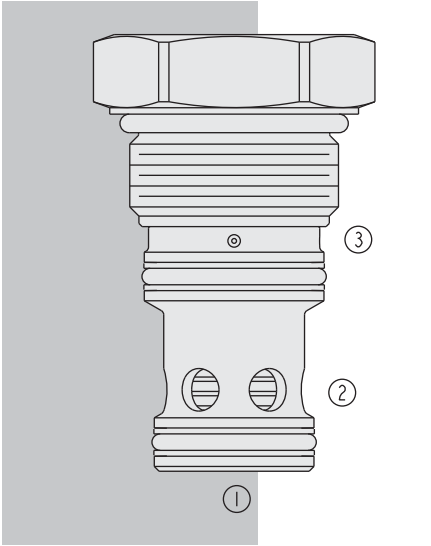


# DIRECTIONAL VALVES

## HEV16-S34 HyPerformance™ Vented Spool-Type



### DESCRIPTION

A high-pressure spool-type, screw-in, cartridge-style, hydraulic directional element, with multi-function potential when used with other directional, pressure, or flow control devices.

### OPERATION

The **HEV16-S34** is a spring-biased blocking valve which will shift to allow full flow from ① to ② only when ③ is vented to create a pressure drop across the internal orifice which exceeds the pressure of the selected bias spring.

HEV16-S34 is a vent-to-open directional valve.

### FEATURES

- Multiple function/application potential.
- Smooth shift transition.
- Low pressure drop.
- 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:** 690 bar (10000 psi)

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

**Flow:** Up to 190 lpm (50 gpm)

**Internal Leakage:** 164 ml/minute (10 cu. in./minute) max. 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

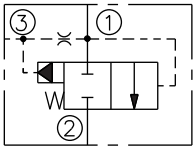
**Installation:** No restrictions; See page 9.020.1

**Cavity:** HVC16-S3; See page 9.116.1

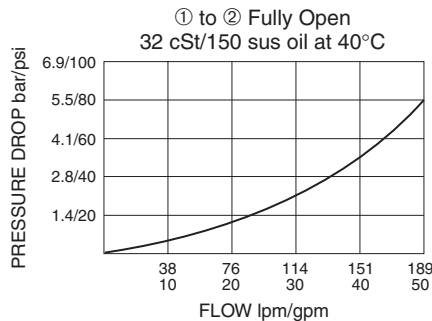
**Cavity Tool:** HCT16-S3XX; See page 8.600.1

**Seal Kit:** SK16-S3X-X; See page 8.650.1

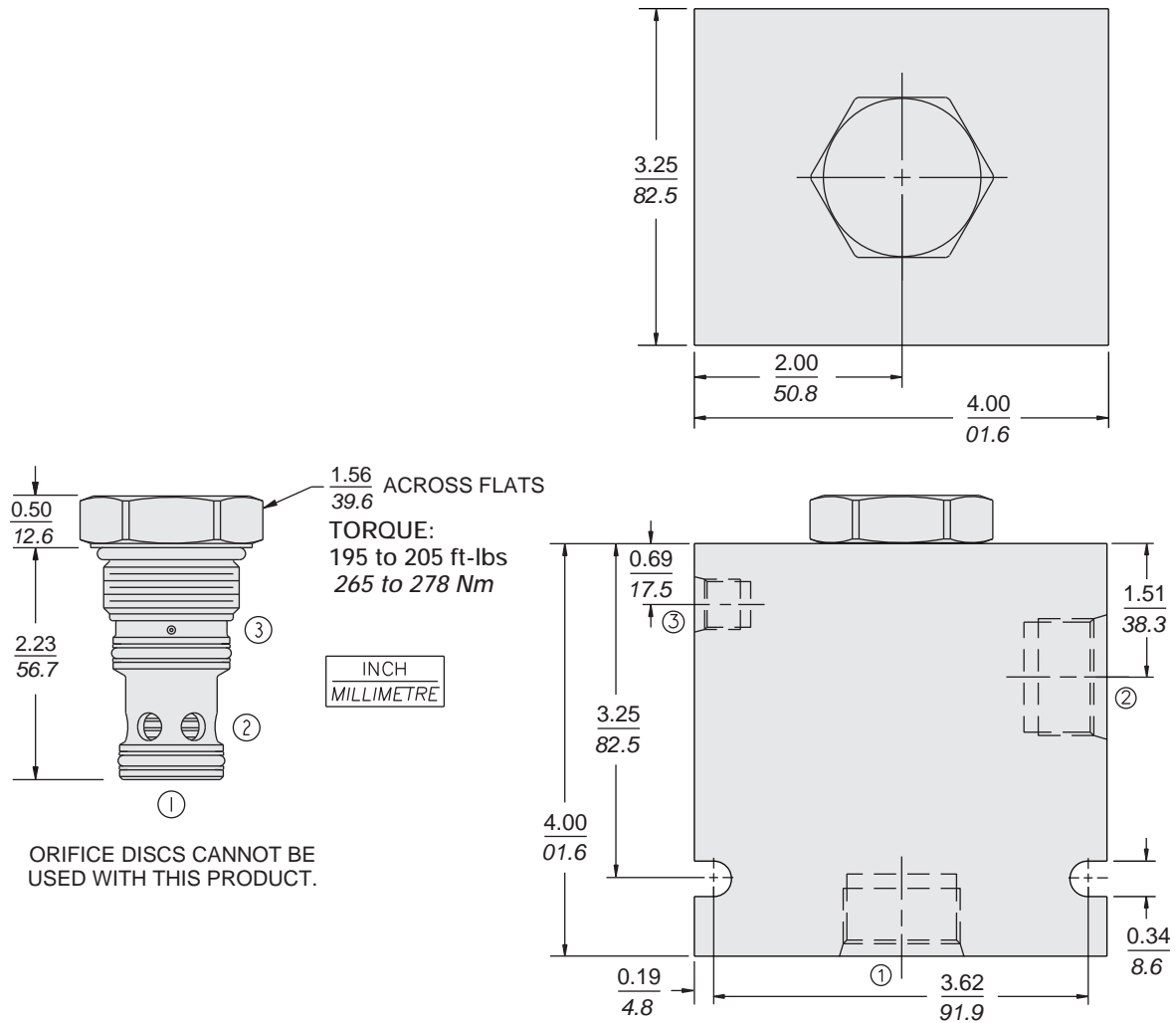
### SYMBOL



### PERFORMANCE (Cartridge Only)



## DIMENSIONS



## MATERIALS

**Cartridge:** Weight: 0.30 kg. (0.67 lbs.)  
 Steel with hardened work surfaces.  
 Zinc-nickel plated exposed surfaces.  
 PPDI Urethane seals with no backup rings standard.

**Ported Body:** Weight: 5.34 kg. (11.77 lbs.); HyPerformance™  
 Ductile iron (code 'D') standard.  
 Rated to 345 bar (5000 psi).

## TO ORDER

HEV16-S34 - - -

<b>Porting</b>		<b>Bias Spring Value</b>
Cartridge Only	<b>0</b>	<b>10</b> 0.7 bar (10 psi)
SAE 16	<b>16TD</b>	<b>20</b> 1.4 bar (20 psi)
1 in. BSP*	<b>8BD</b>	<b>40</b> 2.8 bar (40 psi)
*BSP Body; U.K. Mfr. Only		<b>80</b> 5.5 bar (80 psi)

### Seals

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