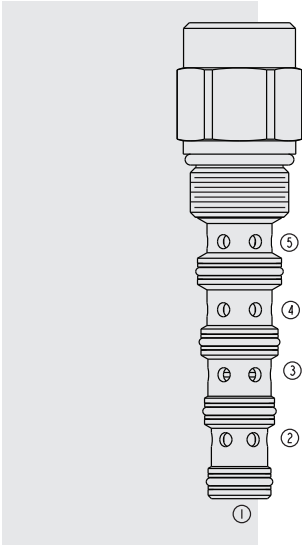


PD10-51 Piloted 3-Way Spool



DESCRIPTION

A screw-in, cartridge-style, pilot-operated, spool-type, hydraulic directional valve.

OPERATION

When in neutral the **PD10-51** allows flow between ports 2, 3 and 4. On remote pilot signal at 1, the valve's spool shifts to block all ports. The spring chamber is vented to the tank through port 5. The vented spring chamber allows the valve to be fully pressurized at ports 1, 2, 3, and 4 without affecting required pilot pressure. Pressure at port 5 will affect required pilot pressure.

FEATURES

- Hardened spool and cage for long life.
- 150 and 250 psi bias springs available.

RATINGS

Operating Pressure: 240 bar (3500 psi)

Flow: 0–45 lpm (0–12 gpm); See Performance Chart

Internal Leakage at 241 bar (3500 psi): 164 ml/minute (10 cu. in./minute). Zero leakage from port 1 to 2 with sealed spool.

Temperature: -40 to 120°C

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

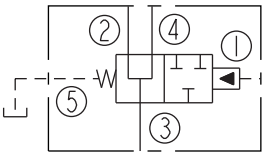
Installation: No restrictions; See page 9.020.1

Cavity: VC10-5; See page 9.110.1

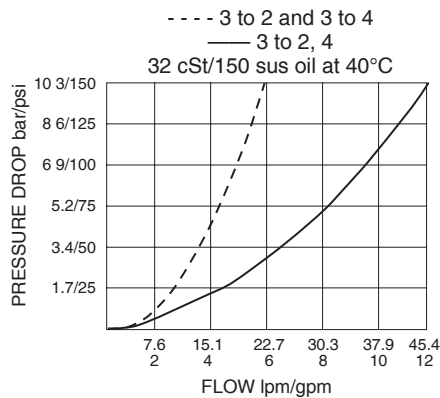
Cavity Tool: CT10-5XX; See page 8.600.1

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

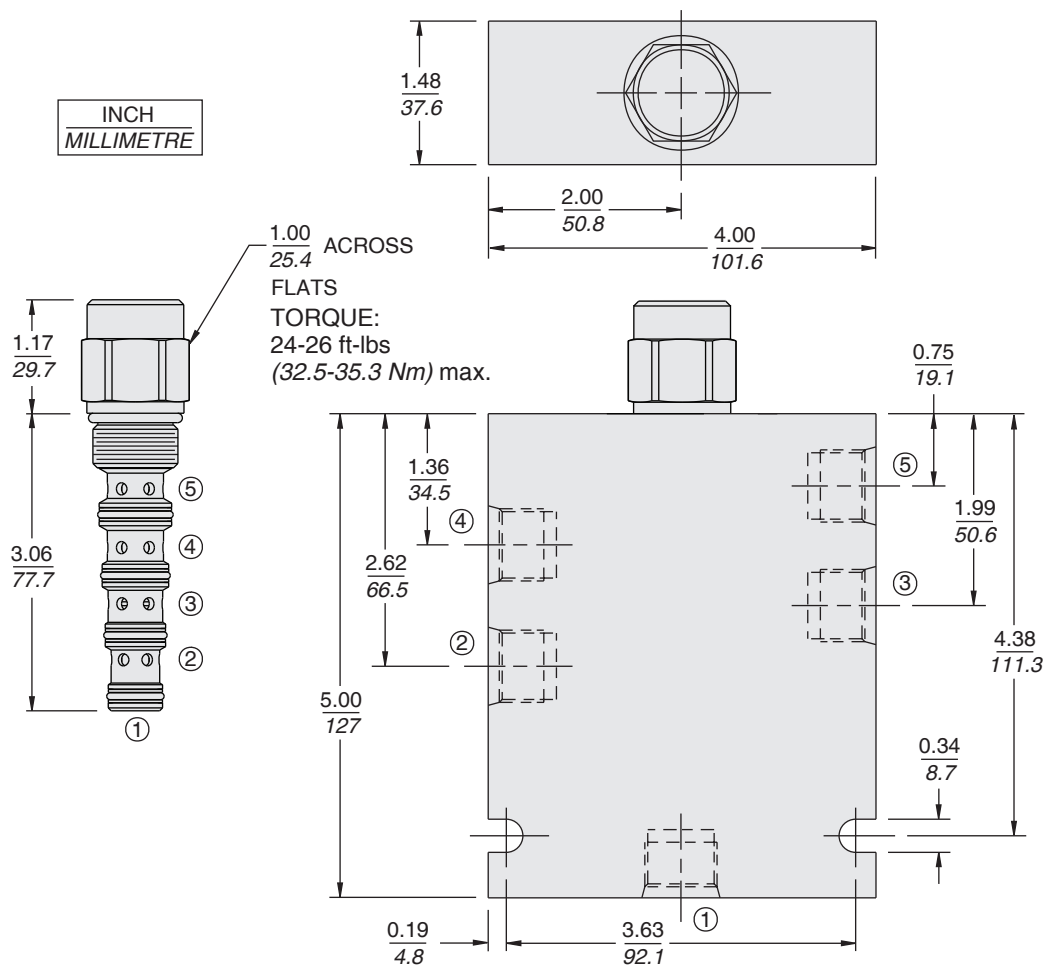
ISO SYMBOL



PERFORMANCE (Cartridge Only)



DIMENSIONS



MATERIALS

Cartridge: Weight: 0.23 kg. (0.5 lbs.)
Steel with hardened work surfaces.
Zinc-plated exposed surfaces.
Buna N O-rings and polyester elastomer back-ups standard.

Ported Body: Weight: .41 kg. (0.85 lbs.); Anodized high strength 6061T6 aluminum alloy, rated to 207 bar (3000 psi). See page 8.010.1

TO ORDER

PD10-51 - - -

Porting
Cartridge Only 0
SAE 6 6T
SAE 8 8T

Bias Spring†

150 10.3 bar (150 psi)
230 15.9 bar (230 psi)

†Note: 15.9 bar (230 psi) bias spring is required for use with sealed spool.

Seals

N Buna N (Standard)
V Fluorocarbon (Viton)
P Polyurethane
NS Buna N w/Sealed Spool 1 to 2 only
VS Fluorocarbon (Viton) w/Sealed Spool 1 to 2 only
PS Polyurethane w/Sealed Spool 1 to 2 only