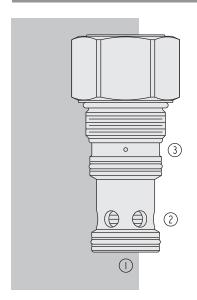
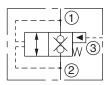
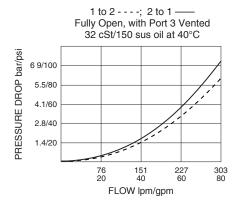
# HEP42-S38 HyPerformance™ Piloted Poppet-Type



## **SYMBOL**



# PERFORMANCE (Cartridge Only)



#### DESCRIPTION

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

#### **OPERATION**

The HEP42-S38 is a spring-biased poppet valve which will block 1 to 2 or 2 to 1 until pressure at 1 or 2 exceeds the cumulative pressure at 3 and bias spring. With no pressure at 3, flow will be allowed from 1 to 2 or 2 to 1 once the bias spring force is overcome with pressure at 1 or 2.

When the element is in the closed state, the ratio of areas 1 and 2 is 1:1, and the ratio of areas 1 or 2 to 3 is 1:2.

### **FEATURES**

- Multiple function/application potential.
- · 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 (6090 psi)

**Proof Pressure:** 690 bar (10,000 psi) **Burst Pressure:** 1380 bar (20000 psi)

Flow: Up to 284 lpm (75 gpm)

Internal Leakage: 12 drops/minute max. at 350 bar (5075 psi)

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

Ambient Temperature: -40 to 90°C (-40 to 194°F)

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

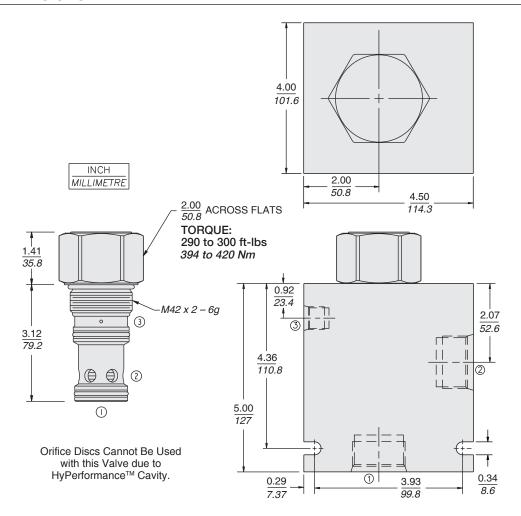
Installation: No restrictions; See page 9.020.1

Cavity: HVC42-S3; See page 9.142.1

Cavity Tool: HCT42-S3XX; See page 8.600.1

Seal Kit: SK42-S3U-OO with Urethane seals; See page 8.650.1

### **DIMENSIONS**

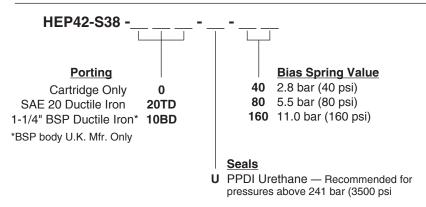


# **MATERIALS**

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



NOTE: Consult factory for additional seal options.

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