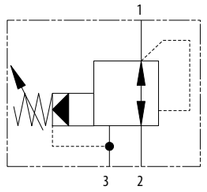
PRV2-16 - Pressure reducing/relieving valve

Spool, pilot operated
151 L/min (40 USgpm) • 350 bar (5000 psi)



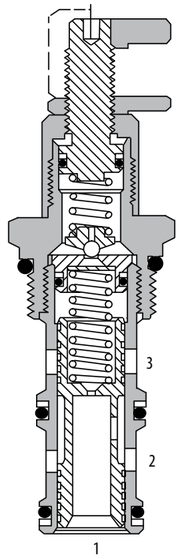
Operation

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)	350 bar (5000 psi)
Cartridge fatigue pressure (infinite life)	350 bar (5000 psi)
Rated flow	151 L/min (40 USgpm)
Cavity	C-16–3
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	0,40 kg. (0.89 lbs.)
Seal kits	565811 Buna–N 889610 Viton®

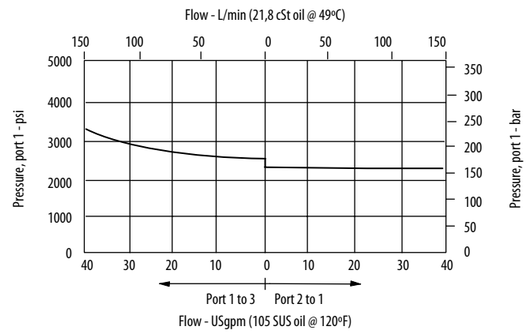
Viton is a registered trademark of E.I. DuPont

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 drop curve

Cartridge only



Where measurements are critical request certified drawings. We reserve the right to change specifications without notice.

PRV2-16 - Pressure reducing/relieving valve

Spool, pilot operated
151 L/min (40 USgpm) • 350 bar (5000 psi)

Model code

PRV2 – 16 (V) – * – (S) – * – **/ ** – 00**

1 2 3 4 5 6 7 8 9

1 Function

PRV2 - Pressure reducing/ relieving valve

2 Size

16 - 16 size

3 Seal material

Blank - Buna-N
V - Viton®

4 Adjustment

C - Cap
K - Knob
S - Screw

5 Valve housing material

S - Steel
A - Aluminum

6 Port size

0 - Cartridge only

Code	Port size	Housing number		
		Aluminum light duty	Aluminum fatigue rated	Steel fatigue rated
6B	3/4" BSPP	02–175465	–	–
4G	1/2" BSPP	–	876720	02–175131
6G	3/4" BSPP	–	876722	02–175132
10H	SAE 10	–	876721	–
12H	SAE 12	–	876723	–
10T	SAE 10	–	–	02–175129
12T	SAE 12	566152	–	02–175130

See section J for housing.

7 Cracking pressure range

Note: Code based on pressure in psi.
30 - 34-210 bar (500-3000 psi)
60 - 70-415 bar (1000-6000 psi)

Torque cartridge in housing
A - 108-122 Nm (80-90 ft. lbs)
S - 136-149 Nm (100-110 ft. bs)

8 Factory set reduced pressure

Within ranges in 7

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)

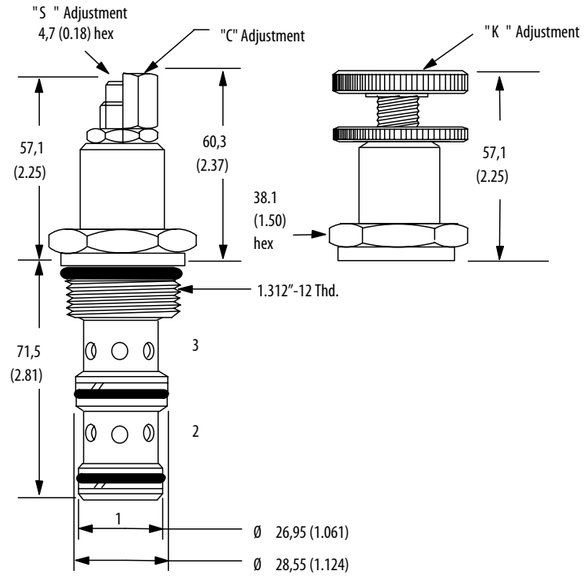
9 Special features

00 - None
(Only required if valve has special features, omitted if "00.")

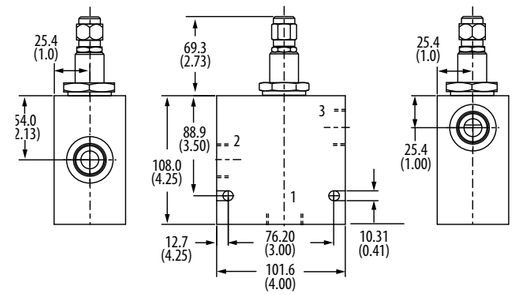
Dimensions

mm (inch)

Cartridge only



Installation drawing (Steel)



⚠ 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).

Where measurements are critical request certified drawings. We reserve the right to change specifications without notice.