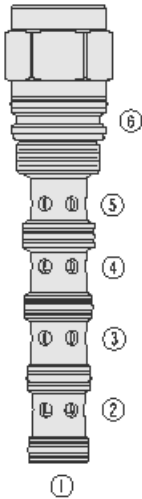




## Overview



### Description

The PD16-S61N is a screw-in, cartridge style, pilot operated, spool-type, hydraulic directional valve.

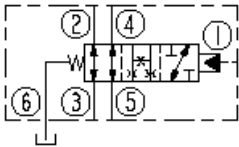
### Operation

In the neutral position flow is allowed between ports 2 and 3 and between ports 4 and 5. On remote pilot signal at port 1 the valve's spool shifts to allow flow between ports 3 and 4, while blocking ports 2 and 5. The spring chamber is vented to the tank through port 6. The vented spring chamber allows the valve to be fully pressurized at ports 1, 2, 3, 4, and 5 without affecting required pilot pressure. Pressure at port 6 will affect required pilot pressure.

### Features

- Hardened spool and cage for long life.
- 60, 110 and 170 psi bias springs available.

### Symbol



## Ratings

### Pressure Ratings

Pressure rating 240 bar (3500 psi)

### Flow Ratings

Flow rating See performance graph  
 Maximum internal leakage 164 ml/min (10 in<sup>3</sup>/min) - **Note:** At 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 90 °C (-40 to 194 °F)	

## Operating Parameters

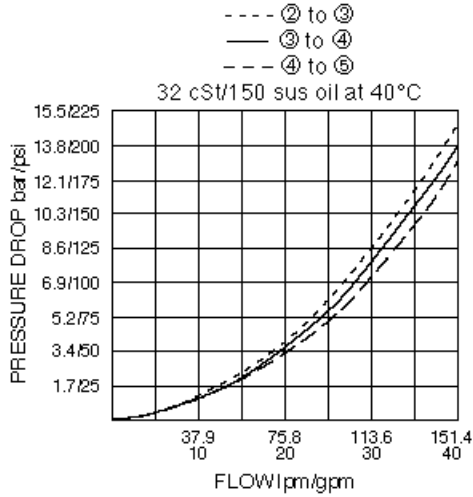
Fluids	Mineral based or synthetic hydraulic fluid with lubricating properties
Fluid viscosity range	7.4 to 420 cSt
Maximum operating contamination level	20/18/14 per ISO 4406

## Properties

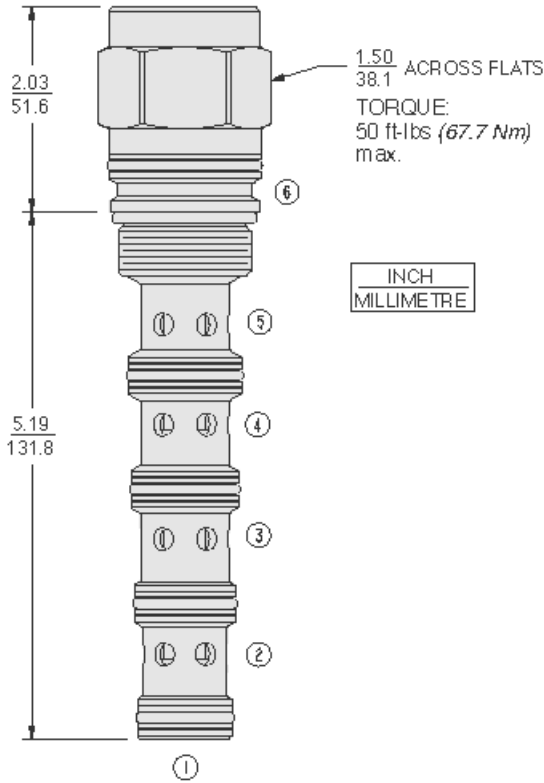
Unit weight	0.74 kg (1.62 lb)
Internal wetted surface area	528 cm <sup>2</sup> (81.86 in <sup>2</sup> )



## Performance



## Dimensions



## Installation Specifications

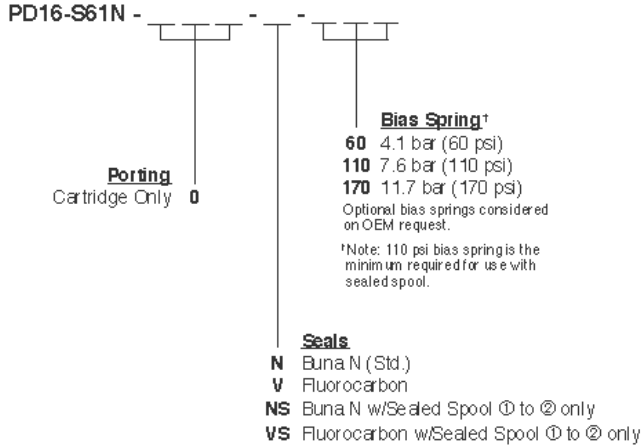
Cavity	VC16-S6
Cartridge installation torque	62.4 to 73.2 N-m (46 to 54 ft-lb)
Maximum allowable torque	163 N-m (120 ft-lb)
Orientation restriction	None

## Accessories

Seal kit	SK16-6X-BMMMM	- Note: X = seal option
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Order Code



Model Options

PD16-S61N-H-J-R

H Line Body

CODE	DESCRIPTION
0	No Body

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
60	60 psi Bias Spring
80	80 psi Bias Spring
110	110 psi Bias Spring
170	170 psi Bias Spring