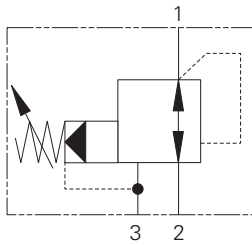


PRV2-10 - Pressure Reducing/Relieving Valve

Spool, pilot operated

38 L/min (10 USgpm) • 240 bar (3500 psi)



Operation

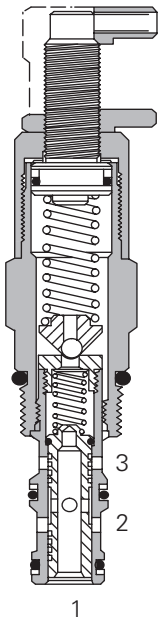
This valve is normally open allowing inlet oil to pass to the regulated line until the outlet (regulated) pressure exceeds the setting of the pilot section. When this setting is achieved a pilot flow occurs, causing a pressure imbalance across the main spool, which then moves throttling the inlet flow

and preventing any further pressure rise in the regulated line. If any external force causes the regulated pressure to rise more than 5-10% above the setting, the main spool moves back further, opening the regulated port to the tank line, thus working as a relief valve.

Features

Cartridge construction with hardened, ground and honed working parts giving smooth, stable operation over all pressure ranges.

Sectional View



Performance Data

Ratings and Specifications

Performance data is typical with fluid at 21,8 cSt (105 SUS) and 49° C (120° F)

| | |
|--|---|
| Typical application pressure (all ports) | 240 bar (3500 psi) |
| Cartridge fatigue pressure (infinite life) | 210 bar (3000 psi) |
| Rated flow | 38 L/min (10 USgpm) |
| Cavity | C-10-3 |
| Standard housing materials | Aluminum or steel |
| Temperature range | -40° to 120°C (-40° to 248°F) |
| Fluids | All general purpose hydraulic fluids such as: MIL-H-5606, SAE 10, SAE 20, etc. |
| Filtration | Cleanliness Code 18/16/13 |
| Weight cartridge only | 0,24 kg (0.54 lbs) |
| Seal kits | 565804 Buna-N 889599 Viton® |

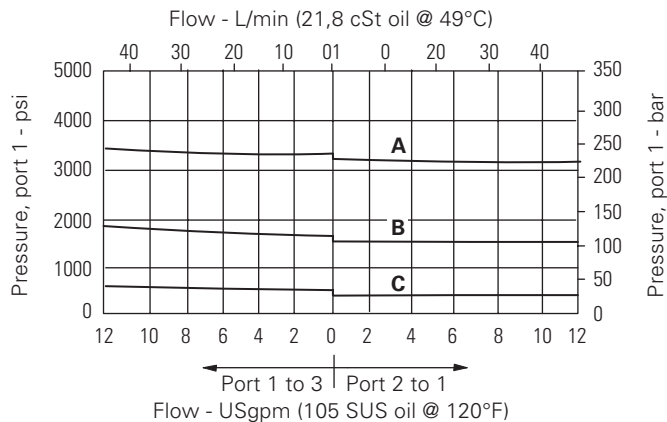
Viton is a registered trademark of E.I. DuPont

Description

This is a pilot operated screw in cartridge pressure reducing / relieving valve. The valve maintains a constant outlet pressure in hydraulic sub-systems regardless of fluctuations in the primary system. In addition to this it will act as a relief valve if the pressure in the sub-system rises higher than the setting of the valve directing excess fluid to tank.

Pressure Override Curves

Cartridge only



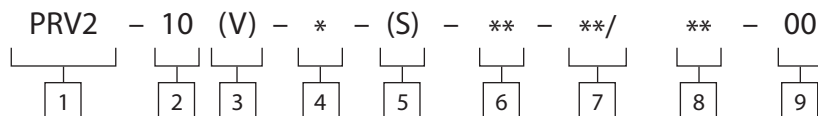
- A - 35 spring
- B - 20 spring
- C - 3 spring

PRV2-10-PressureReducing/RelievingValve

Spool, pilot operated

38 L/min (10 USgpm) • 240 bar (3500 psi)

Model Code



1 Function

PRV2 - Pressure reducing/
relieving valve

2 Size

10 - 10 size

3 Seal material

Blank - Buna-N
V - Viton®

4 Adjustment

C - Cap
F - Factory set
I - Internal
K - Knob
S - Screw

5 Valve Housing Material

Blank - Aluminum
S - Steel

6 Port Size

0 - Cartridge only

Code Port Size Housing Number

| | | Aluminum Light duty | Aluminum Fatigue rated | Steel Fatigue rated |
|----|-----------|------------------------|---------------------------|------------------------|
| 3B | 3/8" BSPP | 02-173358 | - | - |
| 2G | 1/4" BSPP | - | 876705 | 02-175127 |
| 3G | 3/8" BSPP | - | 876714 | 02-175128 |
| 6H | SAE 6 | - | 876704 | - |
| 8H | SAE 8 | - | 876711 | - |
| 6T | SAE 6 | 566162 | - | 02-175124 |
| 8T | SAE 8 | - | - | 02-175125 |

See section J for housing.

7 Cracking Pressure Range

Note: Code based on pressure
in psi.

3 - 3,5-20 bar
(50-300 psi)
20 - 7-140 bar
(100-2000 psi)
35 - 17-240 bar
(250-3500 psi)

8 Factory Set Reduced Pressure

Within ranges in
Blank - Normal factory
setting at approximate mid-
range. User requested settings
in 3,45 bar (50 psi) steps,
Coded as in the following
examples:
10 - 70 bar (1000 psi)
10.5 - 72,4 bar (1050 psi)

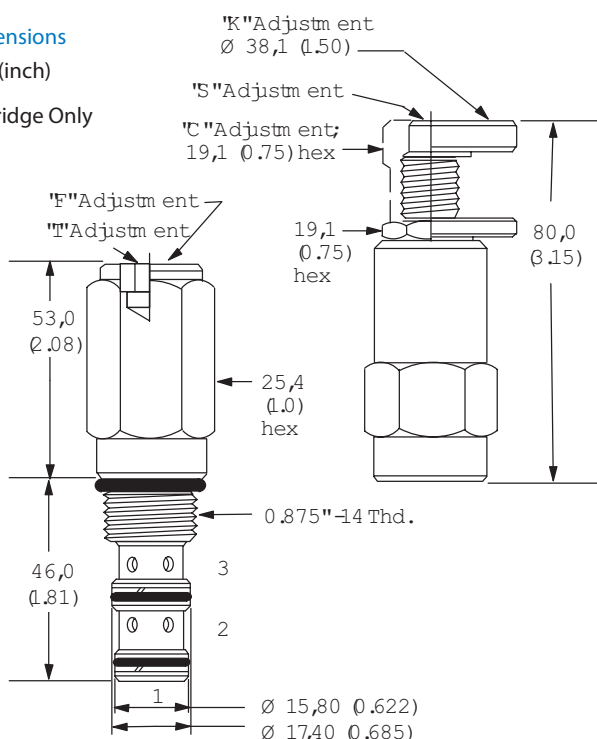
9 Special Features

00 - None
(Only required if valve has special
features, omitted if "00.")
SS - 316 Stainless Steel
external components

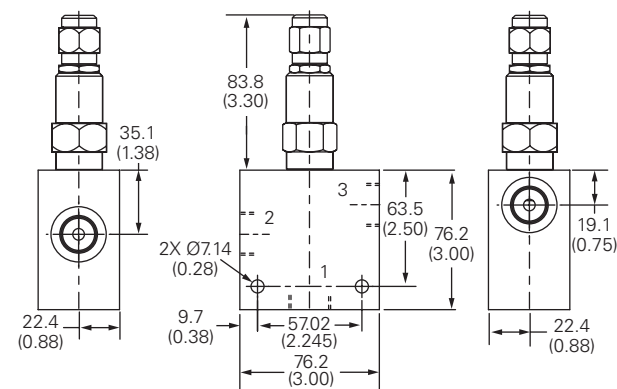
Dimensions

mm (inch)

Cartridge Only



Installation Drawing (Steel)



Torque cartridge in housing
A - 47-54 Nm (35-40 ft. lbs)
S - 68-75 Nm (50-55 ft. lbs)



WARNING

Aluminum housings
can be used for
pressures up to 210 bar (3000
psi). Steel housings must be
used for operating pressures
above 210 bar (3000 psi).