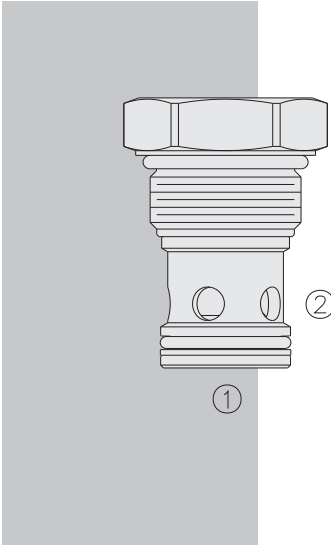


HCV16-20 HyPerformance™ Check Valve



DESCRIPTION

A screw-in, cartridge-style, hydraulic check valve for use as a blocking or load-holding device in high pressure applications.

OPERATION

The **HCV16-20** allows flow from 1 to 2, while normally blocking flow in the opposite direction.

The cartridge has a fully guided poppet which is spring-biased to closed until sufficient pressure is applied at 1 to open to 2.

FEATURES

- Hardened seat for long life and low leakage.
- Optional bias springs for back-pressure application flexibility.
- 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: 2 million cycles at 420 bar

Proof Pressure: 690 bar (10000 psi)

Burst Pressure: 1380 bar (20000 psi)

Flow: Up to 151 lpm (40 gpm)

Max. Internal Leakage: 0.25 ml/minute (5 drops/minute) at 350 bar (5075 psi)

Operating Temperature: -54 to 107°C (-65 to 225°F) 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

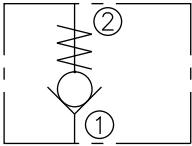
Installation: No restrictions; See page 9.020.1

Cavity: HVC16-2; See page 9.116.1

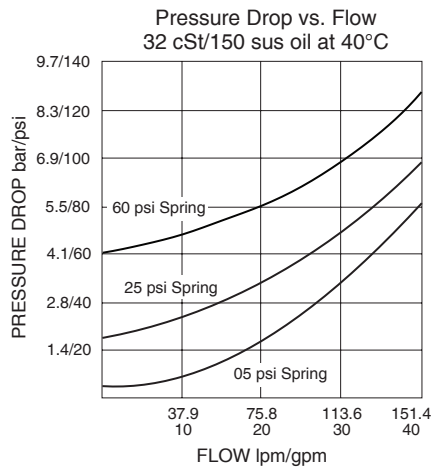
Cavity Tool: HCT16-2XX; See page 8.600.1

Seal Kit: SK16-2X-X; See page 8.650.1

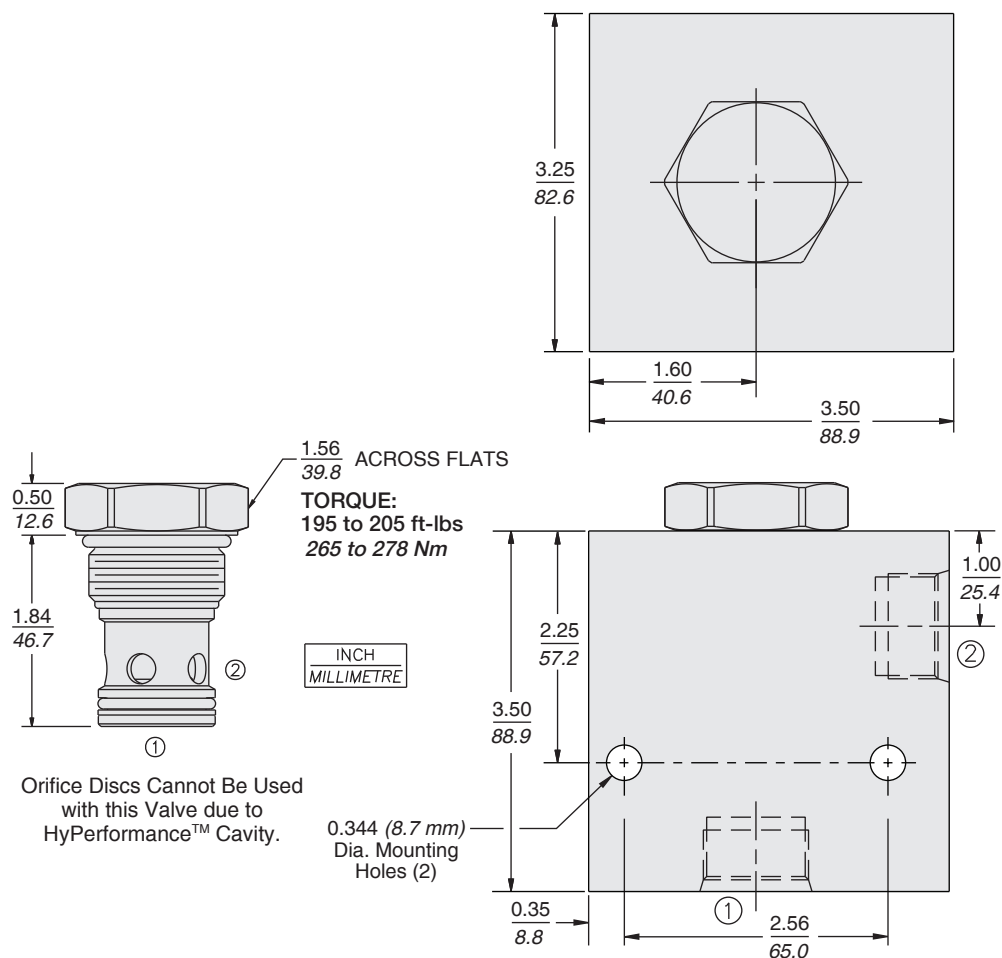
ISO SYMBOL



PERFORMANCE (Cartridge Only)



DIMENSIONS



MATERIALS

Cartridge: Weight: 0.32 kg. (0.70 lbs.)
Steel with hardened work surfaces.
Zinc-nickel plated exposed surfaces.
PPDI Urethane seals and no back-up rings standard.

Ported Body: Weight: 3.97 kg. (8.75 lbs.); H-series ductile iron standard. Rated to 345 bar (5000 psi). See page 8.016.1.

TO ORDER

HCV16-20 - - -

Porting
Cartridge Only **0**
SAE 16 **16HT**
1 in. BSP* **8HB**
*BSP Body; U.K. Mfr. Only

Bias Spring Value

- 05** 0.35 bar (5 psi)
- 08** 0.6 bar (8 psi)
- 15** 1.0 bar (15 psi)
- 25** 1.7 bar (25 psi)
- 45** 3.5 bar (45 psi)
- 60** 4.1 bar (60 psi)

Seals

U PPDI Urethane

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