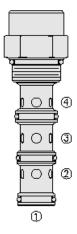


## Overview



## **Description**

The PD16-41 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 4 bidirectionally, 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.

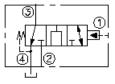
#### <u>Features</u>

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



**Symbol** 

Open Transition:



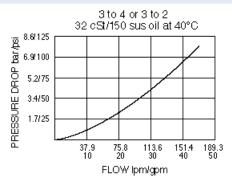
### Ratings

<u>Pressure Ratings</u>	
Pressure rating	241 bar (3500 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) <b>- Note:</b> At 207 bar (3000 psi) 0 lpm (0 gpm) <b>- Note:</b> From port 1 to 2 with sealed spool at 207 bar (3000 psi)
Properties	
Matariala	steel with work surfaces hardened, external surfaces are zinc plated

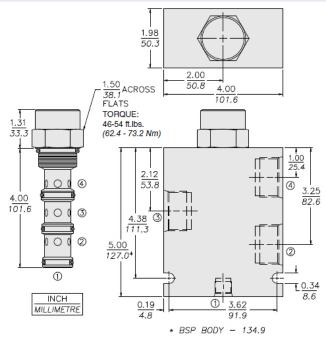
steel with work surfaces hardened, external surfaces are zinc plated 0.52 kg (1.15 lb)



# 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

VS Fluorocarbon with Sealed Spool



# **Order Code**

PD16-41		
Option		Bias Springs <sup>†</sup>
None (Blank)		60 4.1 bar (60 psi)
Open Transition N		<b>110</b> 7.6 bar (110 psi)
		170 11.7 bar (170 psi)
Porting		Optional bias springs considered on OEM request.
Cartridge Only 0 SAE 12, SAE 6 Pilot 12T SAE 16, SAE 6 Pilot 16T		<sup>t</sup> Note: 110 psi bias spring is the minimum required for use with sealed spool.
		Seals
	Ň	BunaN (Std.)
	NS	Buna N with Sealed Spool
	v	Fluorocarbon

## **Model Options**

## PD16-41B-H-J-R

### **B** Spool Option

	•
CODE	DESCRIPTION
BLANK	Standard
Ν	Normally Open in Transition
H Line Body	

### 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
Ν	Buna-N
NS	Buna-N with a Sealed Spool
V	Fluorocarbon
VS	Fluorocarbon with a Sealed Spool
Р	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