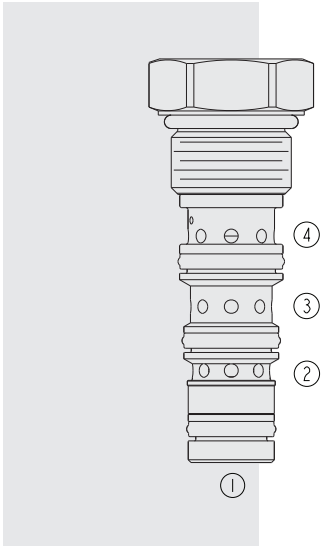


# HTD10-40 Torque Divider



## DESCRIPTION

A high pressure, spool-type, screw-in, cartridge-style, hydraulic pressure reducing/relieving valve that maintains the control port pressure at the midpoint of the supply port pressure.

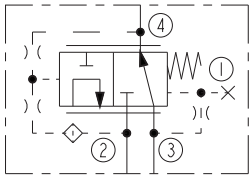
## OPERATION

The spool of the **HTD10-40** is biased to block flow from port 2 to 3 and allow flow from port 3 to 4. Pressure applied to port 2 shifts the spool to block flow to port 4 and allow flow from 2 to 3 until the pressure at 3 is at the midpoint of the pressure at 2 and port 4. The valve relieves flow from 3 to 4 if the pressure at 3 increases above the midpoint. Port 1 is blocked (unused).

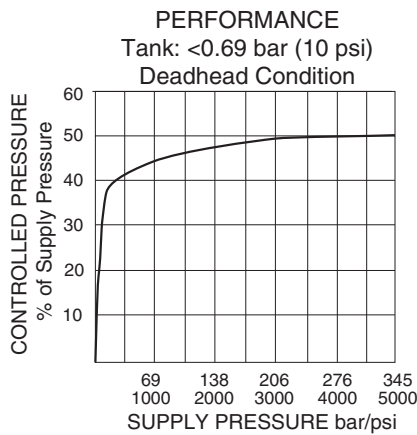
## FEATURES

- Divides torque between two series motors.
- Accommodates differential flow (size optimized).
- Cost-effective.
- Hardened spool and cage for long life.
- 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%.

## ISO SYMBOL



## PERFORMANCE (Cartridge Only)



## RATINGS

**Operating Pressure:** 350 bar (5075 psi) all ports; 10% life cycle 420 bar (6090 psi)  
Note: All HyPerformance products are tested for 900K cycles at 350 bar and 100K cycles at 420 bar.

**Proof Pressure:** 690 bar (10000 psi)

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

**Flow Rating:** 56.8 lpm (15 gpm)

**Control Pressure Setting:** Midpoint of supply and tank pressure. See performance chart.

**Maximum Internal Leakage:** 1.95 lpm (0.52 gpm) at 350 bar (5075 psi)

**Temperature:** -40 to 100°C (-40 to 212°F) with standard Buna seals;  
-26 to 204°C (-15 to 400°F) with fluorocarbon seals;  
-54°C to 107°C (-65°F 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

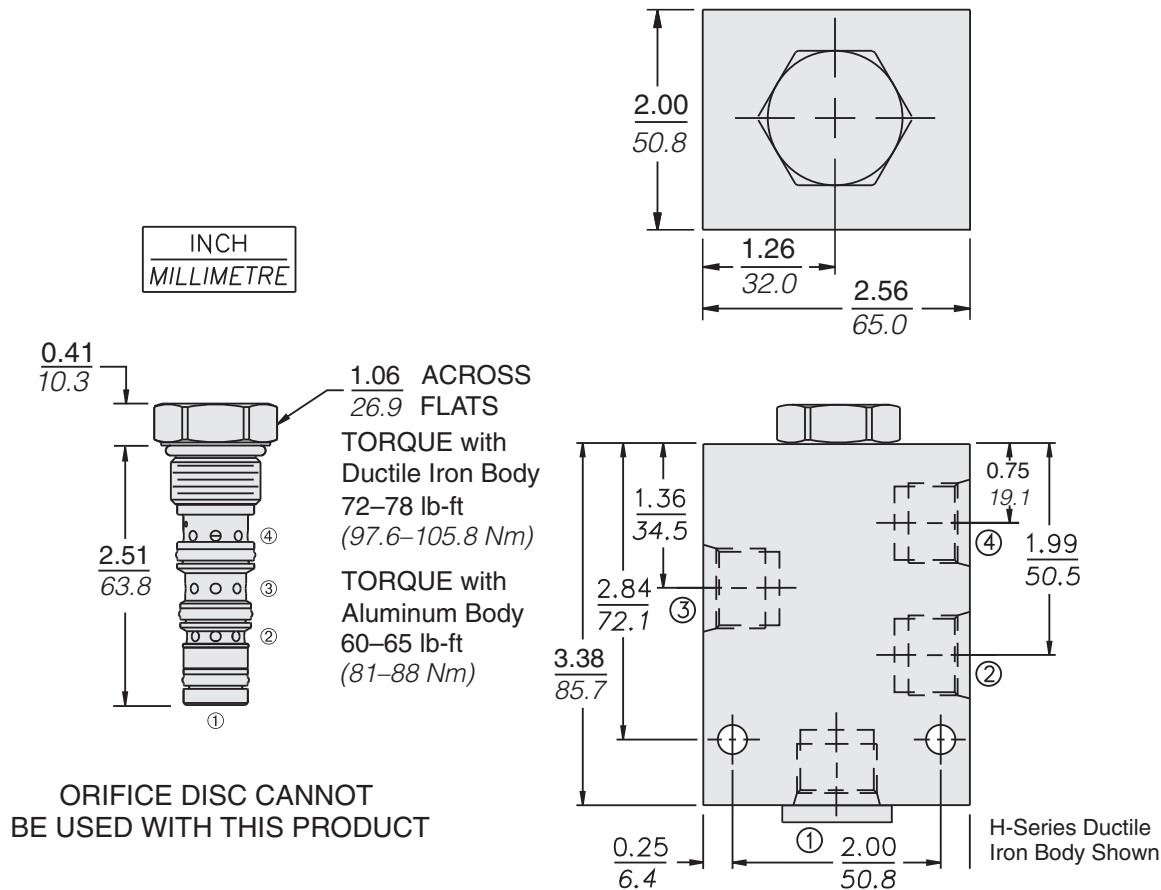
**Cavity:** HVC10-4; See page 9.110.1

**Cavity Tool:** HCT10-4XX; See page 8.600.1

**Seal Kit:** SK10-4U-000 (urethane); SK10-4N-BMM (Buna); SK10-4V-BMM (fluorocarbon); See page 8.650.1

**HTD10-40**

**DIMENSIONS**

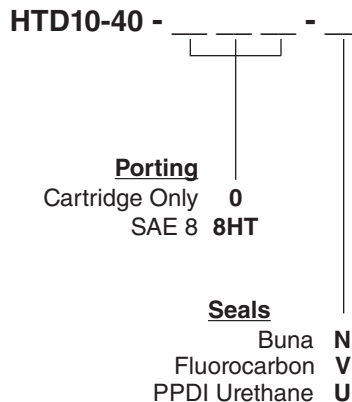


**MATERIALS**

**Cartridge:** Weight: 0.15 kg (0.32 lb)  
 Steel with hardened work surfaces.  
 Zinc-plated exposed surfaces.  
 Urethane seals standard.

**Standard Ported Body:** Weight: 1.75 kg (3.87 lb)  
 H-series ductile iron body, rated to 350 bar (5075 psi).  
 See page 8.010.1.

**TO ORDER**



**Note:** PPDI urethane seals are recommended for operating pressures above 241 bar (3500 psi).