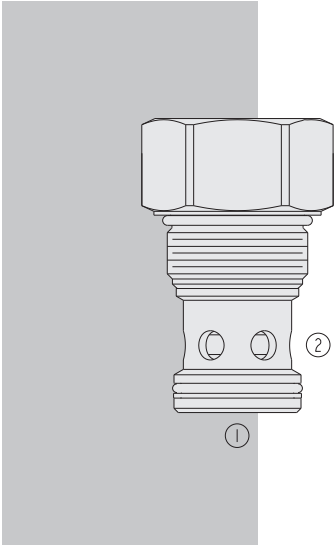


HCV42-M20 HyPerformance™ Check Valve



DESCRIPTION

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

OPERATION

The **HCV42-M20** allows flow from 1 to 2, while 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.

Proof Pressure: 420 bar (6090 psi)

Burst Pressure: 1380 bar (20000 psi)

Flow Rating: 303 lpm (80 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

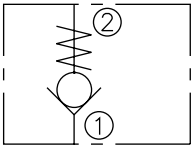
Installation: No restrictions; See page 9.020.1. Installation torque for ductile iron body is 290-310 ft. lbs. (394-420 Nm); installation torque for aluminum body is 220-230 ft. lbs. (298-312 Nm).

Cavity: HVC42-M2; See page 9.142.1

Cavity Tool: HCT42-M2XX; See page 8.600.1

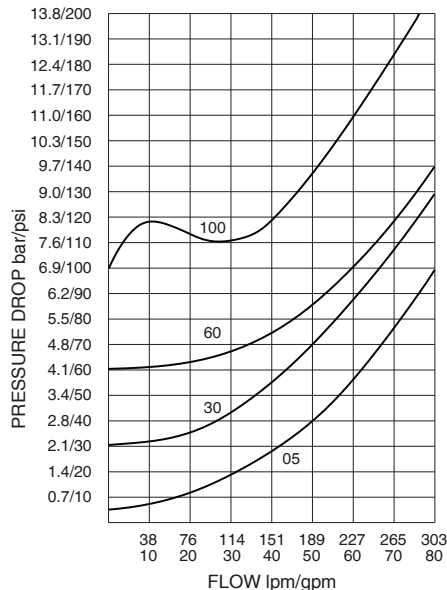
Seal Kit: SK42-M2U-0; See page 8.650.1

ISO SYMBOL

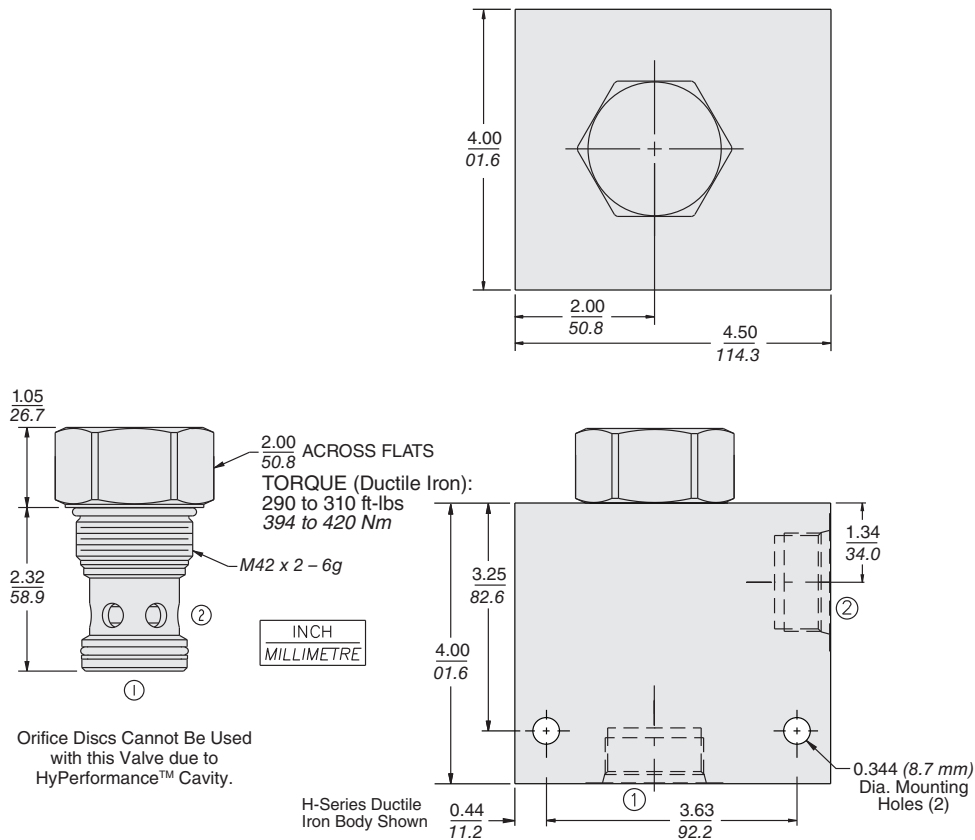


PERFORMANCE (Cartridge Only)

PRESSURE DROP vs. FLOW
for selected Spring Code Options
32 cSt/150 sus oil at 40°C (104°F)



DIMENSIONS



MATERIALS

Cartridge: Weight: 0.68 kg. (1.50 lbs.)
 Steel with hardened work surfaces.
 Zinc-nickel plated exposed surfaces.
 PPDl Urethane seals without backup rings standard.

Ported Body: Weight: 7.21 kg. (15.89 lbs.); H-series ductile iron standard. Rated to 345 bar (5000 psi). See page 8.042.1.

TO ORDER

HCV42-M20 -

Porting
 Cartridge Only **0**
 SAE 20 **20HT**
 1-1/4 in. BSP* **10HB**
 *BSP Body; U.K. Mfr. Only

Bias Spring Value

5 0.35 bar (5 psi)
15 1.0 bar (15 psi)
30 2.1 bar (30 psi)
60 4.1 bar (60 psi)
100 6.9 bar (100 psi)

Seals

U PPDl Urethane — Recommended for pressures above 241 bar (3500 psi)