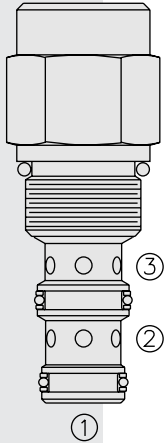


# DIRECTIONAL VALVES

## PD10-32 Piloted 2-Way Spool, Normally Closed,



### DESCRIPTION

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

### OPERATION

In neutral (unpiloted), the PD10-32 blocks flow from ③ to ② bidirectionally. The spring bias chamber is internally vented to ③.

On remote pilot signal at ①, the valve shifts to open ② to ③ unidirectionally.

### 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

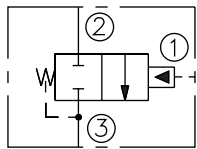
**Cavity:** VC10-3; See page 9.110.1

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

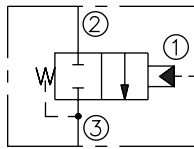
**Seal Kit:** SK10-3X-MM; See page 8.650.1

### SYMBOLS

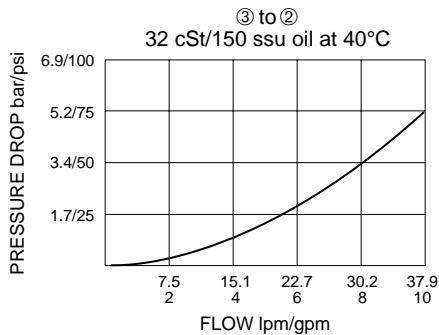
#### USASI:



#### ISO:



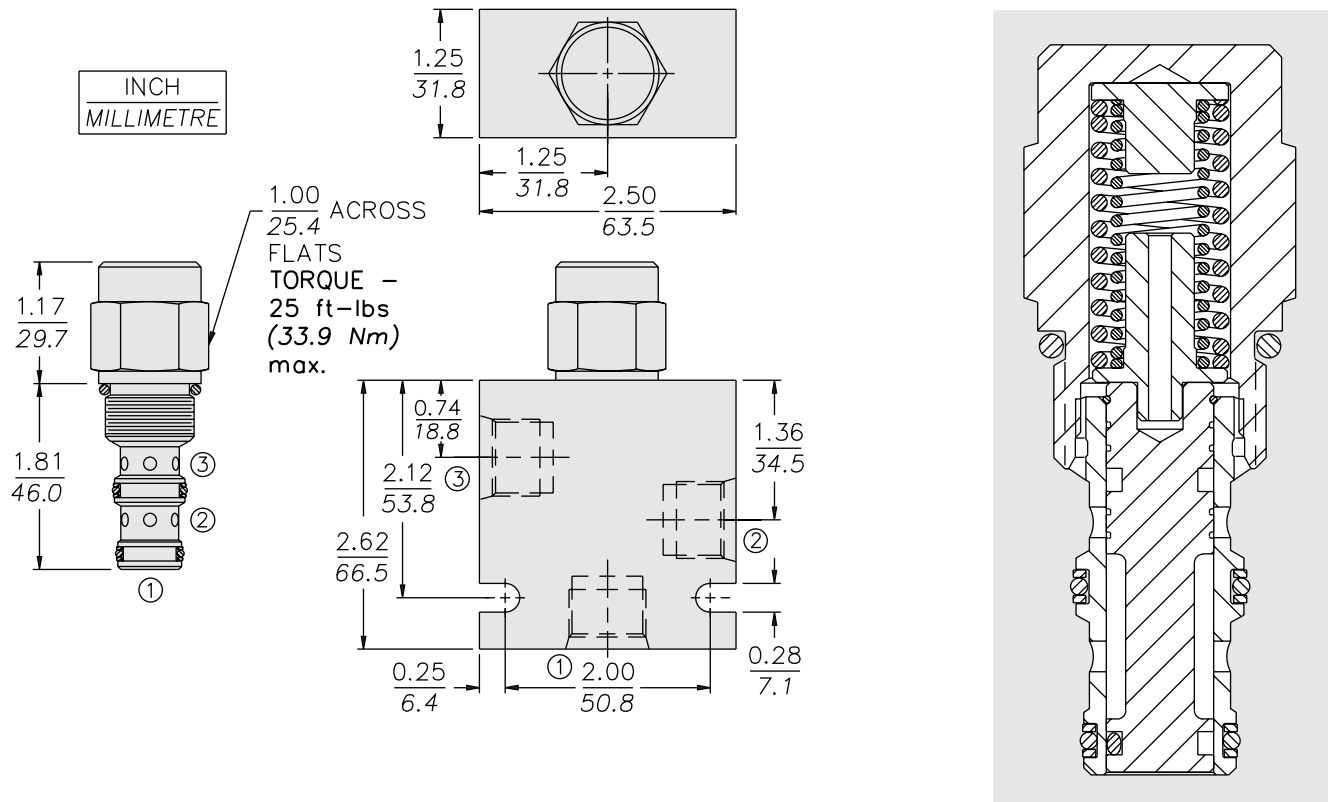
### PERFORMANCE (Cartridge Only)



# Internal Vent

PD10-32

## 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

PD10-32 -

**Porting**  
Cartridge Only **0**  
SAE 6 **6T**  
SAE 8 **8T**  
1/4 in. BSP\* **2B**  
3/8 in. BSP\* **3B**

\*BSP Body  
U.K. Mfr. Only

**Bias Spring†**  
**40** 2.8 bar (40 psi)  
**60** 4.1 bar (60 psi)  
**110** 7.6 bar (110 psi)  
**170** 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