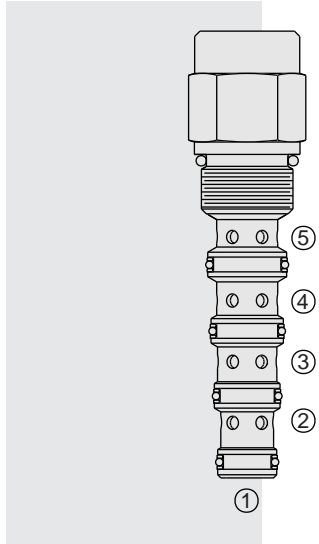


PD10-50 Piloted 3-Way Spool



DESCRIPTION

A screw-in, cartridge-style, pilot-operated, spool-type, hydraulic directional valve which is open in transition, for three-way circuits requiring remote pilot operation.

OPERATION

In neutral (unpiloted), the **PD10-50** allows flow from ③ to ② bidirectionally, while flow is blocked from ③ to ④. The spring chamber is vented to tank at port ⑤, and is internally O-ring sealed from the cartridge flow paths.

On remote pilot signal at ①, the valve shifts to block flow from ③ to ②, while opening flow between ③ and ④ bidirectionally. Any pressure at port ⑤ is added to the spring value.

FEATURES

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

RATINGS

Operating Pressure: 240 bar (3500 psi)

Proof Pressure: 350 bar (5075 psi)

Flow: See Performance Chart

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

Pilot Pressure Required using 10.3 bar (150 psi) Spring:

To Spool Crossover: 10.3 bar (150 psi)

To Full Spool Shift: 12.2 bar (177 psi)

Oil Volume Required to Full Shift: 0.44 cc (0.027 cu. in.)

Temperature: -40 to 100°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: VC10-5; See page 9.110.1

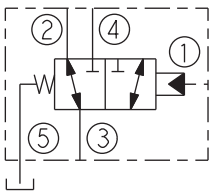
Cavity Tool: CT10-5XX; See page 8.600.1

Seal Kit: SK10-5X-MMMM; See page 8.650.1

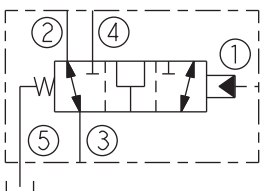
Cap Vent Seal: Part No. 6003117

SYMBOLS

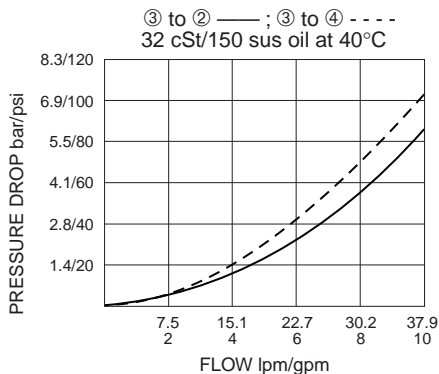
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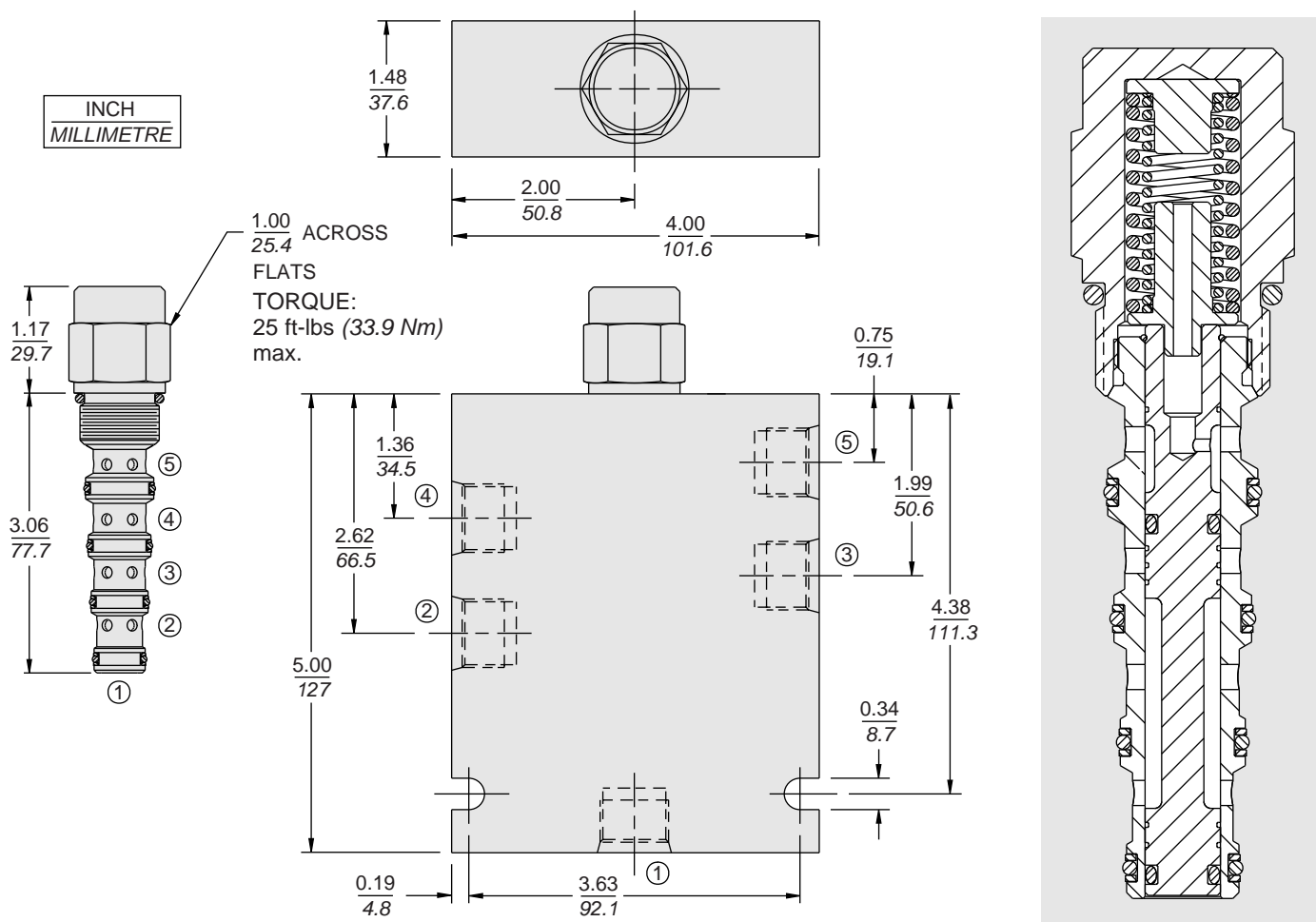
Open Transition:



PERFORMANCE (Cartridge Only)



DIMENSIONS



MATERIALS

Cartridge: Weight: 0.20 kg. (0.44 lbs.)
Steel with hardened work surfaces;
Zinc-plated exposed surfaces.
Buna N O-rings and polyester
elastomer back-ups standard.

Standard Ported Body: Weight:
0.41 kg. (0.85 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

PD10-50		-	-	-	-
Option	None (Blank)				
	Open Transition	N			
Porting	Cartridge Only	0			
	SAE 6	6T			
	SAE 8	8T			
				Bias Spring	
				100	6.9 bar (100 psi)
				150	10.3 bar (150 psi)
				230	15.9 bar (230 psi)
				Seals	
			N		Buna N (Std.)
			NS		Buna N with Sealed Spool
			V		Fluorocarbon
			VS		Fluorocarbon with Sealed Spool