**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**
• Bias spring options.
• Sealed spool option.
• Industry common cavity.
• Hardened spool and cage for long life.

**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 100°C (-40 to 212°F) with standard Buna seals; -26 to 204°C (-15 to 400°F) with fluorocarbon seals; -54 to 107°C (-65 to 225°F) with polyurethane seals
Filtration: See page 9.010.1
Fluids: Mineral-based or synthetics with lubricating properties at viscosities of 3 to 22 cSt/150 sus oil at 40°C (104°F); 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
Cap Vent Seal: 6003117

**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.
**DIMENSIONS**

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. Other
seal options available.

Standard Ported Body: Weight:
0.36 kg. (0.80 lbs.) Anodized high-
strength aluminum alloy, rated to 207
bar (3000 psi). Ductile iron bodies
available; dimensions may differ. See
page 8.010.1

**MATERIALS**

**TO ORDER**

**PD10-30**

**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

**Seals**
- Buna N (Std.) N
- Buna N with NS
- Sealed Spool V
- Fluorocarbon VS
- Fluorocarbon with Polyurethane PS
- Sealed Spool
- Polyurethane with
- Sealed Spool

**Bias Spring**
- 40 2.8 bar (40 psi)
- 60 4.1 bar (60 psi)
- 110 7.6 bar (110 psi)
- 130 9.0 bar (130 psi)
- 170 11.7 bar (170 psi)

*Note: 110 psi bias spring is the minimum required for use with sealed spool.