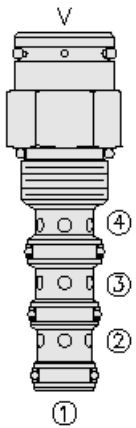




Overview



Description

The pd10-40xx is a screw-in, cartridge style, pilot-operated, spool type, hydraulic directional valve.

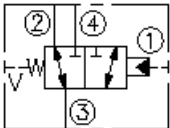
Operation

In 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 to 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.
- Industry common cavity.

Symbol



Ratings

Pressure Ratings

Pressure rating 241 bar (3500 psi)

Flow Ratings

Flow rating - **Note:** See performance graph

Temperature Ratings

Operating fluid temperature	-40 to 100 °C (-40 to 212 °F)	- Note: With buna N seals
	-26 to 204 °C (-15 to 400 °F)	- Note: With fluorocarbon seals
	-54 to 107 °C (-65 to 225 °F)	- Note: With polyurethane and urethane seals
Storage temperature	-40 to 70 °C (-40 to 160 °F)	
Ambient temperature	-40 to 90 °C (-40 to 194 °F)	

Operating Parameters

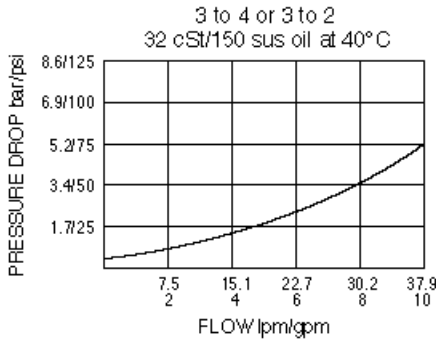
Fluids	Mineral based or synthetic hydraulic fluid with lubricating properties	
Fluid viscosity range	7.4 to 420 cSt	
Maximum operating contamination level	18/16/13 per ISO 4406	

Properties

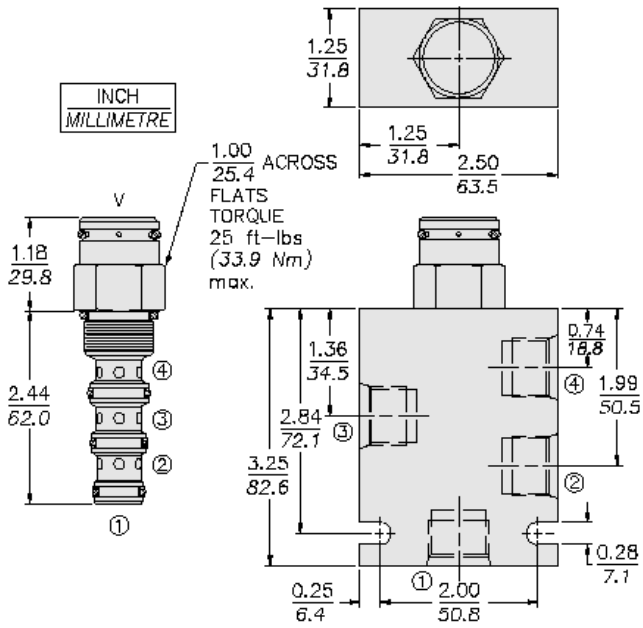
Unit weight	0.20 kg (0.43 lb)	- Note: Standard
	0.30 kg (0.67 lb)	- Note: Tall cap
Internal wetted surface area	189 cm ² (29.3 in ²)	- Note: (standard)
	225 cm ² (34.9 in ²)	- Note: (tall cap)



Performance



Dimensions



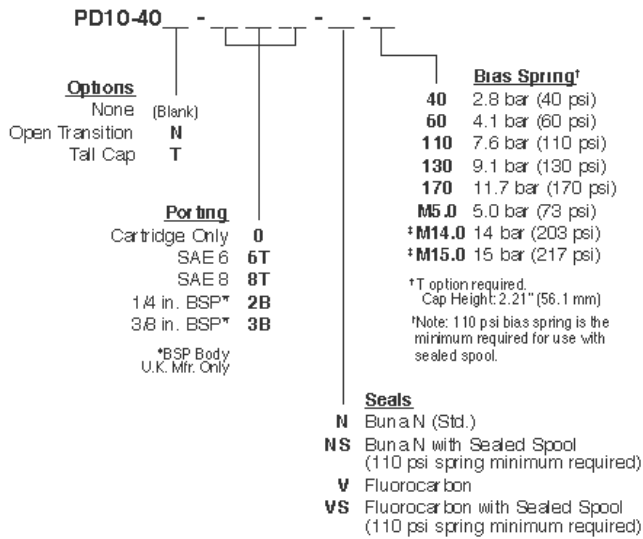
Installation Specifications

Cavity	VC10-4
Cartridge installation torque	32.6 to 35.4 N-m (24 to 26 ft-lb)
Orientation restriction	None

Accessories

Seal kit	SK10-4N-MMM ; SK10-4V-MMM ; SK10-4P-MMM ; SK10-4U-000	- Note: Buna N - Note: Polyurethane
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Order Code



Model Options

PD10-40BC-H-J-R

B Spool Option

CODE	DESCRIPTION
BLANK	Standard
N	Normally Open in Transition

C Tall Cap

CODE	DESCRIPTION
BLANK	Standard Cap
T	Tall Cap

H Line Body

CODE	DESCRIPTION
0	No Body
6T	Aluminum SAE 6
8T	Aluminum SAE 8
6TD	Ductile Iron SAE 6

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
40	40 psi Bias Spring
60	60 psi Bias Spring



CODE	DESCRIPTION
M5.0	5 bar Bias Spring
110	110 psi Bias Spring
130	130 psi Bias Spring
170	170 psi Bias Spring
200	200 psi Bias Spring
M14.0	14 bar Bias Spring
M15.0	15 bar Bias Spring