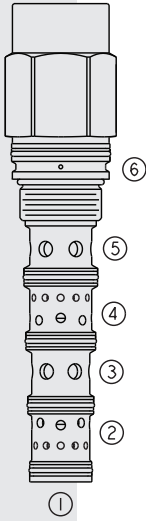
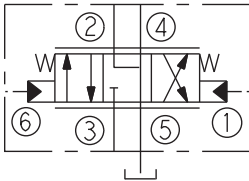


HPE42-S67D HyPerformance™ Proportional

U.S. Patent
6,554,014



ISO SYMBOL



DESCRIPTION

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

OPERATION

When the **HPE42-S67D** is in neutral position inlet port 3 is blocked and ports 2, 4 and 5 are connected to each other. On remote pilot signal at 1, the spool shifts proportionally to the applied pilot pressure to allow flow from 3 to 4, through a load such as a hydraulic cylinder or motor, and from 2 to 5 and to tank. Port 5 is to be used as a tank port only with maximum pressure of 69 bar (1000 psi). On remote pilot signal at 6, the spool shifts proportionally to the applied force in the opposite direction, thus reversing the flow direction.

The spool is symmetrical and provides meter-in and meter-out control.

FEATURES

- Hardened spool and cage for long life.
- Excellent metering characteristics.
- Good linearity.
- 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

Maximum Operating Pressure: Ports 2, 3, 4 (work): 350 bar (5075 psi) (10% life cycle) 420 bar (6090 psi); Ports 1 and 6 (pilot): 35 bar (500 psi); Port 5 (tank): 69 bar (1000 psi)

Flow Rating: 170 lpm (45 gpm)

Internal Leakage: 820 ml/minute (50 cu. in./minute) at 350 bar (5075 psi)

Temperature: -54°C to 107°C with 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

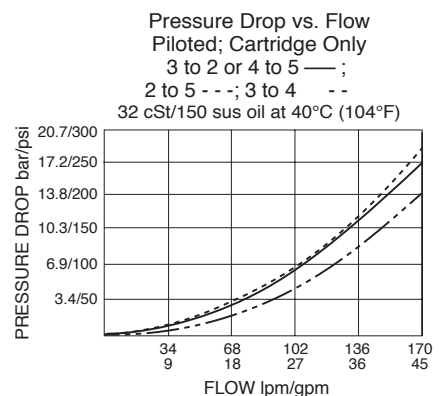
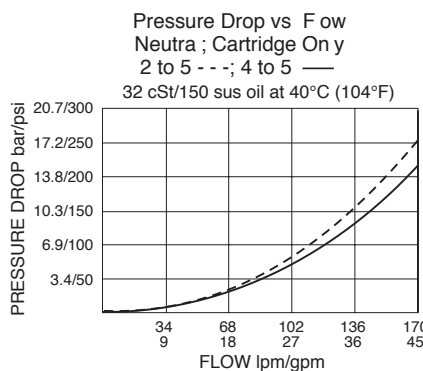
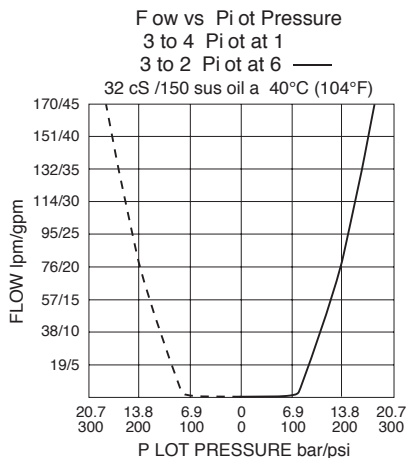
Installation: No restrictions; See page 9.020.1

Cavity: HVC42-S6, Variation A; See page 9.142.1

Cavity Tool: HCT42-S6; See page 8.600.1

Seal Kit: HSK42-S6U-0000; See page 8.650.1

PERFORMANCE (Cartridge Only)

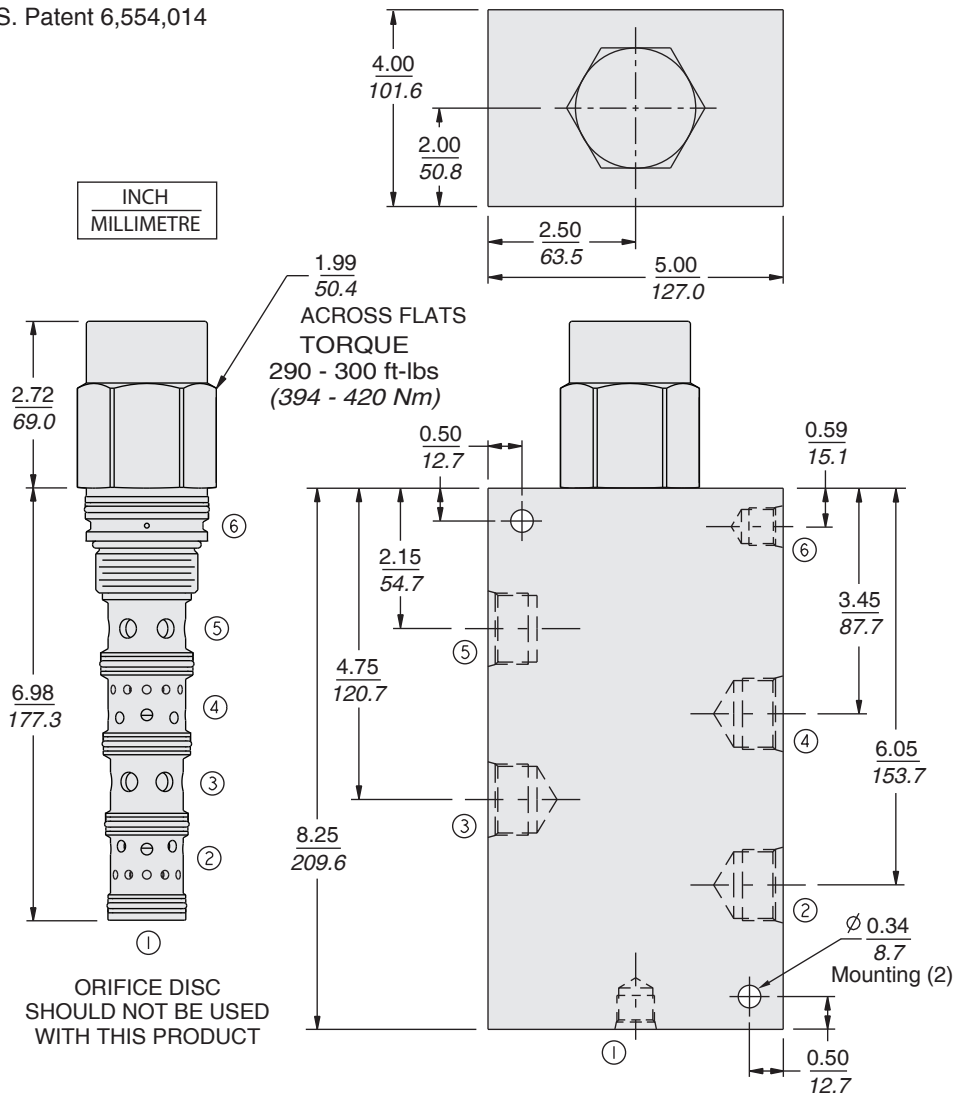


Pilot-Operated Directional Valve

HPE42-S67D

DIMENSIONS

U.S. Patent 6,554,014



MATERIALS

Cartridge: Weight: 2.0 kg. (4.5 lbs.)
Steel with hardened work surfaces.
Zinc-plated exposed surfaces.
Buna N O-rings and polyester
elastomer back-ups standard.

Ported Body: Weight: 16.61 kg.
(36.62 lbs.) HyPerformance™ ductile
iron (code 'D') standard. Rated to
345 bar (5000 psi).
See page 8.042.1

TO ORDER

HPE42-S67D - -

Porting

Cartridge Only **0**
SAE 20 **20TD**
*1-1/4 in. BSP **10BD**
*BSP Body; U.K. Mfr. Only

Seals

U PPDI Urethane (Std.)

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

Note: Consult factory for additional seal options.