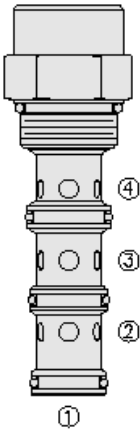




Overview



Description

The PD16-42 is a screw-in, cartridge style, pilot operated, spool-type hydraulic directional valve.

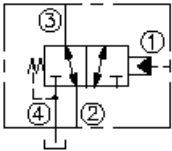
Operation

In the neutral position the valve allows flow from port 3 to 2, while port 4 is blocked. On remote pilot signal at port 1 the valve shifts to open from 3 to 4, while blocking flow to port 2. Since port 4 is common to the spring chamber, pressure on port 4 will directly (1:1) affect the pilot pressure required and must be added to the bias spring value.

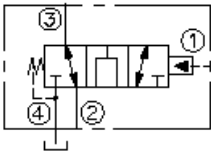
Features

- Hardened spool and cage for long life.
- Optional sealed pilot
- Industry-common cavity.

Symbol



Open Transition:



Ratings

Pressure Ratings

Pressure rating 207 bar (3000 psi)

Temperature Ratings

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

Flow Ratings

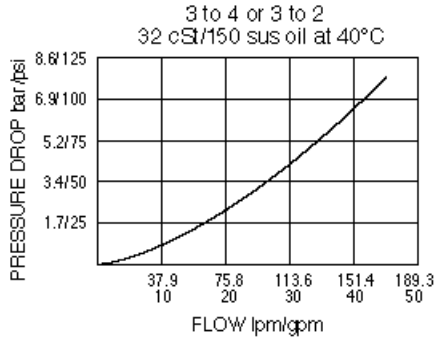
Maximum internal leakage 245 ml/min (15 in³/min) - **Note:** At 207 bar (3000 psi)
0 lpm (0 gpm) - **Note:** From port 1 to 2 with sealed spool

Properties

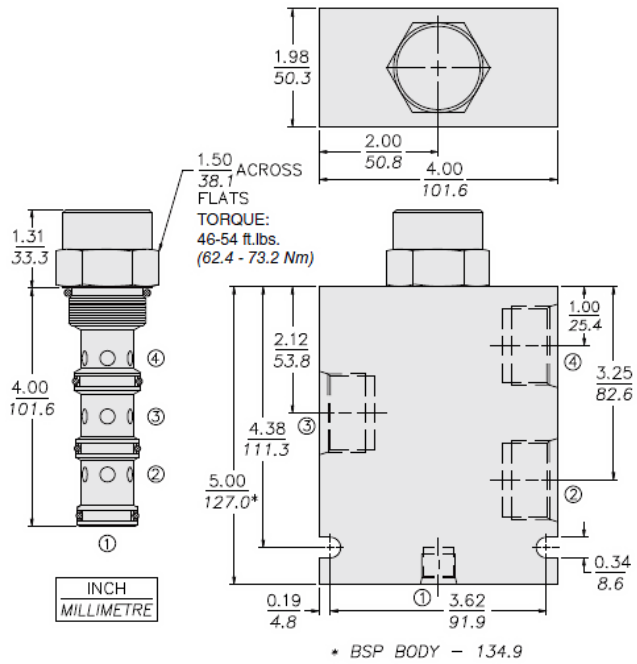
Materials steel with work surfaces hardened, external surfaces are zinc plated
Unit weight 0.52 kg (1.15 lb)



Performance



Dimensions



Installation Specifications

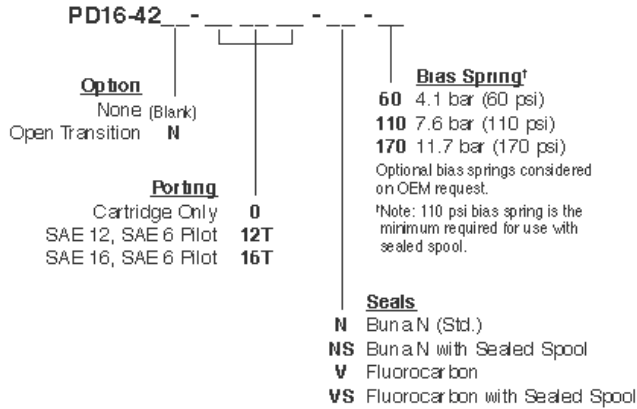
Cavity	VC16-4
Cartridge installation torque	62.4 to 73.2 N-m (46 to 54 ft-lb)

Accessories

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



Order Code



Model Options

PD16-42B-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