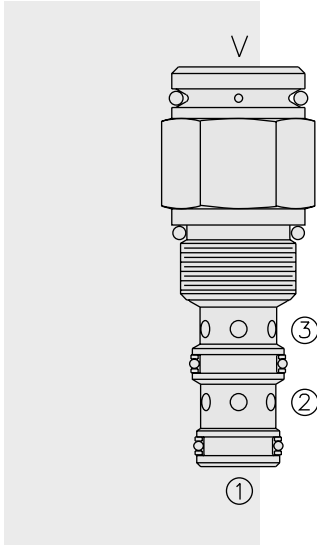


DIRECTIONAL VALVES

PD10-30 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 **PD10-30** allows flow from ③ to ② bidirectionally. V is a spring chamber vent-to-atmosphere, which is internally O-ring sealed from the cartridge flow paths.

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

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 ssu)

Installation: No restrictions; See page 9.020.1

Cavity: VC10-3; See page 9.110.1

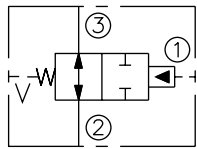
Cavity Tool: CT10-3XX; See page 8.600.1

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

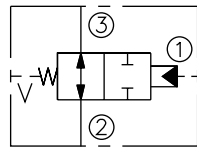
Cap Vent Seal: 6003117

SYMBOLS

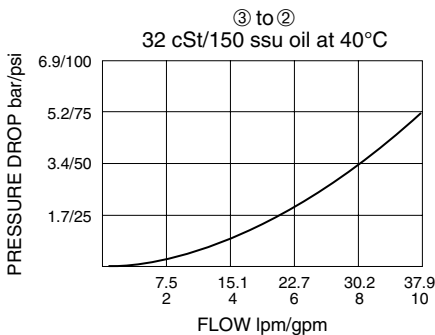
USASI:



ISO:



PERFORMANCE (Cartridge Only)

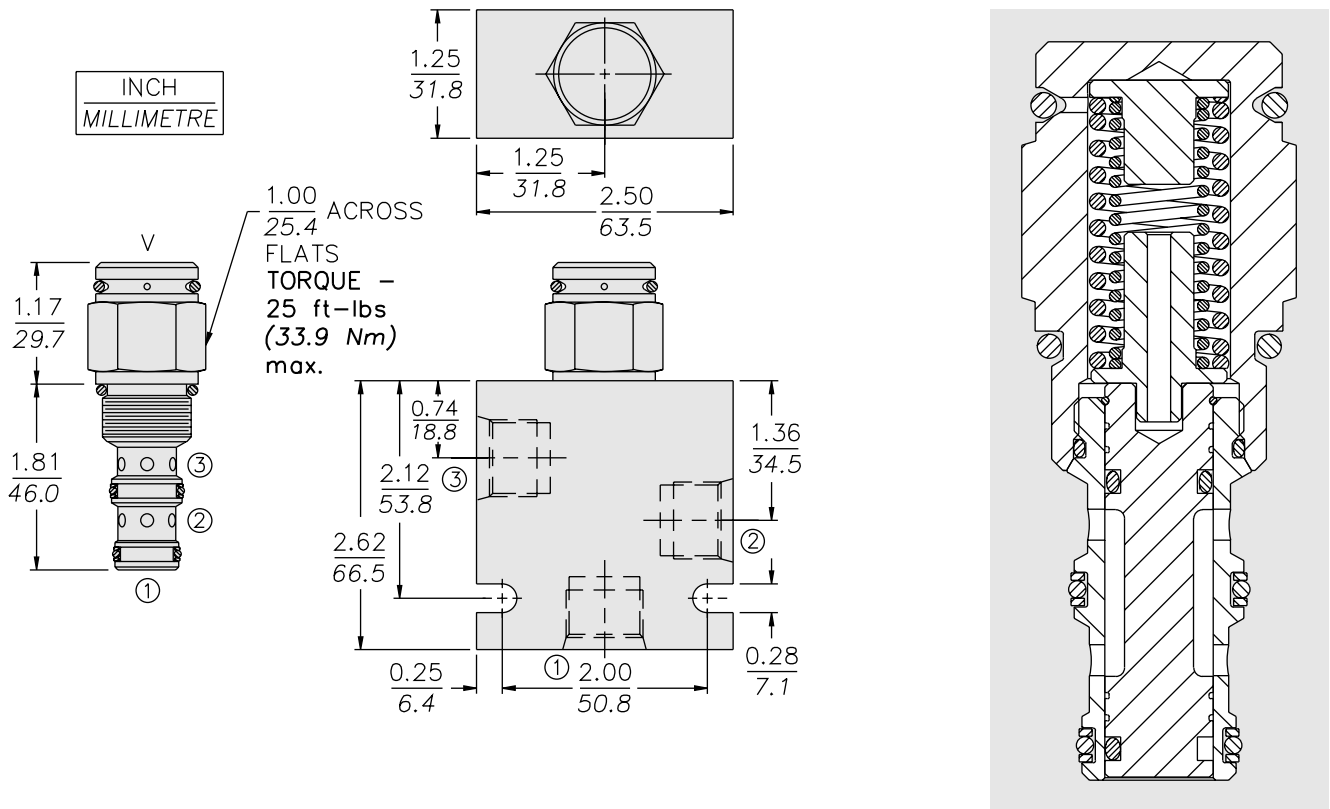


Note: This valve is designed with a dynamic oil-to-atmosphere seal in the vent section. Ambient conditions will cause this vent seal to degrade which will reduce the valve's cycle life. If this could cause a problem, we suggest that a non-vented model be selected, or special seal be used. Consult factory for assistance.

External Vent

PD10-30

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 240 bar (3500 psi); See page 8.010.1. Ductile iron and steel bodies available; dimensions may differ; consult factory.

TO ORDER

PD10-30 -		Bias Spring[†]	
Porting			
Cartridge Only	0	40	2.8 bar (40 psi)
SAE 6	6T	60	4.1 bar (60 psi)
SAE 8	8T	110	7.6 bar (110 psi)
1/4 in. BSP*	2B	170	11.7 bar (170 psi)
3/8 in. BSP*	3B		
*BSP Body U.K. Mfr. Only		[†] Note: 110 psi bias spring is the minimum required for use with sealed spool.	
Seals			
Buna N (Std.)	N		
Buna N with Sealed Spool	NS		
Fluorocarbon	V		
Fluorocarbon with Sealed Spool	VS		