 1
					14.5 - 4700 psi	Air	VIII Div. 1
0.75 - 1 NPS	1 NPS	0.222 sq in	0.531 in	0.13 in	14.5 - 2220 psi	Air	VIII Div. 1
						Steam	VIII Div. 1
1 - 1.5 NPS	1.5 NPS	0.352 sq in	0.669 in	0.17 in	14.5 - 740 psi	Air	VIII Div. 1
						Steam	VIII Div. 1
		0.568 sq in	0.85 in	0.21 in	14.5 - 285 psi	Air	VIII Div. 1
						Steam	VIII Div. 1

Certification Number: **44020** Design Series or catalog number: **9 Series (Liquids)**

Type Classification: **Safety Relief Valve**

Capacity Tests: **Sec. VIII Div. 1 at National Board T L (Worthington) on July 24, 1997**

Method of Establishing Relieving Capacity: **Flow Capacity, K**

Certified Value: **.632 Unitless**

Test Medium: **Water**

Certified Medium: **Liquid**

Set Pressure Definition: **First Steady Stream**

Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
0.5 - 1 NPS	1 NPS	0.124 sq in	0.398 in	0.1 in	14.5 - 4700 psi	Water	VIII
0.75 - 1 NPS	1 NPS	0.222 sq in	0.531 in	0.13 in	14.5 - 2220 psi	Water	VIII
1 - 1.5 NPS	1.5 NPS	0.352 sq in	0.669 in	0.17 in	14.5 - 740 psi	Water	VIII
		0.568 sq in	0.85 in	0.21 in	14.5 - 285 psi	Water	VIII

Weir Power & Industrial - France (SAR)
 location: Rue Jean Baptiste Grison

NB#: 44031

Certification Number: **44031** Design Series or catalog number **76 Series Steam & Liquid (Water K=0.850)**

Type Classification: **Pilot Operated Pressure Relief Valve**

Capacity Tests: **Sec. I at National Board T L (Worthington) on October 27, 2014**

Method of Establishing Relieving Capacity: **Flow Capacity, K**

Certified Value: **.873 Unitless**

Certified Value (alternate medium): **.850 Unitless**

Test Medium: **Steam/Water**

Certified Medium: **Steam**

Set Pressure Definition: **Pop**

Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
1 - 1.5 NPS	2, 3 NPS	0.124 sq in	[D] 0.398 in	0.1 in	100 - 6960 psi	Steam	I
						Water	I
		0.222 sq in	[E] 0.531 in	0.13 in	100 - 6960 psi	Steam	I
						Water	I
		0.352 sq in	[F] 0.669 in	0.17 in	100 - 6960 psi	Steam	I
						Water	I
1.5 - 2 NPS	3 NPS	0.568 sq in	[G] 0.85 in	0.21 in	100 - 6960 psi	Steam	I
						Water	I
		0.887 sq in	[H] 1.063 in	0.43 in	100 - 6960 psi	Steam	I
						Water	I
2 - 3 NPS	3, 4 NPS	1.457 sq in	[J] 1.362 in	0.34 in	100 - 6960 psi	Steam	I
						Water	I
3 NPS	4, 6 NPS	2.097 sq in	[K] 1.634 in	0.41 in	100 - 6960 psi	Steam	I
						Water	I
3 - 4 NPS	4, 6 NPS	3.229 sq in	[L] 2.028 in	0.51 in	100 - 3750 psi	Steam	I
						Water	I
4 NPS	6 NPS	3.818 sq in	[M] 2.205 in	0.57 in	100 - 3750 psi	Steam	I
						Water	I
		5.143 sq in	[N] 2.559 in	0.64 in	100 - 3750 psi	Steam	I
						Water	I
		7.069 sq in	[P] 3 in	0.75 in	100 - 3750 psi	Steam	I
						Water	I
6 NPS	8 NPS	12.92 sq in	[Q] 4.055 in	1.01 in	100 - 3750 psi	Steam	I
						Water	I
	8,10 NPS	15.9 sq in	[R] 4.5 in	1.13 in	100 - 3750 psi	Steam	I
						Water	I
8 NPS	10 NPS	22.19 sq in	[S] 5.315 in	1.33 in	100 - 1500 psi	Steam	I
						Water	I
		28.27 sq in	[T] 6 in	1.5 in	100 - 1500 psi	Steam	I
						Water	I
10 NPS	14 NPS	39.44 sq in	[U] 7.087 in	1.77 in	100 - 750 psi	Steam	I
						Water	I
12 NPS	2x12 NPS	61.63 sq in	[W] 8.858 in	2.21 in	100 - 750 psi	Steam	I
						Water	I

Weir Power & Industrial - France (SAR)
 location: Rue Jean Baptiste Grison

NB#: 44042

Certification
 Number: **44042**

Design Series
 or catalog number **76 Series**

Type Classification: **Pilot Operated Pressure Relief Valve**

Capacity Tests: **Sec. VIII Div. 1 at National Board T L (Worthington) on July 24, 1997**

Method of Establishing Relieving Capacity: **Flow Capacity, K**

Certified Value: **.848 Unitless**

Test Medium: **Air/Gas**

Certified Medium: **Steam & Air/Gas**

Set Pressure Definition: **Initial Audible Discharge**

Blowdown: **Adjustable and Fixed for Mod. Pilot**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
1 - 1.5 NPS		0.124 sq in	[D] 0.394 in	0.1 in	26.1 - 10000 psi	Air	VIII
					26.1 - 4350 psi	Steam	VIII
		0.222 sq in	[E] 0.531 in	0.13 in	26.1 - 4350 psi	Steam	VIII
					26.1 - 6250 psi	Air	VIII
1.5 - 2 NPS		0.352 sq in	[F] 0.669 in	0.17 in	26.1 - 4350 psi	Steam	VIII
					26.1 - 6250 psi	Air	VIII
		0.568 sq in	[G] 0.85 in	0.21 in	26.1 - 4350 psi	Steam	VIII
					26.1 - 6250 psi	Air	VIII
1.5 - 2 NPS		0.887 sq in	[H] 1.063 in	0.27 in	26.1 - 4350 psi	Steam	VIII
					26.1 - 6250 psi	Air	VIII
		1.457 sq in	[J] 1.362 in	0.34 in	26.1 - 3750 psi	Air	VIII
						Steam	VIII
3 NPS		2.097 sq in	[K] 1.634 in	0.41 in	26.1 - 3750 psi	Air	VIII
						Steam	VIII
3 - 4 NPS		3.229 sq in	[L] 2.028 in	0.51 in	26.1 - 3750 psi	Air	VIII
						Steam	VIII
		4.065 sq in	[M] 2.275 in	0.57 in	26.1 - 3750 psi	Air	VIII
						Steam	VIII
4 NPS		5.143 sq in	[N] 2.559 in	0.64 in	26.1 - 2250 psi	Air	VIII
						Steam	VIII
		7.069 sq in	[P] 3 in	0.75 in	26.1 - 2250 psi	Air	VIII
						Steam	VIII
6 NPS		12.915 sq in	[Q] 4.055 in	1.01 in	26.1 - 2250 psi	Air	VIII
						Steam	VIII
		15.9 sq in	[R] 4.5 in	1.13 in	26.1 - 2250 psi	Air	VIII
						Steam	VIII
8 NPS		22.19 sq in	[S] 5.315 in	1.33 in	26.1 - 1495 psi	Air	VIII
						Steam	VIII
		28.27 sq in	[T] 6 in	1.5 in	26.1 - 1495 psi	Air	VIII
						Steam	VIII
10 NPS		39.44 sq in	[U] 7.087 in	1.77 in	26.1 - 290 psi	Air	VIII
						Steam	VIII
12 NPS		61.63 sq in	[W] 8.858 in	2.21 in	26.1 - 290 psi	Air	VIII
						Steam	VIII

Weir Power & Industrial - France (SAR)
 location: Rue Jean Baptiste Grison

NB#: 44053

Certification Number: **44053** Design Series or catalog number **78 (Pilot Operated)**

Type Classification: **Pilot Operated Pressure Relief Valve**

Capacity Tests: **Sec. VIII Div. 1 at National Board T L (Worthington) on August 05, 1999**

Method of Establishing Relieving Capacity: **Flow Capacity, K**

Certified Value: **.878 Unitless**

Test Medium: **Steam & Air/Gas**

Certified Medium: **Steam & Air/Gas**

Set Pressure Definition: **Initial Audible Discharge**

Blowdown: **Adjustable and Fixed for Mod. Pilot**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
1 - 1.5 NPS	2 NPS	0.124 sq in	[D] 0.398 in	0.53 in	26.1 - 6250 psi	Air	VIII Div. 1
					29 - 740 psi	Steam	VIII Div. 1
		0.222 sq in	[E] 0.531 in	0.53 in	26.1 - 6250 psi	Air	VIII
					29 - 740 psi	Steam	VIII Div. 1
		0.352 sq in	[F] 0.669 in	0.53 in	26.1 - 6250 psi	Air	VIII Div. 1
					29 - 740 psi	Steam	VIII Div. 1
1.5 - 2 NPS	3 NPS	0.568 sq in	[G] 0.85 in	0.7 in	26.1 - 6250 psi	Air	VIII Div. 1
					29 - 740 psi	Steam	VIII Div. 1
		0.887 sq in	[H] 1.063 in	0.7 in	26.1 - 6250 psi	Air	VIII Div. 1
					29 - 740 psi	Steam	VIII Div. 1
2 - 3 NPS	3,4 NPS	1.457 sq in	[J] 1.362 in	0.8 in	26.1 - 6250 psi	Air	VIII Div. 1
					29 - 740 psi	Steam	VIII Div. 1
3 NPS	4 NPS	2.097 sq in	[K] 1.634 in	1.18 in	26.1 - 3750 psi	Air	VIII Div. 1
					29 - 740 psi	Steam	VIII Div. 1
3 - 4 NPS	4,6 NPS	3.229 sq in	[L] 2.028 in	1.18 in	26.1 - 3750 psi	Air	VIII Div. 1
					29 - 740 psi	Steam	VIII Div. 1
4 NPS	6 NPS	4.095 sq in	[M] 2.284 in	1.57 in	26.1 - 3750 psi	Air	VIII Div. 1
					29 - 740 psi	Steam	VIII Div. 1
		5.143 sq in	[N] 2.559 in	1.57 in	26.1 - 3750 psi	Air	VIII Div. 1
					29 - 740 psi	Steam	VIII Div. 1
		7.069 sq in	[P] 3 in	1.57 in	26.1 - 3750 psi	Air	VIII Div. 1
					29 - 740 psi	Steam	VIII Div. 1
6 NPS	8 NPS	12.915 sq in	[Q] 4.055 in	2.16 in	26.1 - 3750 psi	Air	VIII
					29 - 740 psi	Steam	VIII Div. 1
		15.904 sq in	[R] 4.5 in	2.16 in	26.1 - 1500 psi	Air	VIII Div. 1
					29 - 740 psi	Steam	VIII Div. 1
8 NPS	10 NPS	28.274 sq in	[T] 6 in	2.99 in	26.1 - 1500 psi	Air	VIII Div. 1
					29 - 740 psi	Steam	VIII Div. 1

Weir Power & Industrial - France (SAR)
 location: Rue Jean Baptiste Grison

NB#: 44064

Certification Number: **44064** Design Series or catalog number: **78 (Pilot Operated, Liquid)**

Type Classification: **Pilot Operated Pressure Relief Valve**

Capacity Tests: **Sec. VIII Div. 1 at National Board T L (Worthington) on August 06, 1999**

Method of Establishing Relieving Capacity: **Flow Capacity, K**

Certified Value: **.857 Unitless**

Test Medium: **Water**

Certified Medium: **Liquid**

Set Pressure Definition: **First Steady Stream**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
1 - 1.5 NPS	2 NPS	0.124 sq in	[D] 0.398 in	0.53 in	26.1 - 6250 psi	Water	VIII
		0.222 sq in	[E] 0.531 in	0.53 in	26.1 - 6250 psi	Water	VIII
		0.352 sq in	[F] 0.669 in	0.53 in	26.1 - 6250 psi	Water	VIII
1.5 - 2 NPS	3 NPS	0.568 sq in	[G] 0.85 in	0.7 in	26.1 - 6250 psi		VIII
		0.887 sq in	[H] 1.063 in	0.7 in	26.1 - 6250 psi	Water	VIII
2 - 3 NPS	3, 4 NPS	1.457 sq in	[J] 1.362 in	0.8 in	26.1 - 6250 psi	Water	VIII
3 NPS	4 NPS	2.097 sq in	[K] 1.634 in	1.18 in	26.1 - 3750 psi	Water	VIII
3 - 4 NPS	4, 6 NPS	3.229 sq in	[L] 2.028 in	1.18 in	26.1 - 3750 psi	Water	VIII
4 NPS	6 NPS	4.095 sq in	[M] 2.283 in	1.57 in	26.1 - 3750 psi	Water	VIII
		5.143 sq in	[N] 2.559 in	1.57 in	26.1 - 3750 psi	Water	VIII
		7.069 sq in	[P] 3 in	1.57 in	26.1 - 3750 psi	Water	VIII
6 NPS	8 NPS	12.915 sq in	[Q] 4.055 in	2.16 in	26.1 - 3750 psi	Water	VIII
		15.904 sq in	[R] 4.5 in	2.16 in	26.1 - 1500 psi	Water	VIII
8 NPS	10 NPS	28.274 sq in	[T] 6 in	2.99 in	26.1 - 1500 psi	Water	VIII

Certification Number: **44097** Design Series or catalog number: **74 Series**

Type Classification: **Pilot Operated Pressure Relief Valve**

Capacity Tests: **Sec. VIII Div. 1 at National Board T L (Worthington) on January 13, 2016**

Method of Establishing Relieving Capacity: **Flow Capacity, K**

Certified Value: **.831 Unitless**

Test Medium: **Air/Gas**

Certified Medium: **Air/Gas**

Special Service: **None**

Set Pressure Definition: **Pop**

Blowdown: **Adjustable**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
2 in	3 in	3.044 sq in	1.968 in	0.886 in	15 - 30 psi	Air	VIII Div. 1
3 in	4 in	7.792 sq in	3.15 in	1.417 in	15 - 30 psi	Air	VIII Div. 1
4 in	6 in	12.174 sq in	3.937 in	1.772 in	15 - 30 psi	Air	VIII Div. 1
6 NPS	8 NPS	27.39 sq in	5.906 in	2.953 in	15 - 30 psi	Air	VIII Div. 1
8 NPS	10 NPS	48.695 sq in	7.874 in	3.937 in	15 - 30 psi	Air	VIII Div. 1
10 NPS	12 NPS	76.085 sq in	9.842 in	4.921 in	15 - 30 psi	Air	VIII Div. 1
12 NPS	16 NPS	109.56 sq in	11.811 in	5.906 in	15 - 30 psi	Air	VIII Div. 1
14 NPS	18 NPS	149.13 sq in	13.78 in	6.89 in	15 - 30 psi	Air	VIII Div. 1

Weir Power & Industrial - France (SAR)
 location: Rue Jean Baptiste Grison

NB#: 44109

Certification Number: **44109** Design Series or catalog number **78LP Series**

Type Classification: **Pilot Operated Pressure Relief Valve**

Capacity Tests: **Sec. VIII Div. 1 at National Board T L (Worthington) on August 05, 2016**

Method of Establishing Relieving Capacity: **Flow Capacity, K**

Certified Value: **0.840 Unitless**

Test Medium: **Air/Gas**

Certified Medium: **Air/Gas**

Special Service: **None**

Set Pressure Definition: **Pop**

Blowdown: **Adjustable**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
2 in	3 in	2.723 sq in	[DN47] 1.862	0.886 in	15 - 145 psi	Air	VIII Div. 1
3 in	4 in	5.965 sq in	[DN70] 2.756	1.417 in	15 - 145 psi	Air	VIII Div. 1
4 in	6 in	10.3 sq in	[DN92] 3.622	1.772 in	15 - 145 psi	Air	VIII Div. 1
6 in	8 in	21.69 sq in	[DN133] 5.256	2.657 in	15 - 145 psi	Air	VIII Div. 1

Certification Number: **44110** Design Series or catalog number **STARFLOW-V**

Type Classification: **Safety Valve**

Capacity Tests: **Control Script failed for control txtCoc , Source=**

Method of Establishing Relieving Capacity: **Flow Capacity, K**

Certified Value: **0.876 Unitless**

Test Medium: **Steam**

Certified Medium: **Steam**

Special Service: **None**

Set Pressure Definition: **Pop**

Blowdown: **Adjustable by Dual Ring**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
1.5 NPS	2, 3 NPS	0.373 sq in	[F] 0.689 in	0.172 in	30 - 2250 psi	Steam	I & VIII Div. 1
1.5 - 2 NPS	3 NPS	0.589 sq in	[G] 0.8661 in	0.217 in	30 - 2250 psi	Steam	I & VIII Div. 1
2 NPS	3 NPS	0.996 sq in	[H] 1.126 in	0.281 in	30 - 2250 psi	Steam	I & VIII Div. 1
3 NPS	4 NPS	1.457 sq in	[J] 1.3622 in	0.341 in	30 - 2250 psi	Steam	I & VIII Div. 1
	4, 6 NPS	1.667 sq in	[K] 1.457 in	0.364 in	30 - 2250 psi	Steam	I & VIII Div. 1
4 NPS	6 NPS	2.758 sq in	[L] 1.874 in	0.469 in	30 - 2250 psi	Steam	I & VIII Div. 1
		3.983 sq in	[M] 2.252 in	0.563 in	30 - 2250 psi	Steam	I & VIII Div. 1
		5.303 sq in	[N] 2.5984 in	0.65 in	30 - 2250 psi	Steam	I & VIII Div. 1
		7.069 sq in	[P] 3 in	0.75 in	30 - 2250 psi	Steam	I & VIII Div. 1
6 NPS	8 NPS	10.148 sq in	[Q] 3.594 in	0.902 in	30 - 1494 psi	Steam	I & VIII Div. 1
	8, 10 NPS	14.173 sq in	[R] 4.248 in	1.062 in	30 - 1494 psi	Steam	I & VIII Div. 1
8 NPS	10 NPS	23.997 sq in	[T] 5.528 in	1.382 in	30 - 740 psi	Steam	I & VIII Div. 1
10 NPS	14 NPS	38.548 sq in	[V] 7 in	1.75 in	30 - 740 psi	Steam	I & VIII Div. 1
12 NPS	2x12 NPS	55.438 sq in	[W] 8.402 in	2.1 in	30 - 740 psi	Steam	I & VIII Div. 1

Weir Power & Industrial - France (SAR)
 location: Rue Jean Baptiste Grison

NB#: 44121

Certification Number: **44121** Design Series or catalog number **STARFLOW-V (Restricted Lift)**

Type Classification: **Safety Valve**

Capacity Tests: **Control Script failed for control txtCoc , Source=**

Method of Establishing Relieving Capacity: **Flow Capacity, K**

Certified Value: **0.876 Unitless**

Test Medium: **Steam**

Certified Medium: **Steam**

Special Service: **None**

Set Pressure Definition: **Pop**

Blowdown: **Adjustable by Dual Ring**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
1.5 NPS	2, 3 NPS	0.373 sq in	[F] 0.689 in	0.095 in	30 - 2250 psi	Steam	I & VIII Div. 1
1.5 - 2 NPS	3 NPS	0.589 sq in	[G] 0.8661 in	0.119 in	30 - 2250 psi	Steam	I & VIII Div. 1
2 NPS	3 NPS	0.996 sq in	[H] 1.126 in	0.155 in	30 - 2250 psi	Steam	I & VIII Div. 1
3 NPS	4 NPS	1.457 sq in	[J] 1.3622 in	0.187 in	30 - 2250 psi	Steam	I & VIII Div. 1
	4, 6 NPS	1.667 sq in	[K] 1.457 in	0.2 in	30 - 2250 psi	Steam	I & VIII Div. 1
4 NPS	6 NPS	2.758 sq in	[L] 1.874 in	0.258 in	30 - 2250 psi	Steam	I & VIII Div. 1
		3.983 sq in	[M] 2.252 in	0.31 in	30 - 2250 psi	Steam	I & VIII Div. 1
		5.303 sq in	[N] 2.5984 in	0.357 in	30 - 2250 psi	Steam	I & VIII Div. 1
		7.069 sq in	[P] 3 in	0.413 in	30 - 2250 psi	Steam	I & VIII Div. 1
6 NPS	8 NPS	10.148 sq in	[Q] 3.594 in	0.496 in	30 - 1494 psi	Steam	I & VIII Div. 1
	8, 10 NPS	14.173 sq in	[R] 4.248 in	0.584 in	30 - 1494 psi	Steam	I & VIII Div. 1
8 NPS	10 NPS	23.997 sq in	[T] 5.528 in	0.76 in	30 - 740 psi	Steam	I & VIII Div. 1
10 NPS	14 NPS	34.485 sq in	[V] 7 in	0.963 in	30 - 740 psi	Steam	I & VIII Div. 1
12 NPS	2x12 NPS	55.438 sq in	[W] 8.402 in	1.155 in	30 - 740 psi	Steam	I & VIII Div. 1

Weir Power & Industrial - France (SAR)
 location: Rue Jean Baptiste Grison

NB#: 92001

Certification Number: **92001** Design Series or catalog number **P3, P4, P5**

Type Classification: **Safety Relief Valve**

Capacity Tests: **Sec. VIII Div. 1 at National Board T L (Picaway) on June 05, 1986**

Method of Establishing Relieving Capacity: **Flow Capacity, K**

Certified Value: **.876 Unitless**

Test Medium: **Air/Gas**

Certified Medium: **Steam & Air/Gas**

Set Pressure Definition: **Pop**

Blowdown: **Adjustable by Single Ring**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
1 - 1.5 NPS		0.134 sq in	[D] 0.413 in	0.128 in	15 - 10000 psi	Air	VIII
					15 - 2900 psi	Steam	VIII
		0.273 sq in	[E] 0.59 in	0.183 in	15 - 2900 psi	Steam	VIII
					15 - 7500 psi	Air	VIII
1.5 NPS		0.373 sq in	[F] 0.689 in	0.214 in	15 - 2900 psi	Steam	VIII
					15 - 6000 psi	Air	VIII
1.5 - 2 NPS		0.589 sq in	[G] 0.866 in	0.268 in	15 - 2900 psi	Steam	VIII
					15 - 6000 psi	Air	VIII
		0.881 sq in	[H] 1.059 in	0.328 in	15 - 2900 psi	Steam	VIII
					15 - 5000 psi	Air	VIII
2 NPS		1.457 sq in	[J] 1.362 in	0.422 in	15 - 2900 psi	Steam	VIII
					15 - 3200 psi	Air	VIII
3 NPS		2.097 sq in	[K] 1.634 in	0.506 in	15 - 2900 psi	Steam	VIII
					15 - 3200 psi	Air	VIII
		3.284 sq in	[L] 2.045 in	0.634 in	15 - 2000 psi	Air	VIII
						Steam	VIII
4 NPS		4.093 sq in	[M] 2.283 in	0.708 in	15 - 2000 psi	Air	VIII
						Steam	VIII
		4.987 sq in	[N] 2.52 in	0.781 in	15 - 1300 psi	Air	VIII
						Steam	VIII
		7.215 sq in	[P] 3.031 in	0.94 in	15 - 1300 psi	Air	VIII
						Steam	VIII
6 NPS		12.914 sq in	[Q] 4.055 in	1.257 in	15 - 1000 psi	Air	VIII
						Steam	VIII
		17.818 sq in	[R] 4.763 in	1.477 in	15 - 700 psi	Air	VIII
						Steam	VIII
8 NPS		28.871 sq in	[T] 6.063 in	1.88 in	15 - 600 psi	Air	VIII
						Steam	VIII
10 NPS		46.759 sq in	[V] 7.716 in	2.392 in	15 - 450 psi	Air	VIII
						Steam	VIII
12 NPS		70.108 sq in	[W] 9.448 in	2.93 in	15 - 450 psi	Air	VIII
						Steam	VIII

Weir Power & Industrial - France (SAR)
 Location: Rue Jean Baptiste Grison

NB#: 92012

Certification Number: **92012** Design Series or catalog number **P3, P4 (liquids)**

Type Classification: **Relief Valve**

Capacity Tests: **Sec. VIII Div. 1 at National Board T L (Worthington) on December 07, 1993**

Method of Establishing Relieving Capacity: **Flow Capacity, K**

Certified Value: **.631 Unitless**

Test Medium: **Water**

Certified Medium: **Liquid**

Set Pressure Definition: **First Steady Stream**

Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

Inlet Size	Outlet Size	Flow Area	Orifice [designator] diameter	Lift	Set Pressure Range	Media	Code Section
1 - 1.5 NPS		0.134 sq in	[D] 0.413 in	0.128 in	15 - 10000 psi	Water	VIII
		0.273 sq in	[E] 0.59 in	0.183 in	15 - 7500 psi	Water	VIII
1 - 2 NPS		0.881 sq in	[H] 1.059 in	0.328 in	15 - 5000 psi	Water	VIII
1.5 NPS		0.373 sq in	[F] 0.689 in	0.214 in	15 - 6000 psi	Water	VIII
1.5 - 2 NPS		0.589 sq in	[G] 0.866 in	0.268 in	15 - 6000 psi	Water	VIII
2 - 3 NPS		1.457 sq in	[J] 1.362 in	0.422 in	15 - 3200 psi	Water	VIII
3 NPS		2.097 sq in	[K] 1.634 in	0.506 in	15 - 3200 psi	Water	VIII
3 - 4 NPS		3.284 sq in	[L] 2.045 in	0.634 in	15 - 2000 psi	Water	VIII
4 NPS		4.093 sq in	[M] 2.283 in	0.708 in	15 - 2000 psi	Water	VIII
		4.987 sq in	[N] 2.52 in	0.781 in	15 - 1300 psi	Water	VIII
		7.032 sq in	[P] 2.992 in	0.94 in	15 - 1300 psi	Water	VIII
6 NPS		12.914 sq in	[Q] 4.055 in	1.257 in	15 - 1000 psi	Water	VIII
		15.267 sq in	[R] 5.984 in	1.477 in	15 - 500 psi	Water	VIII
8 NPS		28.126 sq in	[T] 5.984 in	1.88 in	15 - 500 psi	Water	VIII

Certification Number: **92034** Design Series or catalog number **Starsteam V Series**

Type Classification: **Safety Relief Valve**

Capacity Tests: **Sec. I at National Board T L (Worthington) on August 03, 2012**

Method of Establishing Relieving Capacity: **Flow Capacity, K**

Certified Value: **0.878 Unitless**

Test Medium: **Steam**

Certified Medium: **Steam**

Special Service: **None**

Set Pressure Definition: **Pop**

Blowdown: **Adjustable by Dual Ring**

Scope of Nominal Size and Set Pressure Ranges:

Inlet Size	Outlet Size	Flow Area	Orifice [designator] diameter	Lift	Set Pressure Range	Media	Code Section
1.5 NPS	3 NPS	0.996 sq in	[1] 1.125 in	0.2835 in	15 - 6525 psi	Steam	I & VIII Div. 1
2 NPS	3 NPS	1.667 sq in	[2] 1.456 in	0.3661 in	15 - 6525 psi	Steam	I & VIII Div. 1
2.5 - 6 NPS	6 NPS	2.758 sq in	[3] 1.874 in	0.4685 in	15 - 6525 psi	Steam	I & VIII Div. 1
3 NPS	6 NPS	3.983 sq in	[4] 2.251 in	0.562 in	15 - 6525 psi	Steam	I & VIII Div. 1
4 NPS	6 NPS	5.303 sq in	[5] 2.598 in	0.6496 in	15 - 6525 psi	Steam	I & VIII Div. 1
		7.069 sq in	[6] 3 in	0.752 in	15 - 3280 psi	Steam	I & VIII Div. 1
6 NPS	8 NPS	11.056 sq in	[Q] 3.751 in	0.9409 in	15 - 2798.5 psi	Steam	I & VIII Div. 1
	10 NPS	15.904 sq in	[R] 4.5 in	1.126 in	15 - 1580 psi	Steam	I & VIII Div. 1
		19.299 sq in	[RR] 4.957 in	1.239 in	15 - 1580 psi	Steam	I & VIII Div. 1
8 NPS	10 NPS	27.391 sq in	[T] 5.905 in	1.4764 in	15 - 1190 psi	Steam	I & VIII Div. 1

Weir Power & Industrial - France (SAR)
 location: Rue Jean Baptiste Grison

NB#: 92045

Certification Number: **92045** Design Series or catalog number **Starsteam V Series (Res. Lift)**

Type Classification: **Safety Valve**

Capacity Tests: **Sec. I at National Board T L (Worthington) on August 06, 2012**

Method of Establishing Relieving Capacity: **Flow Capacity, K**

Certified Value: **0.878 Unitless**

Test Medium: **Steam**

Certified Medium: **Steam**

Set Pressure Definition: **Pop**

Blowdown: **Adjustable by Dual Ring**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
1.5 NPS	3 NPS	0.996 sq in	[1] 1.125 in	0.156 in	15 - 6525 psi	Steam	I & VIII Div. 1
2 NPS	3 NPS	1.667 sq in	[2] 1.456 in	0.201 in	15 - 6525 psi	Steam	I & VIII Div. 1
2.5 NPS	6 NPS	2.758 sq in	[3] 1.874 in	0.258 in	15 - 6525 psi	Steam	I & VIII Div. 1
3 NPS	6 NPS	3.983 sq in	[4] 2.251 in	0.309 in	15 - 6525 psi	Steam	I & VIII Div. 1
4 NPS	6 NPS	5.303 sq in	[5] 2.598 in	0.357 in	15 - 6525 psi	Steam	I & VIII Div. 1
		7.069 sq in	[6] 3 in	0.414 in	15 - 3280 psi	Steam	I & VIII Div. 1
6 NPS	8 NPS	11.056 sq in	[Q] 3.571 in	0.517 in	15 - 2798 psi	Steam	I & VIII Div. 1
	10 NPS	15.904 sq in	[R] 4.5 in	0.619 in	15 - 1580 psi	Steam	I & VIII Div. 1
		19.299	[RR] 4.957 in	0.681	15 - 1580 psi	Steam	I & VIII Div. 1
8 NPS	10 NPS	27.391 sq in	[T] 5.905 in	0.812 in	15 - 1190 psi	Steam	I & VIII Div. 1

Certification Number: **92056** Design Series or catalog number **76 Series (Liquid)**

Type Classification: **Pilot Operated Pressure Relief Valve**

Capacity Tests: **Sec. VIII Div. 1 at National Board T L (Worthington) on June 07, 2013**

Method of Establishing Relieving Capacity: **Flow Capacity, K**

Certified Value: **.850 Unitless**

Test Medium: **Water**

Certified Medium: **Liquid**

Special Service: **None**

Set Pressure Definition: **First Steady Stream**

Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
1 - 1.5 NPS	2, 3 NPS	0.124 sq in	[D] 0.398 in	0.1 in	100 - 6960 psi	Water	VIII Div. 1
		0.222 sq in	[E] 0.531 in	0.13 in	100 - 6960 psi	Water	VIII Div. 1
1.5 NPS	2, 3 NPS	0.352 sq in	[F] 0.669 in	0.17 in	100 - 6960 psi	Water	VIII Div. 1
1.5 - 2 NPS	3 NPS	0.568 sq in	[G] 0.85 in	0.21 in	100 - 6960 psi	Water	VIII Div. 1
		0.887 sq in	[H] 1.063 in	0.43 in	100 - 6960 psi	Water	VIII Div. 1
2 - 3 NPS	3, 4 NPS	1.457 sq in	[J] 1.362 in	0.34 in	100 - 3750 psi	Water	VIII Div. 1
3 NPS	4, 6 NPS	2.097 sq in	[K] 1.634 in	0.41 in	100 - 3750 psi	Water	VIII Div. 1
3 - 4 NPS	6 NPS	3.229 sq in	[L] 2.028 in	0.51 in	100 - 3750 psi	Water	VIII Div. 1
4 NPS	6 NPS	3.818 sq in	[M] 2.205 in	0.57 in	100 - 3750 psi	Water	VIII Div. 1
		5.143 sq in	[N] 2.559 in	0.64 in	100 - 3750 psi	Water	VIII Div. 1
		7.069 sq in	[P] 3 in	0.75 in	100 - 3750 psi	Water	VIII Div. 1
6 NPS	8 NPS	12.92 sq in	[Q] 4.055 in	1.01 in	100 - 3750 psi	Water	VIII Div. 1
	8, 10 NPS	15.9 sq in	[R] 4.5 in	1.13 in	100 - 3750 psi	Water	VIII Div. 1
8 NPS	10 NPS	22.19 sq in	[S] 5.315 in	1.3 in	100 - 1500 psi	Water	VIII Div. 1
		28.27 sq in	[T] 6 in	1.5 in	100 - 1500 psi	Water	VIII Div. 1
10 NPS	14 NPS	39.44 sq in	[U,V] 7.087 in	1.77 in	100 - 750 psi	Water	VIII Div. 1
12 NPS	2x12 NPS	61.63 sq in	[W] 8.858 in	2.21 in	100 - 750 psi	Water	VIII Div. 1

Xuzhou Bafang Safety Device Co., Ltd (XBA)

NB#: 00684

location: No. 800, Shidai Road, Xuzhou City, Jiangsu Province 221000 Peoples Republic Of China

Xuzhou Bafang Safety Device Co., Ltd (XBA)

location: No. 800, Shidai Road, Xuzhou City, Jiangsu Province 221000 Peoples Republic Of China

Certification
Number: **00684**Design Series
or catalog number **FCD**Holder Designation: **FH**Type Classification: **Rupture Disk Device**Capacity Tests: **Sec. VIII Div. 1 at National Board T L (Worthington) on June 05, 2015**Method of Establishing Relieving Capacity: **Resistance Factor, 3 Size, Krg**Certified Value: **0.6 Unitless**Test Medium: **Air/Gas**Certified Medium: **Air or gases (Krg)**Set Pressure Definition: **Burst Pressure**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
1 NPS		1.03 sq in			88 - 1000 psi	Air	VIII Div. 1
1.5 NPS		1.58 sq in			62 - 700 psi	Air	VIII Div. 1
2 NPS		2.13 sq in			30 - 550 psi	Air	VIII Div. 1
3 NPS		3.16 sq in			22 - 450 psi	Air	VIII Div. 1
4 NPS		4.12 sq in			16 - 415 psi	Air	VIII Div. 1
6 NPS		6.31 sq in			12 - 320 psi	Air	VIII Div. 1
8 NPS		8.52 sq in			10 - 295 psi	Air	VIII Div. 1
10 NPS		10.72 sq in			8 - 240 psi	Air	VIII Div. 1
12 NPS		12.77 sq in			6 - 200 psi	Air	VIII Div. 1
14 NPS		14.42 sq in			6 - 175 psi	Air	VIII Div. 1
16 NPS		16.46 sq in			6 - 150 psi	Air	VIII Div. 1
18 NPS		18.53 sq in			6 - 135 psi	Air	VIII Div. 1
20 NPS		20.65 sq in			3 - 120 psi	Air	VIII Div. 1
24 NPS		24.72 sq in			3 - 100 psi	Air	VIII Div. 1
28 NPS		29.42 sq in			3 - 93 psi	Air	VIII Div. 1
30 NPS		31.63 sq in			3 - 88 psi	Air	VIII Div. 1
36 NPS		37.37 sq in			3 - 75 psi	Air	VIII Div. 1

Certification
Number: **00954**Design Series
or catalog number **RCD Series Rupture Disc**Holder Designation: **RH**Type Classification: **Rupture Disk Device**Capacity Tests: **Sec. VIII Div. 1 at National Board T L (Worthington) on June 01, 2016**Method of Establishing Relieving Capacity: **Resistance Factor, 3 Size, Krg**Certified Value: **0.97 Unitless**Test Medium: **Air/Gas**Certified Medium: **Air or gases (Krg)**Set Pressure Definition: **Burst Pressure**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
1 NPS		0.63 sq in			217 - 580 psi	Air	VIII Div. 1
1.5 NPS		1.74 sq in			174 - 435 psi	Air	VIII Div. 1
2 NPS		2.35 sq in			130 - 435 psi	Air	VIII Div. 1
3 NPS		5.4 sq in			116 - 435 psi	Air	VIII Div. 1
4 NPS		9.06 sq in			116 - 362 psi	Air	VIII Div. 1
6 NPS		17.41 sq in			72.5 - 217 psi	Air	VIII Div. 1
8 NPS		30.18 sq in			36 - 87 psi	Air	VIII Div. 1

Certification Number: **00965** Design Series or catalog number: **9100 Series Buckling Pin Relief Valve**

Type Classification: **Buckling Pin Non-reclosing Device**

Capacity Tests: **Sec. VIII Div. 1 at National Board T L (Worthington) on June 02, 2016**

Method of Establishing Relieving Capacity: **Flow Capacity, K**

Certified Value: **1.685 Unitless**

Test Medium: **Air/Gas**

Certified Medium: **Air or gases (Krg)**

Set Pressure Definition: **Buckling Pressure**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
1.5 NPS	1.5 NPS	1.767 sq in	1.5 in	0.75 in	15 - 275 psi	Air	VIII Div. 1
2 NPS	2 NPS	3.301 sq in	2.05 in	1.02 in	15 - 275 psi	Air	VIII Div. 1
3 NPS	3 NPS	7.022 sq in	2.99 in	1.5 in	15 - 275 psi	Air	VIII Div. 1
4 NPS	4 NPS	12.692 sq in	4.02 in	1.97 in	15 - 275 psi	Air	VIII Div. 1
6 NPS	6 NPS	28.086 sq in	5.98 in	2.56 in	1 - 275 psi	Air	VIII Div. 1
8 NPS	8 NPS	50.14 sq in	8.99 in	2.95 in	1 - 275 psi	Air	VIII Div. 1
10 NPS	10 NPS	78.54 sq in	10 in	3.54 in	1 - 275 psi	Air	VIII Div. 1
12 NPS	12 NPS	113.286 sq in	12.01 in	3.94 in	1 - 275 psi	Air	VIII Div. 1
14 NPS	14 NPS	138.303 sq in	13.27 in	4.33 in	1 - 275 psi	Air	VIII Div. 1
16 NPS	16 NPS	182.415 sq in	15.24 in	4.92 in	1 - 275 psi	Air	VIII Div. 1
20 NPS	20 NPS	291.039 sq in	19.25 in	5.91 in	1 - 275 psi	Air	VIII Div. 1
24 NPS	24 NPS	425.288 sq in	23.27 in	6.89 in	1 - 275 psi	Air	VIII Div. 1
28 NPS	28 NPS	574.678 sq in	27.05 in	8.06 in	1 - 275 psi	Air	VIII Div. 1
32 NPS	32 NPS	750.391 sq in	30.91 in	9.06 in	1 - 145 psi	Air	VIII Div. 1
36 NPS	36 NPS	957.72 sq in	34.92 in	10.02 in	1 - 145 psi	Air	VIII Div. 1
40 NPS	40 NPS	1183.589 sq in	38.82 in	11.22 in	1 - 145 psi	Air	VIII Div. 1

YONGYI VALVE GROUP CO., LTD. (YOY)

NB#: 04116

location: Dong'ou Industrial Area, Oubei Town, Yongjia, Zhejiang 325105 Peoples Republic Of China

Acceptable Abbrev.: YOY

YONGYI VALVE GROUP CO., LTD. (YOY)

location: Dong'ou Industrial Area, Oubei Town, Yongjia, Zhejiang 325105 Peoples Republic Of China

Acceptable Abbrev.: YOY

Certification Number:	04116	Design Series or catalog number	YFA42C-300aC 1-1/2G3
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Type Classification: Safety Relief Valve

Capacity Tests: Sec. VIII Div. 1 at National Board T L (Worthington) on September 19, 2016

Method of Establishing Relieving Capacity: Flow Capacity, 3 valve average

Certified Value: 1892 SCFM

Test Medium: Gas

Certified Medium: Air/Gas

Set Pressure Definition: Pop

Blowdown: Adjustable by Single Ring

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
1.5 NPS	3 NPS	0.501 sq in	[G] 0.8 in	0.2 in	200 - 200 psi	Air	VIII Div. 1

Certification Number:	04127	Design Series or catalog number	YFA42C-150C 2J3
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Type Classification: Safety Relief Valve

Capacity Tests: Sec. VIII Div. 1 at National Board T L (Worthington) on September 19, 2016

Method of Establishing Relieving Capacity: Flow Capacity, 3 valve average

Certified Value: 2578 SCFM

Test Medium: Gas

Certified Medium: Air/Gas

Set Pressure Definition: Pop

Blowdown: Adjustable by Single Ring

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
2 NPS	3 NPS	1.285 sq in	[J] 1.2795 in	0.32 in	100 - 100 psi	Air	VIII Div. 1

Zeeco, Inc. (ZCO)

NB#: 03306

location: 22151 East 91st Street, Broken Arrow, OK 74014 United States

Zeeco, Inc. (ZCO)

location: 22151 East 91st Street, Broken Arrow, OK 74014 United States

Certification Number: **03306** Design Series or catalog number: **PO-BPV**

Type Classification: **Buckling Pin Non-reclosing Device**Capacity Tests: **Sec. VIII Div. 1 at National Board T L (Worthington) on March 03, 2008**Method of Establishing Relieving Capacity: **Resistance Factor, 3 Size, Krg**Certified Value: **2.49 Unitless**Certification Provisions: **per CC 2397**Test Medium: **Air**Certified Medium: **Air or gases (Krg)**Set Pressure Definition: **Buckling Pressure**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
6 NPS	6 NPS	28.274 sq in	6 in	3.57 in	15 - 50 psi		VIII Div. 1
8 NPS	8 NPS	48.955 sq in	7.895 in	4.69 in	15 - 50 psi		VIII Div. 1
10 NPS	10 NPS	77.21 sq in	9.915 in	5.89 in	15 - 50 psi		VIII Div. 1
12 NPS	12 NPS	110.66 sq in	11.87 in	7.06 in	15 - 50 psi		VIII Div. 1
14 NPS	14 NPS	134.99 sq in	13.11 in	7.8 in	15 - 50 psi		VIII Div. 1
16 NPS	16 NPS	178.37 sq in	15.07 in	8.97 in	15 - 50 psi		VIII Div. 1
18 NPS	18 NPS	228.72 sq in	17.065 in	10.15 in	15 - 50 psi		VIII Div. 1
20 NPS	20 NPS	284.87 sq in	19.045 in	11.32 in	15 - 50 psi		VIII Div. 1
24 NPS	24 NPS	406.67 sq in	22.755 in	13.53 in	15 - 50 psi		VIII Div. 1
30 NPS	30 NPS	646.47 sq in	28.69 in	17.06 in	15 - 50 psi		VIII Div. 1
48 NPS	48 NPS	1698 sq in	46.5 in	27.63 in	15 - 50 psi		VIII Div. 1

Certification Number: **03317** Design Series or catalog number: **DA-BPV**

Type Classification: **Buckling Pin Non-reclosing Device**Capacity Tests: **Control Script failed for control txtCoc , Source=**Method of Establishing Relieving Capacity: **Resistance Factor, 3 Size, Krg**Certified Value: **2.17 Unitless**Certification Provisions: **per CC 2397**Test Medium: **Air**Certified Medium: **Air or gases (Krg)**Set Pressure Definition: **Buckling Pressure**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
6 NPS	6 NPS	28.274 sq in	6 in	3.57 in	15 - 50 psi		VIII Div. 1
8 NPS	8 NPS	48.955 sq in	7.895 in	4.69 in	15 - 50 psi		VIII Div. 1
10 NPS	10 NPS	77.21 sq in	9.915 in	5.89 in	15 - 50 psi		VIII Div. 1
12 NPS	12 NPS	110.66 sq in	11.87 in	7.06 in	15 - 50 psi		VIII Div. 1
14 NPS	14 NPS	134.99 sq in	13.11 in	7.8 in	15 - 50 psi		VIII Div. 1
16 NPS	16 NPS	178.37 sq in	15.07 in	8.97 in	15 - 50 psi		VIII Div. 1
18 NPS	18 NPS	228.72 sq in	17.065 in	10.15 in	15 - 50 psi		VIII Div. 1
20 NPS	20 NPS	284.87 sq in	19.045 in	11.32 in	15 - 50 psi		VIII Div. 1
24 NPS	24 NPS	406.67 sq in	22.755 in	13.53 in	15 - 50 psi		VIII Div. 1
30 NPS	30 NPS	646.47 sq in	28.69 in	17.06 in	15 - 50 psi		VIII Div. 1
48 NPS	48 NPS	1698 sq in	46.5 in	27.63 in	15 - 50 psi		VIII Div. 1

Zhejiang Chaochao Safety Valve Manufacturing Co., Ltd. (CXI)

NB#: 12755

Location: No. 139, Bei-Er Road, Xiaolin Town, Cixi City, Zhejiang Province, 315321 Peoples Republic Of China

Acceptable Abbrev.: CHAOCHAO

Zhejiang Chaochao Safety Valve Manufacturing Co., Ltd. (CXI)

Location: No. 139, Bei-Er Road, Xiaolin Town, Cixi City, Zhejiang Province, 315321 Peoples Republic Of China

Acceptable Abbrev.: CHAOCHAO

Certification Number: **12755** Design Series or catalog number: **AX2.II**

Type Classification: **Safety Relief Valve**Capacity Tests: **Sec. VIII Div. 1 at National Board T L (Worthington) on February 02, 2005**Method of Establishing Relieving Capacity: **Flow Capacity, Slope**Certified Value: **0.31 SCFM/PSIA**Test Medium: **Air/Gas**Certified Medium: **Air/Gas**Set Pressure Definition: **Pop**Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

Inlet Size	Outlet Size	Flow Area	Orifice [designator] diameter	Lift	Set Pressure Range	Media	Code Section
0.125 - 0.25 NPS	Side	12.5 sq mm	4 mm	1 mm	75 - 250 psi	Air	VIII Div. 1

Certification Number: **12812** Design Series or catalog number: **CAXL4-2.5**

Type Classification: **Safety Valve**Capacity Tests: **Sec. VIII Div. 1 at National Board T L (Worthington) on July 22, 2015**Method of Establishing Relieving Capacity: **Flow Capacity, Slope**Certified Value: **1.837 SCFM/PSIA**Test Medium: **Air**Certified Medium: **Air**Set Pressure Definition: **Pop**Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

Inlet Size	Outlet Size	Flow Area	Orifice [designator] diameter	Lift	Set Pressure Range	Media	Code Section
0.5 NPS		0.122 sq in	0.394 in		75 - 250 psi	Air	VIII Div. 1

Certification Number: **12823** Design Series or catalog number: **CAX3.11-2.5**

Type Classification: **Safety Valve**Capacity Tests: **Sec. VIII Div. 1 at National Board T L (Worthington) on July 22, 2015**Method of Establishing Relieving Capacity: **Flow Capacity, Slope**Certified Value: **.873 SCFM/PSIA**Test Medium: **Air**Certified Medium: **Air**Set Pressure Definition: **Pop**Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

Inlet Size	Outlet Size	Flow Area	Orifice [designator] diameter	Lift	Set Pressure Range	Media	Code Section
0.25 - 0.375 NPS	Side	0.06 sq in	0.276 in		75 - 250 psi	Air	VIII Div. 1

Zhejiang Chaochao Safety Valve Manufacturing Co., Ltd. (CXI)

NB#: 12834

Location: No. 139, Bei-Er Road, Xiaolin Town, Cixi City, Zhejiang Province, 315321 Peoples Republic Of China

Acceptable Abbrev.: CHAOCHAO

Certification Number: **12834** Design Series or catalog number: **CAXL6-2.5**

Type Classification: **Safety Valve**Capacity Tests: **Sec. VIII Div. 1 at National Board T L (Worthington) on July 22, 2015**Method of Establishing Relieving Capacity: **Flow Capacity, Slope**Certified Value: **3.254 SCFM/PSIA**Test Medium: **Air**Certified Medium: **Air**Set Pressure Definition: **Pop**Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
0.75 NPS		0.221 sq in	[E] 0.531 sq in		15 - 250 psi	Air	VIII Div. 1

Certification Number: **12845** Design Series or catalog number: **CAXL8-2.5**

Type Classification: **Safety Valve**Capacity Tests: **Sec. VIII Div. 1 at National Board T L (Worthington) on October 07, 2015**Method of Establishing Relieving Capacity: **Flow Capacity, Slope**Certified Value: **7.231 SCFM/PSIA**Test Medium: **Air**Certified Medium: **Air**Set Pressure Definition: **Pop**Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
1 NPS		0.487 sq in	0.787 in	0.197 in	75 - 250 psi	Air	VIII Div. 1

Certification Number: **12856** Design Series or catalog number: **CAXL8.II - 2.5**

Type Classification: **Safety Valve**Capacity Tests: **Sec. VIII Div. 1 at National Board T L (Worthington) on October 08, 2015**Method of Establishing Relieving Capacity: **Flow Capacity, Slope**Certified Value: **7.212**Test Medium: **Air**Certified Medium: **Air**Set Pressure Definition: **Pop**Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
1 NPS		0.439 sq in	0.748 in	0.187 in	75 - 250 psi	Air	VIII Div. 1

Certification Number: **12867** Design Series or catalog number: **CAGU24**

Type Classification: **Safety Valve**Capacity Tests: **Sec. VIII Div. 1 at National Board T L (Worthington) on November 30, 2016**Method of Establishing Relieving Capacity: **Flow Capacity, Slope**Certified Value: **0.70 SCFM/PSIA**Test Medium: **Gas**Certified Medium: **Air/Gas**Set Pressure Definition: **Pop**Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
0.125 - 0.25 NPS	Side	0.048 sq in	0.248 in	0.062 in	50 - 350 psi	Air	VIII Div. 1

ZOOK Canada Inc. (PEL)

NB#: 82000

location: 4400 South Service Road, Burlington, ON L7L 5R8 Canada

Acceptable Abbrev.: ZOOK

ZOOK Canada Inc. (PEL)

NB#: 82000

location: 4400 South Service Road, Burlington, ON L7L 5R8 Canada

Acceptable Abbrev.: ZOOK

ZOOK Canada Inc. (PEL)

location: 4400 South Service Road, Burlington, ON L7L 5R8 Canada

Acceptable Abbrev.: ZOOK

Certification Number: **82000** Design Series or catalog number: **RL-PB-LVR Series**

Holder Designation: 1 - 9, 7A, 1U - 6U, ST

Type Classification: Rupture Disk Device

Capacity Tests: Sec. VIII Div. 1 at National Board T L (Worthington) on November 25, 1998

Method of Establishing Relieving Capacity: Resistance Factor, 3 Size, Krgl

Certified Value: 5.46 Unitless

Test Medium: Air/Gas & Liquid

Certified Medium: Air or gases, and liquid (Krgl)

Set Pressure Definition: Burst Pressure

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
0.5 NPS		0.13 sq in			170 - 30000 psi		VIII Div. 1
0.75 NPS		0.35 sq in			110 - 15000 psi		VIII Div. 1
1 NPS		0.51 sq in			91 - 12000 psi		VIII Div. 1
1.5 NPS		1.05 sq in			59 - 6000 psi		VIII Div. 1
2 NPS		3.19 sq in			36 - 6000 psi		VIII Div. 1
3 NPS		7.02 sq in			25 - 6000 psi		VIII Div. 1
4 NPS		12.18 sq in			19 - 6000 psi		VIII Div. 1
6 NPS		21.76 sq in			15 - 3600 psi		VIII Div. 1
8 NPS		35.92 sq in			15 - 2100 psi		VIII Div. 1
10 NPS		57.96 sq in			15 - 1400 psi		VIII Div. 1
12 NPS		85.54 sq in			15 - 1000 psi		VIII Div. 1
14 NPS		110.2 sq in			15 - 750 psi		VIII Div. 1
16 NPS		146.2 sq in			15 - 500 psi		VIII Div. 1
18 NPS		197 sq in			15 - 475 psi		VIII Div. 1
20 NPS		240.7 sq in			15 - 450 psi		VIII Div. 1
24 NPS		348.9 sq in			15 - 275 psi		VIII Div. 1

ZOOK Canada Inc. (PEL)

NB#: 82011

Location: 4400 South Service Road, Burlington, ON L7L 5R8 Canada

Acceptable Abbrev.: ZOOK

Certification
Number: **82011**Design Series
or catalog number **R-PB-R**

Holder Designation: 1 - 9, 7A, 1U - 6U, ST

Type Classification: Rupture Disk Device

Capacity Tests: Sec. VIII Div. 1 at National Board T L (Worthington) on January 27, 1999

Method of Establishing Relieving Capacity: Resistance Factor, 3 Size, Krgl

Certified Value: 0.92 Unitless

Test Medium: Air/Gas & Liquid

Certified Medium: Air or gases, and liquid (Krgl)

Special Service: None

Set Pressure Definition: Burst Pressure

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
0.25 NPS		0.05 sq in			180 - 80000 psi		VIII Div. 1
0.5 NPS		0.17 sq in			170 - 30000 psi		VIII Div. 1
0.75 NPS		0.44 sq in			110 - 15000 psi		VIII Div. 1
1 NPS		0.71 sq in			68 - 12000 psi		VIII Div. 1
1.5 NPS		1.54 sq in			27 - 6000 psi		VIII Div. 1
2 NPS		3.36 sq in			16 - 6000 psi		VIII Div. 1
3 NPS		7.39 sq in			25 - 6000 psi		VIII Div. 1
4 NPS		12.73 sq in			19 - 6000 psi		VIII Div. 1
6 NPS		28.27 sq in			15 - 3600 psi		VIII Div. 1
8 NPS		50.01 sq in			15 - 2100 psi		VIII Div. 1
10 NPS		78.54 sq in			15 - 1400 psi		VIII Div. 1
12 NPS		113.1 sq in			15 - 1000 psi		VIII Div. 1
14 NPS		137.9 sq in			15 - 750 psi		VIII Div. 1
16 NPS		182.7 sq in			15 - 500 psi		VIII Div. 1
18 NPS		233.7 sq in			15 - 475 psi		VIII Div. 1
20 NPS		291 sq in			15 - 450 psi		VIII Div. 1
24 NPS		424.6 sq in			15 - 275 psi		VIII Div. 1

ZOOK Canada Inc. (PEL)

NB#: 82022

Location: 4400 South Service Road, Burlington, ON L7L 5R8 Canada

Acceptable Abbrev.: ZOOK

Certification
Number: **82022**Design Series
or catalog number **R-D-R Series**

Holder Designation: 1 - 9, 7A, 1U - 6U, ST

Type Classification: Rupture Disk Device

Capacity Tests: Sec. VIII Div. 1 at National Board T L (Worthington) on August 28, 1998

Method of Establishing Relieving Capacity: Resistance Factor, 3 Size, Krgl

Certified Value: 2.4 Unitless

Test Medium: Air/Gas & Liquid

Certified Medium: Air or gases, and liquid (Krgl)

Set Pressure Definition: Burst Pressure

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
0.5 NPS		0.17 sq in			60 - 6000 psi		VIII Div. 1
0.75 NPS		0.44 sq in			48 - 6000 psi		VIII Div. 1
1 NPS		0.71 sq in			30 - 6000 psi		VIII Div. 1
1.5 NPS		1.54 sq in			20 - 3000 psi		VIII Div. 1
2 NPS		3.36 sq in			16 - 3000 psi		VIII Div. 1
3 NPS		7.39 sq in			15 - 3000 psi		VIII Div. 1
4 NPS		12.73 sq in			15 - 3000 psi		VIII Div. 1
6 NPS		28.27 sq in			15 - 2160 psi		VIII Div. 1
8 NPS		50 sq in			15 - 1440 psi		VIII Div. 1
10 NPS		78.54 sq in			15 - 750 psi		VIII Div. 1
12 NPS		113.1 sq in			15 - 750 psi		VIII Div. 1
14 NPS		137.9 sq in			15 - 750 psi		VIII Div. 1
16 NPS		182.7 sq in			15 - 500 psi		VIII Div. 1
18 NPS		233.7 sq in			15 - 475 psi		VIII Div. 1
20 NPS		291 sq in			15 - 450 psi		VIII Div. 1
24 NPS		424.6 sq in			15 - 275 psi		VIII Div. 1

Certification
Number: **82033**Design Series
or catalog number **R-D-VR Series**

Holder Designation: 1 - 9, 7A, 1U - 6U

Type Classification: Rupture Disk Device

Capacity Tests: Sec. VIII Div. 1 at National Board T L (Worthington) on October 30, 1998

Method of Establishing Relieving Capacity: Resistance Factor, 3 Size, Krgl

Certified Value: 6.21 Unitless

Test Medium: Air/Gas & Liquid

Certified Medium: Air or gases, and liquid (Krgl)

Set Pressure Definition: Burst Pressure

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
0.5 NPS		0.13 sq in			60 - 6000 psi		VIII Div. 1
0.75 NPS		0.35 sq in			48 - 6000 psi		VIII Div. 1
1 NPS		0.51 sq in			30 - 6000 psi		VIII Div. 1
1.5 NPS		1.05 sq in			20 - 3000 psi		VIII Div. 1
2 NPS		3.19 sq in			16 - 3000 psi		VIII Div. 1
3 NPS		7.02 sq in			15 - 3000 psi		VIII Div. 1
4 NPS		12.18 sq in			15 - 3000 psi		VIII Div. 1
6 NPS		21.76 sq in			15 - 2160 psi		VIII Div. 1
8 NPS		35.92 sq in			15 - 1440 psi		VIII Div. 1
10 NPS		57.96 sq in			15 - 750 psi		VIII Div. 1
12 NPS		85.54 sq in			15 - 750 psi		VIII Div. 1
14 NPS		110.2 sq in			15 - 750 psi		VIII Div. 1
16 NPS		146.2 sq in			15 - 500 psi		VIII Div. 1
18 NPS		197 sq in			15 - 475 psi		VIII Div. 1
20 NPS		240.7 sq in			15 - 450 psi		VIII Div. 1
24 NPS		348.9 sq in			15 - 275 psi		VIII Div. 1

ZOOK Canada Inc. (PEL)

NB#: 82044

Location: 4400 South Service Road, Burlington, ON L7L 5R8 Canada

Acceptable Abbrev.: ZOOK

Certification Number: **82044** Design Series or catalog number **SFAL & SFA-II-L Series**

Holder Designation: UH Series, FS11-FS6U, FAH Series

Type Classification: Rupture Disk Device

Capacity Tests: Sec. VIII Div. 1 at National Board T L (Worthington) on October 30, 1998

Method of Establishing Relieving Capacity: Resistance Factor, 3 Size, Krg

Certified Value: 0.39 Unitless

Test Medium: Air/Gas

Certified Medium: Air or gases (Krg)

Set Pressure Definition: Burst Pressure

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
0.5 NPS		0.3 sq in			200 - 6000 psi		VIII Div. 1
0.75 NPS		0.53 sq in			125 - 6000 psi		VIII Div. 1
1 NPS		0.86 sq in			79 - 6000 psi		VIII Div. 1
1.5 NPS		2.04 sq in			73 - 6000 psi		VIII Div. 1
2 NPS		3.36 sq in			61 - 3600 psi		VIII Div. 1
3 NPS		7.39 sq in			40 - 3600 psi		VIII Div. 1
4 NPS		12.73 sq in			32 - 3000 psi		VIII Div. 1
6 NPS		28.89 sq in			27 - 1440 psi		VIII Div. 1
8 NPS		50.03 sq in			25 - 1440 psi		VIII Div. 1
10 NPS		78.85 sq in			22 - 1440 psi		VIII Div. 1
12 NPS		113.1 sq in			20 - 720 psi		VIII Div. 1
14 NPS		137.9 sq in			17 - 500 psi		VIII Div. 1
16 NPS		182.7 sq in			15 - 285 psi		VIII Div. 1
18 NPS		233.7 sq in			15 - 125 psi		VIII Div. 1
20 NPS		291 sq in			15 - 75 psi		VIII Div. 1
24 NPS		424.6 sq in			15 - 50 psi		VIII Div. 1

Certification Number: **82055** Design Series or catalog number **SB90-L Series**

Holder Designation: SB7, SB7A

Type Classification: Rupture Disk Device

Capacity Tests: Sec. VIII Div. 1 at National Board T L (Worthington) on December 05, 1998

Method of Establishing Relieving Capacity: Resistance Factor, 3 Size, Krg

Certified Value: 3.49 Unitless

Test Medium: Air/Gas

Certified Medium: Air or gases (Krg)

Set Pressure Definition: Burst Pressure

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
1 NPS		0.71 sq in			90 - 1800 psi		VIII Div. 1
1.5 NPS		1.59 sq in			77 - 1700 psi		VIII Div. 1
2 NPS		2.83 sq in			26 - 1600 psi		VIII Div. 1
3 NPS		6.36 sq in			30 - 1500 psi		VIII Div. 1
4 NPS		11.31 sq in			25 - 1500 psi		VIII Div. 1
6 NPS		25.45 sq in			20 - 850 psi		VIII Div. 1
8 NPS		45.24 sq in			15 - 800 psi		VIII Div. 1
10 NPS		67.2 sq in			15 - 800 psi		VIII Div. 1
12 NPS		97.59 sq in			15 - 800 psi		VIII Div. 1
14 NPS		119.5 sq in			15 - 700 psi		VIII Div. 1
16 NPS		159 sq in			15 - 700 psi		VIII Div. 1
18 NPS		210.3 sq in			15 - 700 psi		VIII Div. 1
20 NPS		261.9 sq in			15 - 700 psi		VIII Div. 1
24 NPS		382.1 sq in			15 - 700 psi		VIII Div. 1

ZOOK Canada Inc. (PEL)

NB#: 82066

Location: 4400 South Service Road, Burlington, ON L7L 5R8 Canada

Acceptable Abbrev.: ZOOK

Certification
Number: **82066**Design Series
or catalog number **URA-L, URA**Holder Designation: **URA Series, CWA Welded Assembly**Type Classification: **Rupture Disk Device**Capacity Tests: **Sec. VIII Div. 1 at National Board T L (Worthington) on April 30, 2000**Method of Establishing Relieving Capacity: **Resistance Factor, 3 Size, Krgl**Certified Value: **0.78 Unitless**Test Medium: **Air/Gas & Liquid**Certified Medium: **Air or gases, and liquid (Krgl)**Special Service: **None**Set Pressure Definition: **Burst Pressure**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
1 NPS		0.86 sq in			22 - 1000 psi		VIII Div. 1
1.5 NPS		2 sq in			20 - 900 psi		VIII Div. 1
2 NPS		3.36 sq in			18 - 850 psi		VIII Div. 1
3 NPS		7.25 sq in			16 - 750 psi		VIII Div. 1
4 NPS		12.53 sq in			14 - 650 psi		VIII Div. 1
6 NPS		26.59 sq in			12 - 400 psi		VIII Div. 1
8 NPS		45.48 sq in			12 - 250 psi		VIII Div. 1
10 NPS		70.52 sq in			12 - 200 psi		VIII Div. 1
12 NPS		98.33 sq in			12 - 150 psi		VIII Div. 1
14 NPS		124.7 sq in			9 - 175 psi		VIII Div. 1
16 NPS		162.9 sq in			7 - 85 psi		VIII Div. 1
18 NPS		206.1 sq in			7 - 75 psi		VIII Div. 1
20 NPS		254.5 sq in			5 - 60 psi		VIII Div. 1
24 NPS		366.5 sq in			5 - 50 psi		VIII Div. 1

Certification
Number: **82077**Design Series
or catalog number **RA4, RLP**Holder Designation: **RLP Series, RAH Series**Type Classification: **Rupture Disk Device**Capacity Tests: **Sec. VIII Div. 1 at National Board T L (Worthington) on May 05, 2003**Method of Establishing Relieving Capacity: **Resistance Factor, 3 Size, Krgl**Certified Value: **1.63 Unitless**Test Medium: **Air/Gas & Liquid**Certified Medium: **Air or gases, and liquid (Krgl)**Special Service: **None**Set Pressure Definition: **Burst Pressure**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
1 NPS		0.86 sq in			13 - 40 psi		VIII Div. 1
1.5 NPS		1.63 sq in			9 - 25 psi		VIII Div. 1
2 NPS		2.78 sq in			6 - 25 psi		VIII Div. 1
3 NPS		5.69 sq in			4 - 25 psi		VIII Div. 1
4 NPS		9.51 sq in			3 - 20 psi		VIII Div. 1
6 NPS		19.46 sq in			2 - 18 psi		VIII Div. 1
8 NPS		33.28 sq in			2 - 18 psi		VIII Div. 1
10 NPS		50.78 sq in			2 - 14 psi		VIII Div. 1
12 NPS		71.69 sq in			2 - 14 psi		VIII Div. 1

ZOOK Canada Inc. (PEL)

NB#: 82101

Location: 4400 South Service Road, Burlington, ON L7L 5R8 Canada

Acceptable Abbrev.: ZOOK

Certification Number: **82101** Design Series or catalog number **SRA, SRA-L, SRA-C, SRA-LC, SRA-X, RAX**

Holder Designation: **SRA Seires, RAH Series.**Type Classification: **Rupture Disk Device**Capacity Tests: **Sec. VIII Div. 1 at National Board T L (Worthington) on August 28, 2002**Method of Establishing Relieving Capacity: **Resistance Factor, 3 Size, Krg**Certified Value: **2.00 Unitless**Test Medium: **Air/Gas**Certified Medium: **Air or gases (Krg)**Special Service: **None**Set Pressure Definition: **Burst Pressure**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
1 NPS		0.86 sq in			92 - 3705 psi		VIII Div. 1
1.5 NPS		2.04 sq in			81 - 3705 psi		VIII Div. 1
2 NPS		3.36 sq in			60 - 3705 psi		VIII Div. 1
3 NPS		7.39 sq in			55 - 1200 psi		VIII Div. 1
4 NPS		12.73 sq in			48 - 900 psi		VIII Div. 1
6 NPS		28.89 sq in			35 - 900 psi		VIII Div. 1
8 NPS		50 sq in			33 - 700 psi		VIII Div. 1
10 NPS		78.8 sq in			30 - 700 psi		VIII Div. 1
12 NPS		112 sq in			27 - 600 psi		VIII Div. 1
14 NPS		135 sq in			25 - 500 psi		VIII Div. 1
16 NPS		177 sq in			23 - 100 psi		VIII Div. 1
18 NPS		224 sq in			22 - 92 psi		VIII Div. 1
20 NPS		278 sq in			21 - 84 psi		VIII Div. 1
24 NPS		402 sq in			20 - 70 psi		VIII Div. 1

Certification Number: **82112** Design Series or catalog number **RA6 (Liquid)**

Holder Designation: **RAH Series**Type Classification: **Rupture Disk Device**Capacity Tests: **Sec. VIII Div. 1 at National Board T L (Worthington) on September 26, 2008**Method of Establishing Relieving Capacity: **Resistance Factor, 3 Size, Krl**Certified Value: **0.98 Unitless**Test Medium: **Liquid (Krl)**Certified Medium: **Liquid (Krl)**Special Service: **None**Set Pressure Definition: **Burst Pressure**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
1 NPS		0.86 sq in			22 - 200 psi		VIII Div. 1
1.5 NPS		2 sq in			20 - 167 psi		VIII Div. 1
2 NPS		3.36 sq in			18 - 118 psi		VIII Div. 1
2.5 NPS		4.79 sq in			17 - 93 psi		VIII Div. 1
3 NPS		7.25 sq in			16 - 68 psi		VIII Div. 1
4 NPS		12.53 sq in			14 - 69 psi		VIII Div. 1
6 NPS		26.59 sq in			12 - 67 psi		VIII Div. 1
8 NPS		45.48 sq in			12 - 54 psi		VIII Div. 1
10 NPS		70.52 sq in			12 - 46 psi		VIII Div. 1
12 NPS		98.33 sq in			12 - 38 psi		VIII Div. 1
14 NPS		124.7 sq in			9 - 38 psi		VIII Div. 1
16 NPS		162.9 sq in			7 - 40 psi		VIII Div. 1
18 NPS		206.1 sq in			6 - 40 psi		VIII Div. 1
20 NPS		254.5 sq in			5 - 38 psi		VIII Div. 1
24 NPS		366.5 sq in			5 - 26 psi		VIII Div. 1

ZOOK Canada Inc. (PEL)

NB#: 82123

Location: 4400 South Service Road, Burlington, ON L7L 5R8 Canada

Acceptable Abbrev.: ZOOK

Certification
Number: **82123**Design Series
or catalog number **RA6 (Air/Gas)**Holder Designation: **RAH Series**Type Classification: **Rupture Disk Device**Capacity Tests: **Sec. VIII Div. 1 at National Board T L (Worthington) on April 14, 2008**Method of Establishing Relieving Capacity: **Resistance Factor, 3 Size, Krg**Certified Value: **0.8 Unitless**Test Medium: **Air**Certified Medium: **Air or gases (Krg)**Special Service: **None**Set Pressure Definition: **Burst Pressure**Blowdown: **Fixed**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
1 NPS		0.86 sq in			25.8 - 144 psi		VIII Div. 1
1.5 NPS		2 sq in			20 - 120 psi		VIII Div. 1
2 NPS		3.36 sq in			18 - 100 psi		VIII Div. 1
2.5 NPS		4.79 sq in			17 - 83 psi		VIII Div. 1
3 NPS		7.25 sq in			16 - 65 psi		VIII Div. 1
4 NPS		12.53 sq in			14 - 55 psi		VIII Div. 1
6 NPS		26.59 sq in			12 - 45 psi		VIII Div. 1
8 NPS		45.48 sq in			12 - 35 psi		VIII Div. 1
10 NPS		70.52 sq in			12 - 30 psi		VIII Div. 1
12 NPS		98.33 sq in			12 - 26 psi		VIII Div. 1
14 NPS		124.7 sq in			9 - 24 psi		VIII Div. 1
16 NPS		162.9 sq in			7 - 22 psi		VIII Div. 1
18 NPS		206.1 sq in			6 - 21 psi		VIII Div. 1
20 NPS		254.5 sq in			5 - 19 psi		VIII Div. 1
24 NPS		366.5 sq in			5 - 18 psi		VIII Div. 1

ZOOK Canada Inc. (PEL)

NB#: 82134

Location: 4400 South Service Road, Burlington, ON L7L 5R8 Canada

Acceptable Abbrev.: ZOOK

Certification Number: **82134** Design Series or catalog number **RA8 (Liquid)**

Holder Designation: RAH Series

Type Classification: Rupture Disk Device

Capacity Tests: Sec. VIII Div. 1 at National Board T L (Worthington) on April 16, 2008

Method of Establishing Relieving Capacity: Resistance Factor, 3 Size, Krl

Certified Value: 1.16 Unitless

Test Medium: Liquid (Krl)

Certified Medium: Liquid (Krl)

Special Service: None

Set Pressure Definition: Burst Pressure

Scope of Nominal Size and Set Pressure Ranges:

Inlet Size	Outlet Size	Flow Area	Orifice [designator] diameter	Lift	Set Pressure Range	Media	Code Section
1 NPS		0.86 sq in			200 - 1000 psi		VIII Div. 1
1.5 NPS		2 sq in			167 - 1000 psi		VIII Div. 1
2 NPS		3.36 sq in			118 - 850 psi		VIII Div. 1
2.5 NPS		4.79 sq in			93 - 800 psi		VIII Div. 1
3 NPS		7.25 sq in			68 - 750 psi		VIII Div. 1
4 NPS		12.53 sq in			69 - 650 psi		VIII Div. 1
6 NPS		26.5 sq in			67 - 425 psi		VIII Div. 1
8 NPS		45.48 sq in			54 - 325 psi		VIII Div. 1
10 NPS		70.52 sq in			46 - 275 psi		VIII Div. 1
12 NPS		98.33 sq in			38 - 225 psi		VIII Div. 1
14 NPS		124.7 sq in			38 - 200 psi		VIII Div. 1
16 NPS		162.9 sq in			40 - 180 psi		VIII Div. 1
18 NPS		206.1 sq in			40 - 160 psi		VIII Div. 1
20 NPS		254.5 sq in			38 - 150 psi		VIII Div. 1
24 NPS		366.5 sq in			26 - 100 psi		VIII Div. 1

Certification Number: **82145** Design Series or catalog number **RA8 (Gas)**

Holder Designation: RAH Series

Type Classification: Rupture Disk Device

Capacity Tests: Sec. VIII Div. 1 at National Board T L (Worthington) on October 01, 2007

Method of Establishing Relieving Capacity: Resistance Factor, 3 Size, Krg

Certified Value: 0.59 Unitless

Test Medium: Air

Certified Medium: Air or gases (Krg)

Special Service: None

Set Pressure Definition: Burst Pressure

Scope of Nominal Size and Set Pressure Ranges:

Inlet Size	Outlet Size	Flow Area	Orifice [designator] diameter	Lift	Set Pressure Range	Media	Code Section
1 NPS		0.86 sq in			144 - 720 psi		VIII Div. 1
1.5 NPS		2 sq in			120 - 720 psi		VIII Div. 1
2 NPS		3.36 sq in			100 - 720 psi		VIII Div. 1
2.5 NPS		4.79 sq in			83 - 720 psi		VIII Div. 1
3 NPS		7.25 sq in			65 - 720 psi		VIII Div. 1
4 NPS		12.53 sq in			55 - 520 psi		VIII Div. 1
6 NPS		26.59 sq in			45 - 285 psi		VIII Div. 1
8 NPS		45.48 sq in			35 - 210 psi		VIII Div. 1
10 NPS		70.52 sq in			30 - 180 psi		VIII Div. 1
12 NPS		98.33 sq in			26 - 155 psi		VIII Div. 1
14 NPS		124.7 sq in			24 - 125 psi		VIII Div. 1
16 NPS		162.9 sq in			22 - 100 psi		VIII Div. 1
18 NPS		206.1 sq in			21 - 85 psi		VIII Div. 1
20 NPS		254.5 sq in			19 - 75 psi		VIII Div. 1
24 NPS		366.5 sq in			18 - 70 psi		VIII Div. 1

ZOOK Canada Inc. (PEL)

NB#: 82156

Location: 4400 South Service Road, Burlington, ON L7L 5R8 Canada

Acceptable Abbrev.: ZOOK

Certification Number: **82156** Design Series or catalog number: **RAUS (Liquid)**

Holder Designation: RAUS installation in standard sanitary O.D. tube fittings

Type Classification: Rupture Disk Device

Capacity Tests: Sec. VIII Div. 1 at National Board T L (Worthington) on January 30, 2009

Method of Establishing Relieving Capacity: Resistance Factor, 3 Size, Krl

Certified Value: 11.67 Unitless

Test Medium: Air/Gas & Liquid

Certified Medium: Liquid (Krl)

Special Service: None

Set Pressure Definition: Burst Pressure

Scope of Nominal Size and Set Pressure Ranges:

Inlet Size	Outlet Size	Flow Area	Orifice [designator] diameter	Lift	Set Pressure Range	Media	Code Section
1 NPS		0.36 sq in			83 - 300 psi		VIII Div. 1
1.5 NPS		0.94 sq in			27 - 250 psi		VIII Div. 1
2 NPS		1.79 sq in			24 - 180 psi		VIII Div. 1
3 NPS		4.34 sq in			20 - 120 psi		VIII Div. 1
4 NPS		7.8 sq in			18 - 80 psi		VIII Div. 1

Certification Number: **82167** Design Series or catalog number: **RAUS (Air/Gas)**

Holder Designation: RAUS for installation in standard sanitary O.D. tube fittings

Type Classification: Rupture Disk Device

Capacity Tests: Sec. VIII Div. 1 at National Board T L (Worthington) on January 30, 2009

Method of Establishing Relieving Capacity: Resistance Factor, 3 Size, Krg

Certified Value: 11.67 Unitless

Test Medium: Air or gases (Krg)

Certified Medium: Air or gases (Krg)

Special Service: None

Set Pressure Definition: Burst Pressure

Scope of Nominal Size and Set Pressure Ranges:

Inlet Size	Outlet Size	Flow Area	Orifice [designator] diameter	Lift	Set Pressure Range	Media	Code Section
1 NPS		0.36 sq in			83 - 300 psi		VIII Div. 1
1.5 NPS		0.94 sq in			27 - 250 psi		VIII Div. 1
2 NPS		1.79 sq in			24 - 180 psi		VIII Div. 1
3 NPS		4.34 sq in			20 - 120 psi		VIII Div. 1
4 NPS		7.8 sq in			18 - 80 psi		VIII Div. 1

Certification Number: **82178** Design Series or catalog number: **Throwaway (TA), Screw Type (ST) Assemblies**

Type Classification: Rupture Disk Device

Capacity Tests: Sec. VIII Div. 1 at National Board T L (Worthington) on July 31, 2015

Method of Establishing Relieving Capacity: Resistance Factor, 3 Size, Krgl

Certified Value: 16.08 Unitless

Test Medium: Air or gases, and liquid (Krgl)

Certified Medium: Air/Gas & Liquid

Set Pressure Definition: Burst Pressure

Blowdown: Fixed

Scope of Nominal Size and Set Pressure Ranges:

Inlet Size	Outlet Size	Flow Area	Orifice [designator] diameter	Lift	Set Pressure Range	Media	Code Section
0.125 NPS		0.01 sq in			33 - 3000 psi		VIII Div. 1
0.25 NPS		0.04 sq in			33 - 3000 psi		VIII Div. 1
0.375 NPS		0.1 sq in			33 - 3000 psi		VIII Div. 1
0.5 NPS		0.13 sq in			33 - 3000 psi		VIII Div. 1
0.75 NPS		0.29 sq in			33 - 3000 psi		VIII Div. 1
1 NPS		0.47 sq in			33 - 3000 psi		VIII Div. 1

ZOOK Canada Inc. (PEL)

NB#: 82189

Location: 4400 South Service Road, Burlington, ON L7L 5R8 Canada

Acceptable Abbrev.: ZOOK

Certification
Number: **82189**Design Series
or catalog number**FAX-L, SFAZ-L and SFA-II-L and SFA-L Series Rupture Disks**

Holder Designation: FAH, FAHI, UH, UHZ, SR7A, and FS1U - FS6U Series

Type Classification: Rupture Disk Device

Capacity Tests: Sec. VIII Div. 1 at National Board T L (Worthington) on June 26, 2015

Method of Establishing Relieving Capacity: Resistance Factor, 3 Size, Krl

Certified Value: 1.78 Unitless

Test Medium: Liquid (Krl)

Certified Medium: Liquid (Krl)

Set Pressure Definition: Burst Pressure

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
0.5 NPS		0.3 sq in			200 - 6000 psi	Water	VIII Div. 1
0.75 NPS		0.53 sq in			125 - 6000 psi	Water	VIII Div. 1
1 NPS		0.86 sq in			79 - 6000 psi	Water	VIII Div. 1
1.5 NPS		2.04 sq in			73 - 6000 psi	Water	VIII Div. 1
2 NPS		3.36 sq in			61 - 3600 psi	Water	VIII Div. 1
3 NPS		7.39 sq in			40 - 3600 psi	Water	VIII Div. 1
4 NPS		12.73 sq in			32 - 3000 psi	Water	VIII Div. 1
6 NPS		28.89 sq in			27 - 1440 psi	Water	VIII Div. 1
8 NPS		50.03 sq in			25 - 1440 psi	Water	VIII Div. 1
10 NPS		78.85 sq in			22 - 1440 psi	Water	VIII Div. 1
12 NPS		113.1 sq in			20 - 720 psi	Water	VIII Div. 1
14 NPS		137.89 sq in			17 - 500 psi	Water	VIII Div. 1
16 NPS		182.65 sq in			15 - 285 psi	Water	VIII Div. 1
18 NPS		233.71 sq in			15 - 125 psi	Water	VIII Div. 1
20 NPS		291.04 sq in			15 - 75 psi	Water	VIII Div. 1
24 NPS		424.56 sq in			15 - 50 psi	Water	VIII Div. 1

Zook Enterprises, LLC (ZOE)

NB#: 76003

location: 16809 Park Circle Drive, Chagrin Falls, OH 44022 United States

Zook Enterprises, LLC (ZOE)

location: 16809 Park Circle Drive, Chagrin Falls, OH 44022 United States

Certification
Number: **76003**Design Series
or catalog number **Mono**Type Classification: **Rupture Disk Device**Capacity Tests: **Sec. VIII Div. 1 at National Board T L (Worthington) on May 27, 1998**Method of Establishing Relieving Capacity: **Resistance Factor, 3 Size, Krgl**Certified Value: **.26 Unitless**Test Medium: **Air/Gas & Liquid**Certified Medium: **Air or gases, and liquid (Krgl)**Special Service: **None**Set Pressure Definition: **Burst Pressure**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
0.5 NPS		0.3 sq in			25 - 150 psi		VIII Div. 1
0.75 NPS		0.53 sq in			25 - 150 psi		VIII Div. 1
1 NPS		0.78 sq in			10 - 150 psi		VIII Div. 1
1.5 NPS		1.76 sq in			7 - 150 psi		VIII Div. 1
2 NPS		3.14 sq in			3 - 150 psi		VIII Div. 1
2.5 NPS		4.78 sq in			3 - 150 psi		VIII Div. 1
3 NPS		7.06 sq in			2 - 150 psi		VIII Div. 1
4 NPS		12.56 sq in			1.5 - 150 psi		VIII Div. 1
5 NPS		19.63 sq in			1.5 - 150 psi		VIII Div. 1
6 NPS		28.27 sq in			1 - 150 psi		VIII Div. 1
8 NPS		50.02 sq in			0.5 - 150 psi		VIII Div. 1
10 NPS		78.53 sq in			.25 - 125 psi		VIII Div. 1
12 NPS		113.09 sq in			.25 - 125 psi		VIII Div. 1
14 NPS		137.88 sq in			.25 - 100 psi		VIII Div. 1
16 NPS		182.65 sq in			.25 - 100 psi		VIII Div. 1
18 NPS		233.7 sq in			.25 - 100 psi		VIII Div. 1
20 NPS		291.03 sq in			.25 - 50 psi		VIII Div. 1
24 NPS		424.55 sq in			.25 - 50 psi		VIII Div. 1

Location: 16809 Park Circle Drive, Chagrin Falls, OH 44022 United States

Certification Number: **76014** Design Series or catalog number: **Inverted**

Type Classification: **Rupture Disk Device**Capacity Tests: **Sec. VIII Div. 1 at National Board T L (Worthington) on May 27, 1998**Method of Establishing Relieving Capacity: **Resistance Factor, 3 Size, Krgl**Certified Value: **.64 Unitless**Test Medium: **Air/Gas & Liquid**Certified Medium: **Air or gases, and liquid (Krgl)**Special Service: **None**Set Pressure Definition: **Burst Pressure**

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
0.5 NPS		0.3 sq in			25 - 1500 psi		N/A
0.75 NPS		0.53 sq in			25 - 1500 psi		N/A
1 NPS		0.53 sq in	[San]		10 - 100 psi		N/A
		0.78 sq in			10 - 1500 psi		N/A
1.5 NPS		1.37 sq in	[San]		7 - 100 psi		N/A
		1.76 sq in			7 - 1000 psi		N/A
2 NPS		2.6 sq in	[San]		3 - 100 psi		N/A
		3.14 sq in			3 - 750 psi		N/A
2.5 NPS		4.23 sq in	[San]		2 - 75 psi		N/A
		4.78 sq in			3 - 750 psi		N/A
3 NPS		6.25 sq in	[San]		2 - 75 psi		N/A
		7.06 sq in			2 - 750 psi		N/A
3.5 NPS		9.62 sq in			1.5 - 500 psi		VIII Div. 1
4 NPS		11.18 sq in	[San]		1.5 - 60 psi		N/A
		12.56 sq in			1.5 - 500 psi		N/A
5 NPS		19.63 sq in			1.5 - 500 psi		N/A
6 NPS		28.27 sq in			1 - 450 psi		N/A
8 NPS		50.02 sq in			.5 - 450 psi		N/A
10 NPS		78.53 sq in			.25 - 150 psi		N/A
12 NPS		113.09 sq in			.25 - 150 psi		N/A
14 NPS		137.88 sq in			.25 - 150 psi		N/A
16 NPS		182.65 sq in			.25 - 150 psi		N/A
18 NPS		233.7 sq in			.25 - 150 psi		N/A
20 NPS		291.03 sq in			.25 - 150 psi		N/A
24 NPS		424.55 sq in			.25 - 150 psi		N/A

Location: 16809 Park Circle Drive, Chagrin Falls, OH 44022 United States

Certification Number: **76025** Design Series or catalog number **Mono Style W/Plate Vac. Support**

Type Classification: Rupture Disk Device

Capacity Tests: Sec. VIII Div. 1 at National Board T L (Worthington) on April 22, 1999

Method of Establishing Relieving Capacity: Resistance Factor, 3 Size, Krgl

Certified Value: 15.7 Unitless

Test Medium: Air/Gas & Liquid

Certified Medium: Air or gases, and liquid (Krgl)

Set Pressure Definition: Burst Pressure

Scope of Nominal Size and Set Pressure Ranges:

Inlet Size	Outlet Size	Flow Area	Orifice [designator] diameter	Lift	Set Pressure Range	Media	Code Section
1 NPS		0.32 sq in			10 - 150 psi		VIII Div. 1
1.5 NPS		0.72 sq in			7 - 150 psi		VIII Div. 1
2 NPS		1.3 sq in			3 - 150 psi		VIII Div. 1
2.5 NPS		2.04 sq in			3 - 150 psi		VIII Div. 1
3 NPS		2.95 sq in			2 - 150 psi		VIII Div. 1
4 NPS		5.47 sq in			1.5 - 150 psi		VIII Div. 1
5 NPS		8.39 sq in			1.5 - 150 psi		VIII Div. 1
6 NPS		12.05 sq in			1 - 150 psi		VIII Div. 1
8 NPS		21.14 sq in			0.5 - 150 psi		VIII Div. 1
10 NPS		32.66 sq in			.25 - 125 psi		VIII Div. 1
12 NPS		47.24 sq in			.25 - 125 psi		VIII Div. 1
14 NPS		58.07 sq in			.25 - 100 psi		VIII Div. 1
16 NPS		84.49 sq in			.25 - 100 psi		VIII Div. 1
18 NPS		104.31 sq in			.25 - 100 psi		VIII Div. 1
20 NPS		122.49 sq in			.25 - 50 psi		VIII Div. 1
24 NPS		190.61 sq in			.25 - 50 psi		VIII Div. 1

Certification Number: **76036** Design Series or catalog number **Mono Style W/Cross Vac. Support**

Type Classification: Rupture Disk Device

Capacity Tests: Sec. VIII Div. 1 at National Board T L (Worthington) on November 20, 1998

Method of Establishing Relieving Capacity: Resistance Factor, 3 Size, Krgl

Certified Value: 5.4 Unitless

Test Medium: Air/Gas & Liquid

Certified Medium: Air or gases, and liquid (Krgl)

Set Pressure Definition: Burst Pressure

Scope of Nominal Size and Set Pressure Ranges:

Inlet Size	Outlet Size	Flow Area	Orifice [designator] diameter	Lift	Set Pressure Range	Media	Code Section
1 NPS		0.47 sq in			10 - 150 psi		VIII Div. 1
1.5 NPS		1.05 sq in			7 - 150 psi		VIII Div. 1
2 NPS		1.86 sq in			3 - 150 psi		VIII Div. 1
2.5 NPS		2.94 sq in			3 - 150 psi		VIII Div. 1
3 NPS		4.31 sq in			2 - 150 psi		VIII Div. 1
4 NPS		8.81 sq in			1.5 - 150 psi		VIII Div. 1
5 NPS		12.7 sq in			1.5 - 150 psi		VIII Div. 1
6 NPS		17.27 sq in			1 - 150 psi		VIII Div. 1
8 NPS		31.82 sq in			.5 - 150 psi		VIII Div. 1
10 NPS		50.78 sq in			.25 - 125 psi		VIII Div. 1
12 NPS		69.09 sq in			.25 - 125 psi		VIII Div. 1
14 NPS		83.31 sq in			.25 - 100 psi		VIII Div. 1
16 NPS		112.6 sq in			.25 - 100 psi		VIII Div. 1
18 NPS		153.7 sq in			.25 - 100 psi		VIII Div. 1
20 NPS		184.5 sq in			.25 - 50 psi		VIII Div. 1
24 NPS		294.1 sq in			.25 - 50 psi		VIII Div. 1

Location: 16809 Park Circle Drive, Chagrin Falls, OH 44022 United States

Certification Number: **76047** Design Series or catalog number **Mono W/Ring Vac. Support**

Type Classification: Rupture Disk Device

Capacity Tests: Sec. VIII Div. 1 at National Board T L (Worthington) on May 27, 1998

Method of Establishing Relieving Capacity: Resistance Factor, 1 Size, Krg

Certified Value: 6.44 Unitless

Test Medium: Air/Gas & Liquid

Certified Medium: Air or gases, and liquid (Krgl)

Special Service: None

Set Pressure Definition: Burst Pressure

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
1 NPS		0.44 sq in			15 - 20 psi		VIII Div. 1

Certification Number: **76058** Design Series or catalog number **Mono Style W/Bar Vacuum Support**

Type Classification: Rupture Disk Device

Capacity Tests: Sec. VIII Div. 1 at National Board T L (Worthington) on December 16, 1999

Method of Establishing Relieving Capacity: Resistance Factor, 3 Size, Krgl

Certified Value: 2.4 Unitless

Test Medium: Air/Gas & Liquid

Certified Medium: Air or gases, and liquid (Krgl)

Set Pressure Definition: Burst Pressure

Scope of Nominal Size and Set Pressure Ranges:

<i>Inlet Size</i>	<i>Outlet Size</i>	<i>Flow Area</i>	<i>Orifice [designator] diameter</i>	<i>Lift</i>	<i>Set Pressure Range</i>	<i>Media</i>	<i>Code Section</i>
1 NPS		0.6 sq in			10 - 150 psi		VIII Div. 1
1.5 NPS		1.34 sq in			7 - 150 psi		VIII Div. 1
2 NPS		2.39 sq in			3 - 150 psi		VIII Div. 1
2.5 NPS		3.65 sq in			3 - 150 psi		VIII Div. 1
3 NPS		5.56 sq in			2 - 150 psi		VIII Div. 1
4 NPS		10.56 sq in			1.5 - 150 psi		VIII Div. 1
5 NPS		15.88 sq in			1.5 - 150 psi		VIII Div. 1
6 NPS		22.27 sq in			1 - 150 psi		VIII Div. 1
8 NPS		40.26 sq in			0.5 - 150 psi		VIII Div. 1
10 NPS		63.53 sq in			0.25 - 125 psi		VIII Div. 1
12 NPS		89.09 sq in			.25 - 125 psi		VIII Div. 1
14 NPS		108.06 sq in			.25 - 100 psi		VIII Div. 1
16 NPS		144.52 sq in			.25 - 100 psi		VIII Div. 1
18 NPS		181.95 sq in			.25 - 100 psi		VIII Div. 1
20 NPS		233.28 sq in			.25 - 50 psi		VIII Div. 1
24 NPS		354.8 sq in			.25 - 50 psi		VIII Div. 1

LISTING OF RUPTURE CCFs BY VALVE MANUFACTURER

This section lists combination capacity factors for various rupture disks or non-reclosing pressure relief devices in combination with various pressure relief valve types. See paragraphs UG-127 and UG-132 of Section VI II division 1 for more details on the application of these factors.

Broady Flow Control Limited,East Yorkshire,

with disk from: Continental Disc Corporation (CDC)

Valve manufacturer

Broady Flow Control Limited,East Yorkshire,

with rupture disks from:

Continental Disc Corporation (CDC)

Cert Number	Disk Type Number	Heads	Code Section	Valve Type
93002	HPX	HPX	VIII Div. 1	3500

Disk Cert Number 75585

Min Size NPS	Min Set Pressure psi	Disk Material	CCF	Test Date
1	15	316SS	0.999	11-May-2015

Crosby Valve, LLC ,St. Louis ,MO

with disk from: BS & B Safety Systems, LLC (BSB)

Valve manufacturer

Crosby Valve, LLC ,St. Louis ,MO

with rupture disks from:

BS & B Safety Systems, LLC (BSB)

Cert Number 15073	Disk Type Number GFN	Heads NF-7R	Code Section VIII	Valve Type JB
Min Size NPS 2	Min Set Pressure psi 90	Disk Material NICKEL	CCF 0.974	Test Date 19-Sep-1980
Cert Number 15073	Disk Type Number JRS	Heads SRB-7RS	Code Section VIII	Valve Type JB
Min Size NPS 1	Min Set Pressure psi 76	Disk Material STAINLESS	CCF 0.983	Test Date 7-Jan-1983
Min Size NPS 1.5	Min Set Pressure psi 22.5	Disk Material MONEL	CCF 0.981	Test Date 4-Jun-1986
Cert Number 15073	Disk Type Number RLS	Heads SRB-7RS	Code Section VIII	Valve Type JB
Min Size NPS 1	Min Set Pressure psi 125	Disk Material NICKEL	CCF 0.997	Test Date 10-Jan-1989
Cert Number 15073	Disk Type Number S90	Heads S90-7R or SRB-7RS	Code Section VIII	Valve Type JB
Min Size NPS 1	Min Set Pressure psi 126	Disk Material NICKEL	CCF 0.955	Test Date 7-Jan-1983
Min Size NPS 2	Min Set Pressure psi 75	Disk Material NICKEL	CCF 0.994	Test Date 7-Jan-1983
Cert Number 15073	Disk Type Number SVI	Heads SVI	Code Section VIII	Valve Type JB
Min Size NPS 1.5	Min Set Pressure psi 125	Disk Material NICKEL	CCF 0.95	Test Date 7-Jan-1983
Min Size NPS 2	Min Set Pressure psi 90	Disk Material NICKEL	CCF 0.96	Test Date 7-Jan-1983
Cert Number 15196	Disk Type Number JRS	Heads SRB-7RS	Code Section VIII	Valve Type JO/HSU (Class 2 and 3)
Min Size NPS 1	Min Set Pressure psi 76	Disk Material STAINLESS	CCF 0.998	Test Date 7-Jan-1983
Cert Number 15196	Disk Type Number S90	Heads S90-7R or SRB-7RS	Code Section VIII	Valve Type JO/HSU (Class 2 and 3)
Min Size NPS 1	Min Set Pressure psi 126	Disk Material NICKEL	CCF 0.959	Test Date 7-Jan-1983
Min Size NPS 2	Min Set Pressure psi 75	Disk Material NICKEL	CCF 0.995	Test Date 7-Jan-1983
Min Size NPS 1.5	Min Set Pressure psi 100	Disk Material NICKEL	CCF 0.972	Test Date 5-Aug-1987
Min Size NPS 1.5	Min Set Pressure psi 103	Disk Material INCONEL	CCF 0.973	Test Date 5-Aug-1987
Cert Number 15196	Disk Type Number SVI	Heads SVI	Code Section VIII	Valve Type JO/HSU (Class 2 and 3)
Min Size NPS 1.5	Min Set Pressure psi 125	Disk Material NICKEL	CCF 0.956	Test Date 7-Jan-1983
Min Size NPS 2	Min Set Pressure psi 90	Disk Material NICKEL	CCF 0.967	Test Date 7-Jan-1983

Crosby Valve, LLC ,St. Louis ,MO

with disk from: BS & B Safety Systems, LLC (BSB)

Cert Number	Disk Type Number	Heads	Code Section	Valve Type
15242	S-90		VIII Div. 1	JPV, JPV-M, JPV-MT

Min Size NPS	Min Set Pressure psi	Disk Material	CCF	Test Date
2	100	Inconel	1	31-Oct-1995

Cert Number	Disk Type Number	Heads	Code Section	Valve Type
36144	JRS	SRB-7RS	VIII	D, DB & ND, NDB

Min Size NPS	Min Set Pressure psi	Disk Material	CCF	Test Date
1	50	316 SS	0.989	10-Jun-1981
3	35	316 SS	0.978	10-Jun-1981
2	18.5	MONEL	0.975	4-Jun-1986

Cert Number	Disk Type Number	Heads	Code Section	Valve Type
36144	S90	S90-7R or SRB-7RS	VIII	D, DB & ND, NDB

Min Size NPS	Min Set Pressure psi	Disk Material	CCF	Test Date
1	125	NICKEL	0.977	10-Jun-1981
3	60	NICKEL	0.994	10-Jun-1981

Crosby Valve, LLC ,St. Louis ,MO

with disk from: Continental Disc Corporation (CDC)

with rupture disks from:

Continental Disc Corporation (CDC)

Cert Number	Disk Type Number	Heads	Code Section	Valve Type
15073	ULTRX, MINTRX, STARX	ULTRX, MINTRX,	VIII	JB

Min Size NPS	Min Set Pressure psi	Disk Material	CCF	Test Date
1.5	30	316 STAINLESS STEEL	0.993	21-Sep-1988
1.5	30	HASTELLOY	1	21-Sep-1988
1.5	30	INCONEL	0.991	21-Sep-1988
1.5	30	MONEL	0.994	21-Sep-1988
1.5	30	NICKEL	1	21-Sep-1988

Cert Number	Disk Type Number	Heads	Code Section	Valve Type
15073	ZAP	ZAP	VIII	JB

Min Size NPS	Min Set Pressure psi	Disk Material	CCF	Test Date
1	75	MONEL	0.99	3-Sep-1982
1	75	STAINLESS STEEL	0.987	3-Sep-1982
1.5	50	MONEL	0.983	3-Sep-1982
1.5	50	STAINLESS STEEL	0.976	3-Sep-1982

Cert Number	Disk Type Number	Heads	Code Section	Valve Type
15196	ULTRX, MINTRX, STARX	ULTRX, MINTRX,	VIII	JO/HSU (Class 2 and 3)

Min Size NPS	Min Set Pressure psi	Disk Material	CCF	Test Date
1	60	316 STAINLESS STEEL	0.989	21-Sep-1988
1	60	HASTELLOY	0.992	21-Sep-1988
1	60	INCONEL	0.994	21-Sep-1988
1	60	MONEL	0.993	21-Sep-1988
1	60	NICKEL	0.982	21-Sep-1988
1.5	30	316 STAINLESS STEEL	0.991	21-Sep-1988
1.5	30	HASTELLOY	0.987	21-Sep-1988
1.5	30	INCONEL	0.988	21-Sep-1988
1.5	30	MONEL	0.989	21-Sep-1988
1.5	30	NICKEL	0.986	21-Sep-1988
3	15	316 STAINLESS STEEL	0.998	21-Sep-1988
3	15	HASTELLOY	1	21-Sep-1988
3	15	INCONEL	0.999	21-Sep-1988
3	15	MONEL	1	21-Sep-1988
3	15	NICKEL	0.997	21-Sep-1988

Cert Number	Disk Type Number	Heads	Code Section	Valve Type
15196	ZAP	ZAP	VIII	JO/HSU (Class 2 and 3)

Min Size NPS	Min Set Pressure psi	Disk Material	CCF	Test Date
1	75	MONEL	0.986	3-Sep-1982
1	75	STAINLESS STEEL	0.98	3-Sep-1982
1.5	50	MONEL	0.98	3-Sep-1982
1.5	50	STAINLESS STEEL	0.981	3-Sep-1982
1	60	INCONEL	0.989	26-Aug-1988
1	60	NICKEL	0.994	26-Aug-1988
1.5	30	NICKEL	0.975	26-Aug-1988

Cert Number	Disk Type Number	Heads	Code Section	Valve Type
36144	CDCV		VIII	D, DB & ND, NDB

Min Size NPS	Min Set Pressure psi	Disk Material	CCF	Test Date
3	15	Ni/Tef/Ni	0.966	3-Nov-1979

Crosby Valve, LLC ,St. Louis ,MO

with disk from: Continental Disc Corporation (CDC)

Cert Number	Disk Type Number	Heads	Code Section	Valve Type
36144	MINTRX, ULTRX, STARX	ULTRX, MINTRX,	VIII	D, DB & ND, NDB

Min Size NPS	Min Set Pressure psi	Disk Material	CCF	Test Date
1	46	TEFLON/NICKEL	0.984	19-Dec-1990

Cert Number	Disk Type Number	Heads	Code Section	Valve Type
36144	ZAP		VIII	D, DB & ND, NDB

Min Size NPS	Min Set Pressure psi	Disk Material	CCF	Test Date
1	50	SS/Ni/SS	0.996	30-Jan-1980
3	15	Ni/Tef/Ni	0.966	30-Jan-1980

with rupture disks from:

Crosby Valve & Gage (CVH)

Cert Number	Disk Type Number	Heads	Code Section	Valve Type
15196	RSD & VIP		VIII	JO/HSU (Class 2 and 3)

Min Size NPS	Min Set Pressure psi	Disk Material	CCF	Test Date
2	50	ALUMINUM	0.953	29-Mar-1979
2	50	NICKEL	0.968	29-Mar-1979

with rupture disks from:

Crosby Valve, LLC (CVM)

Cert Number	Disk Type Number	Heads	Code Section	Valve Type
15196	COV	COV	VIII	JO/HSU (Class 2 and 3)

Min Size NPS	Min Set Pressure psi	Disk Material	CCF	Test Date
2	31	MONEL/TEFLON/MONEL	0.956	14-Aug-1986

with rupture disks from:

Fike Corporation (FIK)

Cert Number	Disk Type Number	Heads	Code Section	Valve Type
36144	MRK	MRK	VIII	D, DB & ND, NDB

Min Size NPS	Min Set Pressure psi	Disk Material	CCF	Test Date
3	31.5	NICKEL	0.993	7-Aug-1980
1	30	316SS	0.972	12-Sep-1980
1	50	NICKEL	0.988	12-Sep-1980
3	19.8	NICKEL	0.976	1-Jun-1987
3	21	316SS	0.946	1-Jun-1987

with rupture disks from:

Oklahoma Safety Equipment Company, Inc. (OSECO) (OSE)

Cert Number	Disk Type Number	Heads	Code Section	Valve Type
36144	FAS	FAS	VIII	D, DB & ND, NDB

Min Size NPS	Min Set Pressure psi	Disk Material	CCF	Test Date
1.5	90	NICKEL	0.989	18-Mar-1987

Cert Number	Disk Type Number	Heads	Code Section	Valve Type
36144	PCR	PCR	VIII	D, DB & ND, NDB

Min Size NPS	Min Set Pressure psi	Disk Material	CCF	Test Date
1.5	90	NICKEL	0.982	18-Mar-1987

Dresser, LLC, Jacksonville, FL

with disk from: BS & B Safety Systems, LLC (BSB)

Valve manufacturer

Dresser, LLC, Jacksonville, FL

with rupture disks from:

BS & B Safety Systems, LLC (BSB)

Cert Number	Disk Type Number	Heads	Code Section	Valve Type
18166	S90		VIII	1900E-2, 1900-30E-2

Min Size NPS	Min Set Pressure psi	Disk Material	CCF	Test Date
1	146	ALLOY 400	0.948	1-Jun-1994

Cert Number	Disk Type Number	Heads	Code Section	Valve Type
18201	GFN	NF-7R	VIII	1900, 1900-30, 1900-35

Min Size NPS	Min Set Pressure psi	Disk Material	CCF	Test Date
2	89	NICKEL	0.987	8-Dec-1980

Cert Number	Disk Type Number	Heads	Code Section	Valve Type
18201	JRS	SRB-7RS, SRB-7FS	VIII	1900, 1900-30, 1900-35

Min Size NPS	Min Set Pressure psi	Disk Material	CCF	Test Date
1	21	MONEL	0.996	12-Apr-1985
1	22.5	316 SS	0.988	12-Apr-1985
1	24	HASTELLOY C	0.99	12-Apr-1985

Cert Number	Disk Type Number	Heads	Code Section	Valve Type
18201	RB-90	RB-70	VIII	1900, 1900-30, 1900-35

Min Size NPS	Min Set Pressure psi	Disk Material	CCF	Test Date
1	75	NICKEL	0.972	8-Dec-1978
2	45	NICKEL	0.954	8-Dec-1978
3	36	NICKEL	0.958	8-Dec-1978
1	74	NICKEL, TEFLON	0.976	29-Aug-1979

Cert Number	Disk Type Number	Heads	Code Section	Valve Type
18201	RLS	S90-7R, SRB-7RS, SRB-	VIII	1900, 1900-30, 1900-35

Min Size NPS	Min Set Pressure psi	Disk Material	CCF	Test Date
1.5	81.9	NICKEL	0.965	30-Mar-1984
1	146	MONEL	0.977	12-Apr-1985
1	167	HASTELLOY C	0.974	12-Apr-1985
2	82.5	MONEL	0.971	12-Apr-1985
2	83	INCONEL	0.971	12-Apr-1985
2	112	HASTELLOY C	0.974	12-Apr-1985
3	62	MONEL	0.93	31-May-1985
1.5	95	INCONEL	0.956	28-Jul-1987

Dresser, LLC, Jacksonville, FL

with disk from: BS & B Safety Systems, LLC (BSB)

Cert Number	Disk Type Number	Heads	Code Section	Valve Type
18201	S90	S90-7R, SRB-7RS, SRB-	VIII	1900, 1900-30, 1900-35

Min Size NPS	Min Set Pressure psi	Disk Material	CCF	Test Date
1	75	Al Teflon	0.91	24-Jun-1977
1	125	NICKEL	0.954	24-Jun-1977
1.5	81.9	NICKEL	0.965	24-Jun-1977
2	45	Al Teflon	0.96	24-Jun-1977
2	75	NICKEL	0.969	24-Jun-1977
3	36	Al Teflon	0.98	24-Jun-1977
3	55	NICKEL	0.995	24-Jun-1977
2	85	316 SS	0.969	15-Apr-1980
2	85	316 TEFLON	0.968	15-Apr-1980
2	85	INCONEL	0.988	15-Apr-1980
2	85	INCONEL, TEFLON	0.994	15-Apr-1980
3	65	INCONEL, TEFLON	0.988	15-Apr-1980

Cert Number	Disk Type Number	Heads	Code Section	Valve Type
18201	S-90	S90-7R, SRB-7RS, SRB-	VIII	1900, 1900-30, 1900-35

Min Size NPS	Min Set Pressure psi	Disk Material	CCF	Test Date
1	73	NICKEL	0.967	29-Aug-1979
1	73	NICKEL, TEFLON	0.989	29-Aug-1979

Cert Number	Disk Type Number	Heads	Code Section	Valve Type
18201	SVI		VIII	1900, 1900-30, 1900-35

Min Size NPS	Min Set Pressure psi	Disk Material	CCF	Test Date
1.5	76	NICKEL	0.964	29-Aug-1979
1.5	76	NICKEL, TEFLON	0.983	29-Aug-1979
4	40	NICKEL	0.971	29-Aug-1979
4	40	NICKEL, TEFLON	0.95	19-Sep-1979
3	85	INCONEL	0.986	15-Apr-1980

Dresser, LLC, Jacksonville, FL

with disk from: Continental Disc Corporation (CDC)

with rupture disks from:

Continental Disc Corporation (CDC)

Cert Number	Disk Type Number	Heads	Code Section	Valve Type
18144	HPX (Air/Gas)	HPX	VIII Div. 1	1900D-2, 1900-30D-2
<i>Cert number 75585</i>				

Min Size NPS	Min Set Pressure psi	Disk Material	CCF	Test Date
1	15	316SS	0.998	6-Apr-2015

Cert Number	Disk Type Number	Heads	Code Section	Valve Type
18166	HPX (Air/Gas)	HPX	VIII Div. 1	1900E-2, 1900-30E-2
<i>Cert number 75585</i>				

Min Size NPS	Min Set Pressure psi	Disk Material	CCF	Test Date
1	15	316SS	0.995	9-Mar-2015

Cert Number	Disk Type Number	Heads	Code Section	Valve Type
18201	CDC	CDC	VIII	1900, 1900-30, 1900-35

Min Size NPS	Min Set Pressure psi	Disk Material	CCF	Test Date
1.5	30	316SS/TEFLON	0.973	18-Oct-1985
1.5	30	ICONEL/TEFLON	0.963	18-Oct-1985
1.5	30	MONEL/TEFLON	0.97	18-Oct-1985
1.5	30	NICKEL/TEFLON	0.971	18-Oct-1985
3	15	316SS/TEFLON	0.977	18-Oct-1985
3	15	ICONEL/TEFLON	0.973	18-Oct-1985
3	15	MONEL/TEFLON	0.985	18-Oct-1985
3	15	NICKEL/TEFLON	0.98	18-Oct-1985

Cert Number	Disk Type Number	Heads	Code Section	Valve Type
18201	CDCV		VIII	1900, 1900-30, 1900-35

Min Size NPS	Min Set Pressure psi	Disk Material	CCF	Test Date
3	15	316SS/TEFLON/NICKEL	0.95	19-Oct-1985
3	15	316SS/TEFLON/NICKEL	0.953	19-Oct-1985
3	15	MONEL/TEFLON/MONEL	0.956	19-Oct-1985
3	15	NICKEL/TEFLON/NICKEL	0.95	19-Oct-1985

Cert Number	Disk Type Number	Heads	Code Section	Valve Type
18201	HPX (Air/Gas)	HPX	VIII Div. 1	1900, 1900-30, 1900-35
<i>Cert number 75585</i>				

Min Size NPS	Min Set Pressure psi	Disk Material	CCF	Test Date
1.5	15	316SS	1	7-Apr-2015

Cert Number	Disk Type Number	Heads	Code Section	Valve Type
18201	ULTRX, MINTRX, STARX	ULTRX, MINTRX,	VIII	1900, 1900-30, 1900-35

Min Size NPS	Min Set Pressure psi	Disk Material	CCF	Test Date
1.5	30	316SS	0.978	18-Oct-1985
1.5	30	316SS/TEFLON	0.967	18-Oct-1985
1.5	30	HASTELLOY C	0.97	18-Oct-1985
1.5	30	INCONEL	0.973	18-Oct-1985
1.5	30	MONEL	0.976	18-Oct-1985
1.5	30	NICKEL	0.977	18-Oct-1985
1.5	30	NICKEL/TEFLON	0.951	18-Oct-1985
3	15	316SS	0.97	18-Oct-1985
3	15	316SS/TEFLON	0.954	18-Oct-1985
3	15	HASTELLOY C	0.984	18-Oct-1985
3	15	INCONEL	0.98	18-Oct-1985
3	15	MONEL	0.975	18-Oct-1985
3	15	NICKEL	0.982	18-Oct-1985
3	15	NICKEL/TEFLON	0.956	18-Oct-1985

Dresser, LLC, Jacksonville, FL

with disk from: Continental Disc Corporation (CDC)

Cert Number	Disk Type Number	Heads	Code Section	Valve Type
18201	ZAP	ZAP	VIII	1900, 1900-30, 1900-35

Min Size NPS	Min Set Pressure psi	Disk Material	CCF	Test Date
1	50	SS/NICKEL/SS	0.984	2-Jan-1979
3	35	SS/NICKEL/SS	0.984	2-Jan-1979
3	15	316SS	0.966	18-Oct-1985
3	15	INCONEL	0.968	18-Oct-1985
3	15	MONEL	0.966	18-Oct-1985
3	15	NICKEL	0.967	18-Oct-1985
3	15	NICKEL/TEFLON	0.958	18-Oct-1985

Dresser, LLC, Jacksonville, FL

with disk from: Fike Corporation (FIK)

with rupture disks from:

Fike Corporation (FIK)

Cert Number	Disk Type Number	Heads	Code Section	Valve Type
18166	Poly SD		VIII Div. 1	1900E-2, 1900-30E-2

Min Size NPS	Min Set Pressure psi	Disk Material	CCF	Test Date
1	59	NICKEL	0.99	23-Mar-1984
1	113	316SS	0.987	23-Mar-1984

Cert Number	Disk Type Number	Heads	Code Section	Valve Type
18166	Poly-SD CS	GI	VIII Div. 1	1900E-2, 1900-30E-2
FIK-M80020				

Min Size in	Min Set Pressure psi	Disk Material	CCF	Test Date
1	125	Aluminum	0.989	3-Feb-2004

Cert Number	Disk Type Number	Heads	Code Section	Valve Type
18166	Poly-SD DH	GI	VIII Div. 1	1900E-2, 1900-30E-2
FIK-M80019				

Min Size in	Min Set Pressure psi	Disk Material	CCF	Test Date
1	32	Aluminum	0.989	18-Feb-2004

Cert Number	Disk Type Number	Heads	Code Section	Valve Type
18166	SRL	GI	VIII Div. 1	1900E-2, 1900-30E-2
FIK-M80031				

Min Size in	Min Set Pressure psi	Disk Material	CCF	Test Date
1	27	Nickel	0.994	23-Feb-2004

Cert Number	Disk Type Number	Heads	Code Section	Valve Type
18166	SRX	GI	VIII Div. 1	1900E-2, 1900-30E-2
FIK-M80042				

Min Size in	Min Set Pressure psi	Disk Material	CCF	Test Date
1	95	Nickel	0.978	12-Feb-2004

Cert Number	Disk Type Number	Heads	Code Section	Valve Type
18201	ATLAS	ATLAS	VIII Div. 1	1900, 1900-30, 1900-35
Disk Cert # 80716.				

Min Size NPS	Min Set Pressure psi	Disk Material	CCF	Test Date
1.5	117	316 SS	0.98	6-Feb-2013

Cert Number	Disk Type Number	Heads	Code Section	Valve Type
18201	Axius	GI	VIII Div. 1	1900, 1900-30, 1900-35
FIK-M80615				

Min Size NPS	Min Set Pressure psi	Disk Material	CCF	Test Date
1.5	15	316SS	0.988	28-Apr-2008

Cert Number	Disk Type Number	Heads	Code Section	Valve Type
18201	FSR SCRD	GI FSR A8911-1-4	VIII Div. 1	1900, 1900-30, 1900-35
M80075				

Min Size NPS	Min Set Pressure psi	Disk Material	CCF	Test Date
1.5	240	Nickel	0.984	19-May-2015

Cert Number	Disk Type Number	Heads	Code Section	Valve Type
18201	HOV		VIII	1900, 1900-30, 1900-35

Min Size NPS	Min Set Pressure psi	Disk Material	CCF	Test Date
2	25	SS/TEFLON	0.976	15-Oct-1991
2	49.5	HASTELLOY/TEFLON	0.982	15-Oct-1991

Dresser, LLC, Jacksonville, FL

with disk from: Fike Corporation (FIK)

Cert Number	Disk Type Number	Heads	Code Section	Valve Type
18201	MRK	MRK	VIII	1900, 1900-30, 1900-35
Min Size NPS	Min Set Pressure psi	Disk Material	CCF	Test Date
1	53	NICKEL	0.979	26-Jan-1980
1	59	STAINLESS STEEL	0.976	26-Jan-1980
1.5	48	STAINLESS STEEL	0.979	26-Jan-1980
1.5	57	STAINLESS STEEL	0.992	26-Jan-1980
3	21	NICKEL	0.983	26-Jan-1980
Cert Number	Disk Type Number	Heads	Code Section	Valve Type
18201	Poly SD	Poly SD	VIII	1900, 1900-30, 1900-35
Min Size NPS	Min Set Pressure psi	Disk Material	CCF	Test Date
1	58.5	NICKEL	0.992	17-Apr-1984
1	113	STAINLESS STEEL	0.986	17-Apr-1984
2	75	ALUMINUM/TEFLON	0.994	10-Oct-1991
Cert Number	Disk Type Number	Heads	Code Section	Valve Type
18201	Poly SD CS	GI	VIII	1900, 1900-30, 1900-35
	M80020			
Min Size NPS	Min Set Pressure psi	Disk Material	CCF	Test Date
1.5	115	Aluminum	0.9	10-Dec-2004
Cert Number	Disk Type Number	Heads	Code Section	Valve Type
18201	Poly SD DH	GI	VIII	1900, 1900-30, 1900-35
	M80019			
Min Size NPS	Min Set Pressure psi	Disk Material	CCF	Test Date
1.5	28	Aluminum	0.994	2-Dec-2004
Cert Number	Disk Type Number	Heads	Code Section	Valve Type
18201	Poly-SD Cross Score	GI	VIII Div. 1	1900, 1900-30, 1900-35
	M80020			
Min Size NPS	Min Set Pressure psi	Disk Material	CCF	Test Date
1.5	115	Aluminum	0.9	2-Dec-2004
Cert Number	Disk Type Number	Heads	Code Section	Valve Type
18201	SCRD-FS		VIII	1900, 1900-30, 1900-35
	F Orifice Only			
Min Size NPS	Min Set Pressure psi	Disk Material	CCF	Test Date
1.5	450	TANTALUM	0.999	15-Oct-1991
Cert Number	Disk Type Number	Heads	Code Section	Valve Type
18201	SRL	GI	VIII	1900, 1900-30, 1900-35
	M80031			
Min Size NPS	Min Set Pressure psi	Disk Material	CCF	Test Date
1.5	27	Nickel	0.982	6-Dec-2004
Cert Number	Disk Type Number	Heads	Code Section	Valve Type
18201	SRX	GI	VIII	1900, 1900-30, 1900-35
	M80042			
Min Size NPS	Min Set Pressure psi	Disk Material	CCF	Test Date
1.5	95	Nickel	0.969	9-Dec-2004
Cert Number	Disk Type Number	Heads	Code Section	Valve Type
18447	HOV	HOV	VIII	3900 (39PV, 39MV pilots)
Min Size NPS	Min Set Pressure psi	Disk Material	CCF	Test Date
2	30	SS/TEFLON	0.985	15-Oct-1991
Cert Number	Disk Type Number	Heads	Code Section	Valve Type
18447	Poly SD	Poly SD	VIII	3900 (39PV, 39MV pilots)
Min Size NPS	Min Set Pressure psi	Disk Material	CCF	Test Date
2	55	ALUMINUM/TEFLON	0.989	15-Oct-1991

Dresser, LLC, Jacksonville, FL

with disk from: Oklahoma Safety Equipment Company, Inc. (OSECO) (OSE)

with rupture disks from:

Oklahoma Safety Equipment Company, Inc. (OSECO) (OSE)

Cert Number	Disk Type Number	Heads	Code Section	Valve Type
18201	FAS	FAS	VIII	1900, 1900-30, 1900-35

Min Size NPS	Min Set Pressure psi	Disk Material	CCF	Test Date
1.5	90	NICKEL	0.967	18-Mar-1987

Cert Number	Disk Type Number	Heads	Code Section	Valve Type
18201	PCR	PCR	VIII	1900, 1900-30, 1900-35

Min Size NPS	Min Set Pressure psi	Disk Material	CCF	Test Date
1.5	90	NICKEL	0.972	18-Mar-1987

Valve manufacturer

Emerson Automation Solutions Final Control

with rupture disks from:

BS & B Safety Systems, LLC (BSB)

Cert Number	Disk Type Number	Heads	Code Section	Valve Type
06039	JRS	SRB-7RS	VIII	WB 300/400

Min Size NPS	Min Set Pressure psi	Disk Material	CCF	Test Date
1	98.5	316-SS	0.993	20-Oct-1983

Cert Number	Disk Type Number	Heads	Code Section	Valve Type
06039	S-90	S-90-7R OR SRB-7RS	VIII	WB 300/400

Min Size NPS	Min Set Pressure psi	Disk Material	CCF	Test Date
1	148	Nickel	0.994	21-Oct-1983

Emerson Automation Solutions Final Control US LP,Stafford,TX

with disk from: BS & B Safety Systems, LLC (BSB)

Valve manufacturer

Emerson Automation Solutions Final Control

with rupture disks from:

BS & B Safety Systems, LLC (BSB)

Cert Number	Disk Type Number	Heads	Code Section	Valve Type
01157	S90	S90-7R	VIII	223/423/623/923

Min Size NPS	Min Set Pressure psi	Disk Material	CCF	Test Date
1	150	Inconel, Teflon	0.96	21-Feb-1978
2	73	Nickel	0.96	21-Feb-1978
2	73	Nickel, Teflon	0.96	21-Feb-1978
6	38	Nickel	0.96	21-Feb-1978
6	41.5	Monel, Teflon	0.96	21-Feb-1978

Cert Number	Disk Type Number	Heads	Code Section	Valve Type
15208	CSR	CSR-7RS	VIII Div. 1	JOS-E/JBS-E/JOS-H-E 8400
<i>Test at Crosby</i>				

Min Size NPS	Min Set Pressure psi	Disk Material	CCF	Test Date
1.5	50	Inconel	0.986	13-Aug-1997

Cert Number	Disk Type Number	Heads	Code Section	Valve Type
15208	JRS	SRB-7RS	VIII	JOS-E/JBS-E/JOS-H-E 8400

Min Size NPS	Min Set Pressure psi	Disk Material	CCF	Test Date
1	60	316 SS	0.993	23-Jul-1981
1.5	23	MONEL	0.981	4-Jun-1986

Cert Number	Disk Type Number	Heads	Code Section	Valve Type
15208	RLS	SRB-7RS	VIII	JOS-E/JBS-E/JOS-H-E 8400

Min Size NPS	Min Set Pressure psi	Disk Material	CCF	Test Date
1	138	MONEL	0.981	1-Mar-1991
1	172	HASTELLOY	0.972	1-Mar-1991
2	84.5	MONEL	0.981	1-Mar-1991

Cert Number	Disk Type Number	Heads	Code Section	Valve Type
15208	S90	S90-7R or SRB-7RS	VIII	JOS-E/JBS-E/JOS-H-E 8400

Min Size NPS	Min Set Pressure psi	Disk Material	CCF	Test Date
1	125	NICKEL	0.995	24-Jul-1981
2	75	NICKEL	0.994	24-Jul-1981

Emerson Automation Solutions Final Control US LP,Stafford,TX

with disk from: Continental Disc Corporation (CDC)

with rupture disks from:

Continental Disc Corporation (CDC)

Cert Number	Disk Type Number	Heads	Code Section	Valve Type
15208	CDC		VIII	JOS-E/JBS-E/JOS-H-E 8400

Min Size NPS	Min Set Pressure psi	Disk Material	CCF	Test Date
1	60	MONEL/TEFLON	0.971	3-Sep-1982

Cert Number	Disk Type Number	Heads	Code Section	Valve Type
15208	CDC-FS		VIII	JOS-E/JBS-E/JOS-H-E 8400

Min Size NPS	Min Set Pressure psi	Disk Material	CCF	Test Date
3	15	MONEL/TEFLON	0.986	11-May-1990

Cert Number	Disk Type Number	Heads	Code Section	Valve Type
15208	CDCV FS		VIII	JOS-E/JBS-E/JOS-H-E 8400

Min Size NPS	Min Set Pressure psi	Disk Material	CCF	Test Date
1	60	316SS/TEFLON/316SS	0.985	26-Aug-1988
1	60	HASTELLOY/TEFLON/HAS	0.983	26-Aug-1988
1.5	30	316SS/TEFLON/316SS	0.976	26-Aug-1988
1.5	30	HASTELLOY/TEFLON/HAS	0.973	26-Aug-1988
3	15	316SS/TEFLON/316SS	0.982	26-Aug-1988
3	15	HASTELLOY/TEFLON/HAS	0.981	26-Aug-1988

Cert Number	Disk Type Number	Heads	Code Section	Valve Type
15208	CDCV LL		VIII	JOS-E/JBS-E/JOS-H-E 8400

Min Size NPS	Min Set Pressure psi	Disk Material	CCF	Test Date
1	60	316SS/TEFLON/316SS	0.978	26-Aug-1988
1	60	HASTELLOY/TEFLON/MON	0.96	26-Aug-1988
1	60	MONEL/TEFLON/MONEL	0.961	26-Aug-1988
1.5	30	316SS/TEFLON/315SS	0.959	26-Aug-1988
1.5	30	MONEL/TEFLON/MONEL	0.958	26-Aug-1988
1.5	30	NICKEL/TEFLON/MONEL	0.953	26-Aug-1988
3	15	316SS/TEFLON/316SS	0.953	26-Aug-1988
3	15	MONEL/TEFLON/MONEL	0.979	26-Aug-1988

Cert Number	Disk Type Number	Heads	Code Section	Valve Type
15208	DCV		VIII	JOS-E/JBS-E/JOS-H-E 8400

Min Size NPS	Min Set Pressure psi	Disk Material	CCF	Test Date
3	35	MONEL/TEFLON/MONEL	0.994	3-Sep-1982
3	35	SS/TEFLON/SS	0.978	3-Sep-1982

Cert Number	Disk Type Number	Heads	Code Section	Valve Type
15208	HPX (Air/Gas)	HPX	VIII Div. 1	JOS-E/JBS-E/JOS-H-E 8400
	Cert number 75585			

Min Size NPS	Min Set Pressure psi	Disk Material	CCF	Test Date
1	15	316SS	1	27-Feb-2015

Cert Number	Disk Type Number	Heads	Code Section	Valve Type
15208	KBA	KBA	VIII	JOS-E/JBS-E/JOS-H-E 8400

Min Size NPS	Min Set Pressure psi	Disk Material	CCF	Test Date
1	60	MONEL	0.984	3-Sep-1982

Emerson Automation Solutions Final Control US LP, Stafford, TX with disk from: Continental Disc Corporation (CDC)

Cert Number	Disk Type Number	Heads	Code Section	Valve Type
15208	MICRO X		VIII	JOS-E/JBS-E/JOS-H-E 8400

Min Size NPS	Min Set Pressure psi	Disk Material	CCF	Test Date
1	150	MONEL	0.984	26-Aug-1988
1	150	NICKEL	0.99	26-Aug-1988
2	80	316 SS	0.991	26-Aug-1988
2	80	INCONEL	0.997	26-Aug-1988
2	80	MONEL	0.988	26-Aug-1988
2	80	NICKEL	0.992	26-Aug-1988

Cert Number	Disk Type Number	Heads	Code Section	Valve Type
15208	ULTRX, MINTRX, STARX	ULTRX, MINTRX,	VIII	JOS-E/JBS-E/JOS-H-E 8400

Min Size NPS	Min Set Pressure psi	Disk Material	CCF	Test Date
1	60	316 STAINLESS STEEL	0.98	21-Sep-1988
1	60	HASTELLOY	0.987	21-Sep-1988
1	60	INCONEL	0.984	21-Sep-1988
1	60	MONEL	0.98	21-Sep-1988
1	60	NICKEL	0.981	21-Sep-1988
1.5	30	316 STAINLESS STEEL	0.984	21-Sep-1988
1.5	30	HASTELLOY	0.986	21-Sep-1988
1.5	30	INCONEL	0.989	21-Sep-1988
1.5	30	MONEL	0.987	21-Sep-1988
1.5	30	NICKEL	0.981	21-Sep-1988
1.5	30	TANTALUM	0.978	21-Sep-1988
3	15	316 STAINLESS STEEL	0.985	21-Sep-1988
3	15	HASTELLOY	0.992	21-Sep-1988
3	15	INCONEL	0.991	21-Sep-1988
3	15	MONEL	0.987	21-Sep-1988
3	15	NICKEL	0.981	21-Sep-1988

Cert Number	Disk Type Number	Heads	Code Section	Valve Type
15208	ZAP	ZAP	VIII	JOS-E/JBS-E/JOS-H-E 8400

Min Size NPS	Min Set Pressure psi	Disk Material	CCF	Test Date
1	60	MONEL	0.985	3-Sep-1982
1	60	STAINLESS STEEL	0.985	3-Sep-1982
3	35	INCONEL	0.992	3-Sep-1982
3	35	MONEL	0.982	3-Sep-1982
3	35	NICKEL	1	3-Sep-1982
3	35	STAINLESS STEEL	0.97	3-Sep-1982
1	60	INCONEL	0.988	26-Aug-1988
1	60	NICKEL	0.992	26-Aug-1988
1.5	30	316 SS	0.955	26-Aug-1988
1.5	30	MONEL	0.955	26-Aug-1988
1.5	30	NICKEL	0.965	26-Aug-1988

with rupture disks from:

Crosby Valve & Gage (CVH)

Cert Number	Disk Type Number	Heads	Code Section	Valve Type
15208	RSD		VIII	JOS-E/JBS-E/JOS-H-E 8400

Min Size NPS	Min Set Pressure psi	Disk Material	CCF	Test Date
2	50	ALUMINUM	0.975	5-Jun-1981
2	50	MONEL	0.969	5-Jun-1981
2	50	NICKEL	0.966	5-Jun-1981
2	100	STAINLESS STEEL	0.982	5-Jun-1981

Emerson Automation Solutions Final Control US LP,Stafford,TX

with disk from: Fike Corporation (FIK)

with rupture disks from:

Fike Corporation (FIK)

Cert Number	Disk Type Number	Heads	Code Section	Valve Type
01157	MRK	MRK	VIII	223/423/623/923

Min Size NPS	Min Set Pressure psi	Disk Material	CCF	Test Date
1	88	316 SS	0.9912	28-Dec-1978
1.5	67	316SS	0.9903	28-Dec-1978
1.5	74	316SS	0.9963	28-Dec-1978
3	39	TANTALUM	0.9934	28-Dec-1978
6	14.6	316SS	0.9621	28-Dec-1978

Cert Number	Disk Type Number	Heads	Code Section	Valve Type
01191	MRK	MRK	VIII	273/473/576/673/973

Min Size NPS	Min Set Pressure psi	Disk Material	CCF	Test Date
1.5	62	NICKEL	0.988	17-Jul-1978

Cert Number	Disk Type Number	Heads	Code Section	Valve Type
15208	Atlas	Atlas-Lo w/spool	VIII Div. 1	JOS-E/JBS-E/JOS-H-E 8400

Min Size NPS	Min Set Pressure psi	Disk Material	CCF	Test Date
1	200	316SS	0.985	11-Nov-2013

Cert Number	Disk Type Number	Heads	Code Section	Valve Type
15208	Axius	GI	VIII Div. 1	JOS-E/JBS-E/JOS-H-E 8400
<i>Disk Cert. No. 80558, test at Fike</i>				

Min Size NPS	Min Set Pressure psi	Disk Material	CCF	Test Date
1	15	316 SS	0.987	5-Nov-2008

Cert Number	Disk Type Number	Heads	Code Section	Valve Type
15208	MRK	MRK	VIII	JOS-E/JBS-E/JOS-H-E 8400

Min Size NPS	Min Set Pressure psi	Disk Material	CCF	Test Date
1	60	316SS	0.967	29-Jul-1981
1	60	NICKEL	0.977	29-Jul-1981
3	35	316SS	0.982	29-Jul-1981
3	35	NICKEL	0.995	29-Jul-1981

Cert Number	Disk Type Number	Heads	Code Section	Valve Type
15208	Poly -SD CS	GI	VIII Div. 1	JOS-E/JBS-E/JOS-H-E 8400
<i>Cert # 80020</i>				
<i>Test at Fike lab</i>				

Min Size NPS	Min Set Pressure psi	Disk Material	CCF	Test Date
1	124	Al	0.97	9-Jul-2004

Cert Number	Disk Type Number	Heads	Code Section	Valve Type
15208	Poly-SD DH	GI	VIII Div. 1	JOS-E/JBS-E/JOS-H-E 8400
<i>cert # 80019</i>				
<i>Test at Fike lab</i>				

Min Size NPS	Min Set Pressure psi	Disk Material	CCF	Test Date
1	32	Al	0.997	7-Jul-2004

Cert Number	Disk Type Number	Heads	Code Section	Valve Type
15208	SRL	GI	VIII Div. 1	JOS-E/JBS-E/JOS-H-E 8400
<i>cert # 80031</i>				
<i>Test at Fike lab</i>				

Min Size NPS	Min Set Pressure psi	Disk Material	CCF	Test Date
1	27	SST Ni	0.979	9-Jul-2004

Emerson Automation Solutions Final Control US LP, Stafford, TX with disk from: Fike Corporation (FIK)

Cert Number	Disk Type Number	Heads	Code Section	Valve Type
15208	SRX	GI	VIII Div. 1	JOS-E/JBS-E/JOS-H-E 8400
	<i>cert.# 80042</i>			
	<i>Test at Fike lab</i>			

Min Size NPS	Min Set Pressure psi	Disk Material	CCF	Test Date
1	95	Ni	0.996	8-Jul-2004

with rupture disks from:

Oklahoma Safety Equipment Company, Inc. (OSECO) (OSE)

Cert Number	Disk Type Number	Heads	Code Section	Valve Type
15208	COV	COV	VIII	JOS-E/JBS-E/JOS-H-E 8400

Min Size NPS	Min Set Pressure psi	Disk Material	CCF	Test Date
2	31	MONEL/TEFLON/MONEL	0.979	14-Aug-1986

Cert Number	Disk Type Number	Heads	Code Section	Valve Type
15208	FAS	FAS	VIII	JOS-E/JBS-E/JOS-H-E 8400

Min Size NPS	Min Set Pressure psi	Disk Material	CCF	Test Date
1.5	90	NICKEL	0.975	18-Mar-1987

Cert Number	Disk Type Number	Heads	Code Section	Valve Type
15208	PCR	PCR	VIII	JOS-E/JBS-E/JOS-H-E 8400

Min Size NPS	Min Set Pressure psi	Disk Material	CCF	Test Date
1.5	90	NICKEL	0.967	18-Mar-1987

Valve manufacturer

Emerson Automation Solutions Final Control,

with rupture disks from:

BS & B Safety Systems, LLC (BSB)

Cert Number	Disk Type Number	Heads	Code Section	Valve Type
36100	JRS	SRB-7RS	VIII	910 to 919

Min Size NPS	Min Set Pressure psi	Disk Material	CCF	Test Date
1	50	316 SS	0.981	13-Apr-1981

Cert Number	Disk Type Number	Heads	Code Section	Valve Type
36100	S-90	S90-7R or SRB-7RS	VIII	910 to 919

Min Size NPS	Min Set Pressure psi	Disk Material	CCF	Test Date
1	125	NICKEL	0.945	13-Apr-1981

Farris Engineering,Brecksville,OH

with disk from: BS & B Safety Systems, LLC (BSB)

Valve manufacturer

Farris Engineering,Brecksville,OH

with rupture disks from:

BS & B Safety Systems, LLC (BSB)

Cert Number	Disk Type Number	Heads	Code Section	Valve Type
57057	BV	FA7R	VIII	2600 & 2600S
<i>Two disks were used in combination with the safety valve.</i>				
Min Size NPS	Min Set Pressure psi	Disk Material	CCF	Test Date
2	88	NICKEL	0.957	23-Jul-1980
Cert Number	Disk Type Number	Heads	Code Section	Valve Type
57057	CSR	CSR-7RS	VIII	2600 & 2600S
Min Size NPS	Min Set Pressure psi	Disk Material	CCF	Test Date
1.5	47	NICKEL	0.974	16-Nov-1989
Cert Number	Disk Type Number	Heads	Code Section	Valve Type
57057	GFN	NF-7R	VIII	2600 & 2600S
<i>Two disks were used in combination with the safety valves.</i>				
Min Size NPS	Min Set Pressure psi	Disk Material	CCF	Test Date
2	90	NICKEL	0.982	9-Sep-1980
Cert Number	Disk Type Number	Heads	Code Section	Valve Type
57057	JRS	SRB-7RS	VIII	2600 & 2600S
Min Size NPS	Min Set Pressure psi	Disk Material	CCF	Test Date
3	40	NICKEL	0.967	8-Nov-1978
4	35	NICKEL	0.98	8-Nov-1978
3	52	HASTELLOY C	0.959	17-Nov-1982
1	50	HASTELLOY B-2	1	27-Oct-1983
1.5	23	MONEL	0.993	5-Jun-1986
1.5	25	STAINLESS STEEL	0.993	5-Jun-1986
1	40	INCONEL	0.996	28-May-1987
4	17	HASTELLOY C276	0.962	15-Oct-1990
4	14	316 SS	0.975	6-May-1991
4	14	HASTELLOY C276	0.956	6-May-1991
Cert Number	Disk Type Number	Heads	Code Section	Valve Type
57057	RB-90	RB-7R	VIII	2600 & 2600S
Min Size NPS	Min Set Pressure psi	Disk Material	CCF	Test Date
1	75	NICKEL	0.977	8-Dec-1978
1.5	54	NICKEL	0.967	8-Dec-1978
2	45	NICKEL	0.964	8-Dec-1978
3	37	INCONEL	0.994	2-Apr-1987
3	62	INCONEL	0.912	2-Apr-1987
Cert Number	Disk Type Number	Heads	Code Section	Valve Type
57057	RLS	SRB-7RS	VIII Div. 1	2600 & 2600S
Min Size NPS	Min Set Pressure psi	Disk Material	CCF	Test Date
1	124.7	Nickel	0.987	3-May-1984
3	53.1	Nickel	0.97	3-May-1984
1	175	HAST C276	0.994	27-Nov-1984
1.5	141	HAST C276	0.967	27-Nov-1984
1	144	INCONEL	0.992	5-Mar-1987
3	43	INCONEL	0.984	15-Apr-1987
1.5	94	INCONEL	0.957	25-Aug-1987
1	183	316 SS	0.978	5-Apr-1990
3	74.5	HASTELLOY C276	0.939	15-Oct-1990

Farris Engineering,Brecksville,OH

with disk from: BS & B Safety Systems, LLC (BSB)

Cert Number	Disk Type Number	Heads	Code Section	Valve Type
57057	S90	S90-7R or SRB-7RS	VIII	2600 & 2600S

Min Size NPS	Min Set Pressure psi	Disk Material	CCF	Test Date
1	125	NI & NI TEFLON	0.993	8-Dec-1979
1	150	INC, INC/TEF & MON/T	0.963	8-Dec-1979
1.5	90	NI & NI TEFLON	0.951	8-Dec-1979
1.5	110	INC,INC/TEF&MON/TEF	0.951	8-Dec-1979
2	75	NI & NI TEFLON	0.979	8-Dec-1979
2	90	INC, INC/TEF, MON/T	0.988	8-Dec-1979
3	40	NI & NI TEFLON	0.955	8-Dec-1979
3	54	NI & NI TEFLON	1	8-Dec-1979
4	35	NI & NI TEFLON	0.98	8-Dec-1979
3	68	INCONEL	0.992	2-Aug-1986

Cert Number	Disk Type Number	Heads	Code Section	Valve Type
57057	XN	NX-7R	VIII	2600 & 2600S

Min Size NPS	Min Set Pressure psi	Disk Material	CCF	Test Date
2	83	316 SS	0.991	26-Oct-1988

Farris Engineering,Brecksville,OH

with disk from: Continental Disc Corporation (CDC)

with rupture disks from:

Continental Disc Corporation (CDC)

Cert Number	Disk Type Number	Heads	Code Section	Valve Type
57057	CDC	CDC	VIII	2600 & 2600S

Min Size NPS	Min Set Pressure psi	Disk Material	CCF	Test Date
1	57	MONEL/TEFLON	0.976	19-Feb-1986
1	58	INCONEL/TEFLON	0.974	19-Feb-1986
1.5	27.5	INCONEL/TEFLON	0.97	19-Feb-1986
1.5	28	NICKEL/TEFLON	0.976	19-Feb-1986
1.5	28.5	MONEL/TEFLON	0.968	19-Feb-1986
1.5	29	SS/TEFLON	0.966	19-Feb-1986

Cert Number	Disk Type Number	Heads	Code Section	Valve Type
57057	CDCV	CVDC	VIII	2600 & 2600S

Min Size NPS	Min Set Pressure psi	Disk Material	CCF	Test Date
1	59	INC/TEFLON/INC	0.969	19-Feb-1986
1	59	MON/TEFLON/MON	0.969	19-Feb-1986
1	59	NICK/TEFLON/NICK	0.976	19-Feb-1986
3	15	INC/TEFLON/INC	0.976	19-Feb-1986
3	15	MONEL/TEFLON/MONEL	0.973	19-Feb-1986
3	15	NICK/TEFLON/NICK	0.992	19-Feb-1986
3	15	SS/TEFLON/SS	0.965	19-Feb-1986

Cert Number	Disk Type Number	Heads	Code Section	Valve Type
57057	HPX (Air/Gas)	HPX	VIII Div. 1	2600 & 2600S

Cert number 75585

Min Size NPS	Min Set Pressure psi	Disk Material	CCF	Test Date
1	15	316SS	0.993	4-Mar-2015

Cert Number	Disk Type Number	Heads	Code Section	Valve Type
57057	MINTRX & ULTRX		VIII	2600 & 2600S

Min Size NPS	Min Set Pressure psi	Disk Material	CCF	Test Date
1.5	30	STAINLESS STEEL	0.989	5-Jun-1991

Cert Number	Disk Type Number	Heads	Code Section	Valve Type
57057	ULTRX, MINTRX, STARX	ULTRX, MINTRX,	VIII	2600 & 2600S

Min Size NPS	Min Set Pressure psi	Disk Material	CCF	Test Date
1	58	SS/INCONEL/SS	0.997	19-Feb-1986
1	58	SS/NICKEL/SS	1	19-Feb-1986
1	59	SS/MONEL/SS	0.999	19-Feb-1986
3	15	SS/INCONEL/SS	0.995	19-Feb-1986
3	15	SS/MONEL/SS	0.989	19-Feb-1986
3	15	SS/NICKEL/SS	0.984	19-Feb-1986
3	15	SS/SS/SS	0.978	19-Feb-1986

Farris Engineering,Brecksville,OH

with disk from: Continental Disc Corporation (CDC)

Cert Number	Disk Type Number	Heads	Code Section	Valve Type
57057	ZAP	ZAP	VIII	2600 & 2600S

Min Size NPS	Min Set Pressure psi	Disk Material	CCF	Test Date
1	50	SS/NICKEL/SS	0.989	2-Jan-1979
3	35	SS/NICKEL/SS	0.985	2-Jan-1979
1	60	SS/ICON/SS/TEFLON	0.985	19-Feb-1986
1	60	SS/INCONEL/SS	0.987	19-Feb-1986
1	60	SS/MONEL/SS	0.982	19-Feb-1986
1	60	SS/MONEL/SS/TEFLON	0.982	19-Feb-1986
1	60	SS/NICKEL/SS	0.985	19-Feb-1986
1	60	SS/NICKEL/SS/TEFLON	0.986	19-Feb-1986
1.5	30	SS/316SS/SS	0.993	19-Feb-1986
1.5	30	SS/INCONEL/SS	0.985	19-Feb-1986
1.5	30	SS/MONEL/SS	0.981	19-Feb-1986
3	15	INC/NICKEL/SS	0.964	19-Feb-1986
3	15	SS/316SS/SS	0.963	19-Feb-1986
3	15	SS/INCONEL/SS	0.967	19-Feb-1986
3	15	SS/MONEL/SS	0.966	19-Feb-1986

Farris Engineering,Brecksville,OH

with disk from: Fike Corporation (FIK)

with rupture disks from:

Fike Corporation (FIK)

Cert Number	Disk Type Number	Heads	Code Section	Valve Type
57057	ATLAS	ATLAS	VIII Div. 1	2600 & 2600S
<i>Disk cert # 80716.</i>				
Min Size NPS	Min Set Pressure psi	Disk Material	CCF	Test Date
1	198	316 SS	0.998	7-Feb-2013
Cert Number	Disk Type Number	Heads	Code Section	Valve Type
57057	Axius	GI	VIII Div. 1	2600 & 2600S
<i>FIK-M80615</i>				
Min Size NPS	Min Set Pressure psi	Disk Material	CCF	Test Date
1	15	316SS	1	5-Jun-2008
Cert Number	Disk Type Number	Heads	Code Section	Valve Type
57057	MRK	MRK	VIII	2600 & 2600S
Min Size NPS	Min Set Pressure psi	Disk Material	CCF	Test Date
3	34	NICKEL	0.983	5-Dec-1980
3	35	316SS	0.978	5-Dec-1980
Cert Number	Disk Type Number	Heads	Code Section	Valve Type
57057	Poly SD	Poly SD	VIII	2600 & 2600S
Min Size NPS	Min Set Pressure psi	Disk Material	CCF	Test Date
1	65.7	NICKEL	1	26-May-1988
1	142.2	INCONEL	1	26-May-1988
Cert Number	Disk Type Number	Heads	Code Section	Valve Type
57057	Poly-SD CS	GI	VIII Div. 1	2600 & 2600S
<i>FIK-M80020</i>				
Min Size in	Min Set Pressure psi	Disk Material	CCF	Test Date
1	125	Aluminum	0.958	11-Feb-2004
Cert Number	Disk Type Number	Heads	Code Section	Valve Type
57057	Poly-SD DH	GI	VIII Div. 1	2600 & 2600S
<i>FIK-M80019</i>				
Min Size in	Min Set Pressure psi	Disk Material	CCF	Test Date
1	32	Aluminum	0.999	24-May-2004
Cert Number	Disk Type Number	Heads	Code Section	Valve Type
57057	PSD	PSD	VIII	2600 & 2600S
Min Size NPS	Min Set Pressure psi	Disk Material	CCF	Test Date
1	74	SS	0.976	16-Jul-1980
1	79	NICKEL	0.997	16-Jul-1980
1.5	58	NICKEL	0.99	16-Jul-1980
2	83	PSD	0.974	25-Jul-1980
Cert Number	Disk Type Number	Heads	Code Section	Valve Type
57057	SRL		VIII Div. 1	2600 & 2600S
Min Size NPS	Min Set Pressure psi	Disk Material	CCF	Test Date
1	29.6	Nickel	0.993	15-Jun-2000
1	27	Nickel	0.996	21-May-2004
Cert Number	Disk Type Number	Heads	Code Section	Valve Type
57057	SRX	GI	VIII Div. 1	2600 & 2600S
<i>FIK-M80042</i>				
Min Size NPS	Min Set Pressure psi	Disk Material	CCF	Test Date
1	95	Nickel	0.969	25-May-2004

Farris Engineering,Brecksville,OH

with disk from: Oklahoma Safety Equipment Company, Inc. (OSECO) (OSE)

with rupture disks from:

Oklahoma Safety Equipment Company, Inc. (OSECO) (OSE)

Cert Number	Disk Type Number	Heads	Code Section	Valve Type
57057	FAS	FAS	VIII	2600 & 2600S

Min Size NPS	Min Set Pressure psi	Disk Material	CCF	Test Date
1.5	90	NICKEL	0.987	18-Mar-1987

Cert Number	Disk Type Number	Heads	Code Section	Valve Type
57057	PCR	PCR	VIII	2600 & 2600S

Min Size NPS	Min Set Pressure psi	Disk Material	CCF	Test Date
1.5	90	NICKEL	0.961	18-Mar-1987

with rupture disks from:

ZOOK Canada Inc. (PEL)

Cert Number	Disk Type Number	Heads	Code Section	Valve Type
57057	SFA-II		VIII Div. 1	2600 & 2600S
	<i>Disk Cert #82044</i>			

Min Size NPS	Min Set Pressure psi	Disk Material	CCF	Test Date
1	125	Nickel	0.98	6-Feb-1997
1.5	90	Nickel	0.98	6-Feb-1997
2	70	Nickel	0.989	6-Feb-1997

Valve manufacturer

Fukui Seisakusho Company, Limited,Hirakata

with rupture disks from:

Fike Corporation (FIK)

Cert Number	Disk Type Number	Heads	Code Section	Valve Type
27032	MRKI-5		VIII	RE Series

Min Size NPS	Min Set Pressure psi	Disk Material	CCF	Test Date
1.5	57	316SS	0.985	10-Jul-1990
1.5	58	NICKEL	0.994	10-Jul-1990

Cert Number	Disk Type Number	Heads	Code Section	Valve Type
27032	Poly SD	Poly SD	VIII	RE Series

Min Size NPS	Min Set Pressure psi	Disk Material	CCF	Test Date
1.5	58.5	NICKEL	0.999	10-Jul-1990

Cert Number	Disk Type Number	Heads	Code Section	Valve Type
27032	SRX	GI	VIII Div. 1	RE Series
	<i>Disk cert. no. 80042</i>			

Min Size NPS	Min Set Pressure psi	Disk Material	CCF	Test Date
1.5	85	Nickel	0.972	23-Mar-2005

Kunkle Valve Div.,Fort Wayne,IN

with disk from: BS & B Safety Systems, LLC (BSB)

Valve manufacturer

Kunkle Valve Div.,Fort Wayne,IN

with rupture disks from:

BS & B Safety Systems, LLC (BSB)

Cert Number	Disk Type Number	Heads	Code Section	Valve Type
36997	JRS	SRB-7RS	VIII	5000 through 5999 Series

Min Size NPS	Min Set Pressure psi	Disk Material	CCF	Test Date
1	50	316 SS	0.998	13-Apr-1981
3	35	316 SS	0.99	13-Apr-1981

Cert Number	Disk Type Number	Heads	Code Section	Valve Type
36997	S90	S90-7R or SRB-7RS	VIII	5000 through 5999 Series

Min Size NPS	Min Set Pressure psi	Disk Material	CCF	Test Date
1	125	NICKEL	0.994	13-Apr-1981
3	60	NICKEL	0.998	13-Apr-1981

with rupture disks from:

Continental Disc Corporation (CDC)

Cert Number	Disk Type Number	Heads	Code Section	Valve Type
36997	ZAP	ZAP	VIII	5000 through 5999 Series

Min Size NPS	Min Set Pressure psi	Disk Material	CCF	Test Date
1	50	SS/Ni/CS	0.988	22-Aug-1979
3	35	SS/Ni/CS	0.992	22-Aug-1979

with rupture disks from:

Fike Corporation (FIK)

Cert Number	Disk Type Number	Heads	Code Section	Valve Type
36997	Poly SD	Poly SD	VIII	5000 through 5999 Series

Min Size NPS	Min Set Pressure psi	Disk Material	CCF	Test Date
2	50	NICKEL	1	8-Apr-1986

Valve manufacturer

LESER GmbH & Company KG,Hohenwestedt,

with rupture disks from:

Continental Disc Corporation (CDC)

Cert Number	Disk Type Number	Heads	Code Section	Valve Type
37224	HPX (Air/Gas)	HPX	VIII Div. 1	526

Cert number 75585

Min Size NPS	Min Set Pressure psi	Disk Material	CCF	Test Date
1	15	316SS	1	12-Mar-2015

Nakakita Seisakusho Company, Limited,Daito City, Osaka,

with disk from: BS & B Safety Systems, LLC (BSB)

Valve manufacturer

Nakakita Seisakusho Company, Limited,Daito

with rupture disks from:

BS & B Safety Systems, LLC (BSB)

Cert Number	Disk Type Number	Heads	Code Section	Valve Type
42039	JRS	SRB-7RB	VIII	NS255

Min Size NPS	Min Set Pressure psi	Disk Material	CCF	Test Date
1	39	NICKEL	0.991	7-Sep-1989

Cert Number	Disk Type Number	Heads	Code Section	Valve Type
42039	RLS	SRB-7RS	VIII	NS255

Min Size NPS	Min Set Pressure psi	Disk Material	CCF	Test Date
1	123	NICKEL	0.995	16-Nov-1989

Cert Number	Disk Type Number	Heads	Code Section	Valve Type
42039	S90	SRB-7RS	VIII	NS255

Min Size NPS	Min Set Pressure psi	Disk Material	CCF	Test Date
1	123	NICKEL	0.978	8-Sep-1989

LISTING OF VR CERTIFICATE HOLDERS

Listed in this section are those repair firms who hold a National Board certificate of authorization to repair pressure relief valves.

These entries are indicated as follows:

COMPANY, LOCATION; VR Number with Expiration Date and Scope for location; Code Section; Special Processes; Test Media

Those possible Scope entries include:

Location - Shop Only, Shop and Field, or Field Only

Code Section - I, III, IV, VIII or combinations

Special Processes - Machining, Welding, Non-Destructive Examination (NDE), Heat Treatment or combinations.

The NDE disciplines are included as well. If no special processes are listed, the repair company will be limited to disassembly, inspection, parts replacement, cleaning, lapping, re-assembly and testing.

Test Media - Steam, Air, Gas, Liquid or combinations

A&R Energy Services, Corporation (ARE)

Robinson, TX

VR #: 1213

Expiration Date: 09/24/20

Scope: Field Only; VIII Div. 1; ; Air/Gas & Liquid

Adams, Davis & Preuett, Incorporated (ADP)

Bentley, LA

VR #: 346

Expiration Date: 12/11/20

Scope: Shop & field controlled by above location; I & VIII; machining; Steam, Air/Gas & Liquid

Admiral Valve Repair and Supply, Inc. (ASR)

North Chicago, IL

VR #: 23

Expiration Date: 03/09/20

Scope: Shop & field controlled by above location; I, IV, & VIII Div.1; machining, Conversion per Part 3 & S7.2 b); Steam, Air/Gas & Liquid

Advance Valve, Incorporated (ADV)

Fenton, MO

VR #: 67

Expiration Date: 10/18/18

Scope: Shop; I & VIII Div. 1; machining; Steam, Air/Gas & Liquid

Advansix, Hopewell Plant (ASG)

Hopewell, VA

VR #: 286

Expiration Date: 03/20/19

Scope: Shop; VIII; machining; Steam (per NBIC Part 3, 4.5.2), Air/Gas & Liquid

Aeon PEC, Inc. (HGO)

Shreveport, LA

VR #: 487

Expiration Date: 03/29/20

Scope: Shop & field controlled by above location; VIII; machining, welding (by "R" holder), Conversion per Part 3 & S7.2 b); Air/Gas & Liquid

Aerojet Rocketdyne, Inc. (AJR)

Canoga Park, CA

VR #: 1203

Expiration Date: 03/07/20

Scope: Shop; VIII Div. 1; Conversion per Part 3 & S7.2 b); Gas

Air Star, Inc. (ASI)

Aztec, NM

VR #: 436

Expiration Date: 02/25/20

Scope: Shop & field controlled by above location; VIII; ; Air/Gas & Liquid

Allied Valve, Inc. - Riverdale, IA (VRS)

Riverdale, IA

VR #: 468

Expiration Date: 07/07/20

Scope: Shop & field controlled by above location; I & VIII; machining, welding (by "R" holder), Conversion per Part 3 & S7.2 b); Steam, Air/Gas & Liquid

Allied Valve, Inc. (ALC)

Chicago, IL

VR #: 4

Expiration Date: 06/15/21

Scope: Shop & field controlled by above location; I, IV, & VIII; machining, welding (by "R" holder), Conversion per Part 3 & S7.2 b); Steam, Air/Gas & Liquid

Allied Valve, Inc. (ALP)

Portage, IN

VR #: 1121

Expiration Date: 08/04/20

Scope: Shop; VIII; machining, Conversion per Part 3 & S7.2 b); Air/Gas & Liquid

Allied Valve, Inc. (AVB)

Bismarck, ND

VR #: 1151

Expiration Date: 06/24/20

Scope: Shop & field controlled by above location; I & VIII Div. 1; machining, Conversion per Part 3 & S7.2 b); Steam, Air/Gas & Liquid

Allied Valve, Inc. (TPW)

Appleton, WI

VR #: 541

Expiration Date: 01/08/19

Scope: Shop & field controlled by above location; I & VIII; machining, Conversion per Part 3 & S7.2 b); Steam, Air/Gas & Liquid

Allied Valve, Inc. (VSS)

Cannon Falls, MN

VR #: 296

Expiration Date: 07/10/18

Scope: Shop & field controlled by above location; I & VIII; machining, Conversion per Part 3 & S7.2 b); Steam, Air/Gas & Liquid

Al-Najim Saudi International Co. Ltd. (ALD)

Dammam,

VR #: 1086

Expiration Date: 05/10/19

Scope: Shop & field controlled by above location; VIII; machining; Air/Gas & Liquid

Al-Najim Saudi International Co. Ltd. (ANJ)

Jubail,

VR #: 1087

Expiration Date: 05/10/19

Scope: Shop; VIII; machining; Air/Gas & Liquid

Alyeska Pipeline Service Company (ALY)

Valdez, AK

VR #: 497

Expiration Date: 04/06/18

Scope: Shop & field controlled by above location; VIII Div. 1; machining & welding (by "R" holder); Steam (per NBIC Part 3, 4.5.2), Air/Gas & Liquid

Applied Control Equipment, LLLP (APP)

Englewood, CO

VR #: 1287

Expiration Date: 11/08/20

Scope: Field Only; I & VIII Div. 1; machining, welding (by "R" holder), Conversion per Part 3 & S7.2 b); Steam, Air/Gas & Liquid

Applied Valve Technology, Inc. (AVT)

Chattanooga, TN

VR #: 571

Expiration Date: 05/31/18

Scope: Shop & field controlled by above location; I & VIII Div. 1; machining; Steam, Air/Gas & Liquid

Aquatrol, Incorporated (AQT)

Elburn, IL

VR #: 1235

Expiration Date: 12/17/18

Scope: Shop; I & VIII (limited per NB-514, 4.0); machining, Conversion per Part 3 & S7.2 b); Steam, Air/Gas & Liquid

Archer Daniels Midland Company, ADM Mechanical, Corn Division (AAC)

Decatur, IL

VR #: 1162

Expiration Date: 11/02/18

Scope: Shop & field controlled by above location; VIII Div. 1; machining & welding (by "R" holder); Steam (per NBIC Part 3, 4.5.2), Air/Gas & Liquid

ARI - Armaturen USA, LP (TAR)

Webster, TX

VR #: 1114

Expiration Date: 08/02/18

Scope: Shop; VIII (limited per NB-514, 4.0); machining, welding (by "R" holder), Conversion per Part 3 & S7.2 b); Air/Gas & Liquid

AS and D, LLC (JCA)

Edwards AFB, CA

VR #: 1112

Expiration Date: 03/07/20

Scope: Shop; VIII; Conversion per Part 3 & S7.2 b); Air/Gas

AS and D, LLC (JTI)

Edwards AFB, CA

VR #: 1192

Expiration Date: 03/28/19

Scope: Shop; VIII Div. 1; Conversion per Part 3 & S7.2 b); Air/Gas & Liquid

Ashland Inc., Specialty Ingredients (ASH)

Hopewell, VA

VR #: 1187

Expiration Date: 08/06/19

Scope: Shop; VIII Div. 1; machining; Steam (per NBIC Part 3, 4.5.2), Air/Gas & Liquid

Atlantic Valve Services LLC (AGN)

Swedesboro, NJ

VR #: 539

Expiration Date: 06/07/19

Scope: Shop & field controlled by above location; I & VIII Div. 1; machining, welding (by "R" holder), Conversion per Part 3 & S7.2 b); Steam, Air/Gas & Liquid

AVP Valve, Inc. (AVP)

Lakeland, FL

VR #: 389

Expiration Date: 07/17/20

Scope: Shop & field controlled by above location; I & VIII Div. 1; machining, welding, Conversion per Part 3 & S7.2 b); Steam, Air/Gas & Liquid

BASF Corporation (ACS)

Palmyra, MO

VR #: 291

Expiration Date: 01/19/19

Scope: Shop; VIII; machining; Steam (per NBIC Part 3, 4.5.2), Air/Gas & Liquid

Basin Valve Company (BAK)

Bakersfield, CA

VR #: 777

Expiration Date: 08/23/20

Scope: Shop & field controlled by above location; I & VIII Div. 1; machining, Conversion per Part 3 & S7.2 b); Steam, Air/Gas & Liquid

Basin Valve Company (BVS)

Signal Hill, CA

VR #: 20

Expiration Date: 11/13/20

Scope: Shop & field controlled by above location; I & VIII Div. 1; machining, Conversion per Part 3 & S7.2 b); Steam, Air/Gas & Liquid

Bay Valve Service & Engineering, LLC (BMT)

Billings, MT

VR #: 1019

Expiration Date: 02/23/19

Scope: Shop & field controlled by above location; I & VIII; machining, Conversion per Part 3 & S7.2 b); Steam, Air/Gas & Liquid

Bay Valve Service & Engineering, LLC (BVA)

Prudhoe Bay, AK

VR #: 1195

Expiration Date: 06/06/19

Scope: Shop & field controlled by above location; I & VIII Div. 1; machining, Conversion per Part 3 & S7.2 b); Steam, Air/Gas & Liquid

Bay Valve Service & Engineering, LLC (MLV)

Odessa, TX

VR #: 94

Expiration Date: 06/13/19

Scope: Shop & field controlled by above location; I & VIII Div. 1; machining, Conversion per Part 3 & S7.2 b); Steam, Air/Gas & Liquid

Bay Valve Service & Engineering, LLC. (CRS)

Benicia, CA

VR #: 43

Expiration Date: 07/14/20

Scope: Shop & field controlled by above location; I & VIII; machining, welding (by "R" holder), Conversion per Part 3 & S7.2 b); Steam, Air/Gas & Liquid

Bay Valve Service & Engineering, LLC. (D.B.A) Bay Valve Service, LLC. (BAY)

Seattle, WA

VR #: 543

Expiration Date: 08/28/19

Scope: Shop & field controlled by above location; I & VIII; machining, Conversion per Part 3 & S7.2 b); Steam, Air/Gas & Liquid

Bay Valve Service & Engineering, LLC. (WAR)

Aurora, CO

VR #: 22

Expiration Date: 03/05/20

Scope: Shop & field controlled by above location; I & VIII Div. 1; machining, Conversion per Part 3 & S7.2 b); Steam, Air/Gas & Liquid

Bay Valve Service & Engineering, LLC. (WSL)

Salt Lake City, UT

VR #: 298

Expiration Date: 11/07/18

Scope: Shop & field controlled by above location; I & VIII; machining; Steam, Air/Gas & Liquid

Bay Valve Service, LLC. (BWA)

Longview, WA

VR #: 748

Expiration Date: 11/16/19

Scope: Shop & field controlled by above location; I & VIII Div. 1; machining, Conversion per Part 3 & S7.2 b); Steam, Air/Gas & Liquid

Bay Valve Service, LLC. (BYS)

Ferndale, WA

VR #: 546

Expiration Date: 07/10/20

Scope: Shop & field controlled by above location; VIII; machining; Air/Gas & Liquid

Birmingham Controls, Incorporated (LSL)

Cerritos, CA

VR #: 162

Expiration Date: 10/09/18

Scope: Shop & field controlled by above location; I & VIII; machining & welding (by "R" holder); Steam, Air/Gas & Liquid

BlackStar Energy Services (MLR)

Odessa, TX

VR #: 1219

Expiration Date: 01/07/21

Scope: Shop & field controlled by above location; VIII Div. 1; machining, Conversion per Part 3 & S7.2 b); Air/Gas & Liquid

Bliss Anand Private Limited (BLS)

HSIIDC, Bawal, Haryana,

VR #: 1051

Expiration Date: 05/29/20

Scope: Shop & field controlled by above location; VIII; machining, Conversion per Part 3 & S7.2 b); Air/Gas & Liquid

BP Products North America, Inc. (BPI)

Whiting, IN

VR #: 1094

Expiration Date: 08/11/19

Scope: Shop; VIII; machining, NDE (UT, MT, PT, Conversion per Part 3 & S7.2 b)); Steam (per NBIC Part 3, 4.5.2), Air/Gas & Liquid

Buckeye Valve and Equipment, LLC (BKV)

Canonsburg, PA

VR #: 1238

Expiration Date: 09/30/18

Scope: Shop & field controlled by above location; I & VIII Div. 1; machining & welding (by "R" holder); Steam, Air/Gas & Liquid

Cajun Valve Services (CJV)

Monroe, LA

VR #: 1267

Expiration Date: 04/12/20

Scope: Shop & field controlled by above location; I & VIII Div. 1; machining, Conversion per Part 3 & S7.2 b); Steam, Air/Gas & Liquid

Caliber Valve and Controls, LLC. (CLV)

Lake Charles, LA

VR #: 1262

Expiration Date: 12/02/19

Scope: Shop & field controlled by above location; I & VIII Div. 1; machining, welding (by "R" holder), Conversion per Part 3 & S7.2 b); Steam, Air/Gas & Liquid

Callender Valve Repair Inc. (CVA)

Hobbs, NM

VR #: 1230

Expiration Date: 10/30/18

Scope: Shop & field controlled by above location; VIII Div. 1; machining; Air/Gas & Liquid

Calumet Superior LLC (MUR)

Superior, WI

VR #: 283

Expiration Date: 01/17/19

Scope: Shop; VIII; machining, welding (by "R" holder), Conversion per Part 3 & S7.2 b); Steam (per NBIC Part 3, 4.5.2), Air/Gas & Liquid

Cameron Process Systems (CPS)

Williston, ND

VR #: 1152

Expiration Date: 06/28/18

Scope: Shop & field controlled by above location; VIII; welding (by "R" holder); Air/Gas

Cameron Trinidad Ltd (CTL)

Point Lisas,

VR #: 1243

Expiration Date: 03/15/19

Scope: Shop; VIII Div. 1; machining, Conversion per Part 3 & S7.2 b); Air/Gas

Cameron Valves and Measurement (CCV)

Midland, TX

VR #: 642

Expiration Date: 05/03/20

Scope: Shop & field controlled by above location; VIII Div. 1; machining, Conversion per Part 3 & S7.2 b); Air/Gas

CD King Construction, LLC dba JD King (CDK)

Seminole, TX

VR #: 1226

Expiration Date: 06/17/18

Scope: Shop & field controlled by above location; VIII Div. 1; machining; Air/Gas & Liquid

Centralia Generating Station (PPL)

Centralia, WA

VR #: 168

Expiration Date: 07/11/18

Scope: Shop; I & VIII Div. 1; machining; Steam, Air/Gas & Liquid

Certified Safety Valve Repair Corporation (CSR)

Linden, NJ

VR #: 593

Expiration Date: 04/27/19

Scope: Shop & field controlled by above location; I & VIII; machining, Conversion per Part 3 & S7.2 b); Steam, Air/Gas & Liquid

Chalmers & Kubeck - AL (CKD)

Decatur, AL

VR #: 1232

Expiration Date: 08/28/18

Scope: Shop & field controlled by above location; I & VIII Div. 1; machining & welding (by "R" holder); Steam, Air/Gas & Liquid

Chalmers & Kubeck - NC (IVG)

Charlotte, NC

VR #: 25

Expiration Date: 05/26/20

Scope: Shop & field controlled by above location; I & VIII; machining, welding (by "R" holder), Conversion per Part 3 & S7.2 b); Steam, Air/Gas & Liquid

Chalmers & Kubeck - North (MON)

Westfield, MA

VR #: 417

Expiration Date: 09/01/19

Scope: Shop & field controlled by above location; I & VIII; machining, welding (by "R" holder), Conversion per Part 3 & S7.2 b); Steam, Air/Gas & Liquid

Chalmers & Kubeck - SC (KSC)

Cayce, SC

VR #: 782

Expiration Date: 11/30/20

Scope: Shop & field controlled by above location; I & VIII Div. 1; machining, welding (by "R" holder), Conversion per Part 3 & S7.2 b); Steam, Air/Gas & Liquid

Chalmers & Kubeck - South (CKS)

Watkinsville, GA

VR #: 771

Expiration Date: 05/18/20

Scope: Shop & field controlled by above location; I & VIII Div. 1; machining, welding (by "R" holder), Conversion per Part 3 & S7.2 b); Steam, Air/Gas & Liquid

Chalmers & Kubeck - TN (VSI)

Chattanooga, TN

VR #: 756

Expiration Date: 10/16/18

Scope: Shop & field controlled by above location; I & VIII; machining, welding (by "R" holder), Conversion per Part 3 & S7.2 b); Steam, Air/Gas & Liquid

Chalmers & Kubeck, Inc. (BRU)

New Brunswick, NJ

VR #: 754

Expiration Date: 12/16/19

Scope: Shop & field controlled by above location; I & VIII Div. 1; machining, welding (by "R" holder), Conversion per Part 3 & S7.2 b); Steam, Air/Gas & Liquid

Chalmers & Kubeck, Inc. (CKB)

Beaver Falls, PA

VR #: 1199

Expiration Date: 01/10/20

Scope: Shop & field controlled by above location; I & VIII Div. 1; machining, welding (by "R" holder), Conversion per Part 3 & S7.2 b); Steam, Air/Gas & Liquid

Chalmers & Kubeck, Incorporated (CKI)

Aston, PA

VR #: 49

Expiration Date: 02/28/21

Scope: Shop & field controlled by above location; I, III, & VIII Div. 1; machining, welding (by "R" holder), Conversion per Part 3 & S7.2 b); Steam, Air/Gas & Liquid

Chemours Washington Works (PWV)

Washington, WV

VR #: 693

Expiration Date: 12/11/19

Scope: Shop; VIII; machining; Steam (per NBIC Part 3, 4.5.2), Air/Gas & Liquid

Cherokee Pharmaceuticals (MCI)

Riverside, PA

VR #: 680

Expiration Date: 07/24/19

Scope: Shop; VIII; Conversion per Part 3 & S7.2 b); Steam (per NBIC Part 3, 4.5.2), Air/Gas

Choice Safety Services, LP (CSS)

Burleson, TX

VR #: 1191

Expiration Date: 10/16/19

Scope: Shop & field controlled by above location; VIII Div. 1; Conversion per Part 3 & S7.2 b); Air/Gas

CHS McPherson Refinery Inc. (NCR)

McPherson, KS

VR #: 621

Expiration Date: 10/08/20

Scope: Shop; VIII; machining; Air/Gas & Liquid

Cincy VR & Repair, LLC (CVR)

Cincinnati, OH

VR #: 1184

Expiration Date: 07/16/19

Scope: Shop & field controlled by above location; I & VIII Div. 1; machining, welding (by "R" holder), Conversion per Part 3 & S7.2 b); Steam, Air/Gas & Liquid

Cleveland Valve and Gauge, Co. (CVG)

Cleveland, OH

VR #: 7

Expiration Date: 06/29/20

Scope: Shop & field controlled by above location; I & VIII; machining, Conversion per Part 3 & S7.2 b); Steam, Air/Gas & Liquid

ConocoPhillips Alaska, Inc. (APX)

Alpine, AK

VR #: 490

Expiration Date: 11/19/20

Scope: Shop & field controlled by above location; VIII; Conversion per Part 3 & S7.2 b); Air/Gas & Liquid

ConocoPhillips Alaska, Inc. (CPK)

Kuparuk, AK

VR #: 1135

Expiration Date: 11/15/20

Scope: Shop & field controlled by above location; VIII; Conversion per Part 3 & S7.2 b); Air/Gas & Liquid

Contro Valve Equipment Inc. (CBU)

Burlington, ON

VR #: 1028

Expiration Date: 04/23/20

Scope: Shop & field controlled by above location; I & VIII Div. 1; machining, Conversion per Part 3 & S7.2 b); Steam, Air/Gas & Liquid

Contro Valve Equipment Inc. (CTB)

Thunder Bay, ON

VR #: 1172

Expiration Date: 02/14/19

Scope: Shop & field controlled by above location; I & VIII (limited per NB-514, 11.0); machining; Steam (Field only), Air/Gas & Liquid

Contro Valve Equipment Inc. (VAL)

Brossard, QC

VR #: 305

Expiration Date: 06/12/20

Scope: Shop & field controlled by above location; I & VIII; machining, Conversion per Part 3 & S7.2 b); Steam, Air/Gas & Liquid

Contro Valve Equipment, Inc. (CTR)

Sarnia, ON

VR #: 623

Expiration Date: 04/27/19

Scope: Shop & field controlled by above location; I & VIII; machining, Conversion per Part 3 & S7.2 b); Steam, Air/Gas & Liquid

Control Southern Inc. (SJF)

Jacksonville, FL

VR #: 366

Expiration Date: 08/21/19

Scope: Shop & field controlled by above location; I & VIII; machining & welding (by "R" holder); Steam, Air/Gas & Liquid

Control Southern, Inc (CSM)

Macon, GA

VR #: 1241

Expiration Date: 11/18/18

Scope: Shop & field controlled by above location; I & VIII Div. 1; machining, welding (by "R" holder), Conversion per Part 3 & S7.2 b); Steam, Air/Gas & Liquid

Corix Control Solutions, LP (BRB)

Edmonton, AB

VR #: 227

Expiration Date: 01/14/20

Scope: Shop & field controlled by above location; I & VIII; machining, Conversion per Part 3 & S7.2 b); Steam, Air/Gas & Liquid

Cornerstone Chemical Company (CFX)

Waggaman, LA

VR #: 240

Expiration Date: 07/07/20

Scope: Shop; VIII; machining; Steam (per NBIC Part 3, 4.5.2), Air/Gas & Liquid

Crosby Valve, LLC (CVM)

Mansfield, MA

VR #: 75

Expiration Date: 08/10/19

Scope: Shop & field controlled by above location; I, III, & VIII Div. 1; machining, welding, welding (by "R" holder), Heat treatment, NDE (RT, UT, MT, PT, Conversion per Part 3 & S7.2 b)); Steam, Air/Gas & Liquid

Custom Valve Repair (CST)

New Castle, PA

VR #: 152

Expiration Date: 04/23/18

Scope: Shop & field controlled by above location; I & VIII Div. 1; machining & welding (by "R" holder); Steam, Air/Gas & Liquid

Cv Techserv, Inc. (CVT)

Hastings, MN

VR #: 269

Expiration Date: 04/05/19

Scope: Shop & field controlled by above location; I & VIII; machining; Steam, Air/Gas & Liquid

Dante Valve Company, Incorporated (DAN)

Bellflower, CA

VR #: 493

Expiration Date: 05/13/18

Scope: Shop; I & VIII Div. 1; machining, Conversion per Part 3 & S7.2 b); Steam, Air/Gas & Liquid

Dayton Precision Services (DPL)

Dayton, OH

VR #: 757

Expiration Date: 02/23/20

Scope: Shop & field controlled by above location; I & VIII Div. 1; machining, Conversion per Part 3 & S7.2 b); Steam, Air/Gas & Liquid

Di-Trol Systems, Inc. (DTS)

Kingsville, TX

VR #: 1259

Expiration Date: 09/01/19

Scope: Shop & field controlled by above location; VIII Div. 1; Conversion per Part 3 & S7.2 b); Air/Gas

Dominion - Surry Power Station (SPP)

Surry, VA

VR #: 637

Expiration Date: 06/07/18

Scope: Shop; VIII Div. 1; machining; Steam (per NBIC Part 3, 4.5.2), Air/Gas & Liquid

Dow Corning Corporation (DOW)

Carrollton, KY

VR #: 1070

Expiration Date: 12/21/18

Scope: Shop; VIII; machining & welding (by "R" holder); Steam (per NBIC Part 3, 4.5.2), Air/Gas & Liquid

Dowco Valve Company, Inc. (DWC)

Hastings, MN

VR #: 268

Expiration Date: 02/15/20

Scope: Shop & field controlled by above location; I & VIII; machining & welding (by "R" holder); Steam, Air/Gas & Liquid

Dowco Valve Company, Inc. (DWI)

Council Bluffs, IA

VR #: 1254

Expiration Date: 07/28/18

Scope: Shop & field controlled by above location; I & VIII Div. 1; machining, welding (by "R" holder), Conversion per Part 3 & S7.2 b); Steam, Air/Gas & Liquid

Dowco Valve Company, Inc. Iowa Division (DIA)

DeWitt, IA

VR #: 1016

Expiration Date: 05/16/18

Scope: Shop & field controlled by above location; I & VIII; machining & welding (by "R" holder); Steam, Air/Gas & Liquid

Dresser Al Rushaid Valve & Instrument Co. Ltd. (DSA)

Yanbu,

VR #: 1115

Expiration Date: 04/17/20

Scope: Shop & field controlled by above location; VIII; machining, Conversion per Part 3 & S7.2 b); Air/Gas & Liquid

Dresser Al Rushaid Valve & Instrument Company, Ltd. (DAR)

Jubail Industrial City,

VR #: 391

Expiration Date: 07/17/20

Scope: Shop & field controlled by above location; VIII; machining, Conversion per Part 3 & S7.2 b); Air/Gas & Liquid

Dresser de Mexico, S.A. de C.V. (DMX)

Tlalnepantla, Estado de Mexico,

VR #: 1075

Expiration Date: 12/01/18

Scope: Shop & field controlled by above location; VIII; machining & welding (by "R" holder); Air/Gas & Liquid

Dresser International, Inc. (DIU)

Dubai,

VR #: 1190

Expiration Date: 11/20/18

Scope: Shop & field controlled by above location; VIII Div. 1; machining & welding (by "R" holder); Air/Gas & Liquid

Dresser Italia SRL (GOI)

Casavatore, Napoli,

VR #: 1260

Expiration Date: 10/29/20

Scope: Shop; VIII (limited per NB-514, 4.0); machining, Conversion per Part 3 & S7.2 b); Air/Gas & Liquid

Dresser LLC (DDT)

Deer Park, TX

VR #: 26

Expiration Date: 09/15/19

Scope: Shop & field controlled by above location; I & VIII Div. 1; machining & welding (by "R" holder); Steam, Air/Gas & Liquid

DZ Atlantic (AGV)

Norfolk, VA

VR #: 579

Expiration Date: 10/04/18

Scope: Field Only; I & VIII Div. 1; machining & welding (by "R" holder); Steam, Air/Gas & Liquid

E.I. DuPont - Kinston Plant (DUK)

Grifton, NC

VR #: 315

Expiration Date: 05/11/19

Scope: Shop; VIII; ; Steam (per NBIC Part 3, 4.5.2), Air/Gas & Liquid

E.I. DuPont de Nemours & Co., Inc. (RIC)

Richmond, VA

VR #: 480

Expiration Date: 07/08/20

Scope: Shop; VIII; machining, Conversion per Part 3 & S7.2 b); Steam (per NBIC Part 3, 4.5.2), Air/Gas & Liquid

E.I. DuPont de Nemours & Company

Orange, TX

VR #: 1202

Expiration Date: 07/03/20

Scope: Shop & field controlled by above location; VIII Div. 1; machining & welding (by "R" holder); Steam (per NBIC Part 3, 4.5.2), Air/Gas & Liquid

East Coast Valve Services, Inc. (ECG)

Groton, CT

VR #: 1215

Expiration Date: 11/19/20

Scope: Shop & field controlled by above location; I & VIII Div. 1; machining, welding (by "R" holder), Conversion per Part 3 & S7.2 b); Steam, Air/Gas & Liquid

East Coast Valve Services, Inc. (ECV)

Chesapeake, VA

VR #: 1024

Expiration Date: 03/29/19

Scope: Shop & field controlled by above location; I & VIII; machining, welding (by "R" holder), Conversion per Part 3 & S7.2 b); Steam, Air/Gas & Liquid

Eastman Chemical Company, Tennessee Operations (ECC)

Kingsport, TN

VR #: 1011

Expiration Date: 06/04/19

Scope: Shop & field controlled by above location; I & VIII Div. 1; machining & welding (by "R" holder); Steam, Steam (per NBIC Part 3, 4.5.2), Air/Gas & Liquid

Emerson Automation Solutions Final Control US LP (AGC)

Stafford, TX

VR #: 293

Expiration Date: 12/31/19

Scope: Shop & field controlled by above location; I & VIII (limited per NB-514, 4.0); machining, welding, Heat treatment, NDE (RT, MT, PT, Conversion per Part 3 & S7.2 b)); Steam, Air/Gas & Liquid

EMERSON PROCESS MANAGEMENT JUBAIL (EMR)

Jubail Industrial City ,

VR #: 1301

Expiration Date: 12/04/20

Scope: Shop & field controlled by above location; VIII Div. 1; Conversion per Part 3 & S7.2 b); Air/Gas & Liquid

Energy Northwest Columbia Generating Station (WPP)

Richland, WA

VR #: 214

Expiration Date: 09/06/19

Scope: Shop; VIII; machining; Air/Gas & Liquid

Energy Power, Incorporated (ENG)

Port Arthur, TX

VR #: 447

Expiration Date: 10/17/18

Scope: Shop & field controlled by above location; I & VIII Div. 1; machining & welding (by "R" holder); Steam, Air/Gas & Liquid

Engineering Systems & Sales, Inc. (ENS)

Ponce, PR

VR #: 196

Expiration Date: 11/19/19

Scope: Shop & field controlled by above location; I & VIII; machining, welding (by "R" holder), Conversion per Part 3 & S7.2 b); Steam, Air/Gas & Liquid

Equilon Enterprises dba Shell Oil Products U.S. Puget Sound Refinery (TEX)

Anacortes, WA

VR #: 219

Expiration Date: 08/08/19

Scope: Shop; VIII; machining, Conversion per Part 3 & S7.2 b); Steam (per NBIC Part 3, 4.5.2), Air/Gas & Liquid

Equistar Chemicals (QQC)

Clinton, IA

VR #: 369

Expiration Date: 02/26/21

Scope: Shop; VIII Div. 1; machining, Conversion per Part 3 & S7.2 b); Air/Gas & Liquid

Exion Asia Pte Ltd (OSA)

Singapore,

VR #: 1044

Expiration Date: 04/11/18

Scope: Shop; VIII Div. 1; machining; Air/Gas & Liquid

Extreme Force Valve, Inc. (EFV)

Jerseyville, IL

VR #: 1227

Expiration Date: 12/01/18

Scope: Shop & field controlled by above location; I & VIII Div. 1; machining, welding (by "R" holder), Conversion per Part 3 & S7.2 b); Steam, Air/Gas & Liquid

F. H. Gaskins Company, Incorporated (FHG)

Norfolk, VA

VR #: 140

Expiration Date: 11/10/20

Scope: Shop & field controlled by above location; I & VIII; machining, Conversion per Part 3 & S7.2 b); Steam, Air/Gas & Liquid

F.W. Webb Process Controls Division (SEV)

Winslow, ME

VR #: 150

Expiration Date: 04/17/20

Scope: Shop & field controlled by above location; I & VIII; machining, Conversion per Part 3 & S7.2 b); Steam, Air/Gas & Liquid

FARRIS ENGINEERING - A Division of CWFC (UK) LTD. (FEE)

Corby,

VR #: 1250

Expiration Date: 08/23/19

Scope: Shop; VIII (limited per NB-514, 4.0); Conversion per Part 3 & S7.2 b); Steam, Air/Gas & Liquid

Farris Engineering (FIC)

Brantford, ON

VR #: 371

Expiration Date: 12/23/18

Scope: Shop; I & VIII (limited per NB-514, 4.0); machining, welding, Heat treatment, NDE (MT & PT); Steam, Air/Gas & Liquid

Farris Engineering (TFO)

Brecksville, OH

VR #: 1248

Expiration Date: 03/23/19

Scope: Shop; I & VIII (limited per NB-514, 4.0); machining, welding, Conversion per Part 3 & S7.2 b); Steam, Air/Gas & Liquid

Fesco, Ltd (FES)

Bridgeport, WV

VR #: 1212

Expiration Date: 03/06/20

Scope: Shop & field controlled by above location; VIII Div. 1; ; Air/Gas

FESCO, Ltd (FSC)

Alice, TX

VR #: 1268

Expiration Date: 03/09/20

Scope: Shop & field controlled by above location; VIII Div. 1; Conversion per Part 3 & S7.2 b); Air/Gas

First Energy Nuclear Operating Company (FENOC)

Oak Harbor, OH

VR #: 316

Expiration Date: 12/13/19

Scope: Shop & field controlled by above location; III & VIII; machining, welding, welding (by "R" holder), NDE (UT, MT & PT); Air/Gas & Liquid

Flotech, Inc. - Charleston Div. (SCI)

North Charleston, SC

VR #: 739

Expiration Date: 08/12/19

Scope: Shop & field controlled by above location; I & VIII Div. 1; machining, welding (by "R" holder), Conversion per Part 3 & S7.2 b); Steam, Air/Gas & Liquid

Flotech, Inc. (FLO)

Jacksonville, FL

VR #: 414

Expiration Date: 10/01/20

Scope: Shop & field controlled by above location; I & VIII; machining, welding (by "R" holder), Conversion per Part 3 & S7.2 b); Steam, Air/Gas & Liquid

Flow Safe Supply, Inc. (FSS)

Houston, TX

VR #: 1148

Expiration Date: 05/18/21

Scope: Shop & field controlled by above location; VIII Div. 1; machining, welding, Conversion per Part 3 & S7.2 b); Air/Gas & Liquid

Flow Safe, Inc. (FLW)

Orchard Park, NY

VR #: 472

Expiration Date: 01/29/20

Scope: Shop; VIII (limited per NB-514, 4.0); machining, welding, Heat treatment, Conversion per Part 3 & S7.2 b); Air/Gas & Liquid

Flow-Zone, LLC (FLZ)

Three Rivers , TX

VR #: 1074

Expiration Date: 06/21/19

Scope: Shop & field controlled by above location; VIII; Conversion per Part 3 & S7.2 b); Air/Gas & Liquid

Fluid Mechanics Valve Company (FMV)

Houston, TX

VR #: 1103

Expiration Date: 12/19/19

Scope: Shop; VIII (limited per NB-514, 4.0); ; Air/Gas & Liquid

FORCE Industries, LLC (FIL)

Houma, LA

VR #: 1169

Expiration Date: 12/18/18

Scope: Shop & field controlled by above location; VIII Div. 1; machining; Air/Gas & Liquid

Frank D. Riggio Company, Incorporated (RIG)

Bayonne, NJ

VR #: 51

Expiration Date: 06/03/18

Scope: Shop & field controlled by above location; I & VIII Div. 1; machining & welding (by "R" holder); Steam, Air/Gas & Liquid

Fueling and Service Technology, Inc. (FST)

Buena Park, CA

VR #: 1249

Expiration Date: 04/12/19

Scope: Field Only; VIII Div. 1; ; Air/Gas & Liquid

G & S Valves & Fittings Company, Incorporated (GSV)

Guttenberg, NJ

VR #: 59

Expiration Date: 02/08/21

Scope: Shop & field controlled by above location; I & VIII; machining; Steam & Air/Gas

Gas Field Specialists, Inc. (GFS)

Mansfield, PA

VR #: 1281

Expiration Date: 08/09/20

Scope: Shop & field controlled by above location; VIII Div. 1; machining, welding (by "R" holder), Conversion per Part 3 & S7.2 b); Air/Gas

Gas Patch Service Co. (GPS)

Rio Vista, CA

VR #: 1138

Expiration Date: 11/11/20

Scope: Shop & field controlled by above location; VIII; ; Air/Gas

GLM Corporation (GCM)

Kenai, AK

VR #: 674

Expiration Date: 06/26/19

Scope: Shop & field controlled by above location; I & VIII; machining, Conversion per Part 3 & S7.2 b); Steam, Air/Gas & Liquid

Great Western Valve (SOC)

Clute, TX

VR #: 1077

Expiration Date: 02/19/19

Scope: Shop & field controlled by above location; VIII; machining, welding (by "R" holder), Conversion per Part 3 & S7.2 b); Air/Gas & Liquid

Great Western Valve (PCV)

Pasadena, TX

VR #: 267

Expiration Date: 05/26/18

Scope: Shop & field controlled by above location; VIII Div. 1; machining, welding (by "R" holder), Conversion per Part 3 & S7.2 b); Air/Gas & Liquid

Great Western Valve (STI)

Texas City, TX

VR #: 244

Expiration Date: 06/26/20

Scope: Shop & field controlled by above location; I & VIII Div. 1; machining, welding (by "R" holder), Conversion per Part 3 & S7.2 b); Steam, Air/Gas & Liquid

Great Western Valve, Inc. (GWN)

Nederland, TX

VR #: 1197

Expiration Date: 01/23/20

Scope: Shop & field controlled by above location; VIII; machining, Conversion per Part 3 & S7.2 b); Air/Gas & Liquid

Groth Equipment Corporation (GEG)

Geismar, LA

VR #: 3

Expiration Date: 02/28/19

Scope: Shop & field controlled by above location; I & VIII; machining, welding, Heat treatment, NDE (RT, UT, MT & PT); Steam, Air/Gas & Liquid

Groth Equipment Corporation (GRG)

Sulphur, LA

VR #: 357

Expiration Date: 11/29/19

Scope: Shop & field controlled by above location; I & VIII Div. 1; machining, welding, Heat treatment, NDE (RT, UT, MT, PT, Conversion per Part 3 & S7.2 b)); Steam, Air/Gas & Liquid

Gulf Coast Valve, Inc. (GCV)

Corpus Christi, TX

VR #: 228

Expiration Date: 03/11/20

Scope: Shop & field controlled by above location; I & VIII; machining, welding (by "R" holder), Conversion per Part 3 & S7.2 b); Steam, Air/Gas & Liquid

Gulf Valve Service Co., LLC (GVS)

Baton Rouge, LA

VR #: 24

Expiration Date: 08/03/18

Scope: Shop; I & VIII Div. 1; machining; Steam, Air/Gas & Liquid

H & H Valve Services, LLC (HHV)

Odessa, TX

VR #: 585

Expiration Date: 02/28/19

Scope: Shop & field controlled by above location; VIII; machining; Air/Gas

Hawaiian Electric Company, Inc. (HEC)

Kapolei, HI

VR #: 633

Expiration Date: 10/22/20

Scope: Shop & field controlled by above location; I & VIII; machining & welding (by "R" holder); Steam (per NBIC Part 3, 4.5.2), Air/Gas & Liquid

Hilcorp Alaska, LLC (UNA)

Kenai, AK

VR #: 656

Expiration Date: 02/05/19

Scope: Field Only; VIII; machining, Conversion per Part 3 & S7.2 b); Air/Gas & Liquid

Husky Lima Refining Company (LIM)

Lima, OH

VR #: 1018

Expiration Date: 12/20/19

Scope: Shop; VIII; machining, welding (by "R" holder), Conversion per Part 3 & S7.2 b); Steam (per NBIC Part 3, 4.5.2), Air/Gas & Liquid

Industrial Controls and Equipment (ICE)

Monessen, PA

VR #: 696

Expiration Date: 02/20/20

Scope: Shop & field controlled by above location; VIII Div. 1; machining, Conversion per Part 3 & S7.2 b); Air/Gas & Liquid

Industrial Steel & Boiler Services, Inc. (ISB)

Chicopee, MA

VR #: 765

Expiration Date: 06/21/20

Scope: Shop & field controlled by above location; I & VIII Div. 1; machining & welding (by "R" holder); Steam, Air/Gas & Liquid

Industrial Valve Sales & Service, Inc. (IVL)

Bastrop, LA

VR #: 319

Expiration Date: 09/17/18

Scope: Shop & field controlled by above location; I & VIII Div. 1; machining; Steam, Air/Gas & Liquid

Industrial Valve Sales & Service, Inc. (IVR)

Cleveland, TN

VR #: 211

Expiration Date: 10/28/18

Scope: Shop & field controlled by above location; I & VIII; machining; Steam, Air/Gas & Liquid

Industrial Valve Sales & Service, Incorporated (IVE)

Mobile, AL

VR #: 72

Expiration Date: 12/01/20

Scope: Shop & field controlled by above location; I & VIII; machining, Conversion per Part 3 & S7.2 b); Steam, Air/Gas & Liquid

Industrial Valve Sales & Services, Inc. (IVS)

Evansville, IN

VR #: 1161

Expiration Date: 09/25/18

Scope: Shop & field controlled by above location; I & VIII Div. 1; machining; Steam, Air/Gas & Liquid

Instrument Control Services (ICS)

Ventura, CA

VR #: 1116

Expiration Date: 06/14/20

Scope: Shop & field controlled by above location; VIII; machining, Conversion per Part 3 & S7.2 b); Air/Gas & Liquid

Integrated Plant Services (IPS)

Columbus, OH

VR #: 622

Expiration Date: 11/21/18

Scope: Shop & field controlled by above location; I & VIII; machining & welding (by "R" holder); Steam, Air/Gas & Liquid

Integrated Pressure Management (IPM)

Houston, TX

VR #: 1280

Expiration Date: 08/22/20

Scope: Shop & field controlled by above location; VIII Div. 1; machining & welding (by "R" holder); Air/Gas & Liquid

Integrated Pressure Management LLC, an affiliate of AWC, Inc (ITP)

Corpus Christi, TX

VR #: 1302

Expiration Date: 01/25/21

Scope: Shop & field controlled by above location; VIII Div. 1; machining, welding (by "R" holder), Conversion per Part 3 & S7.2 b); Air/Gas & Liquid

Integrated Pressure Management, an Affiliate of AWC, Inc. (INP)

Port Arthur, TX

VR #: 1296

Expiration Date: 02/02/21

Scope: Shop & field controlled by above location; VIII Div. 1; machining & welding (by "R" holder); Air/Gas & Liquid

International Valve & Instrument Corporation (INT)

Springfield, MA

VR #: 179

Expiration Date: 02/08/20

Scope: Shop & field controlled by above location; I & VIII; machining, welding, Heat treatment, NDE (PT, Conversion per Part 3 & S7.2 b)); Steam, Air/Gas & Liquid

INVISTA S.a.r.l. - Victoria Site (IVT)

Victoria, TX

VR #: 1095

Expiration Date: 08/31/19

Scope: Shop; VIII; machining, welding (by "R" holder), Conversion per Part 3 & S7.2 b); Steam (per NBIC Part 3, 4.5.2), Air/Gas & Liquid

ISP Chemicals, LLC., Subsidiary of Ashland, Inc. (ISP)

Calvert City, KY

VR #: 673

Expiration Date: 05/01/19

Scope: Shop; VIII; machining; Steam (per NBIC Part 3, 4.5.2), Air/Gas & Liquid

Ivan Ware & Son, Inc. (BHE)

Chattanooga, TN

VR #: 334

Expiration Date: 04/12/19

Scope: Shop & field controlled by above location; I & VIII; machining; Steam, Air/Gas & Liquid

Ivan Ware and Son, Inc. (IWS)

Louisville, KY

VR #: 751

Expiration Date: 12/15/19

Scope: Shop & field controlled by above location; I & VIII Div. 1; machining, Conversion per Part 3 & S7.2 b); Steam, Air/Gas & Liquid

J & A Service, LLC (JAA)

Vernal, UT

VR #: 1106

Expiration Date: 09/13/19

Scope: Shop & field controlled by above location; VIII; ; Air/Gas

J. Koch Associates, Incorporated (JKA)

Paulsboro, NJ

VR #: 427

Expiration Date: 03/16/20

Scope: Shop & field controlled by above location; I & VIII Div. 1; machining, welding (by "R" holder), Conversion per Part 3 & S7.2 b); Steam, Air/Gas & Liquid

JAB Services, Inc. (JAB)

Odessa, TX

VR #: 1256

Expiration Date: 08/04/19

Scope: Field Only; VIII Div. 1; ; Air/Gas

Jim's Lubrication Service, Inc. (JIM)

Odessa, TX

VR #: 1277

Expiration Date: 08/30/20

Scope: Shop & field controlled by above location; VIII Div. 1; machining, Conversion per Part 3 & S7.2 b); Air/Gas & Liquid

L6 Inc. Total Valve Systems (TVG)

Gretna, NE

VR #: 1261

Expiration Date: 11/05/19

Scope: Shop & field controlled by above location; VIII Div. 1; machining, welding (by "R" holder), Conversion per Part 3 & S7.2 b); Air/Gas & Liquid

L6 INC-TOTAL VALVE SYSTEMS (LSY)

PERRYTON, TX

VR #: 1293

Expiration Date: 12/06/20

Scope: Shop & field controlled by above location; VIII Div. 1; machining, welding (by "R" holder), Conversion per Part 3 & S7.2 b); Air/Gas & Liquid

LAM Valves, Incorporated (LMV)

Houston, TX

VR #: 85

Expiration Date: 01/08/19

Scope: Shop; I & VIII Div. 1; ; Steam, Air/Gas & Liquid

Land & Sea Instrumentation Ltd. (LSM)

Dartmouth, NS

VR #: 400

Expiration Date: 01/27/19

Scope: Shop & field controlled by above location; I & VIII Div. 1; machining & welding (by "R" holder); Steam, Air/Gas & Liquid

Laurentide Controls Limited (SIE)

Kirkland, QC

VR #: 337

Expiration Date: 06/22/18

Scope: Shop & field controlled by above location; I, IV, & VIII; machining, Conversion per Part 3 & S7.2 b); Steam, Air/Gas & Liquid

LAW VALVE OF TEXAS (LVT)

Channelview , TX

VR #: 1269

Expiration Date: 03/17/20

Scope: Shop; VIII Div. 1; machining, Conversion per Part 3 & S7.2 b); Air/Gas

LCM Industries, Inc. (LCM)

Odessa, TX

VR #: 1007

Expiration Date: 02/07/19

Scope: Shop & field controlled by above location; VIII; machining; Air/Gas & Liquid

LISCO, Inc (SVR)

Richwood, TX

VR #: 156

Expiration Date: 03/19/19

Scope: Shop & field controlled by above location; I & VIII; machining; Steam, Air/Gas & Liquid

Lobo Valve Services, Inc. (LBV)

Odessa, TX

VR #: 1285

Expiration Date: 10/19/20

Scope: Shop & field controlled by above location; VIII Div. 1; machining, Conversion per Part 3 & S7.2 b); Air/Gas & Liquid

Louisiana Safety Systems, Inc. (LSS)

Lafayette, LA

VR #: 599

Expiration Date: 08/10/19

Scope: Shop & field controlled by above location; VIII Div. 1; machining, Conversion per Part 3 & S7.2 b); Air/Gas & Liquid

Louisiana Valve Source, Inc. (LVS)

Youngsville, LA

VR #: 715

Expiration Date: 06/21/18

Scope: Shop & field controlled by above location; VIII Div. 1; machining & welding; Air/Gas

Major Enterprise, LLC (MAJ)

Houston, TX

VR #: 620

Expiration Date: 07/07/18

Scope: Shop; VIII; machining; Air/Gas

Mec - Tric Control Company (MCT)

Charlotte, NC

VR #: 236

Expiration Date: 05/21/20

Scope: Shop & field controlled by above location; I & VIII; machining, Conversion per Part 3 & S7.2 b); Steam, Air/Gas & Liquid

Mechanical Analysis / Repair, Inc. (MEC)

Lodi, CA

VR #: 1217

Expiration Date: 12/03/20

Scope: Shop & field controlled by above location; VIII Div. 1; machining, welding (by "R" holder), Conversion per Part 3 & S7.2 b); Air/Gas & Liquid

Mecklenburg Valve Source, LLC (MCK)

Charlotte, NC

VR #: 1113

Expiration Date: 04/20/20

Scope: Shop; I & VIII; machining, Conversion per Part 3 & S7.2 b); Steam, Air/Gas & Liquid

Mercer Valve Canada a division of the Unified Valve Group Ltd (MVL)

Calgary, AB

VR #: 1005

Expiration Date: 12/04/18

Scope: Shop; VIII; ; Air/Gas & Liquid

Mercer Valve Co., Inc. (WOS)

Longview, TX

VR #: 1013

Expiration Date: 08/11/20

Scope: Shop & field controlled by above location; VIII; Conversion per Part 3 & S7.2 b); Air/Gas & Liquid

Mercer Valve Co., Inc. (MCO)

Mercer, WI

VR #: 1149

Expiration Date: 06/07/18

Scope: Shop & field controlled by above location; VIII; machining; Air/Gas

Mercer Valve Company, Inc. (MVV)

Houston, TX

VR #: 655

Expiration Date: 08/31/20

Scope: Shop & field controlled by above location; VIII Div. 1; machining, Conversion per Part 3 & S7.2 b); Air/Gas & Liquid

Mercer Valve Company, Inc. Bridgeport Division (MRB)

Bridgeport, TX

VR #: 1211

Expiration Date: 10/23/20

Scope: Shop & field controlled by above location; VIII Div. 1; machining, Conversion per Part 3 & S7.2 b); Air/Gas & Liquid

Mercer Valve Company, Incorporated (MVC)

Oklahoma City, OK

VR #: 413

Expiration Date: 08/27/19

Scope: Shop & field controlled by above location; VIII; machining, Conversion per Part 3 & S7.2 b); Air/Gas & Liquid

Merck & Co, Inc. (MSP)

Elkton, VA

VR #: 745

Expiration Date: 11/10/20

Scope: Shop; VIII Div. 1; machining; Steam (per NBIC Part 3, 4.5.2), Air/Gas & Liquid

Merck & Company, Incorporated (MMD)

Rahway, NJ

VR #: 327

Expiration Date: 11/14/19

Scope: Shop; VIII Div. 1; machining; Steam, Steam (per NBIC Part 3, 4.5.2), Air/Gas & Liquid

Midwest Valve Service, LLC (AFS)

Wausau, WI

VR #: 665

Expiration Date: 03/19/19

Scope: Shop & field controlled by above location; I & VIII; machining; Steam, Air/Gas & Liquid

Midwest Valve Services LLC (MWV)

Mandan, ND

VR #: 1200

Expiration Date: 04/28/20

Scope: Shop & field controlled by above location; I & VIII Div. 1; machining, Conversion per Part 3 & S7.2 b); Steam, Air/Gas & Liquid

Midwest Valve Services, LLC (MID)

Minooka, IL

VR #: 363

Expiration Date: 01/25/20

Scope: Shop & field controlled by above location; I & VIII; machining, welding, Heat treatment, NDE (RT, UT, MT, PT, Conversion per Part 3 & S7.2 b)); Steam, Air/Gas & Liquid

Millennium Power Services, Inc. (MPS)

Fairfield, ME

VR #: 744

Expiration Date: 09/15/19

Scope: Shop & field controlled by above location; I & VIII Div. 1; machining, Conversion per Part 3 & S7.2 b); Steam, Air/Gas & Liquid

Mobile Valve - Tracy (MVT)

Tracy, NB

VR #: 605

Expiration Date: 07/12/19

Scope: Shop & field controlled by above location; I & VIII; machining, Conversion per Part 3 & S7.2 b); Steam, Air/Gas & Liquid

Mobile Valve, a division of Source Atlantic (MVR)

Mt. Uniacke, NS

VR #: 351

Expiration Date: 08/03/20

Scope: Shop & field controlled by above location; I & VIII Div. 1; machining, Conversion per Part 3 & S7.2 b); Steam, Air/Gas & Liquid

Momentive Performance Materials (OSI)

Friendly, WV

VR #: 690

Expiration Date: 08/15/19

Scope: Shop; VIII Div. 1; Conversion per Part 3 & S7.2 b); Steam (per NBIC Part 3, 4.5.2), Air/Gas & Liquid

Monument Chemical Kentucky, LLC (MKY)

Brandenburg, KY

VR #: 1193

Expiration Date: 11/07/19

Scope: Shop; VIII Div. 1; machining, Conversion per Part 3 & S7.2 b); Steam (per NBIC Part 3, 4.5.2), Air/Gas & Liquid

Morris Field Services, LLC (MOR)

Pampa, TX

VR #: 1092

Expiration Date: 08/02/19

Scope: Field Only; VIII; ; Air/Gas

Myers - Aubrey Company (MAC)

Broken Arrow, OK

VR #: 65

Expiration Date: 05/12/18

Scope: Shop & field controlled by above location; I & VIII Div. 1; machining; Steam, Air/Gas & Liquid

Nal Gulf Industrial Support Services (NGU)

Jubail,

VR #: 1251

Expiration Date: 02/07/20

Scope: Shop; VIII Div. 1; machining; Air/Gas & Liquid

NASA Langley Research Center (NLR)

Hampton, VA

VR #: 1253

Expiration Date: 10/14/18

Scope: Shop; VIII Div. 1; ; Air/Gas

NASA Marshall Space Flight Center Valve and Component Laboratory (MSF)

Huntsville, AL

VR #: 1168

Expiration Date: 09/18/18

Scope: Shop & field controlled by above location; VIII Div. 1; machining & welding (by "R" holder); Air/Gas

NASA White Sands Test Facility (NTF)

Las Cruces, NM

VR #: 1076

Expiration Date: 02/08/19

Scope: Shop; VIII; machining; Air/Gas

Newport News Industrial Corporation (NNI)

Newport News, VA

VR #: 377

Expiration Date: 05/08/19

Scope: Shop & field controlled by above location; I, III, & VIII; machining, welding (by "R" holder), Conversion per Part 3 & S7.2 b); Steam, Air/Gas & Liquid

North American Machine Works, Inc. (ANA)

Folcroft, PA

VR #: 600

Expiration Date: 10/12/19

Scope: Shop & field controlled by above location; I & VIII; machining, welding (by "R" holder), Conversion per Part 3 & S7.2 b); Steam, Air/Gas & Liquid

North American Safety Valve Industries, Inc. (NAS)

North Kansas City, MO

VR #: 242

Expiration Date: 08/29/20

Scope: Shop & field controlled by above location; I, IV, & VIII; machining, welding (by "R" holder), Conversion per Part 3 & S7.2 b); Steam, Air/Gas & Liquid

NRG Energy (NRG)

Houston, TX

VR #: 1174

Expiration Date: 03/19/19

Scope: Field Only; I & VIII (limited per NB-514, 11.0); machining & welding (by "R" holder); Steam

NWS Technologies, LLC (NWS)

Spartanburg, SC

VR #: 632

Expiration Date: 04/03/18

Scope: Shop & field controlled by above location; III & VIII; machining, welding, welding (by "R" holder), Heat treatment & NDE (PT); Steam, Air/Gas & Liquid

Oil & Gas Valve Services LLC (OGV)

Rifle, CO

VR #: 1228

Expiration Date: 12/18/18

Scope: Shop & field controlled by above location; VIII Div. 1; ; Air/Gas

Pacific Industrial Service, Inc. (PSI)

St. Helens, OR

VR #: 320

Expiration Date: 04/30/18

Scope: Shop & field controlled by above location; I, IV, & VIII; machining; Steam, Air/Gas & Liquid

Pan Gulf Valve Services Co. Ltd. (PNG)

Jubail 31961,

VR #: 1084

Expiration Date: 04/23/19

Scope: Shop & field controlled by above location; VIII; machining; Air/Gas & Liquid

Panel Specialists, Inc. (SPE)

Houma, LA

VR #: 755

Expiration Date: 02/17/20

Scope: Shop & field controlled by above location; VIII Div. 1; machining, Conversion per Part 3 & S7.2 b); Air/Gas & Liquid

Pansa Machine Shop N.V. (PAN)

Plantage Concordia, Para,

VR #: 1265

Expiration Date: 04/14/20

Scope: Shop & field controlled by above location; VIII Div. 1; machining & welding (by "R" holder); Air/Gas & Liquid

Par Hawaii Refining, LLC (THC)

Kapolei, HI

VR #: 708

Expiration Date: 10/04/20

Scope: Shop; I & VIII Div. 1; machining, Conversion per Part 3 & S7.2 b); Steam, Steam (per NBIC Part 3, 4.5.2), Air/Gas & Liquid

PCE Pacific, AK (STA)

Anchorage, AK

VR #: 630

Expiration Date: 06/03/18

Scope: Shop & field controlled by above location; I, IV, & VIII; machining, welding (by "R" holder), Conversion per Part 3 & S7.2 b); Steam, Air/Gas & Liquid

PCE Pacific, Inc. (NEV)

Salt Lake City, UT

VR #: 273

Expiration Date: 08/30/20

Scope: Shop & field controlled by above location; I & VIII; machining, Conversion per Part 3 & S7.2 b); Steam, Air/Gas & Liquid

PCE Pacific, Inc. (TSR)

Everett, WA

VR #: 8

Expiration Date: 03/24/19

Scope: Shop & field controlled by above location; I, IV, & VIII Div.1; machining, welding (by "R" holder), Conversion per Part 3 & S7.2 b); Steam, Air/Gas & Liquid

PCS Nitrogen Fertilizer, L.P. (ASC)

Augusta, GA

VR #: 1220

Expiration Date: 02/18/21

Scope: Shop; VIII Div. 1; machining & welding (by "R" holder); Steam (per NBIC Part 3, 4.5.2), Air/Gas & Liquid

Pentair Flow Control Pacific Pty Ltd (PFP)

Wangara, Western Australia,

VR #: 1222

Expiration Date: 07/17/18

Scope: Shop; VIII Div. 1; machining; Air/Gas & Liquid

Permian Valve Repair, Incorporated (PER)

Odessa, TX

VR #: 510

Expiration Date: 02/15/21

Scope: Shop & field controlled by above location; VIII Div. 1; machining, Conversion per Part 3 & S7.2 b); Air/Gas & Liquid

Phoenix Calibration (PHO)

Santo Domingo,

VR #: 1198

Expiration Date: 02/28/20

Scope: Shop & field controlled by above location; VIII Div. 1; machining, Conversion per Part 3 & S7.2 b); Air/Gas & Liquid

Pioneer Industrial Corporation (PIC)

Calvert City, KY

VR #: 1257

Expiration Date: 08/18/19

Scope: Shop & field controlled by above location; I & VIII Div. 1; machining, Conversion per Part 3 & S7.2 b); Steam, Air/Gas & Liquid

Pioneer Industrial Corporation (PID)

Decatur, IL

VR #: 1186

Expiration Date: 08/28/19

Scope: Shop; VIII Div. 1; machining, Conversion per Part 3 & S7.2 b); Air/Gas & Liquid

Pioneer Industrial Corporation (PII)

Kansas City, MO

VR #: 635

Expiration Date: 05/11/18

Scope: Shop; VIII; machining; Air/Gas & Liquid

Pioneer Industrial Corporation (ZLT)

St. Louis, MO

VR #: 266

Expiration Date: 01/14/21

Scope: Shop & field controlled by above location; I & VIII; machining, Conversion per Part 3 & S7.2 b); Steam, Air/Gas & Liquid

Platte River Valve, LLC (PLA)

Hastings, NE

VR #: 1081

Expiration Date: 04/08/19

Scope: Shop & field controlled by above location; I & VIII; machining, Conversion per Part 3 & S7.2 b); Steam, Air/Gas & Liquid

Portersville PRD LLC (PRK)

South Point, OH

VR #: 1108

Expiration Date: 12/15/19

Scope: Shop & field controlled by above location; I & VIII Div. 1; machining, Conversion per Part 3 & S7.2 b); Steam, Air/Gas & Liquid

Portersville PRD LLC (PRT)

Blountville, TN

VR #: 1245

Expiration Date: 03/31/19

Scope: Shop & field controlled by above location; VIII Div. 1; machining, Conversion per Part 3 & S7.2 b); Air/Gas & Liquid

Portersville PRD LLC (PRV)

Richmond, VA

VR #: 1292

Expiration Date: 01/12/21

Scope: Shop & field controlled by above location; VIII Div. 1; machining, Conversion per Part 3 & S7.2 b); Air/Gas & Liquid

Portersville PRD LLC. (PTI)

Tallmadge, OH

VR #: 713

Expiration Date: 10/01/20

Scope: Shop & field controlled by above location; I & VIII Div. 1; machining, Conversion per Part 3 & S7.2 b); Steam, Air/Gas & Liquid

Portersville PRD LLC. (PVE)

New Castle, PA

VR #: 28

Expiration Date: 09/26/18

Scope: Shop & field controlled by above location; I & VIII Div. 1; machining & welding; Steam, Air/Gas & Liquid

Precision Fabricating & Cleaning Company, Inc. (PRF)

Cocoa, FL

VR #: 1244

Expiration Date: 02/17/19

Scope: Shop; VIII Div. 1; ; Air/Gas & Liquid

Precision Fitting and Gauge Company (PFG)

Tulsa, OK

VR #: 1004

Expiration Date: 10/31/18

Scope: Shop & field controlled by above location; I & VIII Div. 1; machining & welding (by "R" holder); Steam, Air/Gas & Liquid

Precision Pump & Valve Service, Incorporated (PPV)

Cross Lanes, WV

VR #: 198

Expiration Date: 06/11/19

Scope: Shop & field controlled by above location; I & VIII; machining, welding (by "R" holder), Conversion per Part 3 & S7.2 b); Steam, Air/Gas & Liquid

Precision Pump & Valve, LLC. (PTM)

Lake Charles, LA

VR #: 1201

Expiration Date: 08/16/19

Scope: Shop & field controlled by above location; I & VIII Div. 1; machining, welding (by "R" holder), Heat treatment, NDE (PT, Conversion per Part 3 & S7.2 b)); Steam, Air/Gas & Liquid

Precision Services, Inc. (PUM)

Louisville, KY

VR #: 788

Expiration Date: 09/01/20

Scope: Shop & field controlled by above location; I & VIII Div. 1; machining, welding (by "R" holder), Conversion per Part 3 & S7.2 b); Steam, Air/Gas & Liquid

Precision Valve Group, Inc. (PMN)

Monroe, NC

VR #: 1189

Expiration Date: 09/18/19

Scope: Shop & field controlled by above location; I & VIII Div. 1; machining, Conversion per Part 3 & S7.2 b); Steam, Air/Gas & Liquid

Precision Valves Limited (PVL)

Al Jubail,

VR #: 1240

Expiration Date: 06/08/19

Scope: Shop; VIII Div. 1; machining, Conversion per Part 3 & S7.2 b); Air/Gas & Liquid

Process Equipment & Service Company, Inc. (PES)

Farmington, NM

VR #: 1020

Expiration Date: 03/15/19

Scope: Shop & field controlled by above location; VIII; Conversion per Part 3 & S7.2 b); Air/Gas & Liquid

PROCONEX (PRX)

Royersford, PA

VR #: 1255

Expiration Date: 10/04/19

Scope: Shop & field controlled by above location; VIII Div. 1; Conversion per Part 3 & S7.2 b); Air/Gas & Liquid

Professional Valve Service, Ltd. (PTD)

Sarnia, ON

VR #: 654

Expiration Date: 10/11/18

Scope: Shop & field controlled by above location; I & VIII Div. 1; machining; Steam, Air/Gas & Liquid

PTW Energy Services Inc. (TES)

Naples, UT

VR #: 1159

Expiration Date: 06/08/18

Scope: Field Only; VIII; ; Air/Gas

Puffer Sweiven, LP (PPC)

Corpus Christi, TX

VR #: 459

Expiration Date: 11/29/19

Scope: Shop & field controlled by above location; I & VIII Div. 1; machining, Conversion per Part 3 & S7.2 b); Steam, Air/Gas & Liquid

Puffer Sweiven, LP (PPH)

Houston, TX

VR #: 1237

Expiration Date: 01/08/19

Scope: Shop & field controlled by above location; I & VIII Div. 1; machining, welding (by "R" holder), Conversion per Part 3 & S7.2 b); Steam, Air/Gas & Liquid

Quadco, LLC. (QNM)

Farmington, NM

VR #: 304

Expiration Date: 12/02/19

Scope: Shop & field controlled by above location; I & VIII Div. 1; machining, Conversion per Part 3 & S7.2 b); Steam, Air/Gas & Liquid

Ramsis Engineering Company, W.L.L. (REC)

Askar 951, East Raffa,

VR #: 1194

Expiration Date: 11/17/19

Scope: Shop; VIII Div. 1; machining & welding (by "R" holder); Air/Gas & Liquid

REC Advanced Silicon Materials L.L.C. (AMI)

Silver Bow, MT

VR #: 485

Expiration Date: 10/05/20

Scope: Shop; VIII Div. 1; machining; Air/Gas & Liquid

REC Solar Grade Silicon, LLC. (ASM)

Moses Lake, WA

VR #: 512

Expiration Date: 10/08/19

Scope: Shop; VIII; machining, Conversion per Part 3 & S7.2 b); Air/Gas & Liquid

Redi Services, LLC (RED)

Evanston, WY

VR #: 1038

Expiration Date: 07/14/20

Scope: Shop & field controlled by above location; VIII; machining, Conversion per Part 3 & S7.2 b); Air/Gas & Liquid

Regional Valve Corporation (REV)

Kenner, LA

VR #: 224

Expiration Date: 05/05/20

Scope: Shop & field controlled by above location; I & VIII; machining; Steam, Air/Gas & Liquid

Regional Valve Corporation of Florida (ALA)

Decatur, AL

VR #: 483

Expiration Date: 08/21/20

Scope: Shop & field controlled by above location; I & VIII Div. 1; machining, welding (by "R" holder), Conversion per Part 3 & S7.2 b); Steam, Air/Gas & Liquid

Regional Valve Corporation of Florida (REF)

Cantonment, FL

VR #: 573

Expiration Date: 09/14/20

Scope: Shop & field controlled by above location; I & VIII; machining, welding (by "R" holder), Conversion per Part 3 & S7.2 b); Steam, Air/Gas & Liquid

Relief Valve Service, Inc. (RVS)

Millbrook, AL

VR #: 714

Expiration Date: 05/13/18

Scope: Shop & field controlled by above location; I & VIII Div. 1; machining; Steam, Air/Gas & Liquid

Renew Valve and Machine Company, Inc. (REN)

Carleton, MI

VR #: 6

Expiration Date: 08/06/20

Scope: Shop & field controlled by above location; I & VIII; machining, Conversion per Part 3 & S7.2 b); Steam, Air/Gas & Liquid

Republic Valve Service, Inc. (REP)

Port Allen, LA

VR #: 344

Expiration Date: 02/10/19

Scope: Shop & field controlled by above location; I & VIII Div. 1; machining, Conversion per Part 3 & S7.2 b); Steam, Air/Gas & Liquid

RES Energy Solutions (EFC)

Kilgore, TX

VR #: 653

Expiration Date: 04/09/20

Scope: Shop & field controlled by above location; VIII Div. 1; machining, Conversion per Part 3 & S7.2 b); Air/Gas & Liquid

Robert E. Mason & Associates (MCS)

Charlotte, NC

VR #: 144

Expiration Date: 09/07/20

Scope: Shop & field controlled by above location; I & VIII; machining, Conversion per Part 3 & S7.2 b); Steam, Air/Gas & Liquid

Rocky Mountain Power (UPL)

Salt Lake City, UT

VR #: 380

Expiration Date: 08/24/19

Scope: Shop & field controlled by above location; I & VIII Div. 1; machining & welding (by "R" holder); Steam, Air/Gas & Liquid

Rocky Mountain Testing (RMO)

Casper, WY

VR #: 702

Expiration Date: 02/19/20

Scope: Shop & field controlled by above location; VIII Div. 1; Conversion per Part 3 & S7.2 b); Air/Gas & Liquid

S & S Valve Service, Inc. (SSV)

Metuchen, NJ

VR #: 53

Expiration Date: 06/06/19

Scope: Shop; I & VIII; machining, Conversion per Part 3 & S7.2 b); Steam, Air/Gas & Liquid

Salt River Agricultural Improvement & Power District (SRA)

Tempe, AZ

VR #: 692

Expiration Date: 11/08/19

Scope: Field Only; I & VIII (limited per NB-514, 11.0); machining, welding (by "R" holder), NDE (UT, MT & PT); Steam

Satsuma Valve & Controls, LLC (PSW)

Walker, LA

VR #: 135

Expiration Date: 09/14/19

Scope: Shop; VIII; machining, Conversion per Part 3 & S7.2 b); Air/Gas & Liquid

Savannah River Nuclear Solutions, LLC (WES)

Aiken, SC

VR #: 326

Expiration Date: 10/20/19

Scope: Shop; VIII; machining, welding (by "R" holder), NDE (RT, MT & PT); Steam (per NBIC Part 3, 4.5.2), Air/Gas & Liquid

Schlumberger Canada Limited, Cameron - Valves and Measurement (SCL)

Sarnia, ON

VR #: 1273

Expiration Date: 07/27/20

Scope: Shop & field controlled by above location; I & VIII Div. 1; machining, Conversion per Part 3 & S7.2 b); Steam, Air/Gas & Liquid

Schlumberger Process Solutions (PRS) (SCM)

Odessa, TX

VR #: 1279

Expiration Date: 10/17/20

Scope: Shop & field controlled by above location; VIII Div. 1; ; Air/Gas

Schroeder Valve and Repair, Incorporated (SCH)

North Hollywood, CA

VR #: 594

Expiration Date: 03/21/19

Scope: Shop & field controlled by above location; I & VIII; machining, Conversion per Part 3 & S7.2 b); Steam, Air/Gas & Liquid

Servtech Technical Services LLC (STS)

Dubai,

VR #: 1181

Expiration Date: 03/08/19

Scope: Shop; VIII Div. 1; machining & welding; Air/Gas & Liquid

SETPOINT Integrated Solutions Inc. (ALM)

Mobile, AL

VR #: 752

Expiration Date: 01/25/20

Scope: Shop & field controlled by above location; I & VIII Div. 1; machining, Conversion per Part 3 & S7.2 b); Steam, Air/Gas & Liquid

SETPOINT Integrated Solutions Inc. (CCM)

Monroe, LA

VR #: 456

Expiration Date: 04/08/19

Scope: Shop & field controlled by above location; I & VIII; machining, welding, Heat treatment, NDE (MT, PT, Conversion per Part 3 & S7.2 b)); Steam, Air/Gas & Liquid

SETPOINT Integrated Solutions Inc. (CCS)

Luling, LA

VR #: 18

Expiration Date: 01/29/21

Scope: Shop & field controlled by above location; I & VIII; machining, welding, Heat treatment, NDE (RT, MT, PT, Conversion per Part 3 & S7.2 b)); Steam, Air/Gas & Liquid

SETPOINT Integrated Solutions Inc. (CPA)

Port Arthur, TX

VR #: 1117

Expiration Date: 07/15/20

Scope: Shop & field controlled by above location; I & VIII; machining, welding, Heat treatment, NDE (RT, MT, PT, Conversion per Part 3 & S7.2 b)); Steam, Air/Gas & Liquid

SETPOINT Integrated Solutions Inc. (WLS)

Westlake, LA

VR #: 746

Expiration Date: 09/14/18

Scope: Shop & field controlled by above location; I & VIII; machining, welding, Heat treatment, NDE (MT & PT); Steam, Air/Gas & Liquid

SETPOINT Integrated Solutions, Inc. (SIS)

La Porte, TX

VR #: 1290

Expiration Date: 01/12/21

Scope: Shop & field controlled by above location; I & VIII Div. 1; machining, welding (by "R" holder), Conversion per Part 3 & S7.2 b); Steam & Air/Gas

SETPOINT Integrated Solutions, Inc. (SET)

Baton Rouge, LA

VR #: 1224

Expiration Date: 05/21/18

Scope: Shop & field controlled by above location; I & VIII Div. 1; machining, welding, Heat treatment, NDE (RT, MT, PT, Conversion per Part 3 & S7.2 b)); Steam, Air/Gas & Liquid

SETPOINT Integrated Solutions, Inc. (STC)

Corpus Christi, TX

VR #: 697

Expiration Date: 06/12/21

Scope: Shop & field controlled by above location; I & VIII Div. 1; machining, welding (by "R" holder), Conversion per Part 3 & S7.2 b); Steam, Air/Gas & Liquid

SETPOINT Integrated Solutions, Inc. (STR)

Richwood, TX

VR #: 586

Expiration Date: 11/02/20

Scope: Shop & field controlled by above location; I & VIII Div. 1; machining, welding (by "R" holder), Conversion per Part 3 & S7.2 b); Steam, Air/Gas & Liquid

SETPOINT Integrated Solutions, Incorporated (CCT)

Kilgore, TX

VR #: 397

Expiration Date: 05/15/20

Scope: Shop & field controlled by above location; I & VIII; machining, welding, Heat treatment, NDE (RT, UT, MT, PT, Conversion per Part 3 & S7.2 b)); Steam, Air/Gas & Liquid

Shop Services, Inc. (SSI)

Fellows, CA

VR #: 1150

Expiration Date: 06/07/18

Scope: Shop & field controlled by above location; I & VIII Div. 1; machining, Conversion per Part 3 & S7.2 b); Steam, Air/Gas & Liquid

Solvay Specialty Polymers USA, LLC (SAP)

Marietta, OH

VR #: 738

Expiration Date: 08/10/19

Scope: Shop; VIII Div. 1; machining, Conversion per Part 3 & S7.2 b); Steam (per NBIC Part 3, 4.5.2), Air/Gas & Liquid

South Texas Valve & Repair, L.P. (STV)

Corpus Christi, TX

VR #: 1175

Expiration Date: 02/14/19

Scope: Shop & field controlled by above location; I & VIII Div. 1; machining, Conversion per Part 3 & S7.2 b); Steam, Air/Gas & Liquid

South Texas Valve & Repair, L.P. (TLP)

Port Lavaca, TX

VR #: 719

Expiration Date: 01/22/19

Scope: Shop & field controlled by above location; I & VIII Div. 1; machining, Conversion per Part 3 & S7.2 b); Steam & Air/Gas

Southeast Valve, Inc. (DUL)

Atkinson, NC

VR #: 27

Expiration Date: 03/22/19

Scope: Shop & field controlled by above location; VIII; machining, welding (by "R" holder), Conversion per Part 3 & S7.2 b); Air/Gas & Liquid

Southeast Valve, Inc. Cartersville (HMN)

Cartersville, GA

VR #: 173

Expiration Date: 12/04/18

Scope: Shop & field controlled by above location; I & VIII; machining, Conversion per Part 3 & S7.2 b); Steam, Air/Gas & Liquid

Southeast Valve, Incorporated (SVI)

Pineville, NC

VR #: 56

Expiration Date: 11/22/20

Scope: Shop & field controlled by above location; I & VIII; machining, welding (by "R" holder), Conversion per Part 3 & S7.2 b); Steam, Air/Gas & Liquid

Spartan Controls Ltd. (FIE)

Edmonton, AB

VR #: 705

Expiration Date: 01/20/20

Scope: Shop & field controlled by above location; I & VIII Div. 1; machining, Conversion per Part 3 & S7.2 b); Steam, Air/Gas & Liquid

Spirax Sarco, Incorporated (SPS)

Blythewood, SC

VR #: 1006

Expiration Date: 11/13/20

Scope: Shop; I & VIII Div. 1; machining; Steam

St. Gabriel Valve Service, LLC (SGV)

St. Gabriel, LA

VR #: 365

Expiration Date: 02/27/21

Scope: Shop & field controlled by above location; I & VIII; machining, Conversion per Part 3 & S7.2 b); Steam, Air/Gas & Liquid

Streamline Energy Services (SES)

Corpus Christi, TX

VR #: 1242

Expiration Date: 02/09/19

Scope: Shop & field controlled by above location; VIII Div. 1; machining, welding (by "R" holder), Conversion per Part 3 & S7.2 b); Air/Gas & Liquid

Stritt & Priebe, Incorporated (STP)

Buffalo, NY

VR #: 14

Expiration Date: 12/08/19

Scope: Shop & field controlled by above location; I, IV, & VIII; machining, welding (by "R" holder), Conversion per Part 3 & S7.2 b); Steam, Air/Gas & Liquid

STX Process Equipment, LLC (DLS)

Freer, TX

VR #: 701

Expiration Date: 05/07/20

Scope: Shop & field controlled by above location; VIII Div. 1; machining, Conversion per Part 3 & S7.2 b); Air/Gas

Sunland Field Services, Inc. (SFS)

De Beque, CO

VR #: 1264

Expiration Date: 01/11/20

Scope: Shop & field controlled by above location; VIII Div. 1; ; Air/Gas

Swan Associates, Incorporated (SWA)

Benicia, CA

VR #: 626

Expiration Date: 02/13/21

Scope: Shop; I & VIII; machining, welding, Conversion per Part 3 & S7.2 b); Steam, Air/Gas & Liquid

Syncom Space Services, LLC. (JCT)

Stennis Space Center, MS

VR #: 1089

Expiration Date: 05/26/19

Scope: Shop & field controlled by above location; VIII; machining, welding (by "R" holder), Conversion per Part 3 & S7.2 b); Air/Gas

T & W Valve and Machine Company, Inc. (TWC)

Owensboro, KY

VR #: 1023

Expiration Date: 02/28/20

Scope: Shop & field controlled by above location; I & VIII; machining, welding (by "R" holder), Conversion per Part 3 & S7.2 b); Steam, Air/Gas & Liquid

Team Industrial Services Inc. (FAB)

Benicia, CA

VR #: 1122

Expiration Date: 08/02/20

Scope: Shop & field controlled by above location; I & VIII; machining, welding (by "R" holder), Conversion per Part 3 & S7.2 b); Steam, Air/Gas & Liquid

Team Industrial Services Inc. / TeamFurmanite Div. (CEC)

Corpus Christi, TX

VR #: 343

Expiration Date: 05/20/18

Scope: Shop & field controlled by above location; I & VIII Div. 1; machining, welding (by "R" holder), Conversion per Part 3 & S7.2 b); Steam, Air/Gas & Liquid

Team Industrial Services Inc. / TeamFurmanite Div. (FUR)

Charlotte, NC

VR #: 90

Expiration Date: 09/14/18

Scope: Shop & field controlled by above location; I & VIII; machining, welding (by "R" holder), Conversion per Part 3 & S7.2 b); Steam, Air/Gas & Liquid

Team Industrial Services Inc. / TeamFurmanite Div. (GEH)

Houston, TX

VR #: 1

Expiration Date: 12/07/18

Scope: Shop & field controlled by above location; I & VIII; machining, welding, welding (by "R" holder), Heat treatment, NDE (PT, Conversion per Part 3 & S7.2 b)); Steam, Air/Gas & Liquid

Team Industrial Services Inc. / TeamFurmanite Div. (HMT)

Kent, WA

VR #: 29

Expiration Date: 05/17/19

Scope: Shop & field controlled by above location; I & VIII Div. 1; machining, welding (by "R" holder), Conversion per Part 3 & S7.2 b); Steam, Air/Gas & Liquid

Team Industrial Services Inc. / TeamFurmanite Div. (HVC)

Hobart, IN

VR #: 57

Expiration Date: 03/30/18

Scope: Shop & field controlled by above location; I & VIII; machining, welding (by "R" holder), Conversion per Part 3 & S7.2 b);
Steam, Air/Gas & Liquid

Team Industrial Services Inc. / TeamFurmanite Div. (PSL)

Sulphur, LA

VR #: 126

Expiration Date: 09/14/19

Scope: Shop & field controlled by above location; I & VIII; machining, welding, welding (by "R" holder), Heat treatment, NDE
(PT, Conversion per Part 3 & S7.2 b)); Steam, Air/Gas & Liquid

Team Industrial Services Inc. / TeamFurmanite Div. (PVC)

Broken Arrow, OK

VR #: 44

Expiration Date: 05/15/18

Scope: Shop & field controlled by above location; I & VIII; machining, welding (by "R" holder), Conversion per Part 3 & S7.2 b);
Steam, Air/Gas & Liquid

Team Industrial Services Inc. / TeamFurmanite Div. (SVS)

Saraland, AL

VR #: 260

Expiration Date: 07/11/19

Scope: Shop & field controlled by above location; I & VIII; machining, welding, welding (by "R" holder), Heat treatment, NDE
(PT, Conversion per Part 3 & S7.2 b)); Steam, Air/Gas & Liquid

Team Industrial Services Inc. / TeamFurmanite Div. (TMF)

Mobile, AL

VR #: 1266

Expiration Date: 03/02/20

Scope: Shop & field controlled by above location; I & VIII Div. 1; machining, welding, welding (by "R" holder), Heat treatment,
NDE (PT, Conversion per Part 3 & S7.2 b)); Steam, Air/Gas & Liquid

Team Industrial Services Inc. / TeamFurmanite Div. (UMA)

Salt Lake City, UT

VR #: 1001

Expiration Date: 11/18/18

Scope: Shop & field controlled by above location; I & VIII Div. 1; machining, welding (by "R" holder), Conversion per Part 3 &
S7.2 b); Steam, Air/Gas & Liquid

Team Industrial Services Inc. / TeamFurmanite Div. (VCI)

Parkersburg, WV

VR #: 461

Expiration Date: 03/15/19

Scope: Shop & field controlled by above location; I & VIII; machining, welding (by "R" holder), Conversion per Part 3 & S7.2 b);
Steam, Air/Gas & Liquid

Team Industrial Services Inc. / TeamFurmanite Div. (VSN)

Norfolk, VA

VR #: 15

Expiration Date: 05/02/18

Scope: Shop & field controlled by above location; I & VIII; machining, welding (by "R" holder), Conversion per Part 3 & S7.2 b);
Steam, Air/Gas & Liquid

TEAM Industrial Services, Inc. (TIL)

Loveland, CO

VR #: 1233

Expiration Date: 10/21/18

Scope: Shop & field controlled by above location; I & VIII Div. 1; machining & welding (by "R" holder); Steam, Air/Gas & Liquid

Team Industrial Services, Inc. (TIS)

Alvin, TX

VR #: 718

Expiration Date: 02/16/19

Scope: Shop & field controlled by above location; I, III, & VIII Div. 1; machining & welding (by "R" holder); Steam, Air/Gas & Liquid

Team Industrial Services, Inc. / D.K. Amans Div. (FTO)

Long Beach, CA

VR #: 1066

Expiration Date: 03/10/20

Scope: Shop & field controlled by above location; I & VIII Div. 1; machining, welding (by "R" holder), Conversion per Part 3 & S7.2 b); Steam, Air/Gas & Liquid

Team Industrial Services, Inc. / TEAMFURMANITE Div. (TME)

Geismar, LA

VR #: 1274

Expiration Date: 08/10/20

Scope: Shop & field controlled by above location; I & VIII Div. 1; machining, welding (by "R" holder), Conversion per Part 3 & S7.2 b); Steam, Air/Gas & Liquid

Tesoro Refining & Marketing Company LLC, Anacortes Refinery (SHL)

Anacortes, WA

VR #: 127

Expiration Date: 11/20/19

Scope: Shop; VIII; machining, NDE (PT, Conversion per Part 3 & S7.2 b)); Steam (per NBIC Part 3, 4.5.2), Air/Gas & Liquid

Texan Gas Production Services, LLC (TGP)

Apalachin, NY

VR #: 1236

Expiration Date: 07/08/18

Scope: Shop & field controlled by above location; VIII Div. 1; ; Air/Gas

The Blythe Company (BLY)

Mineral Springs, NC

VR #: 125

Expiration Date: 07/24/19

Scope: Shop; VIII; Conversion per Part 3 & S7.2 b); Air/Gas & Liquid

The Chemours Company FC, LLC (DUB)

Belle, WV

VR #: 392

Expiration Date: 07/30/18

Scope: Shop; VIII; machining; Air/Gas & Liquid

The Chemours Company, Fayetteville Works (DUF)

Fayetteville, NC

VR #: 374

Expiration Date: 05/22/18

Scope: Shop; VIII; ; Steam (per NBIC Part 3, 4.5.2), Air/Gas & Liquid

The Valve Automation Center Inc. (TVA)

Sarnia, ON

VR #: 1275

Expiration Date: 07/07/20

Scope: Shop & field controlled by above location; I & VIII Div. 1; machining; Steam, Air/Gas & Liquid

The Valve Automation Center Inc. (VAC)

Guelph, ON

VR #: 1183

Expiration Date: 10/08/20

Scope: Shop & field controlled by above location; I & VIII Div. 1; machining, Conversion per Part 3 & S7.2 b); Steam (Field only), Air/Gas & Liquid

Thorco Holdings, LLC (THI)

Santa Fe Springs, CA

VR #: 383

Expiration Date: 07/09/18

Scope: Shop & field controlled by above location; I & VIII Div. 1; machining & welding (by "R" holder); Steam, Air/Gas & Liquid

Total Valve Systems (TVO)

Broken Arrow, OK

VR #: 145

Expiration Date: 04/08/20

Scope: Shop & field controlled by above location; I & VIII; machining, welding (by "R" holder), Conversion per Part 3 & S7.2 b); Steam, Air/Gas & Liquid

TRANSWATER API SDN. BHD. (TRW)

Shah Alam,

VR #: 1246

Expiration Date: 09/30/19

Scope: Shop & field controlled by above location; VIII Div. 1; Conversion per Part 3 & S7.2 b); Air/Gas & Liquid

Tristate Valves & Controls, Inc. - Canton (TSV)

Canton, GA

VR #: 1223

Expiration Date: 05/20/18

Scope: Shop & field controlled by above location; I & VIII Div. 1; machining; Steam, Air/Gas & Liquid

Tristate Valves & Controls, Inc. - Wheeling (TVW)

Wheeling, WV

VR #: 1225

Expiration Date: 07/08/18

Scope: Shop & field controlled by above location; VIII Div. 1; machining; Air/Gas & Liquid

Tristate Valves & Controls, Inc. (PLD)

Indianapolis, IN

VR #: 742

Expiration Date: 08/18/19

Scope: Shop & field controlled by above location; I & VIII Div. 1; machining, Conversion per Part 3 & S7.2 b); Steam, Air/Gas & Liquid

TVI, Inc (TVC)

Calvert City, KY

VR #: 570

Expiration Date: 04/04/20

Scope: Shop & field controlled by above location; I & VIII Div. 1; machining, Conversion per Part 3 & S7.2 b); Steam, Air/Gas & Liquid

TVI, Inc. (TRA)

El Dorado, AR

VR #: 1120

Expiration Date: 07/25/20

Scope: Shop & field controlled by above location; VIII; machining, Conversion per Part 3 & S7.2 b); Air/Gas & Liquid

TVI, Inc. (TVI)

Memphis, TN

VR #: 143

Expiration Date: 04/30/20

Scope: Shop & field controlled by above location; I & VIII; machining, Conversion per Part 3 & S7.2 b); Steam, Air/Gas & Liquid

U. P. & S., Incorporated (UPS)

Odessa, TX

VR #: 238

Expiration Date: 06/16/20

Scope: Shop; VIII; ; Air/Gas

Universal Plant Services - Machinery Services (UPM)

Baton Rouge, LA

VR #: 1204

Expiration Date: 03/18/20

Scope: Shop & field controlled by above location; VIII Div. 1; machining, Conversion per Part 3 & S7.2 b); Air/Gas & Liquid

Universal Valve Company, Inc. (UVC)

Midland, TX

VR #: 687

Expiration Date: 08/08/19

Scope: Shop & field controlled by above location; VIII; machining, Conversion per Part 3 & S7.2 b); Air/Gas & Liquid

URS Federal Services, Inc. (KSC Laboratories, CRCA) (URS)

Kennedy Space Center, FL

VR #: 1252

Expiration Date: 05/27/19

Scope: Shop; VIII Div. 1; ; Air/Gas

VALCOM EMI LIMITED (VLM)

VR #: 1247

Expiration Date: 03/26/19

Scope: Shop & field controlled by above location; VIII Div. 1; machining; Air/Gas & Liquid

Valserve, LLC (VLS)

Evanston, WY

VR #: 1041

Expiration Date: 02/28/19

Scope: Shop & field controlled by above location; I & VIII Div. 1; machining, Conversion per Part 3 & S7.2 b); Steam, Air/Gas & Liquid

Valsource International, LLC (VLI)

Pasadena, TX

VR #: 1209

Expiration Date: 09/09/20

Scope: Shop & field controlled by above location; I & VIII Div. 1; machining, welding (by "R" holder), Conversion per Part 3 & S7.2 b); Steam, Air/Gas & Liquid

Valve Reconditioning Service Company (VAR)

Melvindale, MI

VR #: 338

Expiration Date: 07/24/19

Scope: Shop & field controlled by above location; I & VIII; machining, welding, Heat treatment, NDE (RT, UT, MT & PT); Steam, Air/Gas & Liquid

Valve Service & Supply Inc. (VSV)

Kapolei, HI

VR #: 1137

Expiration Date: 08/12/20

Scope: Shop & field controlled by above location; I & VIII Div. 1; machining, Conversion per Part 3 & S7.2 b); Steam, Air/Gas & Liquid

Valve Tech Laboratory, Inc. (VTL)

Woodward, OK

VR #: 531

Expiration Date: 05/26/20

Scope: Shop & field controlled by above location; I & VIII; machining, Conversion per Part 3 & S7.2 b); Steam, Air/Gas & Liquid

ValvTechnologies, Incorporated (VLC)

Houston, TX

VR #: 758

Expiration Date: 08/27/19

Scope: Shop & field controlled by above location; I (limited per NB-514, 4.0); machining, welding, Heat treatment, NDE (RT, UT, MT & PT); Air/Gas & Liquid

Valvulas De Seguridad S.A. DE C.V. (VAV)

Vallejo, Gustavo A. Madero, Mexico City,

VR #: 1283

Expiration Date: 08/03/20

Scope: Shop & field controlled by above location; VIII Div. 1; machining, Conversion per Part 3 & S7.2 b); Air/Gas & Liquid

Vinson Process Controls, LP (VIN)

Carrollton, TX

VR #: 1282

Expiration Date: 08/23/20

Scope: Shop & field controlled by above location; I & VIII Div. 1; machining, welding (by "R" holder), Conversion per Part 3 & S7.2 b); Steam (Field Only), Air/Gas & Liquid

VRC Protx , LLC. (Evanston) (VRR)

Evanston, WY

VR #: 501

Expiration Date: 04/01/21

Scope: Shop & field controlled by above location; I & VIII Div. 1; machining, Conversion per Part 3 & S7.2 b); Steam, Air/Gas & Liquid

VRC Protx, LLC (RIL)

New Berlin, WI

VR #: 71

Expiration Date: 12/08/18

Scope: Shop & field controlled by above location; I & VIII; machining; Steam, Air/Gas & Liquid

VRC Protx, LLC. (Denver) (FVD)

Henderson, CO

VR #: 52

Expiration Date: 04/02/20

Scope: Shop & field controlled by above location; I & VIII; machining, Conversion per Part 3 & S7.2 b); Steam, Air/Gas & Liquid

VRC Protx, LLC. (Farmington) (VRF)

Farmington, NM

VR #: 1263

Expiration Date: 12/15/19

Scope: Shop & field controlled by above location; VIII Div. 1; machining, Conversion per Part 3 & S7.2 b); Air/Gas & Liquid

VRC Protx, LLC. Monroe (VRC)

Monroe, MI

VR #: 1234

Expiration Date: 07/29/18

Scope: Shop & field controlled by above location; I & VIII Div. 1; machining; Steam, Air/Gas & Liquid

Wacker Chemical Corporation (APK)

Calvert City, KY

VR #: 608

Expiration Date: 01/26/20

Scope: Shop; VIII Div. 1; machining; Steam (per NBIC Part 3, 4.5.2), Air/Gas & Liquid

Wal-Tech Valve, Inc. (WTM)

Mobile, AL

VR #: 284

Expiration Date: 01/25/19

Scope: Shop & field controlled by above location; I & VIII Div. 1; machining, Conversion per Part 3 & S7.2 b); Steam, Air/Gas & Liquid

West Indies Valve & Machine Works Corp. (WIV)

Penuelas, PR

VR #: 530

Expiration Date: 02/17/20

Scope: Shop & field controlled by above location; I & VIII; machining, welding (by "R" holder), MT, Conversion per Part 3 & S7.2 b); Steam, Air/Gas & Liquid

Westech Industrial Ltd. (YCO)

Burlington, ON

VR #: 730

Expiration Date: 01/01/19

Scope: Shop & field controlled by above location; I & VIII Div. 1; machining; Steam, Air/Gas & Liquid

Yusuf Bin Ahmed Kanoo Co. Limited (YAK)

Dammam,

VR #: 1088

Expiration Date: 05/21/20

Scope: Shop; VIII; Conversion per Part 3 & S7.2 b); Air/Gas & Liquid

Zeon Chemicals L.P. (ZEO)

Louisville, KY

VR #: 781

Expiration Date: 11/17/20

Scope: Shop; VIII Div. 1; machining, Conversion per Part 3 & S7.2 b); Steam (per NBIC Part 3, 4.5.2), Air/Gas & Liquid

LISTING OF T/O CERTIFICATE HOLDERS

Listed in this section are those firms who hold a National Board certificate of authorization to use the "T/O" Certification mark for confirming seat tightness, confirming or restoring nameplate pressure and/or performance of pressure relief devices. This authorization does not permit any activity that requires disassembly and/or repair of pressure relief valve.

These entries are indicated as follows:

COMPANY, LOCATION; T/O Number with Expiration Date and Scope for location; Code Section; Special Provisions; Test Media

Those possible Scope entries include:

Location - Shop Only, Shop and Field, or Field Only

Code Section - I, III, IV, VIII or combinations

Test Media - Steam, Air, Gas, Liquid or combinations

A&R Energy Services, Corporation (ARE)

Robinson, TX

TO #: 74

Expiration Date: 09/24/20

Scope: Field Only; VIII Div. 1; Air/Gas & Liquid

Advansix, Hopewell Plant (ASG)

Hopewell, VA

TO #: 27

Expiration Date: 03/20/19

Scope: Shop; VIII Div. 1; Section VIII Steam valves tested on air; Steam (per NBIC Part 3, 4.5.2), Air/Gas & Liquid

Aeon PEC, Inc. (HGO)

Shreveport, LA

TO #: 1

Expiration Date: 03/29/20

Scope: Shop & field controlled by above location; VIII Div. 1; Air/Gas & Liquid

Allied Valve, Inc. - Riverdale, IA (VRS)

Riverdale, IA

TO #: 31

Expiration Date: 07/07/20

Scope: Shop & field controlled by above location; I & VIII Div. 1; Steam, Air/Gas & Liquid

Allied Valve, Inc. (ALC)

Chicago, IL

TO #: 112

Expiration Date: 06/15/21

Scope: Shop & field controlled by above location; I, IV, & VIII Div.1; Section VIII Steam valves tested on air; Steam, Air/Gas & Liquid

Allied Valve, Inc. (ALP)

Portage, IN

TO #: 41

Expiration Date: 08/04/20

Scope: Shop; VIII Div. 1; Air/Gas & Liquid

Allied Valve, Inc. (AVB)

Bismarck, ND

TO #: 30

Expiration Date: 06/24/20

Scope: Shop & field controlled by above location; I & VIII Div. 1; Steam, Air/Gas & Liquid

Allied Valve, Inc. (VSS)

Cannon Falls, MN

TO #: 33

Expiration Date: 07/10/18

Scope: Shop & field controlled by above location; I & VIII Div. 1; Steam, Air/Gas & Liquid

Applied Control Equipment, LLLP (APP)

Englewood, CO

TO #: 100

Expiration Date: 11/08/20

Scope: Field Only; I & VIII Div. 1; Steam, Air/Gas & Liquid

Basin Valve Company (BAK)

Bakersfield, CA

TO #: 61

Expiration Date: 08/23/20

Scope: Shop & field controlled by above location; I & VIII Div. 1; Steam, Air/Gas & Liquid

Basin Valve Company (BVS)

Signal Hill, CA

TO #: 65

Expiration Date: 11/13/20

Scope: Shop & field controlled by above location; I & VIII Div. 1; Steam, Air/Gas & Liquid

Bay Valve Service, LLC. (BWA)

Longview, WA

TO #: 39

Expiration Date: 11/16/19

Scope: Shop & field controlled by above location; I & VIII Div. 1; Steam, Air/Gas & Liquid

Chalmers & Kubeck - South (CKS)

Watkinsville, GA

TO #: 47

Expiration Date: 05/18/20

Scope: Shop & field controlled by above location; I & VIII Div. 1; Steam, Air/Gas & Liquid

Chalmers & Kubeck - TN (VSI)

Chattanooga, TN

TO #: 69

Expiration Date: 10/16/18

Scope: Shop & field controlled by above location; I & VIII Div. 1; Section VIII Steam valves tested on air; Steam, Air/Gas & Liquid

Chalmers & Kubeck, Inc. (BRU)

New Brunswick, NJ

TO #: 79

Expiration Date: 12/16/19

Scope: Shop & field controlled by above location; I & VIII Div. 1; Steam, Air/Gas & Liquid

Chalmers & Kubeck, Inc. (CKB)

Beaver Falls, PA

TO #: 60

Expiration Date: 01/10/20

Scope: Shop & field controlled by above location; I, III, & VIII Div. 1; Steam, Air/Gas & Liquid

Chalmers & Kubeck, Incorporated (CKI)

Aston, PA

TO #: 68

Expiration Date: 02/28/21

Scope: Shop & field controlled by above location; I & VIII Div. 1; Steam, Air/Gas & Liquid

Cincy VR & Repair, LLC (CVR)

Cincinnati, OH

TO #: 72

Expiration Date: 07/16/19

Scope: Shop & field controlled by above location; I & VIII Div. 1; Steam, Air/Gas & Liquid

Clean Energy Cryogenics (CLC)

Evanston, WY

TO #: 53

Expiration Date: 06/22/20

Scope: Shop & field controlled by above location; VIII Div. 1; Air/Gas

Cleveland Valve and Gauge, Co. (CVG)

Cleveland, OH

TO #: 70

Expiration Date: 06/29/20

Scope: Shop & field controlled by above location; I & VIII Div. 1; Steam, Air/Gas & Liquid

Contro Valve Equipment Inc. (CBU)

Burlington, ON

TO #: 3

Expiration Date: 04/23/20

Scope: Shop & field controlled by above location; I & VIII Div. 1; Steam, Air/Gas & Liquid

Control Southern Inc. (SJF)

Jacksonville, FL

TO #: 28

Expiration Date: 08/21/19

Scope: Shop & field controlled by above location; I & VIII Div. 1; Steam, Air/Gas & Liquid

Dayton Precision Services (DPL)

Dayton, OH

TO #: 51

Expiration Date: 02/23/20

Scope: Shop & field controlled by above location; I & VIII Div. 1; Steam, Air/Gas & Liquid

Dowco Valve Company, Inc. (DWC)

Hastings, MN

TO #: 25

Expiration Date: 02/15/20

Scope: Shop & field controlled by above location; I & VIII Div. 1; Steam, Air/Gas & Liquid

East Coast Valve Services, Inc. (ECG)

Groton, CT

TO #: 108

Expiration Date: 11/19/20

Scope: Shop & field controlled by above location; I & VIII Div. 1; Steam, Air/Gas & Liquid

Extreme Force Valve, Inc. (EFV)

Jerseyville, IL

TO #: 38

Expiration Date: 12/01/18

Scope: Shop & field controlled by above location; I & VIII Div. 1; Steam, Air/Gas & Liquid

Gas Field Specialists, Inc. (GFS)

Mansfield, PA

TO #: 84

Expiration Date: 08/09/20

Scope: Shop & field controlled by above location; VIII Div. 1; Air/Gas

Gas Patch Service Co. (GPS)

Rio Vista, CA

TO #: 109

Expiration Date: 11/11/20

Scope: Shop & field controlled by above location; VIII; Air/Gas

Integrated Pressure Management LLC, an affiliate of AWC, Inc (ITP)

Corpus Christi, TX

TO #: 107

Expiration Date: 01/25/21

Scope: Shop & field controlled by above location; VIII Div. 1; Air/Gas & Liquid

Integrated Pressure Management, an Affiliate of AWC, Inc. (INP)

Port Arthur, TX

TO #: 106

Expiration Date: 02/02/21

Scope: Shop & field controlled by above location; VIII Div. 1; Air/Gas & Liquid

International Valve & Instrument Corporation (INT)

Springfield, MA

TO #: 43

Expiration Date: 12/08/20

Scope: Shop & field controlled by above location; I & VIII Div. 1; Steam, Air/Gas & Liquid

L6 Inc. Total Valve Systems (TVG)

Gretna, NE

TO #: 36

Expiration Date: 11/05/19

Scope: Shop & field controlled by above location; VIII Div. 1; Air/Gas & Liquid

L6 INC-TOTAL VALVE SYSTEMS (LSY)

PERRYTON, TX

TO #: 103

Expiration Date: 12/06/20

Scope: Shop & field controlled by above location; VIII Div. 1; Air/Gas & Liquid

Lobo Valve Services, Inc. (LBV)

Odessa, TX

TO #: 98

Expiration Date: 10/19/20

Scope: Shop & field controlled by above location; VIII Div. 1; Air/Gas & Liquid

Mainthia Technologies Inc (MTI)

Cleveland, OH

TO #: 86

Expiration Date: 12/18/20

Scope: Shop & field controlled by above location; IV & VIII; Steam, Air/Gas & Liquid

Mecklenburg Valve Source, LLC (MCK)

Charlotte, NC

TO #: 62

Expiration Date: 04/20/20

Scope: Shop; I & VIII Div. 1; Steam, Air/Gas & Liquid

Midwest Valve Service, LLC (AFS)

Wausau, WI

TO #: 29

Expiration Date: 03/19/19

Scope: Shop & field controlled by above location; I & VIII Div. 1; Steam, Air/Gas & Liquid

Midwest Valve Services LLC (MWV)

Mandan, ND

TO #: 13

Expiration Date: 04/28/20

Scope: Shop & field controlled by above location; I & VIII Div. 1; Steam, Air/Gas & Liquid

Midwest Valve Services, LLC (MID)

Minooka, IL

TO #: 7

Expiration Date: 01/25/20

Scope: Shop & field controlled by above location; I & VIII Div. 1; Steam, Air/Gas & Liquid

Millennium Power Services, Inc. (MPS)

Fairfield, ME

TO #: 9

Expiration Date: 09/15/19

Scope: Shop & field controlled by above location; I & VIII Div. 1; Steam, Air/Gas & Liquid

NASA Marshall Space Flight Center Valve and Component Laboratory (MSF)

Huntsville, AL

TO #: 99

Expiration Date: 09/18/18

Scope: Shop & field controlled by above location; VIII Div. 1; Air/Gas

North American Safety Valve Industries, Inc. (NAS)

North Kansas City, MO

TO #: 97

Expiration Date: 08/29/20

Scope: Shop & field controlled by above location; I, IV, & VIII Div.1; Steam, Air/Gas & Liquid

Pansa Machine Shop N.V. (PAN)

Plantage Concordia, Para,

TO #: 63

Expiration Date: 04/14/20

Scope: Shop & field controlled by above location; VIII Div. 1; Air/Gas & Liquid

Portersville PRD LLC (PRK)

South Point, OH

TO #: 14

Expiration Date: 12/15/19

Scope: Shop & field controlled by above location; I & VIII Div. 1; Steam, Air/Gas & Liquid

Portersville PRD LLC (PRV)

Richmond, VA

TO #: 81

Expiration Date: 01/12/21

Scope: Shop & field controlled by above location; VIII Div. 1; Air/Gas & Liquid

Portersville PRD LLC. (PTI)

Tallmadge, OH

TO #: 85

Expiration Date: 10/01/20

Scope: Shop & field controlled by above location; I & VIII Div. 1; Steam, Air/Gas & Liquid

Portersville PRD LLC. (PVE)

New Castle, PA

TO #: 55

Expiration Date: 09/28/18

Scope: Shop & field controlled by above location; I & VIII Div. 1; Steam, Air/Gas & Liquid

Precision Fabricating & Cleaning Company, Inc. (PRF)

Cocoa, FL

TO #: 80

Expiration Date: 02/17/19

Scope: Shop; VIII Div. 1; Air/Gas & Liquid

Precision Pump & Valve Service, Incorporated (PPV)

Cross Lanes, WV

TO #: 110

Expiration Date: 06/11/19

Scope: Shop & field controlled by above location; I & VIII Div. 1; Steam, Air/Gas & Liquid

Precision Services, Inc. (PUM)

Louisville, KY

TO #: 67

Expiration Date: 09/01/20

Scope: Shop & field controlled by above location; I & VIII Div. 1; Steam, Air/Gas & Liquid

PROCONEX (PRX)

Royersford, PA

TO #: 46

Expiration Date: 10/04/19

Scope: Shop & field controlled by above location; VIII Div. 1; Air/Gas & Liquid

Robert E. Mason & Associates (MCS)

Charlotte, NC

TO #: 95

Expiration Date: 09/07/20

Scope: Shop & field controlled by above location; I & VIII Div. 1; Steam, Air/Gas & Liquid

SETPPOINT Integrated Solutions Inc. (ALM)

Mobile, AL

TO #: 12

Expiration Date: 01/25/20

Scope: Shop & field controlled by above location; I & VIII Div. 1; Steam, Air/Gas & Liquid

SETPOINT Integrated Solutions Inc. (CPA)

Port Arthur, TX

TO #: 35

Expiration Date: 07/15/20

Scope: Shop & field controlled by above location; I & VIII Div. 1; Steam, Air/Gas & Liquid

SETPOINT Integrated Solutions, Inc. (SIS)

La Porte, TX

TO #: 77

Expiration Date: 01/12/21

Scope: Shop & field controlled by above location; I & VIII Div. 1; Steam & Air/Gas

SETPOINT Integrated Solutions, Inc. (STC)

Corpus Christi, TX

TO #: 101

Expiration Date: 06/12/21

Scope: Shop & field controlled by above location; I & VIII Div. 1; Steam, Air/Gas & Liquid

SETPOINT Integrated Solutions, Inc. (STR)

Richwood, TX

TO #: 78

Expiration Date: 11/02/20

Scope: Shop & field controlled by above location; I & VIII Div. 1; Steam, Air/Gas & Liquid

SETPOINT Integrated Solutions, Incorporated (CCT)

Kilgore, TX

TO #: 34

Expiration Date: 05/15/20

Scope: Shop & field controlled by above location; I & VIII Div. 1; Steam, Air/Gas & Liquid

SGS North America, Inc. (SGS)

Mansfield, PA

TO #: 66

Expiration Date: 03/07/21

Scope: Field Only; VIII Div. 1; Air/Gas

St. Gabriel Valve Service, LLC (SGV)

St. Gabriel, LA

TO #: 8

Expiration Date: 02/27/21

Scope: Shop & field controlled by above location; I & VIII Div. 1; Steam, Air/Gas & Liquid

Stritt & Priebe, Incorporated (STP)

Buffalo, NY

TO #: 11

Expiration Date: 12/08/19

Scope: Shop & field controlled by above location; I, IV, & VIII Div.1; Steam, Air/Gas & Liquid

Swan Associates, Incorporated (SWA)

Benicia, CA

TO #: 87

Expiration Date: 02/13/21

Scope: Shop & field controlled by above location; I & VIII Div. 1; Steam, Air/Gas & Liquid

T & W Valve and Machine Company, Inc. (TWC)

Owensboro, KY

TO #: 40

Expiration Date: 02/28/20

Scope: Shop & field controlled by above location; I & VIII Div. 1; Steam, Air/Gas & Liquid

Team Industrial Services Inc. (FAB)

Benicia, CA

TO #: 44

Expiration Date: 08/02/20

Scope: Shop & field controlled by above location; I & VIII Div. 1; Section VIII Steam valves tested on air; Steam, Air/Gas & Liquid

Team Industrial Services Inc. / TeamFurmanite Div. (CEC)

Corpus Christi, TX

TO #: 20

Expiration Date: 05/20/18

Scope: Shop & field controlled by above location; I & VIII Div. 1; Steam, Air/Gas & Liquid

Team Industrial Services Inc. / TeamFurmanite Div. (FUR)

Charlotte, NC

TO #: 19

Expiration Date: 09/14/18

Scope: Shop & field controlled by above location; I & VIII Div. 1; Section VIII Steam valves tested on air; Steam, Air/Gas & Liquid

Team Industrial Services Inc. / TeamFurmanite Div. (GEH)

Houston, TX

TO #: 17

Expiration Date: 12/07/18

Scope: Shop & field controlled by above location; I & VIII Div. 1; Steam, Air/Gas & Liquid

Team Industrial Services Inc. / TeamFurmanite Div. (HMT)

Kent, WA

TO #: 32

Expiration Date: 05/17/19

Scope: Shop & field controlled by above location; I & VIII Div. 1; Steam, Air/Gas & Liquid

Team Industrial Services Inc. / TeamFurmanite Div. (HVC)

Hobart, IN

TO #: 21

Expiration Date: 12/30/18

Scope: Shop & field controlled by above location; I & VIII Div. 1; Steam, Air/Gas & Liquid

Team Industrial Services Inc. / TeamFurmanite Div. (PSL)

Sulphur, LA

TO #: 15

Expiration Date: 09/14/19

Scope: Shop & field controlled by above location; I & VIII Div. 1; Steam, Air/Gas & Liquid

Team Industrial Services Inc. / TeamFurmanite Div. (SVS)

Saraland, AL

TO #: 16

Expiration Date: 07/11/19

Scope: Shop & field controlled by above location; I & VIII Div. 1; Steam, Air/Gas & Liquid

Team Industrial Services Inc. / TeamFurmanite Div. (TMF)

Mobile, AL

TO #: 50

Expiration Date: 03/02/20

Scope: Shop & field controlled by above location; I & VIII Div. 1; Steam, Air/Gas & Liquid

Team Industrial Services Inc. / TeamFurmanite Div. (UMA)

Salt Lake City, UT

TO #: 24

Expiration Date: 11/18/18

Scope: Shop & field controlled by above location; I & VIII Div. 1; Steam, Air/Gas & Liquid

Team Industrial Services Inc. / TeamFurmanite Div. (VCI)

Parkersburg, WV

TO #: 23

Expiration Date: 03/15/19

Scope: Shop & field controlled by above location; I & VIII Div. 1; Steam, Air/Gas & Liquid

Team Industrial Services, Inc. / D.K. Amans Div. (FTO)

Long Beach, CA

TO #: 59

Expiration Date: 03/10/20

Scope: Shop & field controlled by above location; I & VIII Div. 1; Section VIII Steam valves tested on air; Steam, Air/Gas & Liquid

Team Industrial Services, Inc. / TEAMFURMANITE Div. (TME)

Geismar, LA

TO #: 48

Expiration Date: 08/10/20

Scope: Shop & field controlled by above location; I & VIII Div. 1; Section VIII Steam valves tested on air; Steam, Air/Gas & Liquid

The Valve Automation Center Inc. (TVA)

Sarnia, ON

TO #: 57

Expiration Date: 07/07/20

Scope: Shop & field controlled by above location; I & VIII Div. 1; Steam, Air/Gas & Liquid

The Valve Automation Center Inc. (VAC)

Guelph, ON

TO #: 10

Expiration Date: 10/08/20

Scope: Shop & field controlled by above location; I & VIII Div. 1; Steam (Field only), Air/Gas & Liquid

Total Valve Systems (TVO)

Broken Arrow, OK

TO #: 37

Expiration Date: 04/08/20

Scope: Shop & field controlled by above location; I & VIII Div. 1; Steam, Air/Gas & Liquid

Tristate Valves & Controls, Inc. - Canton (TSV)

Canton, GA

TO #: 92

Expiration Date: 05/20/18

Scope: Shop & field controlled by above location; I & VIII Div. 1; Steam, Air/Gas & Liquid

Tristate Valves & Controls, Inc. - Wheeling (TVW)

Wheeling, WV

TO #: 93

Expiration Date: 07/18/18

Scope: Shop & field controlled by above location; I & VIII Div. 1; Steam, Air/Gas & Liquid

Tristate Valves & Controls, Inc. (PLD)

Indianapolis, IN

TO #: 54

Expiration Date: 08/18/19

Scope: Shop & field controlled by above location; I & VIII Div. 1; Steam, Air/Gas & Liquid

Universal Plant Services - Machinery Services (UPM)

Baton Rouge, LA

TO #: 5

Expiration Date: 03/18/20

Scope: Shop & field controlled by above location; VIII Div. 1; Air/Gas & Liquid

Valve Service & Supply Inc. (VSV)

Kapolei, HI

TO #: 104

Expiration Date: 08/12/20

Scope: Shop & field controlled by above location; I & VIII Div. 1; Steam, Air/Gas & Liquid

Valve Tech Laboratory, Inc. (VTL)

Woodward, OK

TO #: 49

Expiration Date: 05/26/20

Scope: Shop & field controlled by above location; I & VIII Div. 1; Steam, Air/Gas & Liquid

Valvulas De Seguridad S.A. DE C.V. (VAV)

Vallejo, Gustavo A. Madero, Mexico City,

TO #: 91

Expiration Date: 08/03/20

Scope: Shop & field controlled by above location; VIII; Air/Gas & Liquid

Vinson Process Controls, LP (VIN)

Carrollton, TX

TO #: 71

Expiration Date: 08/23/20

Scope: Shop & field controlled by above location; I & VIII Div. 1; Steam (Field only), Air/Gas & Liquid

VRC Protx , LLC. (Evanston) (VRR)

Evanston, WY

TO #: 83

Expiration Date: 04/01/21

Scope: Shop & field controlled by above location; I & VIII Div. 1; Steam, Air/Gas & Liquid

VRC Protx, LLC. (Denver) (FVD)

Henderson, CO

TO #: 75

Expiration Date: 04/02/20

Scope: Shop & field controlled by above location; I & VIII Div. 1; Steam, Air/Gas & Liquid

VRC Protx, LLC. (Farmington) (VRF)

Farmington, NM

TO #: 82

Expiration Date: 12/15/19

Scope: Shop & field controlled by above location; VIII Div. 1; Air/Gas & Liquid

Wacker Chemical Corporation (APK)

Calvert City, KY

TO #: 52

Expiration Date: 01/26/20

Scope: Shop; VIII Div. 1; Steam (per NBIC Part 3, 4.5.2), Air/Gas & Liquid

Zeon Chemicals L.P. (ZEO)

Louisville, KY

TO #: 116

Expiration Date: 11/17/20

Scope: Shop & field controlled by above location; VIII Div. 1; Air/Gas & Liquid