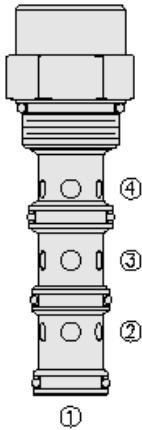




## Overview



### Description

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

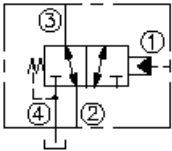
### Operation

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.

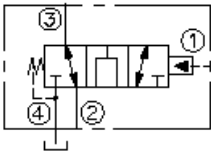
### Features

- 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

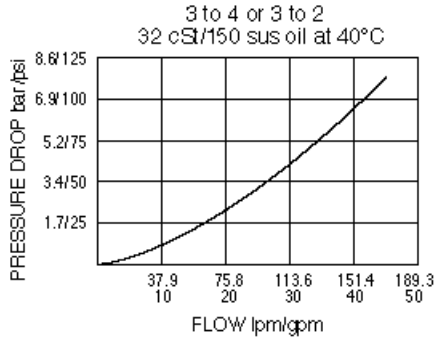
Maximum internal leakage 245 ml/min (15 in<sup>3</sup>/min) - **Note:** At 207 bar (3000 psi)  
0 lpm (0 gpm) - **Note:** From port 1 to 2 with sealed spool

## Properties

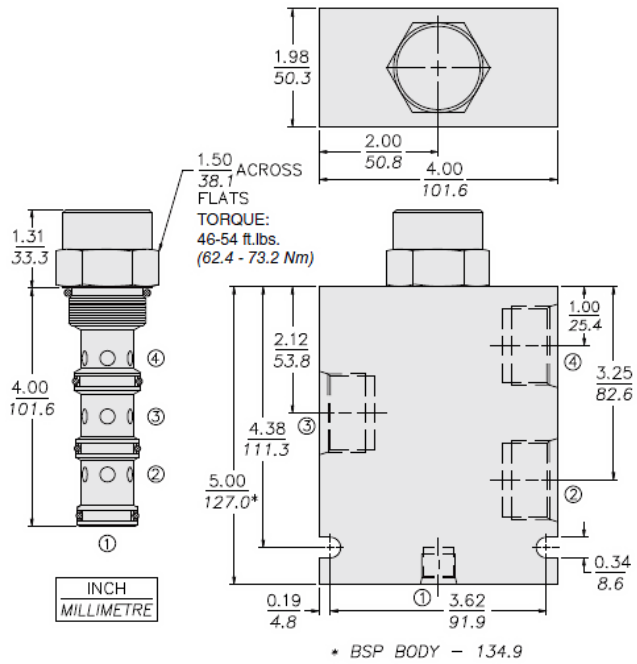
Materials steel with work surfaces hardened, external surfaces are zinc plated  
Unit weight 0.52 kg (1.15 lb)



## Performance



## Dimensions



## Installation Specifications

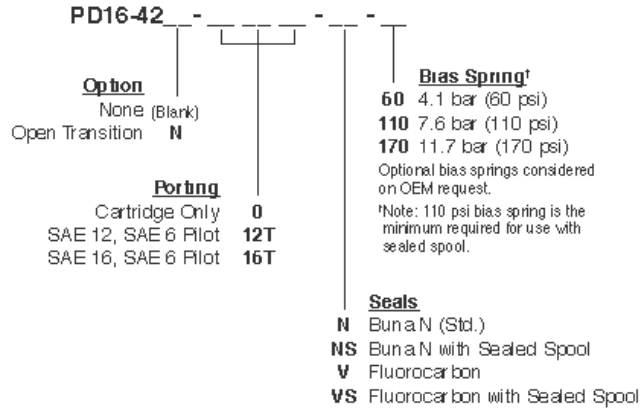
Cavity	VC16-4
Cartridge installation torque	62.4 to 73.2 N-m (46 to 54 ft-lb)

## Accessories

Seal kit	SK16-4N-MMM	- <b>Note:</b> Buna N
	SK16-4V-MMM	- <b>Note:</b> Viton
	SK16-4P-MMM	- <b>Note:</b> Polyurethane
Housings		



Order Code



POSITION	CODE	DESCRIPTION
		PD16-42B-H-J-R
B		Spool Option
B	BLANK	Standard
B	N	Normally Open in Transition
H		Line Body
H	0	No Body
H	16T	Aluminum SAE 16
H	12TD	Ductile Iron SAE 12
H	16TD	Ductile Iron SAE 16
J		Seal
J	N	Buna-N
J	NS	Buna-N with a Sealed Spool
J	V	Fluorocarbon
J	VS	Fluorocarbon with a Sealed Spool
J	P	Polyurethane
J	PS	Polyurethane with a Sealed Spool
J	U	PPDI Urethane
J	US	PPDI Urethane with a Sealed Spool
R		Spring
R	60	60 psi Bias Spring
R	80	80 psi Bias Spring
R	110	110 psi Bias Spring
R	170	170 psi Bias Spring