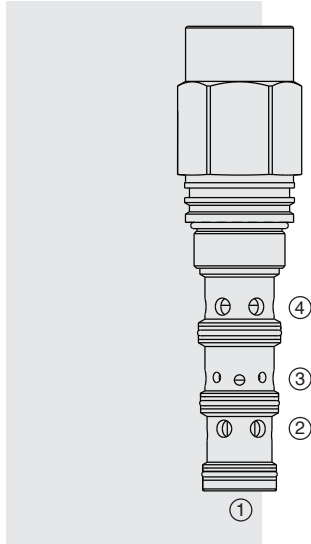


HPE42-M44 HyPerformance™ Piloted 2-Way Spool



DESCRIPTION

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

OPERATION

In neutral (unpiloted), the **HPE42-M44** blocks flow from 2 to 3 bidirectionally. On remote pilot signal at 1, the spool shifts proportionally to the applied pilot pressure to allow flow from port 2 to 3 bidirectionally. The spring chamber is vented to port 4. Pressure at 4 will directly (1:1) affect the pilot pressure required and must be added to the bias spring valve.

FEATURES

- Hardened spool and cage for long life.
- Optional sealed pilot.
- Cost-effective cavity.
- 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% duty cycle 420 bar (6090 psi)

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

Proof Pressure: 690 bar (10,000 psi)

Burst Pressure: 1380 bar (20,000 psi)

Flow Rating: 170 lpm (45 gpm)

Internal Leakage: 230 ml/minute (14 cu. in./minute) max. at 350 bar (5075 psi)

Pilot Pressure Required To Full Spool Shift: 27 bar (400 psi) minimum

Operating Fluid Temperature: -54 to 107°C (-65 to 225°F) with PPDI urethane seals; Storage Temperature: -40 to 70°C (-40 to 160°F)

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

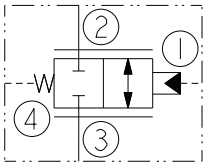
Installation: No restrictions; See page 9.020.1

Cavity: HVC42-M4; See page 9.142.1

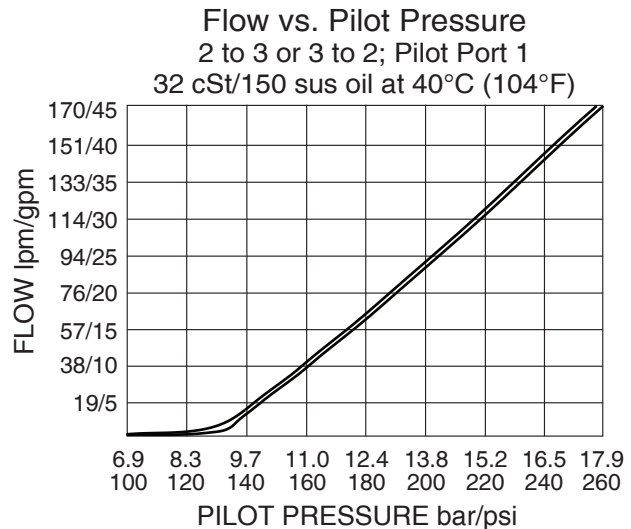
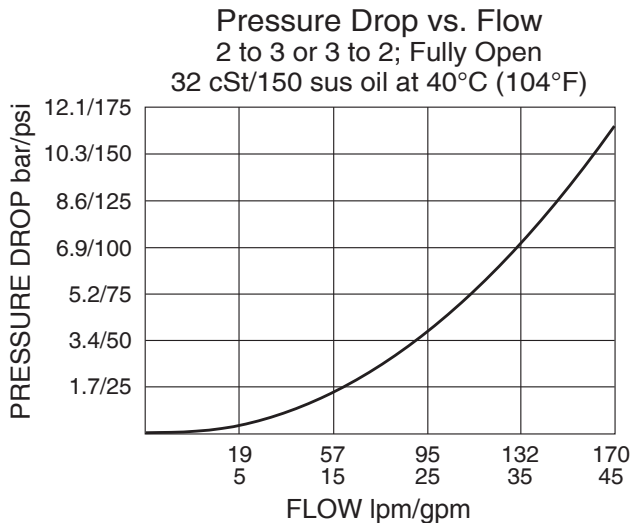
Cavity Tool: HCT42-M4xx; See page 8.600.1

Seal Kit: SK42-M4U-000; See page 8.650.1

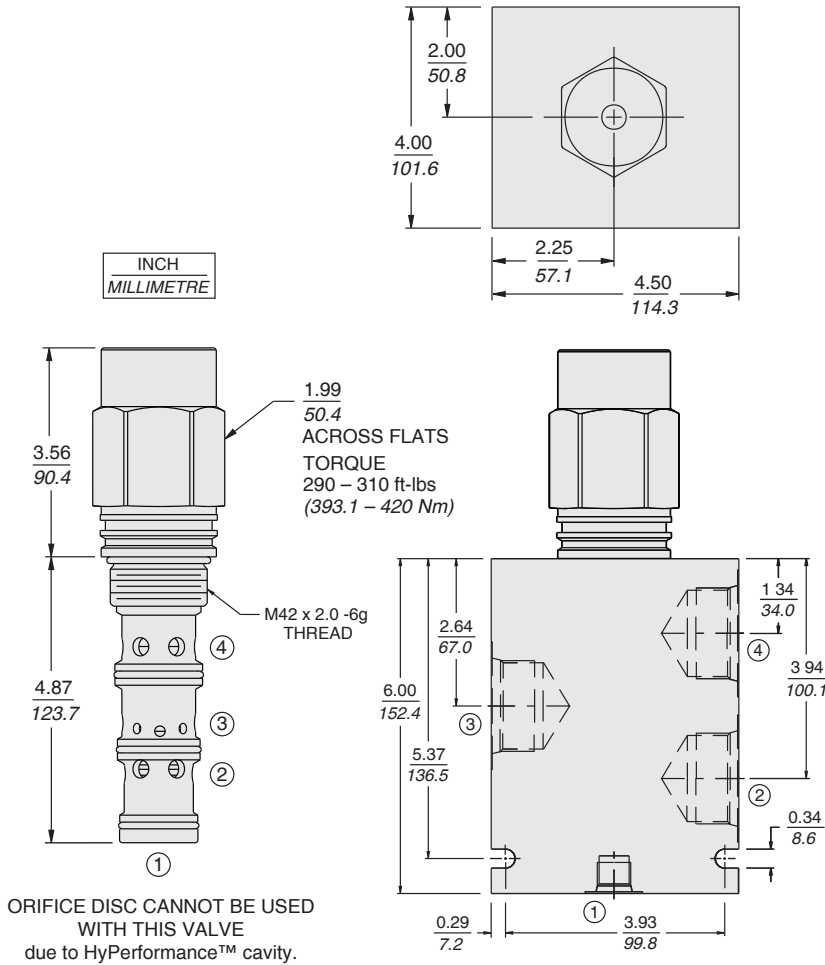
ISO SYMBOL



PERFORMANCE (Cartridge Only)



DIMENSIONS

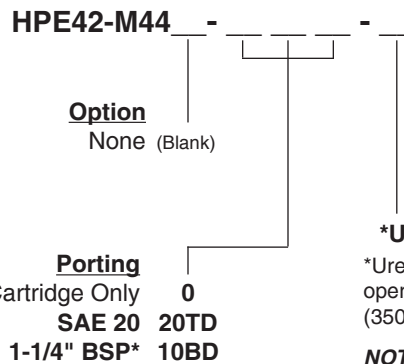


MATERIALS

Cartridge: Weight: 2.0 kg. (4.5 lbs.)
 Steel with hardened work surfaces.
 Zinc-plated exposed surfaces.
 PPDI urethane O-rings without backup rings standard.

Standard Ported Body: Weight: 10.68 kg (23.56 lbs) HyPerformance™ ductile iron (code 'D') standard.
 Rated to 354 bar (5000 psi).
 See page 8.042.1

TO ORDER



Seals
*U PPDI Urethane

*Urethane seals recommended for operating pressures above 241 bar (3500 psi).

NOTE: Consult factory for additional seal options.

* BSP body; U.K. mfr. Only

*Ductile iron body for pressures over 207 bar/3000 psi