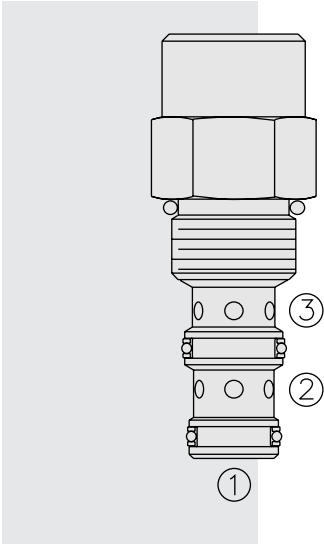


## PD10-35 Piloted 2-Way Spool, Normally Open,



### DESCRIPTION

A screw-in, cartridge-style, pilot-operated, spool-type, normally open hydraulic directional valve for two-way circuits requiring remote pilot actuation.

### OPERATION

In neutral (unpiloted), the **PD10-35** allows flow from ② to ③. The spring bias chamber is internally vented to ③.

On remote pilot signal at ①, the valve shifts to block ③ to ② bidirectionally.

**Note:** Back pressure at ③ will increase the pilot pressure required at ① to shift, at a ratio of 1:1. Consult factory.

Consult factory for applications where bi-directional flow is required when the valve is in the normal or spring-offset position.

### FEATURES

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

### RATINGS

**Operating Pressure:** 240 bar (3500 psi)

**Proof Pressure:** 390 bar (5700 psi)

**Flow:** See Performance Chart

**Internal Leakage:** 82 cc/minute (5 cu. in./minute) max. at 207 bar (3000 psi)

**Pilot Pressure Required: To Full Spool Shift**  
 for 4.1 bar (60 psi) spring: 4.7 bar (68.2 psi)  
 for 7.6 bar (110 psi) spring: 8.6 bar (125 psi)

**Oil Volume Required to Full Shift:** 0.65 cc (0.04 cu. in.)

**Temperature:** -40 to 120°C with standard Buna seals

**Filtration:** See page 9.010.1

**Fluids:** Mineral-based or synthetics with lubricating properties at viscosities of 7.4 to 420 cSt (50 to 2000 sus); See Temperature and Oil Viscosity, page 9.060.1

**Installation:** No restrictions; See page 9.020.1

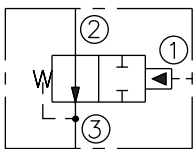
**Cavity:** VC10-3; See page 9.110.1

**Cavity Tool:** CT10-3XX; See page 8.600.1

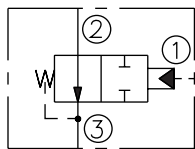
**Seal Kit:** SK10-3X-MM; See page 8.650.1

### SYMBOLS

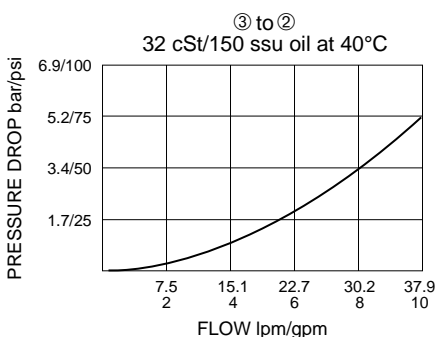
#### USASI:



#### ISO:



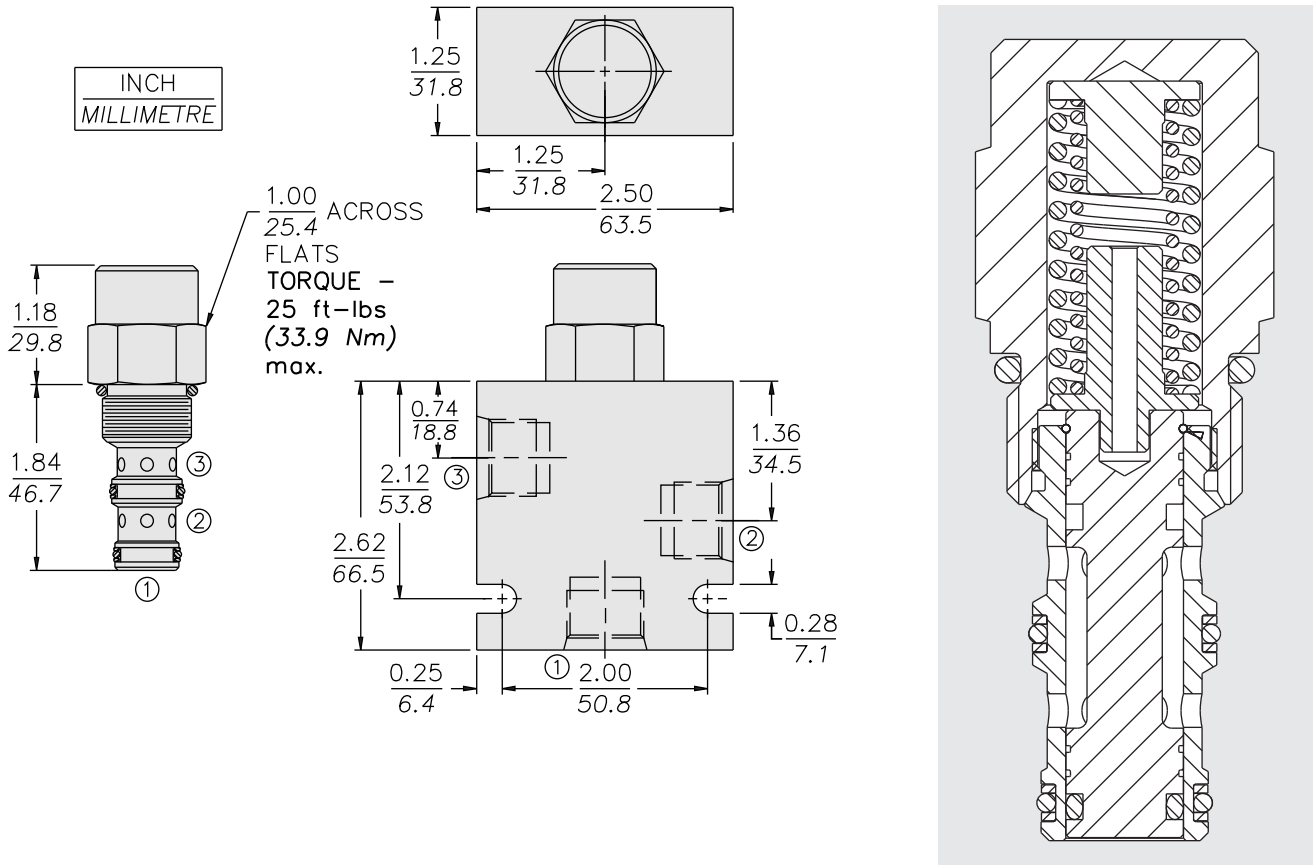
### PERFORMANCE (Cartridge Only)



# Internal Vent

PD10-35

## DIMENSIONS

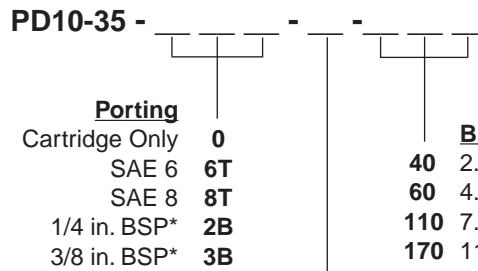


## MATERIALS

**Cartridge:** Weight: 0.15 kg. (0.34 lbs.)  
 Steel with hardened work surfaces.  
 Zinc-plated exposed surfaces.  
 Buna N O-rings and polyester elastomer back-ups standard.

**Standard Ported Body:** Weight: 0.36 kg. (0.80 lbs.)  
 Anodized high-strength 6061 T6 aluminum alloy, rated to 207 bar (3000 psi). Ductile iron bodies available; dimensions may differ. See page 8.010.1

## TO ORDER



\*BSP Body  
 U.K. Mfr. Only

	<b>Bias Spring†</b>
<b>40</b>	2.8 bar (40 psi)
<b>60</b>	4.1 bar (60 psi)
<b>110</b>	7.6 bar (110 psi)
<b>170</b>	11.7 bar (170 psi)

†Note: 110 psi bias spring is the minimum required for use with sealed spool.

### Seals

- N** Buna N (Std.)
- NS** Buna N with Sealed Spool
- V** Fluorocarbon
- VS** Fluorocarbon with Sealed Spool