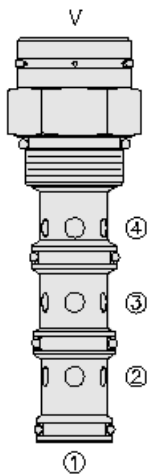




Overview



Description

The PD16-40 is a screw-in, cartridge style, pilot operated, spool-type, hydraulic directional valve.

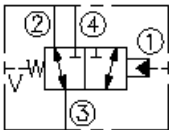
Operation

In the neutral position the valve allows flow from port 3 to 2 bidirectionally, while port 4 is blocked. 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 open port 3 and 4 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.
- Optional sealed pilot
- Industry-common cavity.

Symbol



Ratings

Pressure Ratings

Pressure rating 241 bar (3500 psi)

Temperature Ratings

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

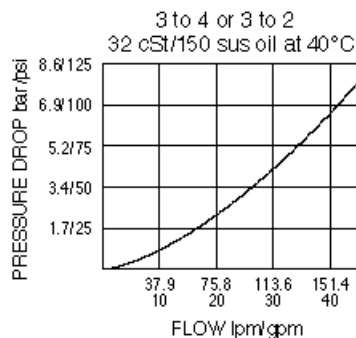
Flow Ratings

Maximum internal leakage 245 ml/min (15 in³/min) bar (3000 psi) **- Note:** From port 1 to 2 with sealed spool at 207

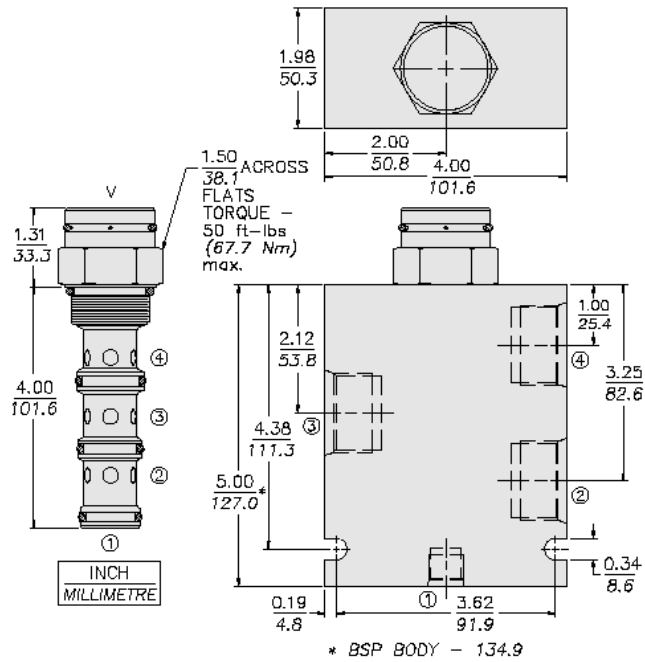
Properties

Materials Steel with work surfaces hardened, external surfaces are zinc plated
Unit weight 0.52 kg (1.15 lb)

Performance



Dimensions



Installation Specifications

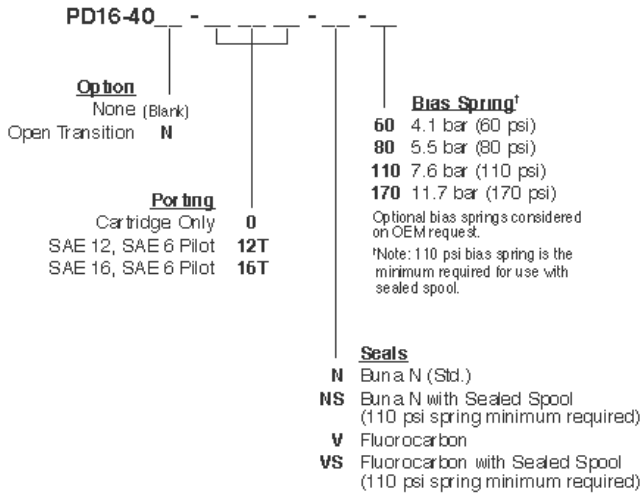
| | |
|-------------------------------|-----------------------------------|
| Cavity | VC16-4 |
| Cartridge installation torque | 44.7 to 50.2 N-m (33 to 37 ft-lb) |

Accessories

| | | |
|----------|-------------|-----------------------------|
| Seal kit | SK16-4N-MMM | - Note: Buna N |
| | SK16-4V-MMM | - Note: Viton |
| | SK16-4P-MMM | - Note: Polyurethane |



Order Code



Model Options

PD16-40B-H-J-R

B Spool Option

| CODE | DESCRIPTION |
|-------|-----------------------------|
| BLANK | Standard |
| N | Normally Open in Transition |

H Line Body

| CODE | DESCRIPTION |
|------|---------------------|
| 0 | No Body |
| 16T | Aluminum SAE 16 |
| 12TD | Ductile Iron SAE 12 |
| 16TD | Ductile Iron SAE 16 |

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 |
|------|---------------------|
| 60 | 60 psi Bias Spring |
| 80 | 80 psi Bias Spring |
| 110 | 110 psi Bias Spring |
| 170 | 170 psi Bias Spring |