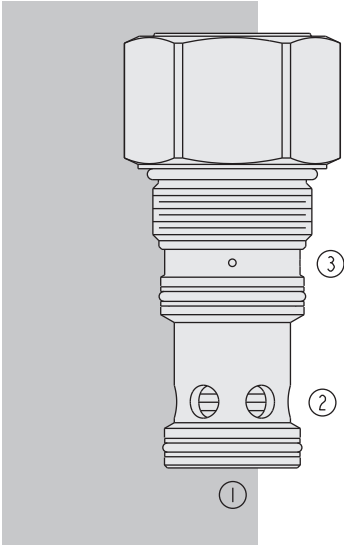


# HEV42-S34 HyPerformance™ Vented Spool-Type



## 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 HEV42-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 value of the selected bias spring force.

HEV42-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.

**Fatigue Rating:** 2 million cycles at 420 bar

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

**Flow:** Up to 379 lpm (100 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

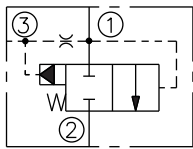
**Cavity:** HVC42-S3; See page 9.142.1

**Cavity Tool:** HCT42-S3XX; See page 8.600.1

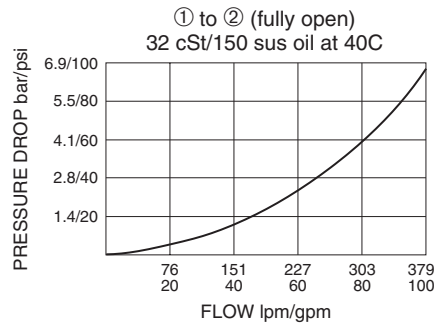
**Seal Kit:** SK42-S3X-X; See page 8.650.1

## SYMBOLS

### USASI/ISO:



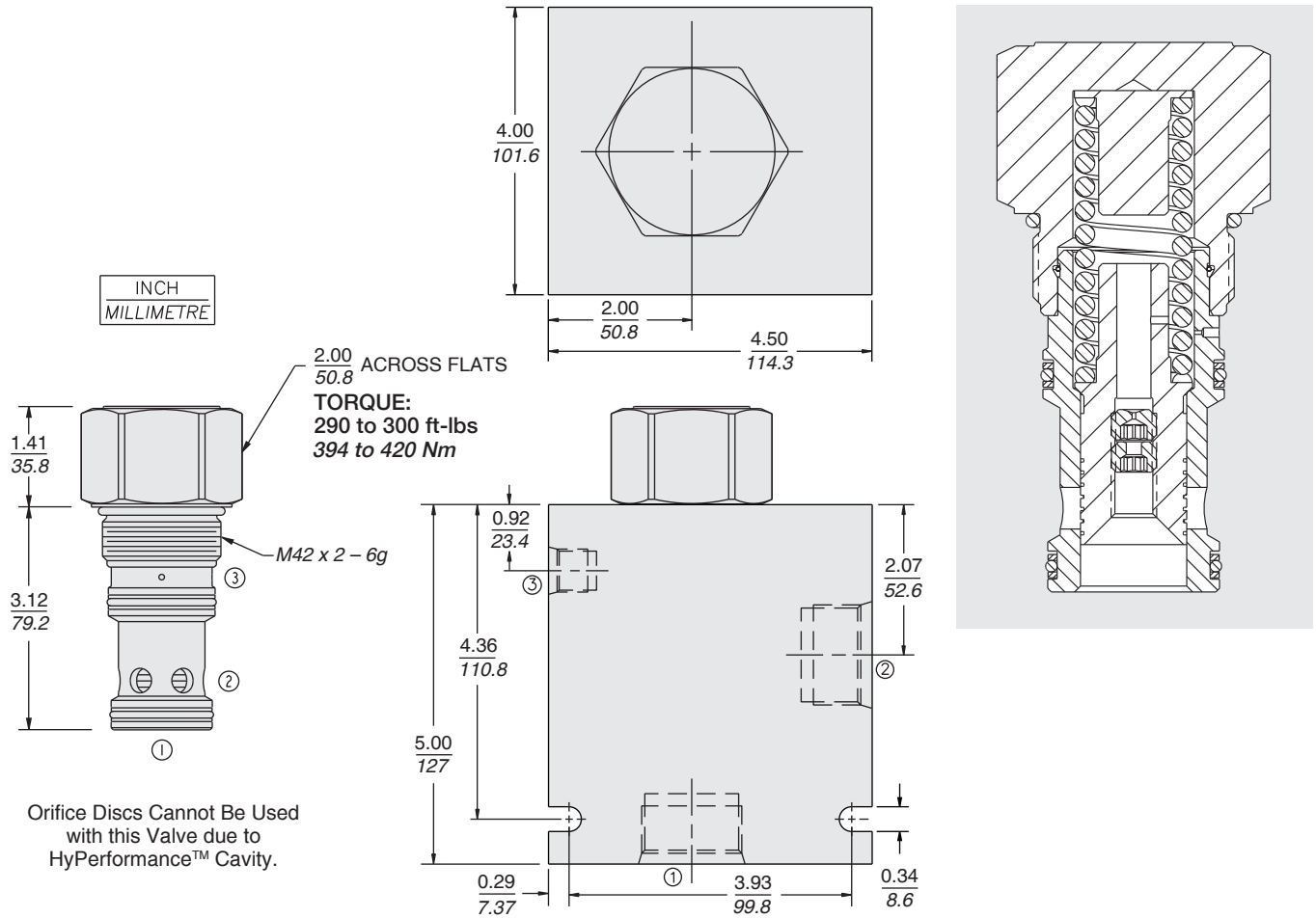
## PERFORMANCE (Cartridge Only)



# Logic Element

# HEV42-S34

## DIMENSIONS



## MATERIALS

**Cartridge:** Weight: 1.04 kg. (2.30 lbs.)  
Steel with hardened work surfaces.  
Zinc-nickel plated exposed surfaces.  
PPDI Urethane seals with no backup rings standard.

**Ported Body:** Weight: 9.03 kg. (19.9 lbs.); HyPerformance™  
Ductile iron (code 'D') standard.  
Rated to 345 bar (5000 psi).

## TO ORDER

**HEV42-S34 -**

<b>Porting</b>	<b>Bias Spring Value</b>
Cartridge Only <b>0</b>	<b>20</b> 1.4 bar (20 psi)
SAE 20 <b>20TD</b>	<b>50</b> 3.4 bar (50 psi)
1-1/4 in. BSP* <b>10BD</b>	<b>80</b> 5.5 bar (80 psi)
*BSP Body; U.K. Mfr. Only	<b>175</b> 12.1 bar (175 psi)

### Seals

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