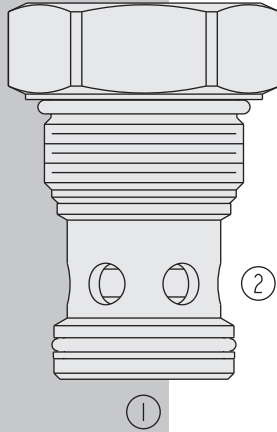


HCV42-M20 HyPerformance™ Check Valve



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.

Fatigue Rating: 2 million cycles at 420 bar

Burst Pressure: 1380 bar (20000 psi)

Flow: 303 lpm (80 gpm)

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

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

Ambient Temperature: -40 to 90°C

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

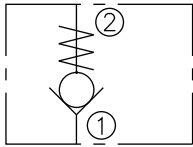
Cavity: HVC42-M2; See page 9.142.1

Cavity Tool: HCT42-M2XX; See page 8.600.1

Seal Kit: SK42-M2X-X; See page 8.650.1

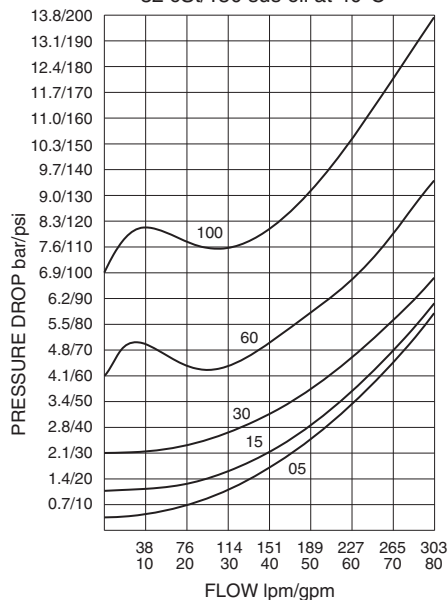
SYMBOLS

USAS/ISO:

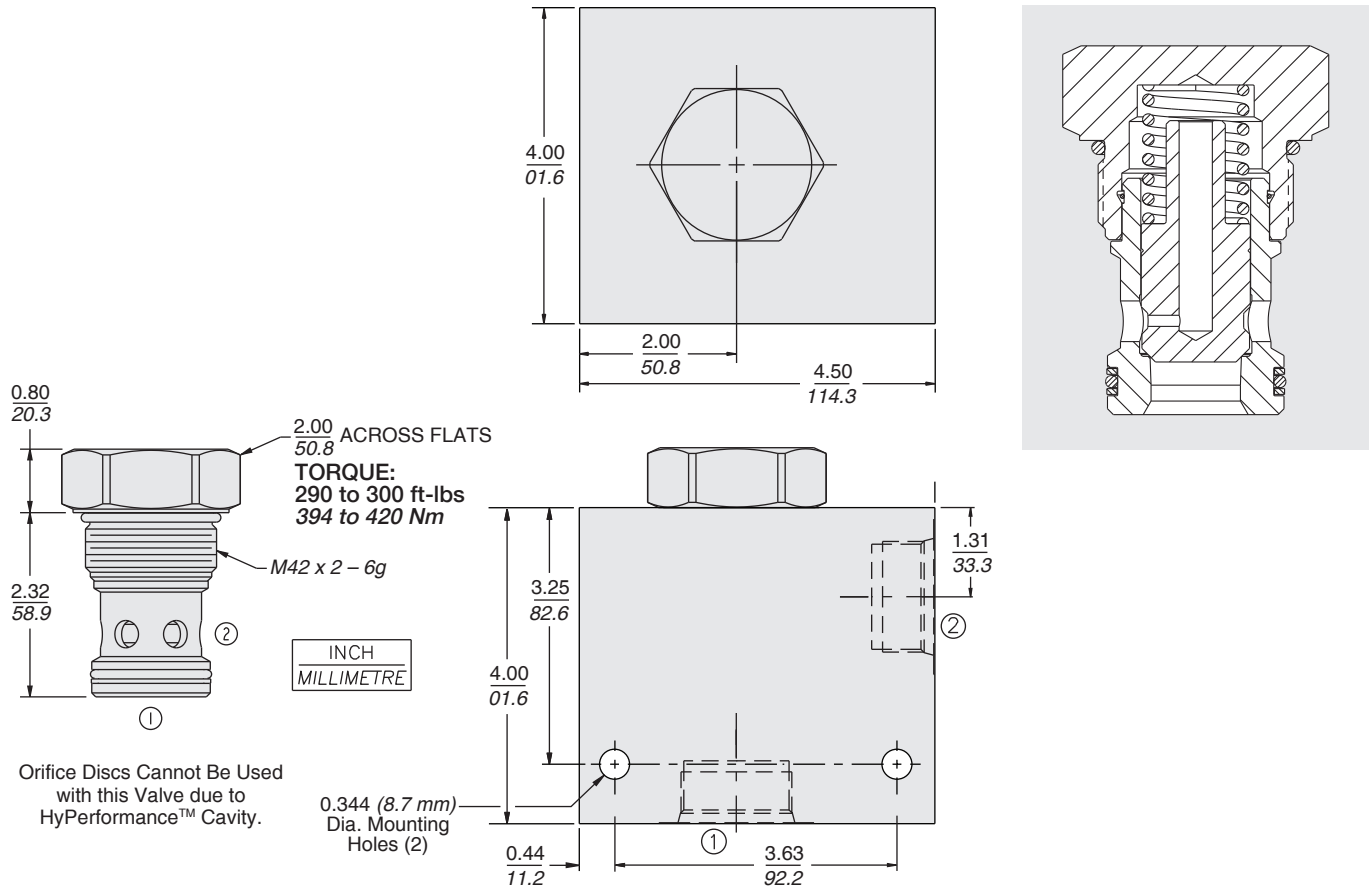


PERFORMANCE (Cartridge Only)

Pressure Drop vs. Flow
for each Spring Code Option
32 cSt/150 sus oil at 40°C



DIMENSIONS

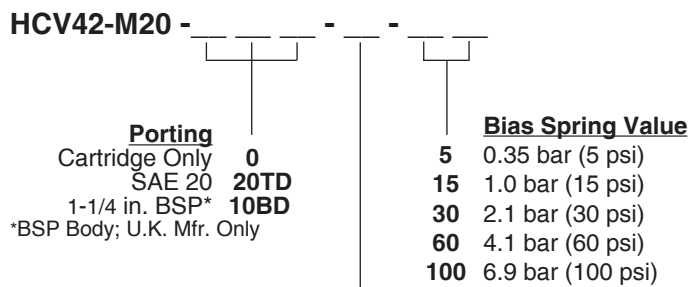


MATERIALS

Cartridge: Weight: 0.68 kg. (1.50 lbs.)
 Steel with hardened work surfaces.
 Zinc-nickel plated exposed surfaces.
 PPDI Urethane seals with no backup rings standard.

Ported Body: Weight: 7.21 kg. (15.89 lbs.); HyPerformance™
 Ductile iron (code 'D') standard.
 Rated to 345 bar (5000 psi).

TO ORDER



Seals

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