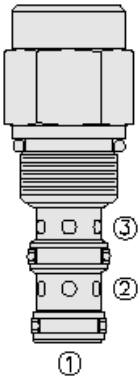




## Overview



### Description

The PD10-35 is a screw-in, cartridge style, pilot-operated, spool type, normally open, hydraulic directional valve.

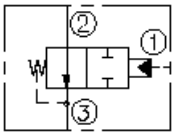
### Operation

In neutral position the valve allows flow from port 2 to 3. The spring chamber is vented to port 3. On remote pilot signal at port 1, the valve's spool shifts to block flow from port 2 to 3. Pressure on port 3 will directly (1:1) affect the pilot pressure required and must be added to the bias spring value.

### Features

- External vent-to-atmosphere.
- Range of bias springs available.
- Sealed spool option for bias spring options 110, 130 and 170.
- Hardened spool and cage for long life.
- Industry common cavity.

### Symbol



## Ratings

### Pressure Ratings

Pressure rating 241 bar (3500 psi)

### Temperature Ratings

Operating fluid temperature -40 to 120 °C (-40 to 248 °F)

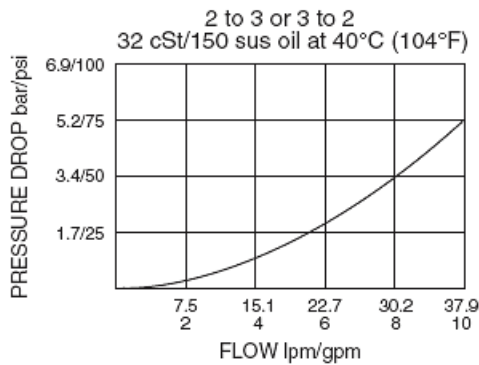
### Flow Ratings

Maximum internal leakage 82 ml/min (5 in<sup>3</sup>/min) - **Note:** From port 1 to 2 and from port 2 to 3 (when piloted), at 207 bar (3000 psi)  
0 lpm (0 gpm) - **Note:** From port 1 to 2 with sealed spool

## Properties

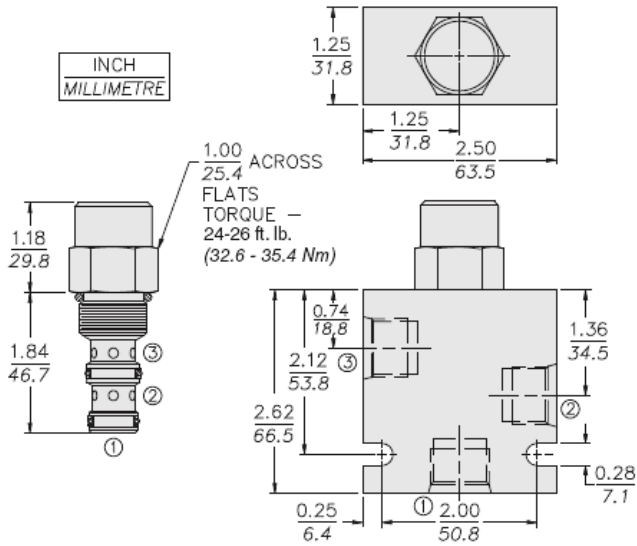
Materials steel with work surfaces hardened. External surfaces are zinc plated  
Unit weight 0.15 kg (0.34 lb)

## Performance





## Dimensions



## Installation Specifications

Cavity	VC10-3
Cartridge installation torque	32.6 to 35.4 N-m (24 to 26 ft-lb)

## Accessories

Seal kit	SK10-3N-MM	- <b>Note:</b> Buna N
	SK10-3V-MM	- <b>Note:</b> Viton
	SK10-3P-MM	- <b>Note:</b> Polyurethane



## Order Code

PD10-35 - - -

<p><b>Porting</b></p> <p>Cartridge Only    <b>0</b></p> <p>SAE 6            <b>6T</b></p> <p>SAE 8            <b>8T</b></p> <p>1/4 in. BSP*    <b>2B</b></p> <p>3/8 in. BSP*    <b>3B</b></p> <p><small>*BSP Body U.K. Mfr. Only</small></p>	<p><b>Bias Spring†</b></p> <p><b>40</b> 2.8 bar (40 psi)</p> <p><b>60</b> 4.1 bar (60 psi)</p> <p><b>110</b> 7.6 bar (110 psi)</p> <p><b>130</b> 9.0 bar (130 psi)</p> <p><b>170</b> 11.7 bar (170 psi)</p> <p><small>†Note: 110 psi bias spring is the minimum required for use with sealed spool.</small></p>
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<p><b>Seals</b></p> <p><b>N</b> Buna N (Std.)</p> <p><b>NS*</b> Buna N with Sealed Spool</p> <p><b>V</b> Fluorocarbon</p> <p><b>VS*</b> Fluorocarbon with Sealed Spool</p> <p><b>P</b> Polyurethane</p> <p><b>VS*</b> Polyurethane with Sealed Spool</p> <p><small>*Note: 110 psi bias spring is the minimum required for use with sealed spool.</small></p>
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### Model Options

#### PD10-35-H-J-R

##### H Line Body

CODE	DESCRIPTION
0	No Body
6T	Aluminum SAE 6
8T	Aluminum SAE 8
6TD	Ductile Iron SAE 6
8TD	Ductile Iron SAE 8
3B	Aluminum BSPP 3/8" (3)
3BD	Ductile Iron BSPP 3/8" (3)

##### 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
110	110 psi Bias Spring
130	130 psi Bias Spring
170	170 psi Bias Spring