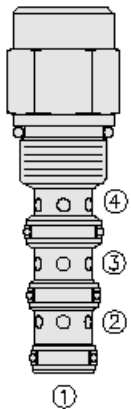




Overview



Description

The pd10-41xx is a screw-in, cartridge style, pilot operated, spool-type hydraulic directional valve

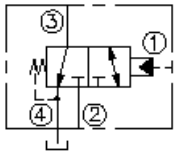
Operation

In neutral position the valve allows flow from port 3 to 4, while port 2 is blocked. On remote pilot signal at port 1 the valve shifts to open from 3 to 2, while blocking flow to port 4. 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

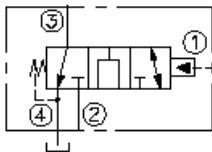
Features

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

Symbol



Open Transition:



Ratings

Pressure Ratings

Pressure rating 241 bar (3500 psi)

Flow Ratings

Maximum internal leakage 82 ml/min (5 in³/min) - **Note:** At from port 1 to 2 or port 2 to 3; zero leakage from port 1 to 2 with sealed spool 207 bar (3000 psi)

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 seals
Storage temperature	-40 to 70 °C (-40 to 160 °F)	
Ambient temperature	-40 to 70 °C (-40 to 160 °F)	

Operating Parameters

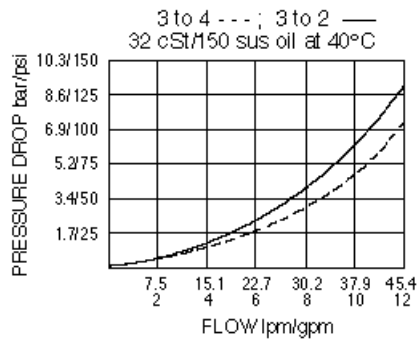
Fluids	Mineral based or synthetic hydraulic fluid with lubricating properties
Fluid viscosity range	7.4 to 420 cSt
Maximum operating contamination level	20/18/14 per ISO 4406

Properties

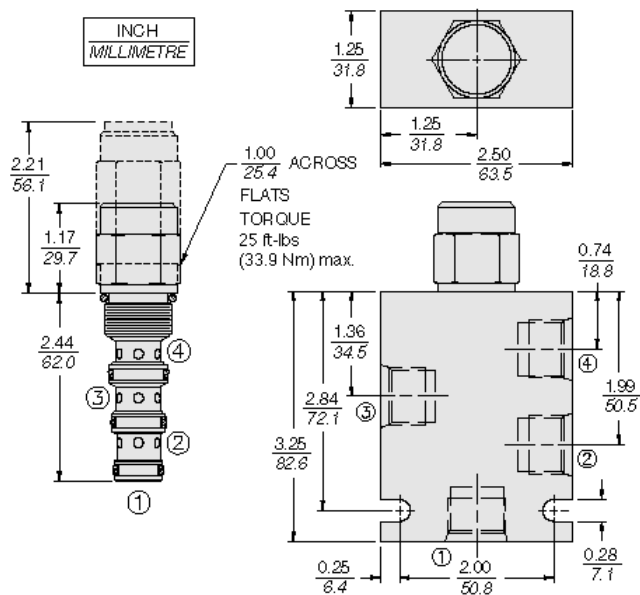
Unit weight	0.19 kg (0.42 lb)	- Note: Pd10-41/41n
	0.27 kg (0.59 lb)	- Note: Pd10-41t/41nt
Internal wetted surface area	188 cm ² (29.1 in ²)	- Note: Pd1041/41n
	223 cm ² (34.6 in ²)	- Note: Pd1041t/41nt



Performance



Dimensions



Materials

Materials

Cartridge: Weight: 0.16 kg (0.35 lb); Steel with hardened work surfaces. Zinc-plated exposed surfaces; Buna N O-rings and polyester elastomer back-ups standard.

Standard Ported Body: Weight: 0.34 kg (0.75 lb); Anodized high-strength 6061 T6 aluminum alloy, rated to 207 bar (3000 psi). Ductile iron bodies available; dimensions may differ.

Installation Specifications

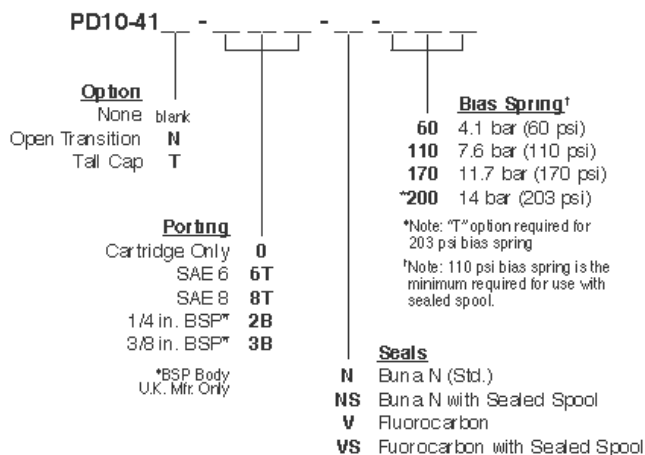
Cavity	VC10-4
Cartridge installation torque	32.5 to 35.3 N-m (24 to 26 ft-lb)
Orientation restriction	None

Accessories

Seal kit	SK10-4X-MMM	- Note: X = seal option
Housings		



Order Code



POSITION	CODE	DESCRIPTION
		PD10-41BC-H-J-R
B		Spool Option
B	BLANK	Standard
B	N	Normally Open in Transition
C		Tall Cap
C	BLANK	Standard Cap
C	T	Tall Cap
H		Line Body
H	0	No Body
H	6T	Aluminum SAE 6
H	8T	Aluminum SAE 8
H	6TD	Ductile Iron SAE 6
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	30	30 psi Bias Spring
R	40	40 psi Bias Spring
R	60	60 psi Bias Spring
R	110	110 psi Bias Spring
R	130	130 psi Bias Spring
R	170	170 psi Bias Spring
R	200	200 psi Bias Spring
R	M14.0	14 bar Bias Spring
R	M15.0	15 bar Bias Spring