

Pressure Relief Valve

Direct acting, Poppet/Ball type
Type : PRV..

Technical Data

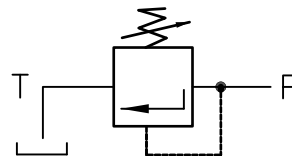
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|-----------------------|--|
| Design | : Screw-in Cartridge Valve |
| Pressure Setting | : Set screw / Knob adjustment |
| Mounting Interface | : Screw-in Threaded |
| Nominal Size | : 10mm [NG10] |
| Max. Pressure | |
| (inlet) | : 630 bar [9150 psi] |
| (outlet) | : 315 bar [4568 psi] |
| Pr. setting [Bar] | : 25, 50, 100, 200, 315, 400, 630. |
| Design Standard | : ISO 4126-1; ISO 12516-2 |
| Test Pressure (PT) | : 1.43 x PS (as per CE/PED) |
| Temperature range | : -20°C to +80°C (Standard) -4°F to +176°F (Standard) |
| Port Cavity | : M35x1.5 - refer fig.2 |
| Fluid | |
| Fluid Viscosity range | : 10 to 400 cSt |
| Recommended visc. | : 32 cSt |
| Fluid contamination | : Class 20/18/15 |
| degree | : according to ISO 4406:1999 or better on request. |

Material of Construction

| | |
|-------|----------------------------------|
| Body | : Carbon Steel / Stainless Steel |
| Seals | : Nitrile / Viton. |



Hydraulic Symbol



Description

The PRV.. type Pressure Relief Valves are direct-acting poppet type Safety Valves. These valves are screw-in cartridge type & designed to prevent over-pressure in hydraulic system.

The PRV.. valves are used to safely limit the maximum permissible pressure to the preset value thereby providing safety to the system in general and downstream components in specific.

These valves have a poppet seat / ball operating against a spring mechanism. When the system pressure reaches the preset value the poppet / ball in the valve opens thereby creating a path for the pressurised fluid to flow from P to T and drain to the tank line.

For better pressure settings over the entire range, the pressure range is sub-divided into 7 pressure ranges.

Operation Principle

The valve consists of a body, spring, poppet with damping piston [upto 400 Bar] or ball [630 Bar] and adjustment mechanism.

The system pressure setting can be controlled infinitely by using the adjustment mechanism and locked at the desired preset value.

The valve is a cartridge design and screwed into the cavity in the manifold block. When the system pressure in P line rises above the value set on the spring the poppet opens against the spring. The hydraulic fluid now flows from the P line into the T line and gets drained (fig.1).

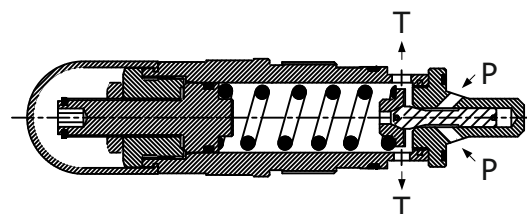


Fig.1

Technical specifications subject to change.

Ordering Code

1 2 3 4 5 6 7 8
PRVS - **10** - **315** /

| | | | |
|---|----------------------------|--|---|
| 1 | Series | Pressure Relief Valve - with Set Screw Pressure Relief Valve - with Knob | = PRVS = PRVK |
| 2 | Size | NG10 | = 10 (standard) |
| 3 | Pressure Rating | Upto 25 bar [362 psi] = 025 Upto 50 bar [725 psi] = 050 Upto 100 bar [1450 psi] = 100 Upto 200 bar [2900 psi] = 200 Upto 315 bar [4568 psi] = 315 Upto 400 bar [5800 psi] = 400 Upto 630 Bar [9150 psi] = 630 | Poppet Seat design Ball design |
| 4 | Set Pressure | Not set Set Relief Pressure - in bar | = - blank (standard) = xxx [mention pressure] |
| 5 | Body | Carbon Steel SS316L | = - blank (standard) = X |
| 6 | Sealing | NBR/Nitrile Viton | = - blank (standard) = V |
| 7 | Certification | Factory Certified CE/PED Certified EAC Certified | = - blank (standard) = 8 = 1 |
| 8 | Pressure Adjustment | Adjustable Factory Preset & Sealed [only PRVS] | = - blank (standard) = S |

* Before ordering, check for availability.



Dimensions in mm [inch]

Other Products

