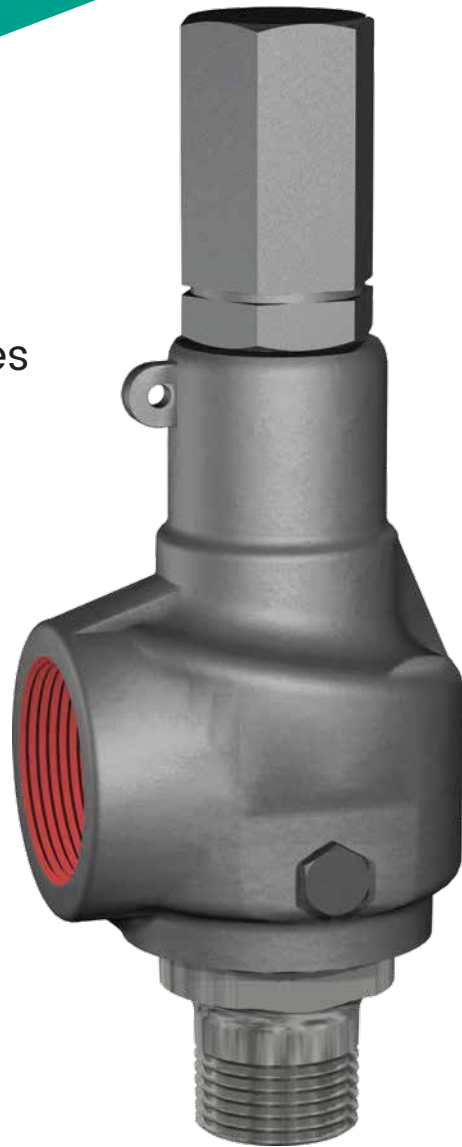


Consolidated™ 1982 Series Safety Relief Valve

A unique design that combines top performance, capabilities and features within an economical, modular assembly.



Conversion Table

All the USCS values are converted to metric values using the following conversion factors:

| USCS Unit | Conversion Factor | Metric Unit |
|----------------------|--------------------------------|---------------------|
| in. | 25.4 | mm |
| lb. | 0.4535924 | kg |
| in ² | 6.4516 | cm ² |
| ft ³ /min | 0.02831685 | m ³ /min |
| gal/min | 3.785412 | L/min |
| lb/hr | 0.4535924 | kg/hr |
| psig | 0.06894757 | barg |
| ft lb | 1.3558181 | Nm |
| °F | $\frac{5}{9} (\text{°F} - 32)$ | °C |

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Features & Benefits

The Consolidated 1982 Series Safety Relief Valves are designed and manufactured in compliance with ASME B&PVC, Section XIII (UV Designator) and Section III (Class I, II and III). Mainly used for steam and liquid applications.

Scope of Design

This product is normally supplied with threaded inlet and outlet connections. The valve ranges in inlet sizes from 0.5" (12.7 mm) through 2" (50.8 mm). Maximum pressure setting is 500 psig (34.47 barg), minimum pressure setting is 10 psig (0.69 barg). This valve is available with a screwed cap, packed lever, plain lever and gag. Unless otherwise specified, the valve is shipped with a screwed cap. The 2" (50.8 mm) 1982 valve can be used for all service media except steam service above 100 psig (6.89 barg).

Specifications

| | |
|---------------------------|--|
| Inlet Sizes: | 0.5" (12.7 mm) through 2" (50.8 mm) |
| Outlet Sizes: | 0.75" (19.1 mm) through 2.5" (63.5 mm) |
| Inlet Ratings: | ASME Class 150 and 300 |
| Outlet Ratings: | ASME Class 150 |
| Orifice Sizes: | Five sizes: 1/2, 3/4, 1, 1-1/2 and 2. |
| Pressure Range: | 10 psig (0.69 barg) to 500 psig (34.47 barg) |
| Temperature Range: | -20°F (-29°C) to 800°F (427°C) |
| Materials: | Carbon steel base and 316 stainless steel internal components. |
| Certifications: | ASME B and PVC, Section III ASME B and PVC, Section XIII (UV) |

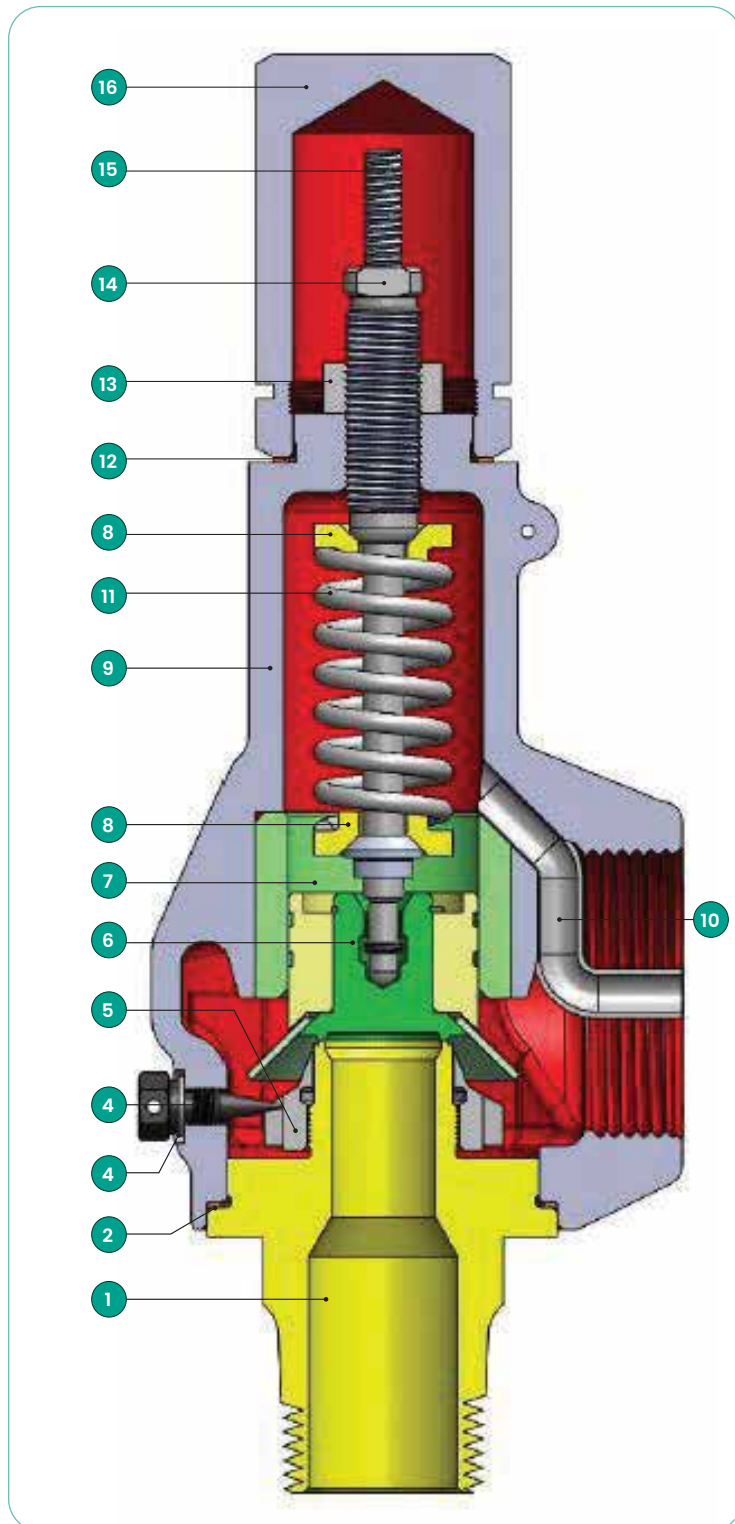
1982 Series Valve Standard Connections

| Valve Type | Inlet Size | | Inlet Type | Outlet Size | | Outlet Type | Orifice Area | |
|------------|------------|------|------------|-------------|------|-------------|-----------------|-----------------|
| | in. | mm | | in. | mm | | in ² | cm ² |
| 1/2-1982 | 0.5 | 12.7 | MNPT | 0.75 | 19.1 | FNPT | 0.121 | 0.781 |
| 3/4-1982 | 0.75 | 19.1 | MNPT | 1 | 25.4 | FNPT | 0.216 | 1.394 |
| 1-1982 | 1 | 25.4 | MNPT | 1.5 | 38.1 | FNPT | 0.332 | 2.142 |
| 1-1/2-1982 | 1.5 | 38.1 | MNPT | 2 | 50.8 | FNPT | 0.857 | 5.529 |
| 2-1982 | 2 | 50.8 | MNPT | 2.5 | 63.5 | FNPT | 1.399 | 9.026 |

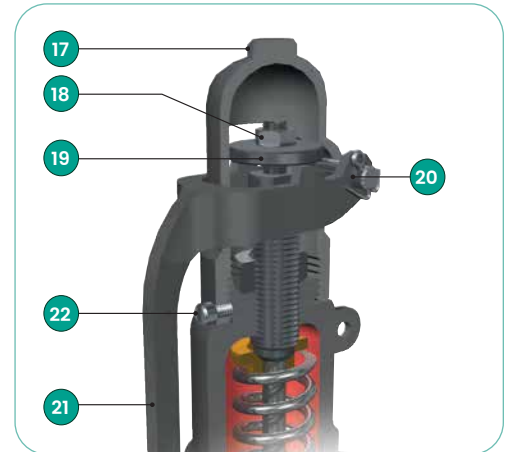
Materials

1982 Series Safety Relief Valve

1982 Series Valve



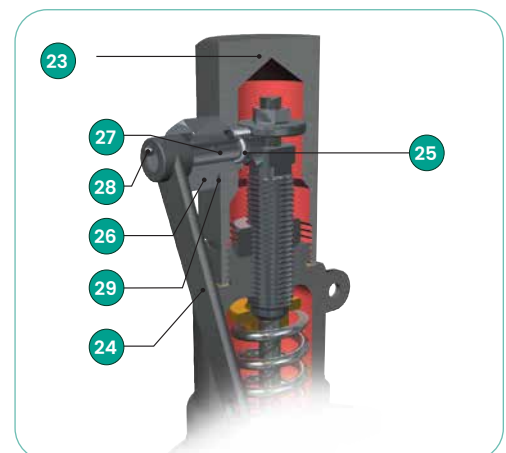
1982 Series Plain Lever



1982 Series Cap with Gag



1982 Series Packed Lever



Materials

1982 Series Safety Relief Valve Standard Materials

| 1982 Series Valve Standard Materials (-CC) | | |
|--|--------------------------------|--|
| Ref. No. | Part | Construction Variation (-CC) |
| 1 | Base | ASME SA479 316 Stainless Steel |
| 1a | Inlet Flange (When Applicable) | ASME SA105 Carbon Steel |
| 2 | Bonnet Gasket | Soft Iron |
| 3 | Adjusting Ring Pin Gasket | Soft Iron |
| 4 | Adjusting Ring Pin | 416 Stainless Steel |
| 5 | Adjusting Ring | 316 Stainless Steel |
| 6 | Disc Assembly | |
| 6a | Disc Collar | 316 Stainless Steel |
| 6b | Disc Holder | 316 Stainless Steel |
| 6c | Disc | 316 Stainless Steel |
| 6d | Disc Retainer | PH15-7 Moly Stainless Steel |
| 7 | Guide | 410 Stainless Steel |
| 8 | Spring Washer | Carbon Steel ⁽¹⁾ |
| 9 | Bonnet | ASME SA216 WCC Carbon Steel ⁽¹⁾ |
| 10 | Eductor Tube | 316 Stainless Steel |
| 11 | Spring | |
| | 1982c | Alloy Steel ⁽¹⁾ |
| | 1982t | Inconel X-750 |
| 12 | Cap Gasket | Soft Iron |
| 13 | Adjusting Screw Locknut | Carbon Steel ⁽¹⁾ |
| 14 | Adjusting Screw | 416 Stainless Steel |
| 15 | Spindle Assembly | |
| 15a | Spindle | Carbon Steel ⁽¹⁾ |
| 15b | Spindle Collar | 410 Stainless Steel |
| 16 | Screwed Cap | Carbon Steel ⁽¹⁾ |
| 17 | Plain Cap | Malleable Iron |
| 18 | Release Locknut | Carbon Steel |
| 19 | Release Nut | 416 Stainless Steel |
| 20 | Lever Pin | Carbon Steel |
| 21 | Plain Lever | Malleable Iron |
| 22 | Cap Screw | Carbon Steel |
| 23 | Packed Cap | Carbon Steel ⁽¹⁾ |
| 24 | Packed Lever | Malleable Iron |
| 25 | O-Ring | Viton 70 |
| 26 | Bushing | 416 Stainless Steel |
| 27 | Cam Shaft | 410 Stainless Steel |
| 28 | Drive Stud | Carbon Steel |
| 29 | Lever Gasket | Soft Iron |
| 30 | Gag | Carbon Steel |
| 31 | Sealing Plug | Carbon Steel |
| 32 | Sealing Plug Gasket | Soft Iron |

1. Black Oxide Coating

Materials

1982 Series Safety Relief Valve Optional Materials

| Stainless Material Variation | |
|--------------------------------|--|
| Component | Construction Variation |
| | Stainless Steel (-CY) |
| Base | ASME SA479 304 Stainless Steel |
| Inlet Flange (When Applicable) | ASME SA182 304 Stainless Steel |
| Bonnet Gasket | A151 316 Stainless Steel (80R _B) |
| Adjusting Ring Pin Gasket | A151 316 Stainless Steel (80R _B) |
| Adjusting Ring Pin | 316 Stainless Steel |
| Adjusting Ring | 316 Stainless Steel |
| Disc Collar | 304 Stainless Steel |
| Disc Holder | 304 Stainless Steel |
| Disc | 304 Stainless Steel |
| Disc Retainer | PH15-7 Moly Stainless Steel |
| Guide | 316 Stainless Steel |
| Spring Washer | 316 Stainless Steel |
| Bonnet | ASME SA351 CF8M Stainless Steel |
| Eductor Tube | 316 Stainless Steel |
| Spring - 1982c | 316 Stainless Steel |
| Spring - 1982t | N/A |
| Cap Gasket | A151 316 Stainless Steel (80R _B) |
| Adjusting Screw Locknut | 316 Stainless Steel |
| Adjusting Screw | 316 Stainless Steel |
| Spindle | 316 Stainless Steel |
| Spindle Collar | 316 Stainless Steel |
| Screwed Cap | 304 Stainless Steel |
| Plain Cap | N/A |
| Release Locknut | N/A |
| Release Nut | N/A |
| Lever Pin | N/A |
| Plain Lever | N/A |
| Cap Screw | N/A |
| Packed Cap | N/A |
| Packed Lever | N/A |
| O-Ring | N/A |
| Bushing | N/A |
| Cam Shaft | N/A |
| Drive Stud | N/A |
| Lever Gasket | N/A |
| Gag | 316 Stainless Steel |
| Sealing Plug | 316 Stainless Steel |
| Sealing Plug Gasket | A151 316 Stainless Steel (80R _B) |

1. The materials in **Red** denote variation from standard material construction.

Materials

1982 Series Safety Relief Valve Optional Materials

| Hastelloy Material Variation ⁽¹⁾ | | | | |
|---|--|--|-----------------------------|-------------------|
| Component | Construction Variation | | | |
| | (-H1) | (-H2) | (-H3) | (-H4) |
| Base | Hastelloy C | Hastelloy C | Hastelloy C | Hastelloy C |
| Inlet Flange (When Applicable) | ASME SA105 Carbon Steel | ASME SA105 Carbon Steel | ASME SB574 N10276 | ASME SB574 N10276 |
| Bonnet Gasket | Soft Iron | Soft Iron | Monel | Monel |
| Adjusting Ring Pin Gasket | Soft Iron | Soft Iron | Monel | Monel |
| Adjusting Ring Pin | 416 Stainless Steel | Hastelloy C | Hastelloy C | Hastelloy C |
| Adjusting Ring | 316 Stainless Steel | Hastelloy C | Hastelloy C | Hastelloy C |
| Disc Collar | Hastelloy C | Hastelloy C | Hastelloy C | Hastelloy C |
| Disc Holder | 304 Stainless Steel | Hastelloy C | Hastelloy C | Hastelloy C |
| Disc | Hastelloy C | Hastelloy C | Hastelloy C | Hastelloy C |
| Disc Retainer | PH15-7 Moly Stainless Steel | PH15-7 Moly Stainless Steel | PH15-7 Moly SSt. | PH15-7 Moly SSt. |
| Guide | 410 Stainless Steel | Hastelloy C | Hastelloy C | Hastelloy C |
| Spring Washer | Carbon Steel ⁽²⁾ | Carbon Steel ⁽²⁾ | Carbon Steel ⁽²⁾ | Hastelloy C |
| Bonnet | ASME SA216 WCC Carbon Steel ⁽²⁾ | ASME SA216 WCC Carbon Steel ⁽²⁾ | Hastelloy C | Hastelloy C |
| Eductor Tube | 316 Stainless Steel | 316 Stainless Steel | Hastelloy C | Hastelloy C |
| Spring - 1982c | Alloy Steel ⁽²⁾ | Alloy Steel ⁽²⁾ | Alloy Steel ⁽²⁾ | Hastelloy C |
| Spring - 1982t | Inconel X-750 | Inconel X-750 | Inconel X-750 | Hastelloy C |
| Cap Gasket | Soft Iron | Soft Iron | Monel | Monel |
| Adjusting Screw Locknut | Carbon Steel ⁽²⁾ | Carbon Steel ⁽²⁾ | Hastelloy C | Hastelloy C |
| Adjusting Screw | 416 Stainless Steel | 416 Stainless Steel | Hastelloy C | Hastelloy C |
| Spindle | Carbon Steel ⁽²⁾ | Hastelloy C | Hastelloy C | Hastelloy C |
| Spindle Collar | 410 Stainless Steel | Hastelloy C | Hastelloy C | Hastelloy C |
| Screwed Cap | Carbon Steel ² | Carbon Steel ² | Hastelloy C | Hastelloy C |
| Plain Cap | Malleable Iron | Malleable Iron | N/A | N/A |
| Release Locknut | Carbon Steel | Carbon Steel | N/A | N/A |
| Release Nut | 416 Stainless Steel | 416 Stainless Steel | N/A | N/A |
| Lever Pin | Carbon Steel | Carbon Steel | N/A | N/A |
| Plain Lever | Malleable Iron | Malleable Iron | N/A | N/A |
| Cap Screw | Carbon Steel | Carbon Steel | N/A | N/A |
| Packed Cap | Carbon Steel ² | Carbon Steel ² | N/A | N/A |
| Packed Lever | Malleable Iron | Malleable Iron | N/A | N/A |
| O-Ring | Viton 70 | Viton 70 | N/A | N/A |
| Bushing | 416 Stainless Steel | 416 Stainless Steel | N/A | N/A |
| Cam Shaft | 410 Stainless Steel | 410 Stainless Steel | N/A | N/A |
| Drive Stud | Carbon Steel | Carbon Steel | N/A | N/A |
| Lever Gasket | Soft Iron | Soft Iron | N/A | N/A |
| Gag | Carbon Steel | Carbon Steel | Hastelloy C | Hastelloy C |
| Sealing Plug | Carbon Steel | Carbon Steel | Hastelloy C | Hastelloy C |
| Sealing Plug Gasket | Soft Iron | Soft Iron | Monel | Monel |

1. The materials in **red** denote variation from standard material construction.

2. Black Oxide Coating.

Materials

1982 Series Safety Relief Valve Optional Materials

| Monel Material Variation ⁽¹⁾ | | | | | |
|---|-------------------------------------|-------------------------------------|-------------------------------------|-----------------------------|----------------------|
| Component | Construction Variation | | | | |
| | (-M1) | (-MB or M1-1/2) | (-M2) | (-M3) | (-M4) |
| Base | Monel | Monel | Monel | Monel | Monel |
| Inlet Flange (when applicable) | ASME SA105 CS | ASME SA105 CS | ASME SA105 CS | ASME SB564 N04400 | ASME SB564 N04400 |
| Bonnet Gasket | Soft Iron | Soft Iron | Soft Iron | Monel | Monel |
| Adjusting Ring Pin Gasket | Soft Iron | Soft Iron | Soft Iron | Monel | Monel |
| Adjusting Ring Pin | 416 Stainless Steel | Monel | Monel | Monel | Monel |
| Adjusting Ring | 316 Stainless Steel | Monel | Monel | Monel | Monel |
| Disc Collar | Monel | Monel | Monel | Monel | Monel |
| Disc Holder | 304 Stainless Steel | Monel | Monel | Monel | Monel |
| Disc | Monel | Monel | Monel | Monel | Monel |
| Disc Retainer | PH15-7 Moly SST. | PH15-7 Moly SST. | PH15-7 Moly SST. | PH15-7 Moly SST. | PH15-7 Moly SST. |
| Guide | 410 Stainless Steel | Monel | Monel | Monel | Monel |
| Spring Washer | Carbon Steel ⁽²⁾ | Carbon Steel ⁽²⁾ | Carbon Steel ⁽²⁾ | Carbon Steel ⁽²⁾ | Monel |
| Bonnet | ASME SA216 WCC CS ⁽²⁾ | ASME SA216 WCC CS ⁽²⁾ | ASME SA216 WCC CS ⁽²⁾ | Monel | Monel |
| Eductor Tube | 316 Stainless Steel | 316 Stainless Steel | 316 Stainless Steel | Monel | Monel |
| Spring 1982c | Alloy Steel ⁽²⁾ | Alloy Steel ⁽²⁾ | Alloy Steel ⁽²⁾ | Alloy Steel ⁽²⁾ | Inconel X-750 |
| Spring 1982t | Inconel X-750 | Inconel X-750 | Inconel X-750 | Inconel X-750 | Inconel X-750 |
| Cap Gasket | Soft Iron | Soft Iron | Soft Iron | Monel | Monel |
| Adjusting Screw Locknut | Carbon Steel ⁽²⁾ | Carbon Steel ⁽²⁾ | Carbon Steel ⁽²⁾ | Monel | Monel |
| Adjusting Screw | 416 Stainless Steel | 416 Stainless Steel | 416 Stainless Steel | Monel | Monel |
| Spindle | Carbon Steel ⁽²⁾ | Carbon Steel ⁽²⁾ | Monel | Monel | Monel |
| Spindle Collar | 410 Stainless Steel | 410 Stainless Steel | Monel | Monel | Monel |
| Screwed Cap | Carbon Steel ⁽²⁾ | Carbon Steel ⁽²⁾ | Carbon Steel ⁽²⁾ | Monel | Monel |
| Plain Cap | Malleable Iron | Malleable Iron | Malleable Iron | N/A | N/A |
| Release Locknut | Carbon Steel | Carbon Steel | Carbon Steel | N/A | N/A |
| Release Nut | 416 Stainless Steel | 416 Stainless Steel | 416 Stainless Steel | N/A | N/A |
| Lever Pin | Carbon Steel | Carbon Steel | Carbon Steel | N/A | N/A |
| Plain Lever | Malleable Iron | Malleable Iron | Malleable Iron | N/A | N/A |
| Cap Screw | Carbon Steel | Carbon Steel | Carbon Steel | N/A | N/A |
| Packed Cap | Carbon Steel ⁽²⁾ | Carbon Steel ⁽²⁾ | Carbon Steel ⁽²⁾ | N/A | N/A |
| Packed Lever | Malleable Iron | Malleable Iron | Malleable Iron | N/A | N/A |
| O-Ring | Viton 70 | Viton 70 | Viton 70 | N/A | N/A |
| Bushing | 416 Stainless Steel | 416 Stainless Steel | 416 Stainless Steel | N/A | N/A |
| Cam Shaft | 410 Stainless Steel | 410 Stainless Steel | 410 Stainless Steel | N/A | N/A |
| Drive Stud | Carbon Steel | Carbon Steel | Carbon Steel | N/A | N/A |
| Lever Gasket | Soft Iron | Soft Iron | Soft Iron | N/A | N/A |
| Gag | Carbon Steel | Carbon Steel | Carbon Steel | Monel | Monel |
| Sealing Plug | Carbon Steel | Carbon Steel | Carbon Steel | Monel | Monel |
| Sealing Plug Gasket | Soft Iron | Soft Iron | Soft Iron | Monel | Monel |

1. The materials in red denote variation from standard material construction.

Materials

1982 Series Safety Relief Valve Optional Materials

| Stainless Steel Material Variation ⁽¹⁾ | | | |
|---|--|---------------------------------|---------------------------------|
| Component | Construction Variation | | |
| | (-S2) | (-S3) | (-S4) |
| Base | ASME SA479 316 Stainless Steel | ASME SA479 316 Stainless Steel | ASME SA479 316 Stainless Steel |
| Inlet Flange (When Applicable) | ASME SA105 Carbon Steel | ASME SA182 316 Stainless Steel | ASME SA182 316 Stainless Steel |
| Bonnet Gasket | Soft Iron | Monel | Monel |
| Adjusting Ring Pin Gasket | Soft Iron | Monel | Monel |
| Adjusting Ring Pin | 316 Stainless Steel | 316 Stainless Steel | 316 Stainless Steel |
| Adjusting Ring | 316 Stainless Steel | 316 Stainless Steel | 316 Stainless Steel |
| Disc Collar | 316 Stainless Steel | 316 Stainless Steel | 316 Stainless Steel |
| Disc Holder | 316 Stainless Steel | 316 Stainless Steel | 316 Stainless Steel |
| Disc | 316 Stainless Steel | 316 Stainless Steel | 316 Stainless Steel |
| Disc Retainer | PH15-7 Moly Stainless Steel | PH15-7 Moly Stainless Steel | PH15-17 Moly Stainless Steel |
| Guide | 316 Stainless Steel | 316 Stainless Steel | 316 Stainless Steel |
| Spring Washer | Carbon Steel ⁽²⁾ | Carbon Steel ⁽²⁾ | 316 Stainless Steel |
| Bonnet | ASME SA216 WCC Carbon Steel ⁽²⁾ | ASME SA351 CF8M Stainless Steel | ASME SA351 CF8M Stainless Steel |
| Eductor Tube | 316 Stainless Steel | 316 Stainless Steel | 316 Stainless Steel |
| Spring - 1982c | Alloy Steel ⁽²⁾ | Alloy Steel ⁽²⁾ | 316 Stainless Steel |
| Spring - 1982t | Inconel X-750 | Inconel X-750 | 316 Stainless Steel |
| Cap Gasket | Soft Iron | Monel | Monel |
| Adjusting Screw Locknut | Carbon Steel ⁽²⁾ | 316 Stainless Steel | 316 Stainless Steel |
| Adjusting Screw | 416 Stainless Steel | 316 Stainless Steel | 316 Stainless Steel |
| Spindle | Carbon Steel ⁽²⁾ | 316 Stainless Steel | 316 Stainless Steel |
| Spindle Collar | 410 Stainless Steel | 316 Stainless Steel | 316 Stainless Steel |
| Screwed Cap | Carbon Steel ⁽²⁾ | 316 Stainless Steel | 316 Stainless Steel |
| Plain Cap | Malleable Iron | 316 Stainless Steel | 316 Stainless Steel |
| Release Locknut | Carbon Steel | 316 Stainless Steel | 316 Stainless Steel |
| Release Nut | 416 Stainless Steel | 316 Stainless Steel | 316 Stainless Steel |
| Lever Pin | Carbon Steel | 316 Stainless Steel | 316 Stainless Steel |
| Plain Lever | Malleable Iron | 316 Stainless Steel | 316 Stainless Steel |
| Cap Screw | Carbon Steel | 316 Stainless Steel | 316 Stainless Steel |
| Packed Cap | Carbon Steel ⁽²⁾ | 316 Stainless Steel | 316 Stainless Steel |
| Packed Lever | Malleable Iron | 316 Stainless Steel | 316 Stainless Steel |
| O-Ring | Viton 70 | Viton 70 | Viton 70 |
| Bushing | 416 Stainless Steel | 316 Stainless Steel | 316 Stainless Steel |
| Cam Shaft | 410 Stainless Steel | 316 Stainless Steel | 316 Stainless Steel |
| Drive Stud | Carbon Steel | 316 Stainless Steel | 316 Stainless Steel |
| Lever Gasket | Soft Iron | Monel | Monel |
| Gag | Carbon Steel | 316 Stainless Steel | 316 Stainless Steel |
| Sealing Plug | Carbon Steel | 316 Stainless Steel | 316 Stainless Steel |
| Sealing Plug Gasket | Soft Iron | Monel | Monel |

1. The materials in **red** denote variation from standard material construction.

2. Black Oxide Coating.

Materials

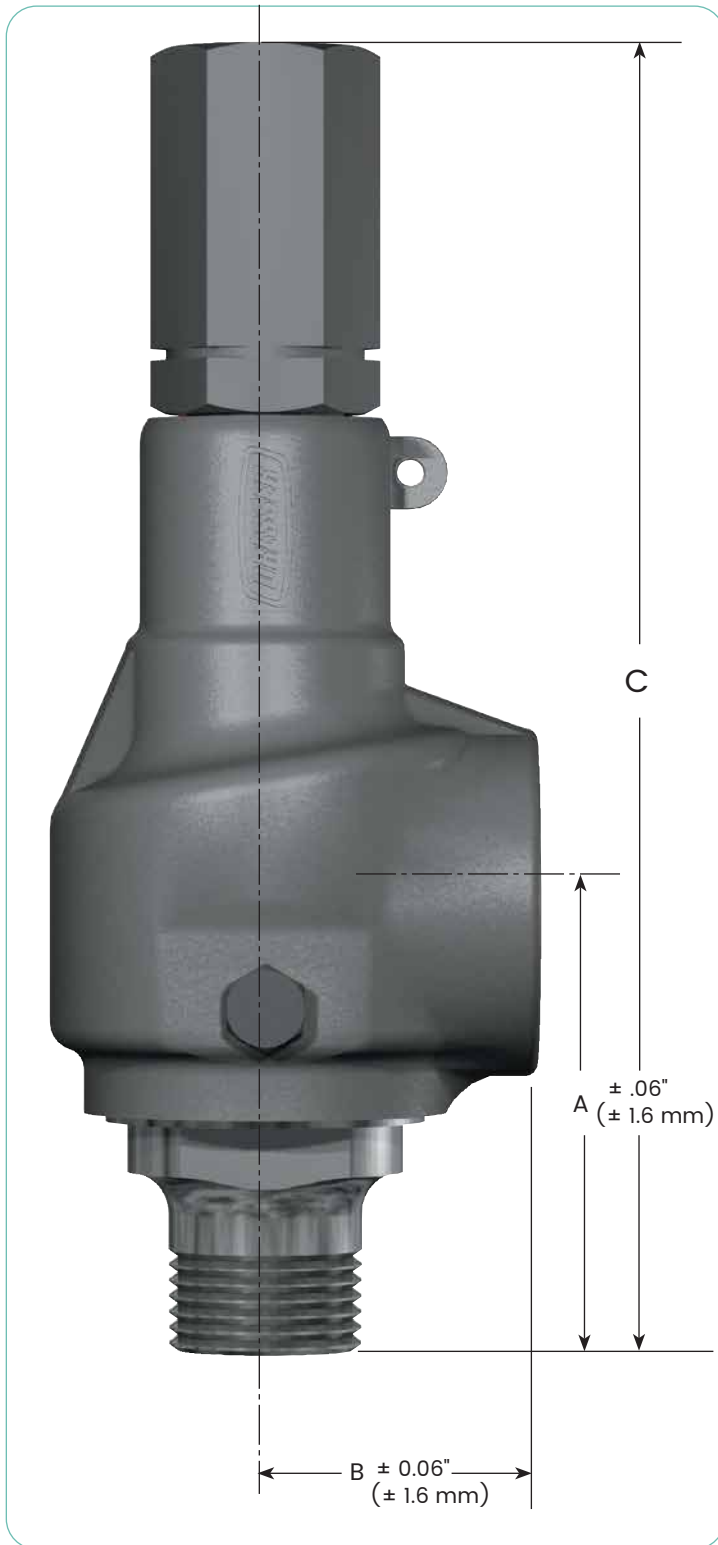
1982 Series Safety Relief Valve Optional Materials

| Steam Service Material Variation ⁽¹⁾ | |
|---|---------------------------------|
| Component | Construction Variation |
| | Steam Service (-SS) |
| Base | ASME SA479 316 Stainless Steel |
| Inlet Flange (When Applicable) | ASME SA182 316 Stainless Steel |
| Bonnet Gasket | 316 Stainless Steel |
| Adjusting Ring Pin Gasket | 316 Stainless Steel |
| Adjusting Ring Pin | 416 Stainless Steel |
| Adjusting Ring | 316 Stainless Steel |
| Disc Collar | 316 Stainless Steel |
| Disc Holder | 316 Stainless Steel |
| Disc | 316 Stainless Steel |
| Disc Retainer | PH15-17 Moly Stainless Steel |
| Guide | 410 Stainless Steel |
| Spring Washer | 316 Stainless Steel |
| Bonnet | ASME SA351 CF8M Stainless Steel |
| Eductor Tube | 316 Stainless Steel |
| Spring - 1982c | 316 Stainless Steel |
| Spring - 1982t | 316 Stainless Steel |
| Cap Gasket | 316 Stainless Steel |
| Adjusting Screw Locknut | 316 Stainless Steel |
| Adjusting Screw | 416 Stainless Steel |
| Spindle | 316 Stainless Steel |
| Spindle Collar | 316 Stainless Steel |
| Screwed Cap | 316 Stainless Steel |
| Plain Cap | 316 Stainless Steel |
| Release Locknut | 316 Stainless Steel |
| Release Nut | 316 Stainless Steel |
| Lever Pin | 316 Stainless Steel |
| Plain Lever | 316 Stainless Steel |
| Cap Screw | 316 Stainless Steel |
| Packed Cap | 316 Stainless Steel |
| Packed Lever | 316 Stainless Steel |
| O-Ring | Viton 70 |
| Bushing | 316 Stainless Steel |
| Cam Shaft | 316 Stainless Steel |
| Drive Stud | 302 Stainless Steel |
| Lever Gasket | 316 Stainless Steel |
| Gag | Carbon Steel |
| Sealing Plug | 316 Stainless Steel |
| Sealing Plug Gasket | 316 Stainless Steel |

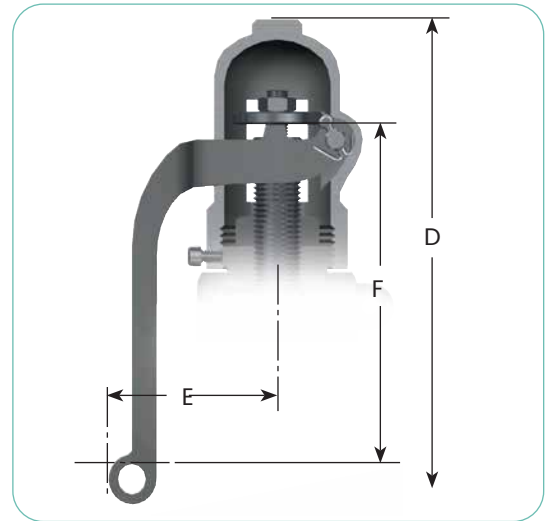
1. The materials in **red** denote variation from standard material construction.

Dimensions & Weights

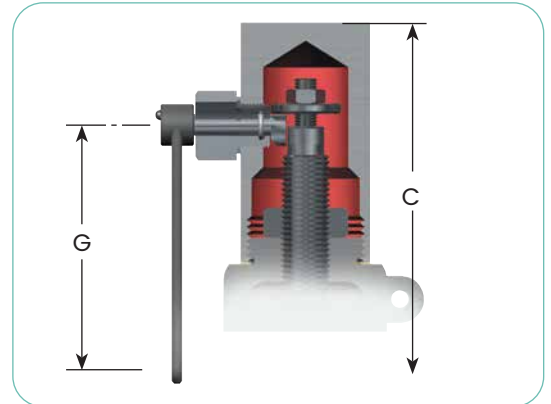
1982 Series Safety Relief Valve Dimensions



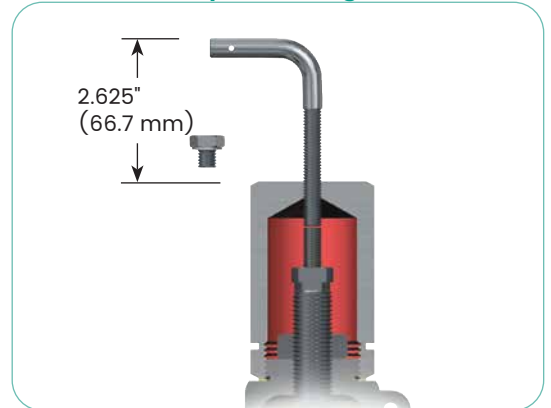
1982 Series Plain Lever



1982 Series Packed Lever



1982 Series Cap with Gag



Dimensions & Weights

| General Valve Dimensions Threaded Inlet | | | | | | | | | | | | | | |
|---|------------|-------|------------|-------------|-------|-------------|------|--------|------|-------|-------|--------|-------|--------|
| Valve Type | Inlet Size | | Inlet Type | Outlet Size | | Outlet Type | A | | B | | C | | D | |
| | in. | mm | | in. | mm | | in. | mm | in. | mm | in. | mm | in. | mm |
| 1/2-1982 | .50 | 12.70 | MNPT | .75 | 19.05 | FNPT | 2.63 | 66.80 | 1.25 | 31.75 | 7.13 | 181.10 | 7.25 | 184.15 |
| 3/4-1982 | .75 | 19.05 | MNPT | 1.00 | 25.40 | FNPT | 2.75 | 69.85 | 1.44 | 36.58 | 7.50 | 190.50 | 7.63 | 193.80 |
| 1-1982 | 1.00 | 25.40 | MNPT | 1.50 | 38.10 | FNPT | 3.25 | 82.55 | 1.88 | 47.75 | 9.13 | 231.90 | 9.13 | 231.90 |
| 1-1/2-1982 | 1.50 | 38.10 | MNPT | 2.00 | 50.80 | FNPT | 3.88 | 98.55 | 2.63 | 66.80 | 12.00 | 304.80 | 11.88 | 301.75 |
| 2-1982 | 2.00 | 50.80 | MNPT | 2.50 | 63.50 | FNPT | 4.38 | 111.25 | 3.25 | 82.55 | 14.06 | 357.12 | 13.88 | 352.55 |

| General Valve Dimensions Threaded Inlet | | | | | | | | | | | | | | |
|---|------------|-------|------------|-------------|-------|-------------|------|-------|------|--------|------|--------|----------------|------|
| Valve Type | Inlet Size | | Inlet Type | Outlet Size | | Outlet Type | E | | F | | G | | Approx. Weight | |
| | in | mm | | in | mm | | in | mm | in | mm | in | mm | lb | kg |
| 1/2-1982 | .50 | 12.70 | MNPT | .75 | 19.05 | FNPT | 1.38 | 35.05 | 2.75 | 69.85 | 2.38 | 60.45 | 2.2 | 1.00 |
| 3/4-1982 | .75 | 19.05 | MNPT | 1.00 | 25.40 | FNPT | 1.38 | 35.05 | 2.75 | 69.85 | 2.38 | 60.45 | 3.0 | 1.36 |
| 1-1982 | 1.00 | 25.40 | MNPT | 1.50 | 38.10 | FNPT | 2.13 | 54.10 | 4.63 | 117.60 | 3.50 | 88.90 | 5.0 | 2.27 |
| 1-1/2-1982 | 1.50 | 38.10 | MNPT | 2.00 | 50.80 | FNPT | 3.69 | 93.73 | 5.81 | 147.57 | 4.75 | 120.65 | 12.0 | 5.44 |
| 2-1982 | 2.00 | 50.80 | MNPT | 2.50 | 63.50 | FNPT | 3.69 | 93.73 | 5.81 | 147.57 | 4.75 | 120.65 | 18.5 | 8.39 |

Dimensions & Weights

| General Valve Dimensions Flanged Inlet | | | | | | | | | | | | | | |
|--|------------|-------|------------|-------------|-------|-------------|------|--------|------|-------|-------|--------|-------|--------|
| Valve Type | Inlet Size | | Inlet Type | Outlet Size | | Outlet Type | A | | B | | C | | D | |
| | in | mm | | in | mm | | in | mm | in | mm | in | mm | in | mm |
| 1/2-1982 | .50 | 12.70 | 150# RF | .75 | 19.05 | FNPT | 2.69 | 68.33 | 1.25 | 31.75 | 7.13 | 181.10 | 7.25 | 184.15 |
| | .50 | 12.70 | 300# RF | | | | 2.69 | 68.33 | 1.25 | 31.75 | 7.13 | 181.10 | 7.25 | 184.15 |
| 3/4-1982 | .75 | 19.05 | 150# RF | 1.00 | 25.40 | FNPT | 2.81 | 71.37 | 1.44 | 36.58 | 7.50 | 190.50 | 7.63 | 193.80 |
| | .75 | 19.05 | 300# RF | | | | 2.81 | 71.37 | 1.44 | 36.58 | 7.50 | 190.50 | 7.63 | 193.80 |
| 1-1982 | 1.00 | 25.40 | 150# RF | 1.50 | 38.10 | FNPT | 3.25 | 82.55 | 1.88 | 47.75 | 9.13 | 231.90 | 9.13 | 231.90 |
| | 1.00 | 25.40 | 300# RF | | | | 3.25 | 82.55 | 1.88 | 47.75 | 9.13 | 231.90 | 9.13 | 231.90 |
| 1-1/2-1982 | 1.50 | 38.10 | 150# RF | 2.00 | 50.80 | FNPT | 4.06 | 103.12 | 2.63 | 66.80 | 12.00 | 304.80 | 11.88 | 301.75 |
| | 1.50 | 38.10 | 300# RF | | | | 4.06 | 103.12 | 2.63 | 66.80 | 12.00 | 304.80 | 11.88 | 301.75 |
| 2-1982 | 2.00 | 50.80 | 150# RF | 2.50 | 63.50 | FNPT | 4.63 | 117.60 | 3.25 | 82.55 | 14.06 | 357.12 | 13.88 | 352.55 |
| | 2.00 | 50.80 | 300# RF | | | | 4.63 | 117.60 | 3.25 | 82.55 | 14.06 | 357.12 | 13.88 | 352.55 |

| General Valve Dimensions Flanged Inlet | | | | | | | | | | | | | | | | |
|--|------------|-------|------------|-------------|-------|-------------|------|-------|------|--------|------|--------|-----|-------|----------------|-------|
| Valve Type | Inlet Size | | Inlet Type | Outlet Size | | Outlet Type | E | | F | | G | | H | | Approx. Weight | |
| | in | mm | | in | mm | | in | mm | in | mm | in | mm | in | mm | lb | kg |
| 1/2-1982 | .50 | 12.70 | 150# RF | .75 | 19.05 | FNPT | 1.38 | 35.05 | 2.75 | 69.85 | 2.38 | 60.45 | .44 | 11.18 | 3.2 | 1.45 |
| | .50 | 12.70 | 300# RF | | | | 1.38 | 35.05 | 2.75 | 69.85 | 2.38 | 60.45 | .56 | 14.22 | 3.7 | 1.68 |
| 3/4-1982 | .75 | 19.05 | 150# RF | 1.00 | 25.40 | FNPT | 1.38 | 35.05 | 2.75 | 69.85 | 2.38 | 60.45 | .50 | 12.70 | 4.5 | 2.04 |
| | .75 | 19.05 | 300# RF | | | | 1.38 | 35.05 | 2.75 | 69.85 | 2.38 | 60.45 | .63 | 16.00 | 5.5 | 2.49 |
| 1-1982 | 1.00 | 25.40 | 150# RF | 1.50 | 38.10 | FNPT | 2.13 | 54.10 | 4.63 | 117.60 | 3.50 | 88.90 | .56 | 14.22 | 7.0 | 3.18 |
| | 1.00 | 25.40 | 300# RF | | | | 2.13 | 54.10 | 4.63 | 117.60 | 3.50 | 88.90 | .69 | 17.53 | 8.0 | 3.63 |
| 1-1/2-1982 | 1.50 | 38.10 | 150# RF | 2.00 | 50.80 | FNPT | 3.69 | 93.73 | 5.81 | 147.57 | 4.75 | 120.65 | .69 | 17.53 | 15.0 | 6.80 |
| | 1.50 | 38.10 | 300# RF | | | | 3.69 | 93.73 | 5.81 | 147.57 | 4.75 | 120.65 | .81 | 20.57 | 18.5 | 8.39 |
| 2-1982 | 2.00 | 50.80 | 150# RF | 2.50 | 63.50 | FNPT | 3.69 | 93.73 | 5.81 | 147.57 | 4.75 | 120.65 | .75 | 19.05 | 23.5 | 10.66 |
| | 2.00 | 50.80 | 300# RF | | | | 3.69 | 93.73 | 5.81 | 147.57 | 4.75 | 120.65 | .88 | 22.35 | 25.5 | 11.57 |

Pressure/Temperature

| Pressure Temperature Ratings 1982 Series Valves Threaded Inlet | | | | | | | | |
|--|-------------------|-------|----------------|-------|-----------------|-------|-----------------|-------|
| Valve Type | -20 °F (-28.9 °C) | | 100°F (37.8°C) | | 400°F (204.4°C) | | 800°F (426.7°C) | |
| | psig | barg | psig | barg | psig | barg | psig | barg |
| 1/2-1982 | 500 | 34.47 | 500 | 34.47 | 500 | 34.47 | 500 | 34.47 |
| 3/4-1982 | 500 | 34.47 | 500 | 34.47 | 500 | 34.47 | 500 | 34.47 |
| 1-1982 | 500 | 34.47 | 500 | 34.47 | 500 | 34.47 | 500 | 34.47 |
| 1-1/2-1982 | 500 | 34.47 | 500 | 34.47 | 500 | 34.47 | 500 | 34.47 |
| 2-1982 ⁽¹⁾ | 500 | 34.47 | 500 | 34.47 | 500 | 34.47 | 500 | 34.47 |

1. Maximum set pressure for steam is 100 psig (6.89 barg) for the 2-1982.

| 150# Inlet Flange Rating | | | | | | | | | |
|--------------------------|---------------|--------------|-------|---------------|-------|-------|-------|-------------|-------|
| Temperature | | Carbon Steel | | 316 Stainless | | Monel | | Hastelloy C | |
| °F | °C | psig | barg | psig | barg | psig | barg | psig | barg |
| -20 to 100 | -28.9 to 37.8 | 285 | 19.65 | 275 | 18.96 | 230 | 15.86 | 290 | 19.99 |
| 200 | 93.3 | 260 | 17.93 | 235 | 16.20 | 200 | 13.79 | 260 | 17.93 |
| 300 | 148.9 | 230 | 15.86 | 215 | 14.82 | 190 | 13.10 | 230 | 15.86 |
| 400 | 204.4 | 200 | 13.79 | 195 | 13.44 | 180 | 12.41 | 200 | 13.79 |
| 500 | 260.0 | 170 | 11.72 | 170 | 11.72 | 170 | 11.72 | 170 | 11.72 |
| 600 | 315.6 | 140 | 9.65 | 140 | 9.65 | 140 | 9.65 | 140 | 9.65 |
| 650 | 343.3 | 125 | 8.62 | 125 | 8.62 | 125 | 8.62 | 125 | 8.62 |
| 700 | 371.1 | 110 | 7.58 | 110 | 7.58 | 110 | 7.58 | 110 | 7.58 |
| 750 | 398.9 | 95 | 6.55 | 95 | 6.55 | 95 | 6.55 | 95 | 6.55 |
| 800 | 426.7 | 80 | 5.52 | 80 | 5.52 | 80 | 5.52 | 80 | 5.52 |

| 300# Inlet Flange Rating | | | | | | | | | |
|--------------------------|---------------|--------------|-------|---------------|-------|-------|-------|-------------|-------|
| Temperature | | Carbon Steel | | 316 Stainless | | Monel | | Hastelloy C | |
| °F | °C | psig | barg | psig | barg | psig | barg | psig | barg |
| -20 to 100 | -28.9 to 37.8 | 740 | 51.02 | 720 | 49.64 | 600 | 41.37 | 750 | 51.71 |
| 200 | 93.3 | 680 | 46.88 | 620 | 42.75 | 525 | 36.20 | 750 | 51.71 |
| 300 | 148.9 | 655 | 45.16 | 560 | 38.61 | 490 | 33.78 | 730 | 50.33 |
| 400 | 204.4 | 635 | 43.78 | 515 | 35.51 | 475 | 32.75 | 700 | 48.26 |
| 500 | 260.0 | 605 | 41.71 | 480 | 33.09 | 475 | 32.75 | 665 | 45.85 |
| 600 | 315.6 | 570 | 39.30 | 450 | 31.03 | 475 | 32.75 | 605 | 41.71 |
| 650 | 343.3 | 550 | 37.92 | 440 | 30.34 | 475 | 32.75 | 590 | 40.68 |
| 700 | 371.1 | 530 | 36.54 | 435 | 29.99 | 470 | 32.41 | 570 | 39.30 |
| 750 | 398.9 | 505 | 34.82 | 425 | 29.30 | 465 | 32.06 | 530 | 36.54 |
| 800 | 426.7 | 410 | 28.27 | 420 | 28.96 | 460 | 31.72 | 510 | 35.16 |

Capacities

Valve Capacity for ASME B&PV Code Section XIII (UV), for Air

Based at 10% overpressure or 3 psig (0.21 barg), whichever is greater, showing 90% of actual capacity.

Units of ft³/min (m³/min) of air per minute are at a temperature of 60°F (15.6°C)

| Inlet Size | | in. | mm | in. | mm | in. | mm | in. | mm | in. | mm |
|--------------|-------|----------------------|---------------------|----------------------|---------------------|----------------------|---------------------|----------------------|---------------------|----------------------|---------------------|
| | | .50 | 12.7 | .75 | 19.1 | 1.00 | 25.4 | 1.50 | 38.1 | 2.00 | 50.8 |
| Orifice Area | | in ² | cm ² | in ² | cm ² | in ² | cm ² | in ² | cm ² | in ² | cm ² |
| | | 0.121 | 0.781 | 0.216 | 1.394 | 0.332 | 2.142 | 0.857 | 5.529 | 1.399 | 9.026 |
| Set Pressure | | Orifice Capacity | | | | | | | | | |
| psig | barg | ft ³ /min | m ³ /min | ft ³ /min | m ³ /min | ft ³ /min | m ³ /min | ft ³ /min | m ³ /min | ft ³ /min | m ³ /min |
| 15 | 1.03 | 62 | 2 | 110 | 3 | 170 | 5 | 439 | 12 | 717 | 20 |
| 20 | 1.38 | 71 | 2 | 127 | 4 | 196 | 6 | 507 | 14 | 827 | 23 |
| 30 | 2.07 | 90 | 3 | 161 | 5 | 248 | 7 | 641 | 18 | 1047 | 30 |
| 40 | 2.76 | 111 | 3 | 198 | 6 | 305 | 9 | 789 | 22 | 1288 | 36 |
| 50 | 3.45 | 132 | 4 | 236 | 7 | 363 | 10 | 937 | 27 | 1530 | 43 |
| 60 | 4.14 | 153 | 4 | 273 | 8 | 420 | 12 | 1085 | 31 | 1771 | 50 |
| 70 | 4.83 | 174 | 5 | 310 | 9 | 477 | 14 | 1233 | 35 | 2013 | 57 |
| 80 | 5.52 | 195 | 6 | 348 | 10 | 535 | 15 | 1381 | 39 | 2254 | 64 |
| 90 | 6.21 | 215 | 6 | 385 | 11 | 592 | 17 | 1529 | 43 | 2496 | 71 |
| 100 | 6.89 | 236 | 7 | 422 | 12 | 649 | 18 | 1677 | 47 | 2737 | 78 |
| 120 | 8.27 | 278 | 8 | 497 | 14 | 764 | 22 | 1972 | 56 | 3220 | 91 |
| 140 | 9.65 | 320 | 9 | 571 | 16 | 878 | 25 | 2268 | 64 | 3703 | 105 |
| 160 | 11.03 | 362 | 10 | 646 | 18 | 993 | 28 | 2564 | 73 | 4186 | 119 |
| 180 | 12.41 | 403 | 11 | 720 | 20 | 1108 | 31 | 2860 | 81 | 4669 | 132 |
| 200 | 13.79 | 445 | 13 | 795 | 23 | 1222 | 35 | 3156 | 89 | 5152 | 146 |
| 220 | 15.17 | 487 | 14 | 870 | 25 | 1337 | 38 | 3452 | 98 | 5635 | 160 |
| 240 | 16.55 | 529 | 15 | 944 | 27 | 1452 | 41 | 3748 | 106 | 6118 | 173 |
| 260 | 17.93 | 570 | 16 | 1019 | 29 | 1566 | 44 | 4044 | 115 | 6601 | 187 |
| 280 | 19.31 | 612 | 17 | 1093 | 31 | 1681 | 48 | 4340 | 123 | 7084 | 201 |
| 300 | 20.68 | 654 | 19 | 1168 | 33 | 1795 | 51 | 4635 | 131 | 7567 | 214 |
| 320 | 22.06 | 696 | 20 | 1243 | 35 | 1910 | 54 | 4931 | 140 | 8050 | 228 |
| 340 | 23.44 | 738 | 21 | 1317 | 37 | 2025 | 57 | 5227 | 148 | 8533 | 242 |
| 360 | 24.82 | 779 | 22 | 1392 | 39 | 2139 | 61 | 5523 | 156 | 9016 | 255 |
| 380 | 26.20 | 821 | 23 | 1466 | 42 | 2254 | 64 | 5819 | 165 | 9499 | 269 |
| 400 | 27.58 | 863 | 24 | 1541 | 44 | 2369 | 67 | 6115 | 173 | 9982 | 283 |
| 420 | 28.96 | 905 | 26 | 1615 | 46 | 2483 | 70 | 6411 | 182 | 10465 | 296 |
| 440 | 30.34 | 946 | 27 | 1690 | 48 | 2598 | 74 | 6707 | 190 | 10948 | 310 |
| 460 | 31.72 | 988 | 28 | 1765 | 50 | 2712 | 77 | 7002 | 198 | 11431 | 324 |
| 480 | 33.09 | 1030 | 29 | 1839 | 52 | 2827 | 80 | 7298 | 207 | 11914 | 337 |
| 500 | 34.47 | 1072 | 30 | 1914 | 54 | 2942 | 83 | 7594 | 215 | 12397 | 351 |

Capacities

Valve Capacity for ASME B&PV Code Section XIII (UV), for Saturated Steam

Based at 10% overpressure or 3 psig (0.21 barg), whichever is greater, showing 90% of actual capacity.

Units of ft³/min (m³/min) of air per minute are at a temperature of 60°F (15.6°C)

| Inlet Size | | in. | mm | in. | mm | in. | mm | in. | mm | in. | mm |
|--------------|-------|------------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|
| | | .50 | 12.7 | .75 | 19.1 | 1.00 | 25.4 | 1.50 | 38.1 | 2.00 | 50.8 |
| Orifice Area | | in ² | cm ² | in ² | cm ² | in ² | cm ² | in ² | cm ² | in ² | cm ² |
| | | 0.121 | 0.781 | 0.216 | 1.394 | 0.332 | 2.142 | 0.857 | 5.529 | 1.399 | 9.026 |
| Set Pressure | | Orifice Capacity | | | | | | | | | |
| psig | barg | lb/hr | kg/hr | lb/hr | kg/hr | lb/hr | kg/hr | lb/hr | kg/hr | lb/hr | kg/hr |
| 15 | 1.03 | 174 | 79 | 311 | 141 | 478 | 217 | 1233 | 559 | 2014 | 914 |
| 20 | 1.38 | 200 | 91 | 358 | 162 | 551 | 250 | 1422 | 645 | 2322 | 1053 |
| 30 | 2.07 | 254 | 115 | 453 | 205 | 697 | 316 | 1800 | 816 | 2938 | 1333 |
| 40 | 2.76 | 312 | 142 | 558 | 253 | 858 | 389 | 2215 | 1005 | 3616 | 1640 |
| 50 | 3.45 | 371 | 168 | 662 | 300 | 1018 | 462 | 2630 | 1193 | 4293 | 1947 |
| 60 | 4.14 | 429 | 195 | 767 | 348 | 1179 | 535 | 3045 | 1381 | 4971 | 2255 |
| 70 | 4.83 | 488 | 221 | 872 | 396 | 1340 | 608 | 3460 | 1569 | 5648 | 2562 |
| 80 | 5.52 | 547 | 248 | 976 | 443 | 1501 | 681 | 3875 | 1758 | 6326 | 2869 |
| 90 | 6.21 | 605 | 274 | 1081 | 490 | 1662 | 754 | 4290 | 1946 | 7004 | 3177 |
| 100 | 6.89 | 664 | 301 | 1186 | 538 | 1822 | 826 | 4705 | 2134 | 7681 | 3484 |
| 120 | 8.27 | 781 | 354 | 1395 | 633 | 2144 | 973 | 5535 | 2511 | N/A | N/A |
| 140 | 9.65 | 898 | 407 | 1604 | 728 | 2466 | 1119 | 6366 | 2888 | N/A | N/A |
| 160 | 11.03 | 1016 | 461 | 1813 | 822 | 2787 | 1264 | 7196 | 3264 | N/A | N/A |
| 180 | 12.41 | 1133 | 514 | 2022 | 917 | 3109 | 1410 | 8026 | 3641 | N/A | N/A |
| 200 | 13.79 | 1250 | 567 | 2232 | 1012 | 3431 | 1556 | 8856 | 4017 | N/A | N/A |
| 220 | 15.17 | 1367 | 620 | 2441 | 1107 | 3752 | 1702 | 9686 | 4393 | N/A | N/A |
| 240 | 16.55 | 1484 | 673 | 2650 | 1202 | 4074 | 1848 | 10516 | 4770 | N/A | N/A |
| 260 | 17.93 | 1602 | 727 | 2859 | 1297 | 4395 | 1994 | 11347 | 5147 | N/A | N/A |
| 280 | 19.31 | 1719 | 780 | 3069 | 1392 | 4717 | 2140 | 12177 | 5523 | N/A | N/A |
| 300 | 20.68 | 1836 | 833 | 3278 | 1487 | 5039 | 2286 | 13007 | 5900 | N/A | N/A |
| 320 | 22.06 | 1953 | 886 | 3487 | 1582 | 5360 | 2431 | 13837 | 6276 | N/A | N/A |
| 340 | 23.44 | 2070 | 939 | 3696 | 1676 | 5682 | 2577 | 14667 | 6653 | N/A | N/A |
| 360 | 24.82 | 2188 | 992 | 3906 | 1772 | 6003 | 2723 | 15498 | 7030 | N/A | N/A |
| 380 | 26.20 | 2305 | 1046 | 4115 | 1867 | 6325 | 2869 | 16328 | 7406 | N/A | N/A |
| 400 | 27.58 | 2422 | 1099 | 4324 | 1961 | 6647 | 3015 | 17158 | 7783 | N/A | N/A |
| 420 | 28.96 | 2539 | 1152 | 4533 | 2056 | 6968 | 3161 | 17988 | 8159 | N/A | N/A |
| 440 | 30.34 | 2657 | 1205 | 4743 | 2151 | 7290 | 3307 | 18818 | 8536 | N/A | N/A |
| 460 | 31.72 | 2774 | 1258 | 4952 | 2246 | 7612 | 3453 | 19649 | 8913 | N/A | N/A |
| 480 | 33.09 | 2891 | 1311 | 5161 | 2341 | 7933 | 3598 | 20479 | 9289 | N/A | N/A |
| 500 | 34.47 | 3008 | 1364 | 5370 | 2436 | 8255 | 3744 | 21309 | 9666 | N/A | N/A |

Capacities

Valve Capacity for ASME B&PV Code Section XIII (UV), for Water

Based at 10% overpressure or 3 psig (0.21 barg), whichever is greater, showing 90% of actual capacity.

Units of ft³/min (m³/min) of air per minute are at a temperature of 60°F (15.6°C)

| Inlet Size | | in. | mm | in. | mm | in. | mm | in. | mm | in. | mm |
|--------------|-------|------------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|
| | | .50 | 12.7 | .75 | 19.1 | 1.00 | 25.4 | 1.50 | 38.1 | 2.00 | 50.8 |
| Orifice Area | | in ² | cm ² | in ² | cm ² | in ² | cm ² | in ² | cm ² | in ² | cm ² |
| | | 0.121 | 0.781 | 0.216 | 1.394 | 0.332 | 2.142 | 0.857 | 5.529 | 1.399 | 9.026 |
| Set Pressure | | Orifice Capacity | | | | | | | | | |
| psig | barg | gal/min | L/min | gal/min | L/min | gal/min | L/min | gal/min | L/min | gal/min | L/min |
| 15 | 1.03 | 14.78 | 56 | 26.39 | 100 | 40.57 | 154 | 104.72 | 396 | 170.95 | 647 |
| 20 | 1.38 | 16.71 | 63 | 29.83 | 113 | 45.86 | 174 | 118.38 | 448 | 193.25 | 732 |
| 30 | 2.07 | 20.02 | 76 | 35.73 | 135 | 54.93 | 208 | 141.80 | 537 | 231.48 | 876 |
| 40 | 2.76 | 23.11 | 87 | 41.26 | 156 | 63.43 | 240 | 163.73 | 620 | 267.29 | 1012 |
| 50 | 3.45 | 25.84 | 98 | 46.13 | 175 | 70.91 | 268 | 183.06 | 693 | 298.83 | 1131 |
| 60 | 4.14 | 28.31 | 107 | 50.54 | 191 | 77.68 | 294 | 200.53 | 759 | 327.36 | 1239 |
| 70 | 4.83 | 30.58 | 116 | 54.59 | 207 | 83.91 | 318 | 216.60 | 820 | 353.59 | 1338 |
| 80 | 5.52 | 32.69 | 124 | 58.36 | 221 | 89.70 | 340 | 231.55 | 877 | 378.00 | 1431 |
| 90 | 6.21 | 34.67 | 131 | 61.90 | 234 | 95.14 | 360 | 245.60 | 930 | 400.93 | 1518 |
| 100 | 6.89 | 36.55 | 138 | 65.25 | 247 | 100.29 | 380 | 258.89 | 980 | 422.62 | 1600 |
| 120 | 8.27 | 40.04 | 152 | 71.47 | 271 | 109.86 | 416 | 283.60 | 1074 | 462.96 | 1752 |
| 140 | 9.65 | 43.24 | 164 | 77.20 | 292 | 118.66 | 449 | 306.32 | 1160 | 500.05 | 1893 |
| 160 | 11.03 | 46.23 | 175 | 82.53 | 312 | 126.86 | 480 | 327.47 | 1240 | 534.58 | 2024 |
| 180 | 12.41 | 49.04 | 186 | 87.54 | 331 | 134.55 | 509 | 347.33 | 1315 | 567.00 | 2146 |
| 200 | 13.79 | 51.69 | 196 | 92.27 | 349 | 141.83 | 537 | 366.12 | 1386 | 597.67 | 2262 |
| 220 | 15.17 | 54.21 | 205 | 96.78 | 366 | 148.75 | 563 | 383.99 | 1454 | 626.85 | 2373 |
| 240 | 16.55 | 56.62 | 214 | 101.08 | 383 | 155.37 | 588 | 401.07 | 1518 | 654.72 | 2478 |
| 260 | 17.93 | 58.93 | 223 | 105.21 | 398 | 161.71 | 612 | 417.44 | 1580 | 681.45 | 2580 |
| 280 | 19.31 | 61.16 | 232 | 109.18 | 413 | 167.82 | 635 | 433.20 | 1640 | 707.18 | 2677 |
| 300 | 20.68 | 63.31 | 240 | 113.01 | 428 | 173.71 | 658 | 448.41 | 1697 | 732.00 | 2771 |
| 320 | 22.06 | 65.38 | 247 | 116.72 | 442 | 179.41 | 679 | 463.11 | 1753 | 756.01 | 2862 |
| 340 | 23.44 | 67.40 | 255 | 120.31 | 455 | 184.93 | 700 | 477.37 | 1807 | 779.27 | 2950 |
| 360 | 24.82 | 69.35 | 263 | 123.80 | 469 | 190.29 | 720 | 491.21 | 1859 | 801.87 | 3035 |
| 380 | 26.20 | 71.25 | 270 | 127.19 | 481 | 195.50 | 740 | 504.67 | 1910 | 823.84 | 3119 |
| 400 | 27.58 | 73.10 | 277 | 130.50 | 494 | 200.58 | 759 | 517.78 | 1960 | 845.24 | 3200 |
| 420 | 28.96 | 74.91 | 284 | 133.72 | 506 | 205.54 | 778 | 530.56 | 2008 | 866.12 | 3279 |
| 440 | 30.34 | 76.67 | 290 | 136.87 | 518 | 210.37 | 796 | 543.05 | 2056 | 886.50 | 3356 |
| 460 | 31.72 | 78.39 | 297 | 139.94 | 530 | 215.10 | 814 | 555.25 | 2102 | 906.42 | 3431 |
| 480 | 33.09 | 80.08 | 303 | 142.95 | 541 | 219.73 | 832 | 567.20 | 2147 | 925.92 | 3505 |
| 500 | 34.47 | 81.73 | 309 | 145.90 | 552 | 224.26 | 849 | 578.89 | 2191 | 945.01 | 3577 |

Valve Configuration Code

| Standard Connections | | | |
|----------------------|-------|-----------------|-----------------|
| Size | | Orifice Area | |
| in. | mm | in ² | cm ² |
| .50 | 12.70 | 0.121 | 0.781 |
| .75 | 19.05 | 0.216 | 1.394 |
| 1.00 | 25.40 | 0.332 | 2.142 |
| 1.50 | 38.10 | 0.857 | 5.529 |
| 2.00 | 50.80 | 1.399 | 9.026 |

| Temperature Class | |
|-------------------|---------------------------|
| Designation | Range |
| c | 400°F (204.4°C) AND BELOW |
| t | 401°F (204.4°C) AND ABOVE |

| Material Class Variations | |
|---------------------------|---|
| Designation | Description |
| CC | Standard Material |
| CY | Stainless Steel |
| SS | Stainless Steel |
| H1 | Hastelloy C (Base & Disc) |
| H2 | Hastelloy C (Internals, Except Spring Assembly) |
| H3 | Hastelloy C (All Except Spring Assembly) |
| H4 | Hastelloy C (Complete Valve) |
| M1 | Monel (Base, Disc, Adjusting Ring & Pin) |
| MB (M1-1/2) | Monel (M1+Disc Holder & Guide) |
| M2 | Monel (Internals, Except Spring Assembly) |
| M3 | Monel (All Except Spring Assembly) |
| M4 | Monel (Complete Valve) |
| S2 | Stainless Steel (Internals, Except Spring Assembly) |
| S3 | Stainless Steel (All Except Spring Assembly) |
| S4 | Stainless Steel (Complete Valve) |

| Interchangeability Number | | |
|---------------------------|---------------|----------------|
| Designation | Valve Type | |
| | Current Inlet | |
| | in. | mm |
| 1 | .50 to 1.50 | 12.70 to 38.10 |
| 2 | 2 | 50.80 |
| 3 | All sizes | |

| Seat Type | |
|-------------|-------------|
| Designation | Description |
| MS | Metal Seat |

| Cap/Lever Design | |
|------------------|-------------|
| Designation | Description |
| 31 | Screwed |
| 33 | Packed |
| 34 | Plain |

| Inlet Type | |
|-------------|------------------|
| Designation | Description |
| SC | Screwed |
| 05 | 150# Raised Face |
| 10 | 300# Raised Face |

| Outlet Type | |
|-------------|-------------|
| Designation | Description |
| SC | Screwed |

| Service | |
|-------------|-------------|
| Designation | Description |
| GS | Gas |
| LS | Liquid |
| SS | Steam |

Ordering a 1982 Series Safety Relief Valve

Specification Sheet

Page _____ of _____

Requisition No. _____

Job No. _____

Date _____

Revised By _____

General

1. Item Number:
2. Tag Number:
3. Service, Line or Equipment No:
4. Number Required:

Basis of Selection

5. Code:
 - ASME Sec. III
 - ASME Section XIII (UV)
 - OTHER Specify:
6. Fire OTHER Specify:
7. Rupture Disk: YES NO

Valve Design

8. Type: Safety Relief
9. Design:
 - Metal Seat Resilient Seat
 - API 527 Seat Tightness
 - OTHER Specify:

Connections

10. Flanged

| | | |
|--------------|---------|---------|
| Inlet Size: | Rating: | Facing: |
| Outlet Size: | Rating: | Facing: |
11. Threaded

| | | |
|---------|-------------------------------|-------------------------------|
| Inlet: | <input type="checkbox"/> MNPT | <input type="checkbox"/> FNPT |
| Outlet: | <input type="checkbox"/> MNPT | <input type="checkbox"/> FNPT |
12. OTHER Specify:

Materials

13. Base:
14. Bonnet:
15. Guide/Rings:
16. Seat Material:
 - Metal:
 - Resilient:
17. Spring:
18. Comply with NACE MRO 175 YES NO
19. OTHER Specify:
20. Cap and Lever Selection
 - Screwed Cap (Standard) Bolted Cap
 - Plain Lever Packed Lever Gag
21. OTHER Specify:

Service Conditions

22. Fluid and State:
23. Required Capacity per Valve & Units:
24. Molecular Weight or Specific Gravity:
25. Viscosity at Flowing Temperature & Units:
26. Operating Pressure & Units:
27. Blowdown: Standard Other
28. Latent Heat of Vaporization & Units:
29. Operating Temperature & Units:
30. Relieving Temperature & Units:
31. Built-up Back Pressure & Units:
32. Superimposed Back Pressure & Units:
33. Cold differential Test Pressure & Units:
34. Allowable Overpressure in Percent or Units:
35. Compressibility Factor, Z:
36. Ratio of Specific Heats:

Sizing and Selection

37. Calculated Orifice Area: _____ in² _____ cm²
38. Selected Orifice Area: _____ in² _____ cm²
39. Orifice Designation (letter):
40. Manufacturer:
41. Model Number:
42. Vendor Calculations Required: YES NO



CONTROLS SUPPLY CHAIN

VALVES ACTUATORS INSTRUMENTATIONS