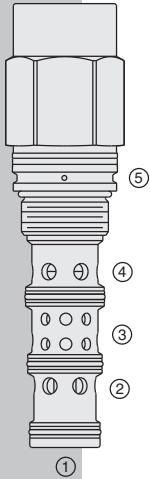


HPD42-S50 HyPerformance™ Piloted 3-Way Spool



DESCRIPTION

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

OPERATION

When in neutral, the **HPD42-S50** allows flow between ports 3 and 2 bidirectionally while port 4 is blocked. On remote pilot signal at 1, the valve's spool shifts to block port 2 while opening flow between ports 3 and 4 bidirectionally. 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 at port 5. Pressure at port 5 will increase the required pilot pressure at a 1:1 ratio.

FEATURES

- Hardened spool and cage for long life.
- All HyPerformance™ products are tested to the rigorous standards of the NFPA specification T2.6.1.
- All HyPerformance™ valves are tested at a verification level of 90% and an assurance of 99%.

RATINGS

Operating Pressure: 350 bar (5075 psi); 10% cycle life: 420 bar (6090 psi)

Note: All HyPerformance products are tested for 900K cycles at 350 bar and 100K at 420 bar.

Fatigue Rating: Two million cycles at 420 bar (6090 psi)

Proof Pressure: 690 bar (10000 psi)

Burst Pressure: 1380 bar (20000 psi)

Flow Rating: 265 lpm (70 gpm) with seal options N, V and U.
246 lpm (65 gpm) with seal options NS, VS and US.

Maximum Internal Leakage: 350 bar (5075 psi) at 32 cSt.

HPD42-S50:

Ports 3-4: 328 ml/min. (20 cu.in./min.)

Ports 3-2: 492 ml/min. (30 cu.in./min.) Pilot Pressure 350 bar (5075 psi)

HPD42-S50N:

Ports 3-4: 410 ml/min. (25 cu.in./min.)

Ports 3-2: 655 ml/min. (40 cu.in./min.) Pilot Pressure 350 bar (5075 psi)

Operating Temperature: -54° to 107°C (-65° to 225°F) with PPDI urethane 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: HVC42-S5; See page 9.142.1

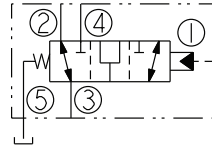
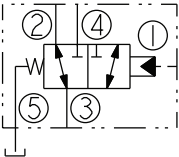
Cavity Tool: HCT42-S5XX; See page 8.600.1.

Seal Kit: HSK42-S5U-0000 (Urethane); See page 8.650.1.

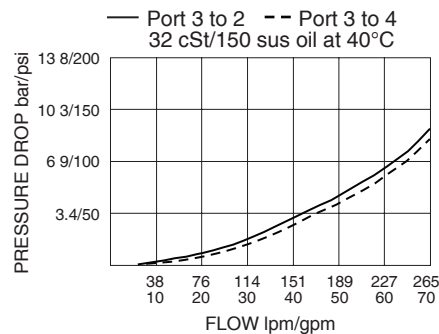
SYMBOLS

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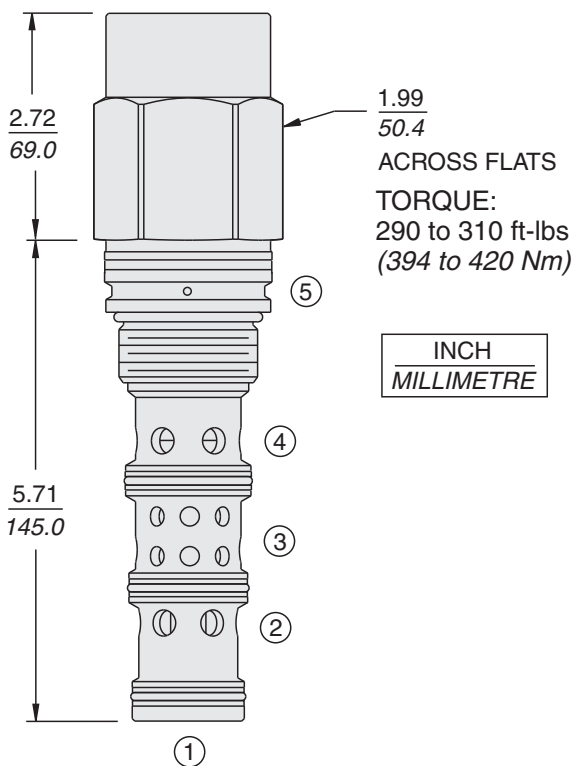
TRANSITION:



PERFORMANCE (Cartridge Only)



DIMENSIONS

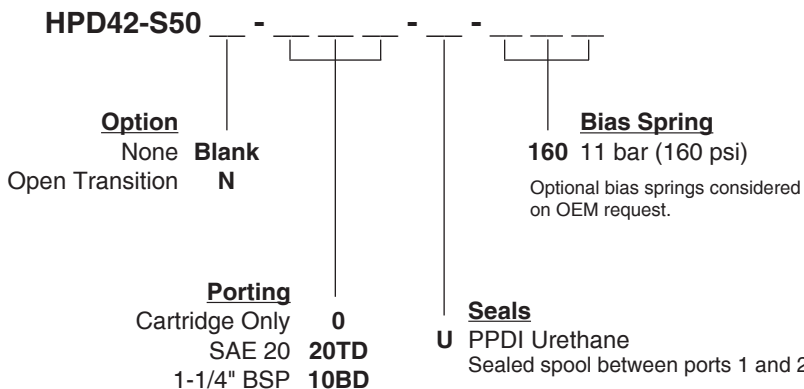


ORIFICE DISC SHOULD NOT BE USED WITH THIS PRODUCT.

MATERIALS

Cartridge: Weight: 1.9 kg. (4.2 lbs.)
Steel with hardened work surfaces.
Zinc-plated exposed surfaces.
PPDI Urethane seals and no back-up rings standard.

TO ORDER



Note: PPDI Urethane seals are recommended for pressures over 241 bar (3500 psi).

Note: Consult factory for additional seal options.