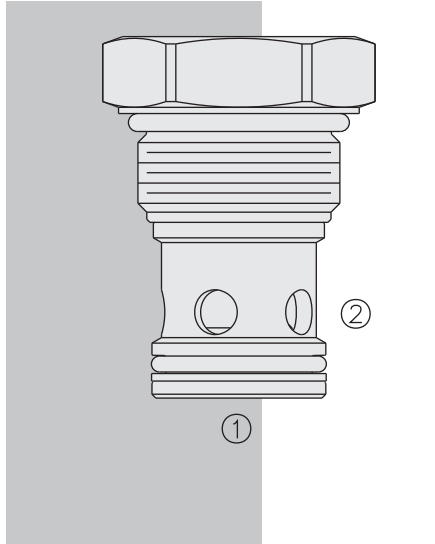


# HCV16-20 HyPerformance™ Check Valve



## 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

**Burst Pressure:** 1380 bar (20000 psi)

**Flow:** Up to 151 lpm (40 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

**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

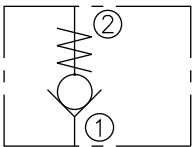
**Cavity:** HVC16-2; See page 9.116.1

**Cavity Tool:** HCT16-2XX; See page 8.600.1

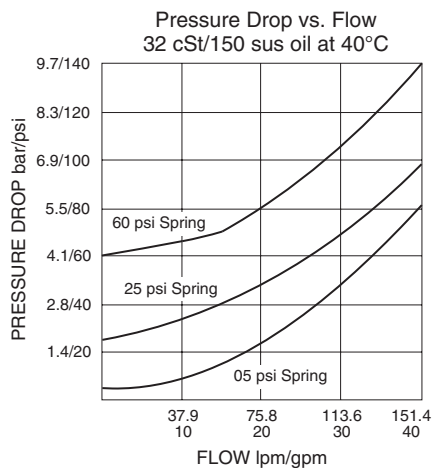
**Seal Kit:** SK16-2X-X; See page 8.650.1

## SYMBOLS

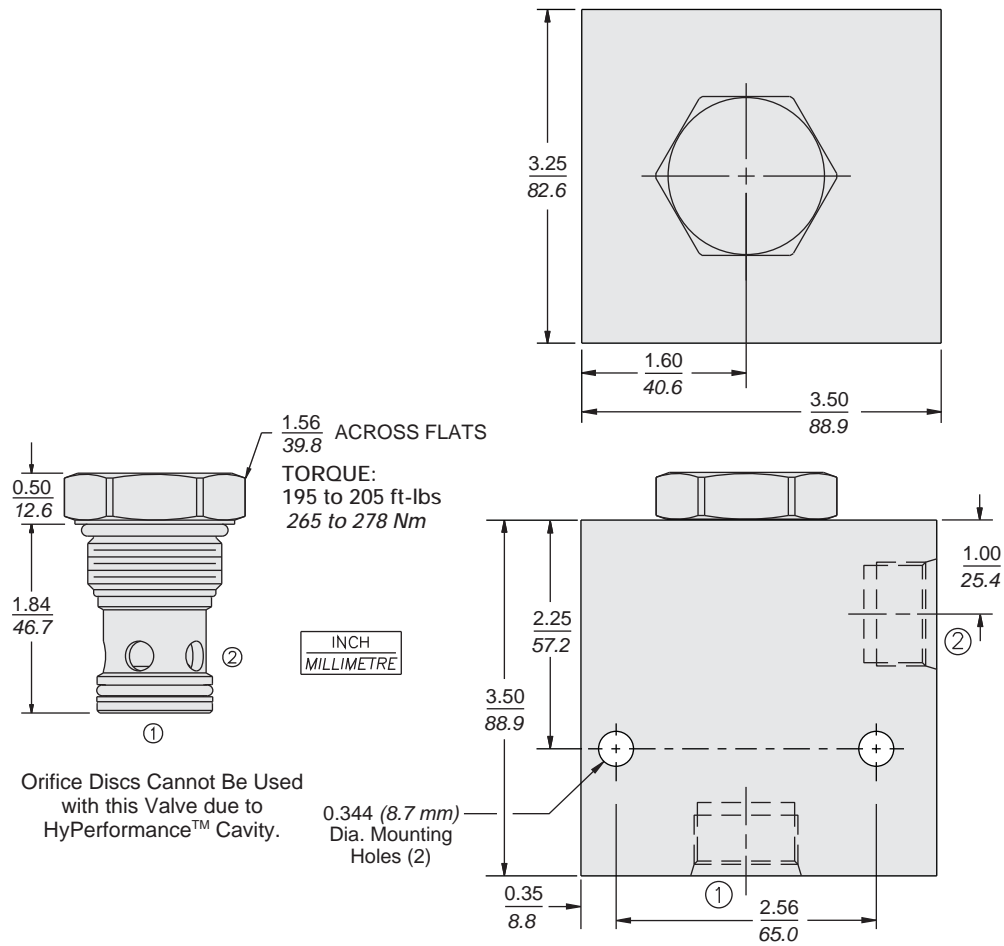
### USASI/ISO:



## 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.); HyPerformance™  
Ductile iron (code 'D') standard.  
Rated to 345 bar (5000 psi).

**TO ORDER**

<b>HCV16-20</b> - - -		
<b>Porting</b>	<b>0</b>	<b>Bias Spring Value</b>
Cartridge Only	SAE 16 <b>16TD</b>	<b>05</b> 0.35 bar (5 psi)
	1 in. BSP* <b>8BD</b>	<b>08</b> 0.6 bar (8 psi)
*BSP Body; U.K. Mfr. Only		<b>15</b> 1.0 bar (15 psi)
		<b>25</b> 1.7 bar (25 psi)
		<b>60</b> 4.1 bar (60 psi)
	<b>Seals</b>	
	<b>U</b> PPDI Urethane	

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