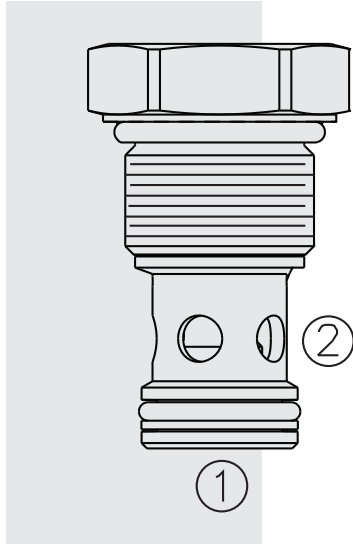


HCV12-20 HyPerformance™ Check Valve



DESCRIPTION

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

OPERATION

The HCV12-20 allows flow passage from 1 to 2, while normally blocking oil flow in the opposite direction.

The cartridge has a fully guided check which is spring-biased 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.
- Fully guided check assembly.
- 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% cycle life: 420 bar (6090 psi)

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

Cycle Life: One million cycles

Proof Pressure: 420 bar (6090 psi)

Burst Pressure: 1380 bar (20000 psi)

Flow: 95 lpm (25 gpm)

Internal Leakage: 0.25 ml/minute (5 drops/minute) max. at 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

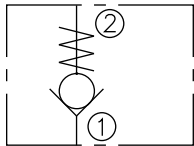
Installation: No restrictions; See page 9.020.1

Cavity: HVC12-2; See page 9.112.1

Cavity Tool: HCT12-2XX; See page 8.600.1

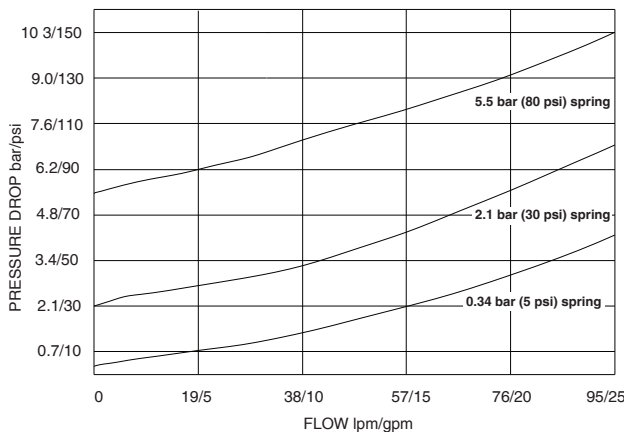
Seal Kit: SK12-2U-0; See page 8.650.1

ISO SYMBOL

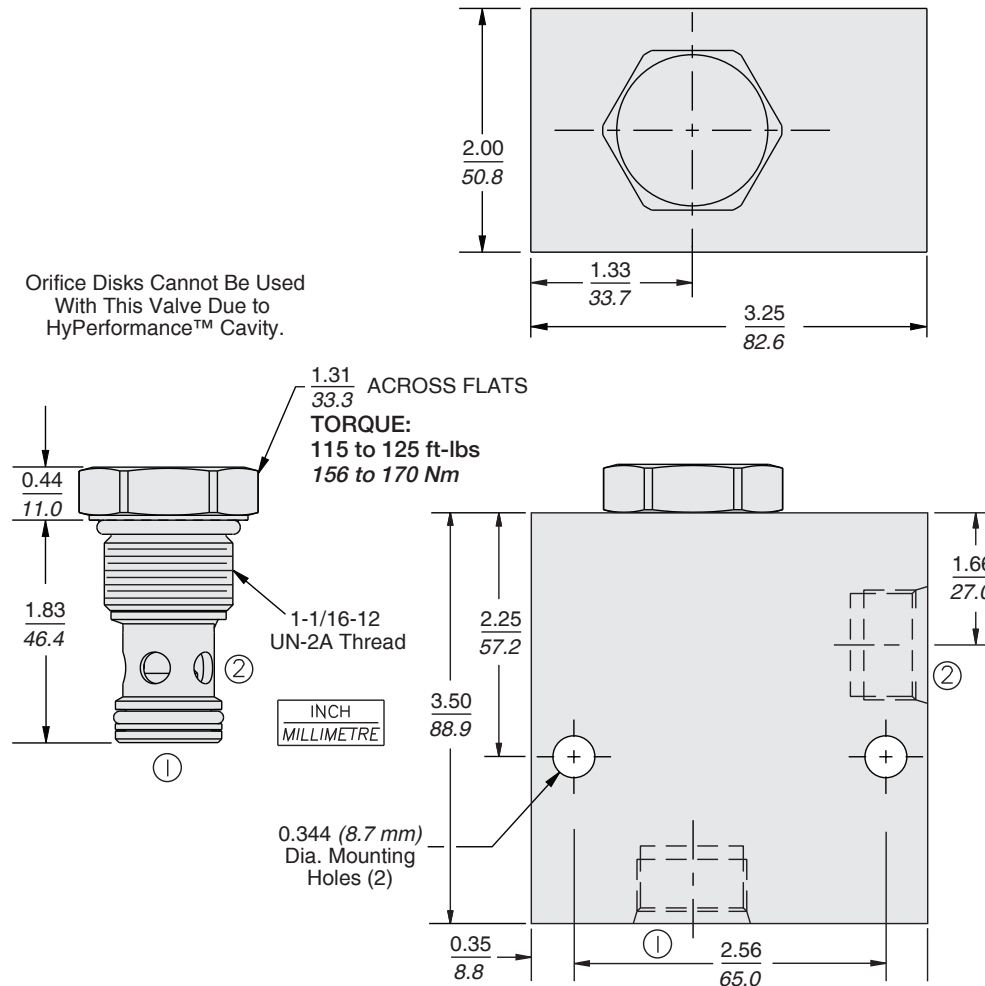


PERFORMANCE (Cartridge Only)

PRESSURE DROP vs. FLOW
32 cSt Oil at 40°C (104°F)



DIMENSIONS



MATERIALS

Cartridge: Weight: 0.18 kg. (0.40 lbs.)
Steel with hardened work surfaces.
Zinc-plated exposed surfaces.
PPDI urethane seals without back-ups standard.

Standard Ported Body: Weight:
2.74 kg. (6.05 lbs.) HyPerformance™
Ductile iron (code 'D') standard.
Rated to 345 bar (5000 psi).

TO ORDER

HCV12-20 - - -

Porting

Cartridge Only **0**
1 in. BSP* **8BD**
SAE 16 **16TD**

*BSP Body; U.K. Mfr. Only

Bias Spring*

5 0.34 bar (5 psi)
25 1.7 bar (25 psi)
30 2.1 bar (30 psi)
40 2.8 bar (40 psi)
50 3.4 bar (50 psi)
60 4.1 bar (60 psi)
80 5.5 bar (80 psi)

Seals

U PPDI Urethane - Recommended for pressures above 241 bar (3500 psi)

NOTE: Additional seal options available. Consult factory.