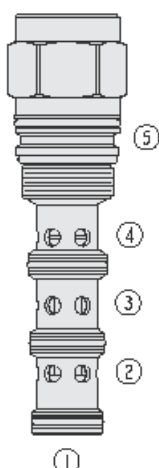




Overview



Description

The PD16-S51 is a screw-in, cartridge style, pilot operated, spool-type hydraulic directional valve.

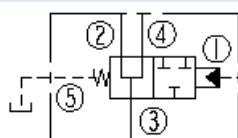
Operation

In the neutral position flow is allowed between ports 2,3,and 4. On remote pilot signal at port 1 the valve's spool shifts to block all ports. The spring chamber is vented to the tank through port 5. The vented spring chamber allows the valve to be fully pressurized at port 1, 2, 3,and 4 without affecting required pilot pressure. Pressure at port 5 will affect required pilot pressure.

Features

- Hardened spool and cage for long life.
- 70, 90 and 140 psi bias springs available.

Symbol



Ratings

Pressure Ratings

Pressure rating 241 bar (3500 psi)

Temperature Ratings

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

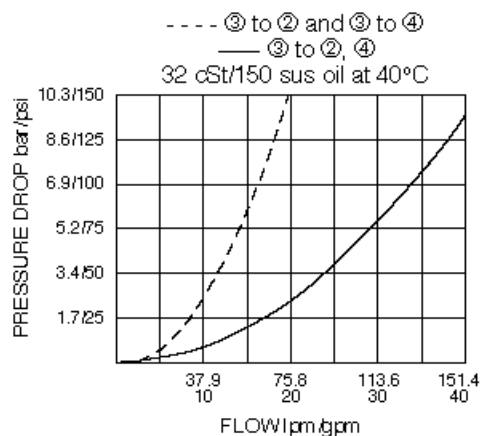
Flow Ratings

Maximum internal leakage 410 ml/min (25 in³/min) - **Note:** Between ports 3 and 2 at 207 bar (3000 psi)
820 ml/min (50 in³/min) - **Note:** Between ports 3 and 4

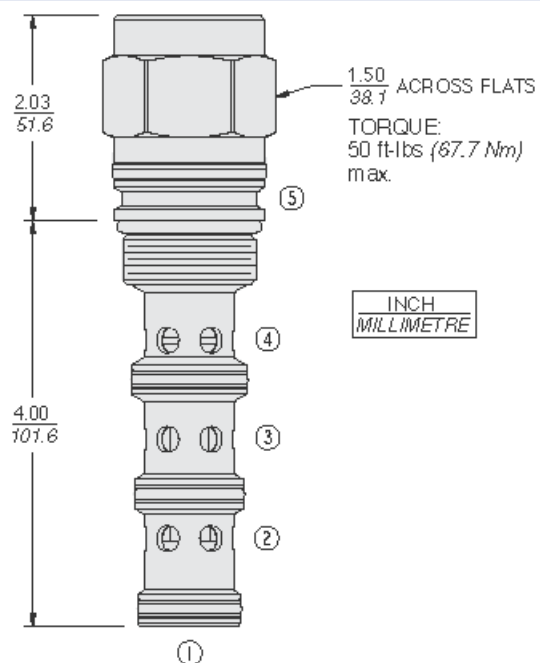
Properties

Materials Steel with work surfaces hardened, external surfaces are zinc plated. Buna N o-rings standard

Performance



Dimensions

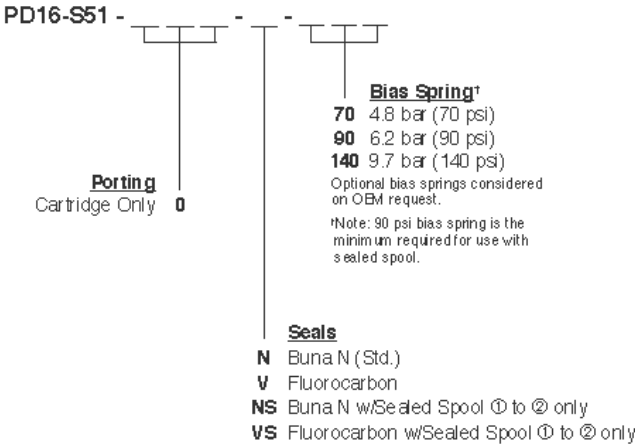


Installation Specifications

Cavity	VC16-S5
Cartridge installation torque	62.4 to 73.2 N-m (46 to 54 ft-lb)



Order Code



Model Options

PD16-S51-H-J-R

H Line Body

CODE	DESCRIPTION
0	No Body

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
70	70 psi Bias Spring
90	90 psi Bias Spring
140	140 psi Bias Spring