

TYPE 2600 SAFETY RELIEF VALVE

The **Type 2600 Relief/Safety Relief valves** are designed to have a short 'simmer', then to open rapidly to the full open position, and to re-seat at a controlled pressure. When the valve is in its fully lifted position, the discharge area is controlled by the bore of the nozzle, which ensures that flow calculations for various mediums can be reliably made.

Valves are supplied in sizes ½" to 1" and can be manufactured in Gunmetal, Cast Steel and Stainless Steel with ends screwed male x female, female x female or flanged to customers requirements.

Valves can also be supplied with a packed lever lifting device, limit switch to indicate opening and closing of the valve, governing ring to limit adjustment of the spring to the set point, for ease of re-setting.

Installation

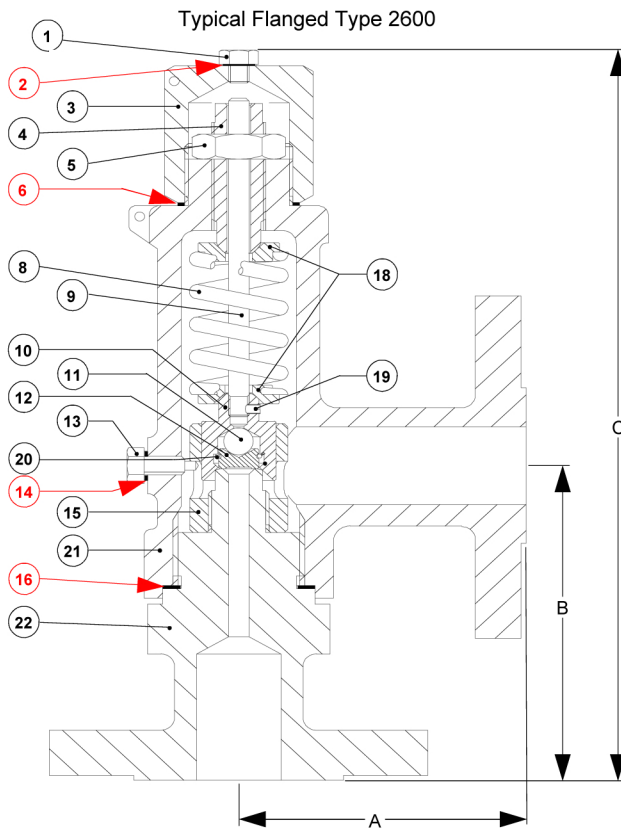
During installation of the valve avoid bumping or shaking to prevent damaging the flange faces and misalignment of the trim. Blow through the circuit line on which the valve is to be installed, this is to remove any foreign bodies. Clean the valve and nozzle connections thoroughly; foreign bodies on the nozzle may damage the valve seat during popping. Install the valve in a vertical position only, with the inlet downwards. After the valve has been installed make it pop at least twice to allow automatic alignment of the trim. Misalignment may be caused accidentally during transport or during installation.

Maintenance

The most frequent operation to be carried out is a precise check, made at regular intervals, to observe whether any obvious faults exist in the different parts of the valve. It should be checked first of all that there are no leakages: these must always be avoided, especially when the medium is poisonous, highly volatile or very expensive. Carry out periodic venting for valves with a lifting device to check regular operation. During these tests the pressure must be at least 75% of the full working pressure.

Overhaul

To overhaul the valve the following procedure should be followed: remove the cap, mark the position of the adjusting screw relevant to the locknut, so the correct position may be found during re-setting. Loosen the adjusting screw and locknut to relax the spring, remove the lockscrew from the body, to free the blowdown ring. Unscrew the nozzle from the body and remove the complete assembly from the inside of the body. Check the contact faces of the seat and disc, should any scratching or pitting be present the surfaces will need to be relapped. Replace all of the joints then assemble the valve in reverse order. To prevent damage to the disc and nozzle faces, place a screwdriver in the spindle slot. This will stop the spindle turning whilst re-setting the valve.



These Items are recommended spares.

| Item | Description | Material (S ₂) | Material (S ₃) |
|------|-------------------|----------------------------|----------------------------|
| 1 | Cap Plug/Gag | Stainless Steel | Stainless Steel |
| 2 | Joint (Plug/Gag) | Non Asbestos | Non Asbestos |
| 3 | Cap | Carbon Steel | Stainless Steel |
| 4 | Adjusting Screw | Stainless Steel | Stainless Steel |
| 5 | Locknut | Carbon Steel | Stainless Steel |
| 6 | Joint (Cap) | Non Asbestos | Non Asbestos |
| 8 | Spring | Stainless Steel | Stainless Steel |
| 9 | Spindle | Stainless Steel | Stainless Steel |
| 10 | Disc Holder | Stainless Steel | Stainless Steel |
| 11 | Ball | Stainless Steel | Stainless Steel |
| 12 | Disc | Stainless Steel | Stainless Steel |
| 13 | Lockscrew | Stainless Steel | Stainless Steel |
| 14 | Joint (Lockscrew) | Non Asbestos | Non Asbestos |
| 15 | Blowdown Ring | Stainless Steel | Stainless Steel |
| 16 | Joint (Body) | Non Asbestos | Non Asbestos |
| 18 | Spring Carrier | Stainless Steel | Stainless Steel |
| 19 | Grubscrew | Stainless Steel | Stainless Steel |
| 20 | Circlip | Stainless Steel | Stainless Steel |
| 21 | Body | Carbon Steel | Stainless Steel |
| 22 | Nozzle | Stainless Steel | Stainless Steel |

| Valve Size | A | B | C | Weight |
|-----------------------|------|------|------|--------|
| <i>Screwed Valves</i> | | | | |
| ½" x 1" | 44.5 | 85.5 | 219 | 3.0 kg |
| ¾" x 1" | | | | |
| 1" x 1" | | | | |
| <i>Flanged Valves</i> | | | | |
| ½" x 1" | 81* | 97* | 231* | 6.0 kg |
| ¾" x 1" | | | | |
| 1" x 1" | | | | |

* Dimensions given are only for ANSI150 RF flanges



TYPE 2600 RELIEF/SAFETY RELIEF VALVE

| Saturated Steam Capacities In pounds per hour (10% Accumulation) | | | Water Capacities In U. S. Gallons per minute (25% Accumulation) | | | Air Capacities in cubic feet Free air per hour (10% Accumulation) | | |
|--|------------------------|------|---|------------------------|------|---|------------------------|------|
| Set Pressure Psi Gauge | Orifice Area (sq. in.) | | Set Pressure Psi Gauge | Orifice Area (sq. in.) | | Set Pressure Psi Gauge | Orifice Area (sq. in.) | |
| | 0.04 | 0.06 | | 0.04 | 0.06 | | 0.04 | 0.06 |
| 10 | 45 | 68 | 10 | 3.3 | 5 | 10 | 15 | 23 |
| 30 | 59 | 89 | 30 | 5.8 | 8.6 | 30 | 29 | 43 |
| 50 | 122 | 184 | 50 | 7.5 | 11.2 | 50 | 42 | 63 |
| 70 | 161 | 242 | 70 | 8.8 | 13.2 | 70 | 55 | 82 |
| 100 | 219 | 328 | 100 | 10.5 | 16 | 100 | 75 | 112 |
| 150 | 315 | 473 | 150 | 13 | 19.4 | 150 | 108 | 162 |
| 200 | 412 | 618 | 200 | 15 | 22.4 | 200 | 141 | 211 |
| 250 | 508 | 763 | 250 | 16.7 | 25 | 250 | 174 | 261 |
| 300 | 605 | 907 | 300 | 18.3 | 27.4 | 300 | 207 | 310 |
| 350 | 700 | 1052 | 350 | 20 | 29.6 | 350 | 240 | 360 |
| 400 | 798 | 1197 | 400 | 21 | 31.6 | 400 | 273 | 409 |
| 450 | 895 | 1342 | 450 | 22.3 | 33.6 | 450 | 306 | 458 |
| 500 | 990 | 1487 | 500 | 23.6 | 35.4 | 500 | 339 | 508 |
| 600 | 1185 | 1776 | 600 | 26 | 38.7 | 600 | 405 | 607 |
| 700 | 1377 | 2066 | 700 | 28 | 42 | 700 | 470 | 706 |
| 800 | 1570 | 2356 | 800 | 30 | 44.7 | 800 | 537 | 805 |
| 900 | 1764 | 2645 | 900 | 31.7 | 47.5 | 900 | 603 | 904 |
| 1000 | 1957 | 2935 | 1000 | 33.4 | 50 | 1000 | 669 | 1003 |
| 1200 | 2343 | 3515 | 1200 | 36.5 | 55 | 1200 | 800 | 1200 |
| 1500 | 2922 | 4383 | 1500 | 41 | 61 | 1500 | 1000 | 1500 |
| 1700 | 3310 | 4963 | 1700 | 43.5 | 65 | 1700 | 1130 | 1700 |
| 2000 | 3900 | 5830 | 2000 | 47 | 71 | 2000 | 1330 | 1995 |

Disclaimer

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