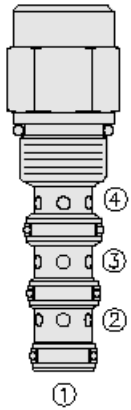




## Overview



### Description

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

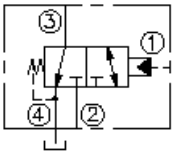
### Operation

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.

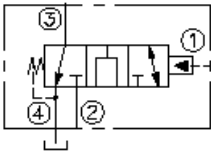
### Features

- 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 in<sup>3</sup>/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)	- <b>Note:</b> With buna N seals
	-26 to 204 °C (-15 to 400 °F)	- <b>Note:</b> With fluorocarbon seals
	-54 to 107 °C (-65 to 225 °F)	- <b>Note:</b> 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

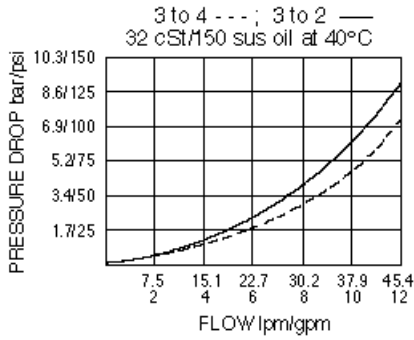
Fluids	Mineral based or synthetic hydraulic fluid with lubricating properties	
Fluid viscosity range	7.4 to 420 cSt	
Maximum operating contamination level	20/18/14 per ISO 4406	

## Properties

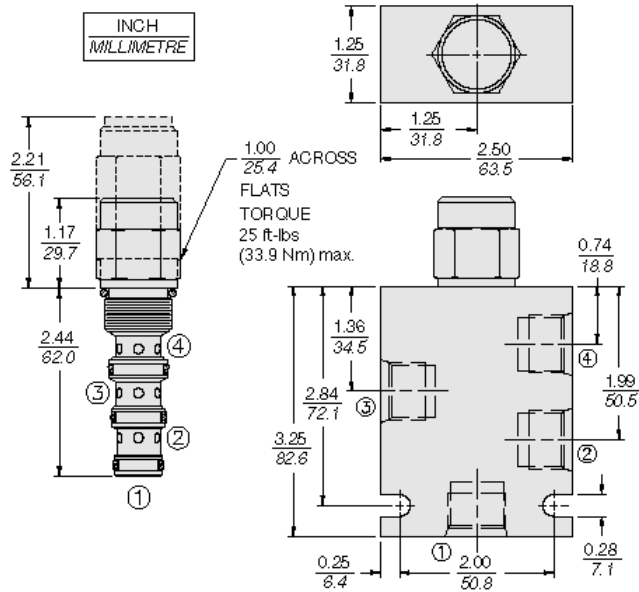
Unit weight	0.19 kg (0.42 lb)	- <b>Note:</b> Pd10-41/41n
	0.27 kg (0.59 lb)	- <b>Note:</b> Pd10-41t/41nt
Internal wetted surface area	188 cm <sup>2</sup> (29.1 in <sup>2</sup> )	- <b>Note:</b> Pd1041/41n
	223 cm <sup>2</sup> (34.6 in <sup>2</sup> )	- <b>Note:</b> Pd1041t/41nt



Performance



Dimensions



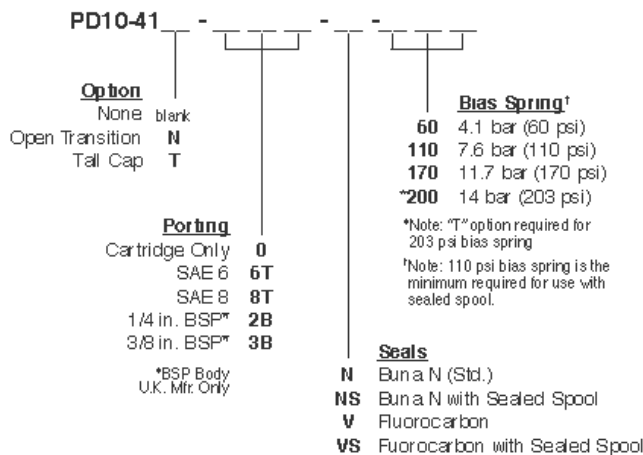
Installation Specifications

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

Order Code



Model Options

PD10-41BC-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
30	30 psi Bias Spring
40	40 psi Bias Spring
60	60 psi 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