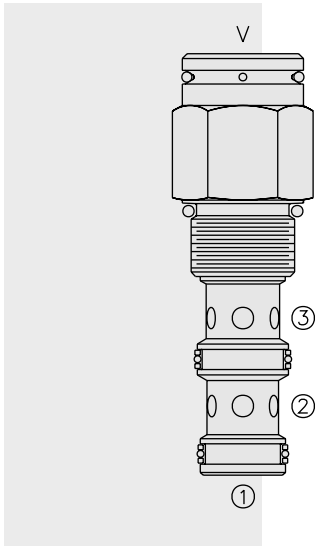


DIRECTIONAL VALVES

PD12-30 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 **PD12-30** 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 ② to ③ bidirectionally.

Because of the vented spring chamber, the cartridge may be fully pressurized at any port without affecting required pilot pressure.

FEATURES

- Hardened spool and cage for long life.
- Cost-effective cavity.

RATINGS

Operating Pressure: 240 bar (3500 psi)

Flow: See Performance Chart

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

Pilot Pressure Required for 7.6 bar (110 psi) Spring:

to Cross-Over: 7.6 bar (110 psi)

to Full Shift: 9.1 bar (132 psi)

Oil Volume Required to Full Shift: 1.32 cc (0.08 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: VC12-3; See page 9.112.1

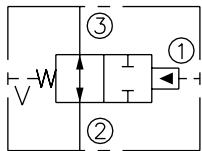
Cavity Tool: CT12-3XX; See page 8.600.1

Seal Kit: SK12-3X-MM; See page 8.650.1

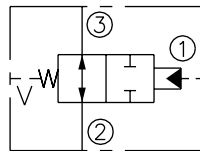
Cap Vent Seal: 6003121

SYMBOLS

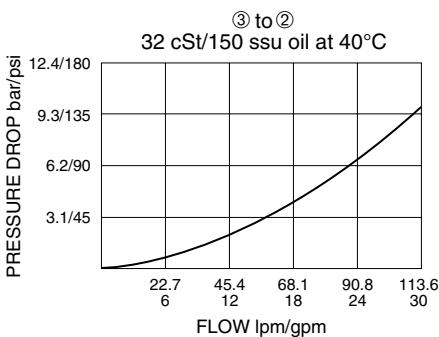
USASI:



ISO:



PERFORMANCE (Cartridge Only)

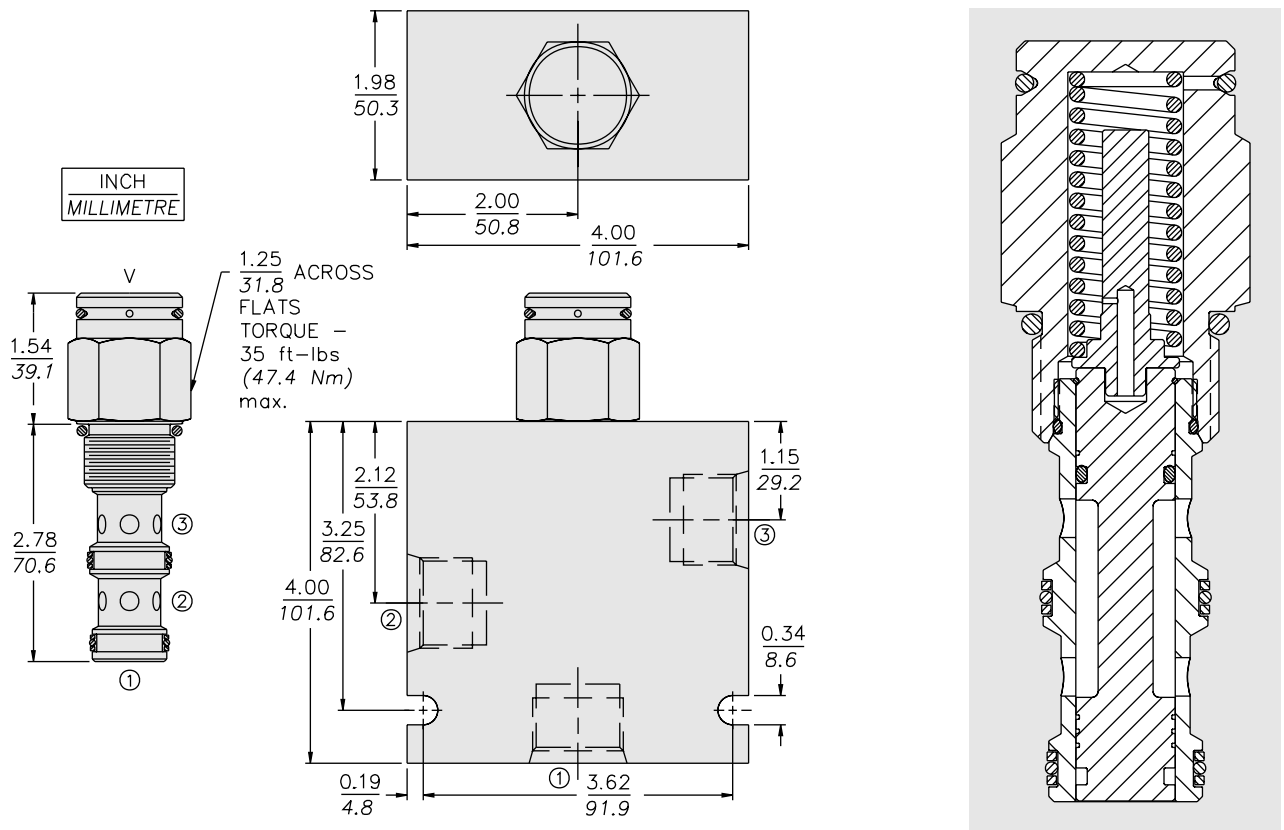


Note: This valve is designed with a dynamic oil-to-atmosphere seal in the vent section. Ambient conditions will cause this vent seal to degrade which will reduce the valve's cycle life. If this could cause a problem, we suggest that a non-vented model be selected, or special seal be used. Consult factory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

External Vent

PD12-30

DIMENSIONS



MATERIALS

Cartridge: Weight: 0.23 kg. (0.50 lbs.); Steel with hardened work surfaces; Zinc-plated exposed surfaces. Buna N O-rings and polyester elastomer back-ups standard.

Standard Ported Body: Weight: 1.13 kg. (2.50 lbs.); Anodized high-strength 6061 T6 aluminum alloy, rated to 240 bar (3500 psi); See page 8.012.1 Ductile iron and steel bodies available; dimensions may differ; consult factory.

TO ORDER

PD12-30 -

	-	-	-
Porting			
Cartridge Only	0		
SAE 8	8T		
SAE 10	10T		
SAE 12	12T		
1/2 in. BSP*	4B		
3/4 in. BSP*	6B		
			Bias Spring
		110	7.6 bar (110 psi)
		170	11.7 bar (170 psi)
			Seals
		N	Buna N (Std.)
		NS	Buna N with Sealed Spool
		V	Fluorocarbon
		VS	Fluorocarbon with Sealed Spool

*BSP Body
U.K. Mfr. Only