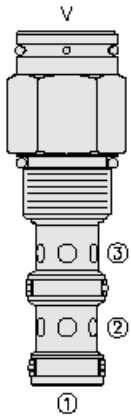




Overview



Description

The PD12-30 is a screw-in, cartridge style, pilot-operated, spool type, normally open, hydraulic directional valve.

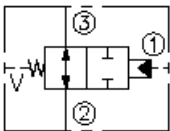
Operation

In neutral position the valve allows flow from port 3 to 2 bi-directionally. The spring chamber is vented to atmosphere "v" which is internally o-ring sealed from the cartridge flow paths. On remote pilot signal at port 1, the valve's spool shifts to block flow from port 3 to 2 while port 2 is blocked. Because of the vented spring chamber, the cartridge may be fully pressurized at any port without affecting required pilot pressure.

Features

- Hardened spool and cage for long life.
- Cost-effective cavity.

Symbol



Ratings

Pressure Ratings

Pressure rating 241 bar (3500 psi)

Temperature Ratings

Operating fluid temperature -40 to 120 °C (-40 to 248 °F)

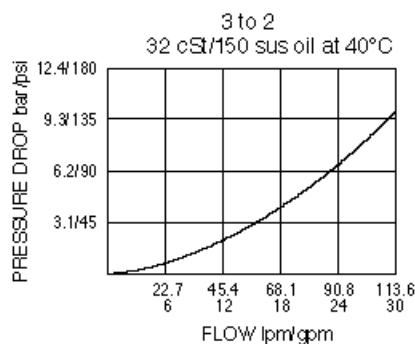
Flow Ratings

Maximum internal leakage 245 ml/min (15 in³/min) - **Note:** From port 1 to 2 and from port 2 to 3 (when piloted), at 207 bar (3000 psi)
0 lpm (0 gpm) - **Note:** From port 1 and 2 with sealed spool

Properties

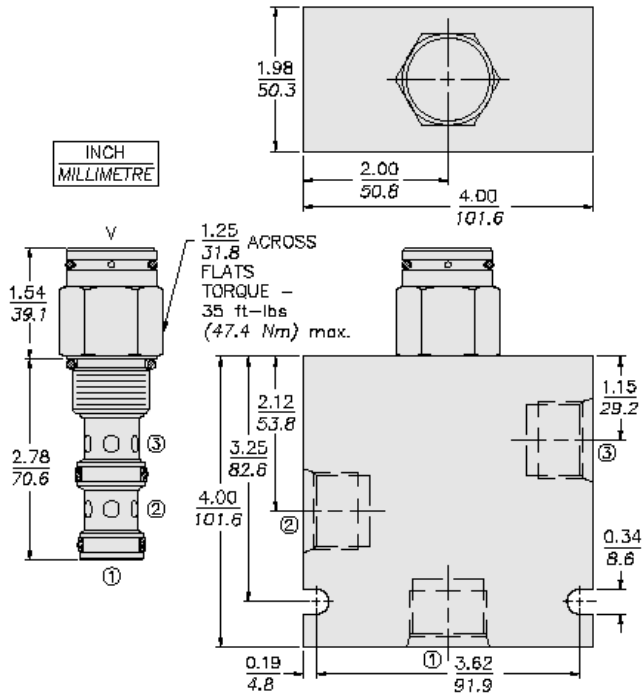
Materials steel with work surfaces hardened. External surfaces are zinc plated
Unit weight 0.23 kg (0.50 lb)

Performance





Dimensions



Installation Specifications

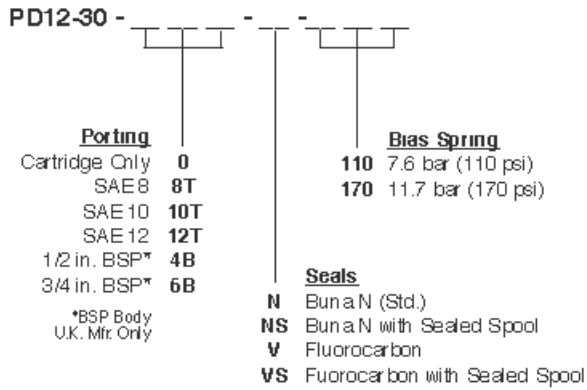
| | |
|-------------------------------|-----------------------------------|
| Cavity | VC12-3 |
| Cartridge installation torque | 44.7 to 50.2 N-m (33 to 37 ft-lb) |

Accessories

| | | |
|----------|------------|-----------------------------|
| Seal kit | SK12-3N-MM | - Note: Buna N |
| | SK12-3V-MM | - Note: Viton |
| | SK12-3P-MM | - Note: Polyurethane |



Order Code



Model Options

PD12-30-H-J-R

H Line Body

| CODE | DESCRIPTION |
|------|---------------------|
| 0 | No Body |
| 8T | Aluminum SAE 8 |
| 10T | Aluminum SAE 10 |
| 12T | Aluminum SAE 12 |
| 12TD | Ductile Iron SAE 12 |

J Seal

| CODE | DESCRIPTION |
|------|-----------------------------------|
| N | Buna-N |
| NS | Buna-N with a Sealed Spool |
| V | Fluorocarbon |
| VS | Fluorocarbon with a Sealed Spool |
| P | Polyurethane |
| PS | Polyurethane with a Sealed Spool |
| U | PPDI Urethane |
| US | PPDI Urethane with a Sealed Spool |

R Spring

| CODE | DESCRIPTION |
|------|---------------------|
| 110 | 110 psi Bias Spring |
| 170 | 170 psi Bias Spring |