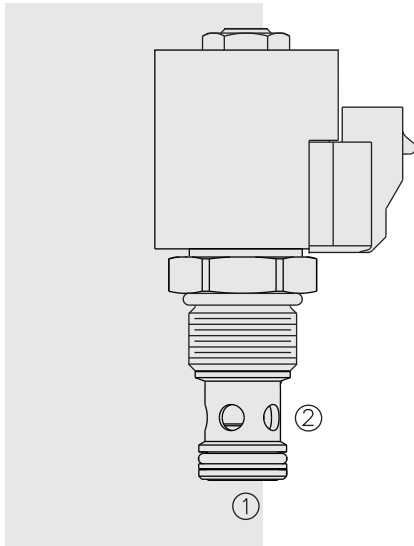
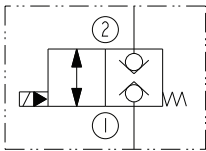


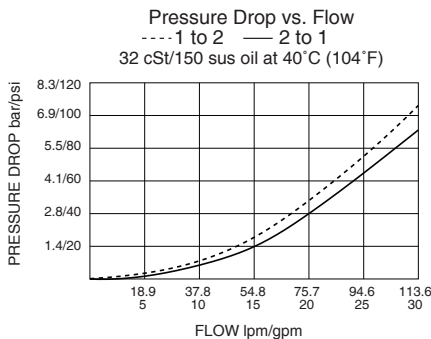
HSV12-28 Poppet, 2-Way, N.C., Bi-Directional Blocking



ISO SYMBOL



PERFORMANCE (Cartridge Only)



DESCRIPTION

A solenoid-operated, two-way, normally closed, internally piloted, poppet-type, bi-directional, screw-in hydraulic cartridge valve, designed to function as a load-holding or blocking valve in applications requiring low internal leakage bi-directionally.

OPERATION

When energized, the HSV12-28 allows flow in both directions. When de-energized, the valve blocks flow in both directions.

Operation of Manual Override Option: The manual override feature is intended for emergency use, not continuous duty operation. To operate, the manual override pin must be seated in the lower detent groove. To shift the valve manually, the operator pushes down on the knob and rotates 180 degrees in either direction. When the manual override is actuated, increased flow can be achieved by pulling on the knob.

FEATURES

- Continuous-duty rated solenoid.
- Hardened seat for long life and low leakage.
- Optional coil voltages and terminations.
- Efficient wet-armature construction.
- Cartridges are voltage interchangeable.
- Manual override option.
- Waterproof E-Coils rated up to IP69K.
- Corrosion-resistant plating.
- Unitized, molded coil design.
- Cost effective cavity.
- 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 cycles at 420 bar.

Proof Pressure: 690 bar (10,000 psi)

Burst Pressure: 1380 bar (20,000 psi)

Flow Rating: 113.6 lpm (30 gpm)

Internal Leakage: 7 drops per minute maximum at 350 bar (5075 psi)

Temperature: -54 to 107 °C (-65 to 225 °F) with standard urethane seals

Coil Duty Rating: Continuous from 85% to 115% of nominal voltage

Initial Coil Current Draw at 20 °C: E-coil: 1.7 amps at 12 Vdc; 0.85 amps at 24 Vdc

Minimum Pull-in Voltage: 85% of nominal at 350 bar (5075 psi)

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: HVC12-2; See page 9.112.1

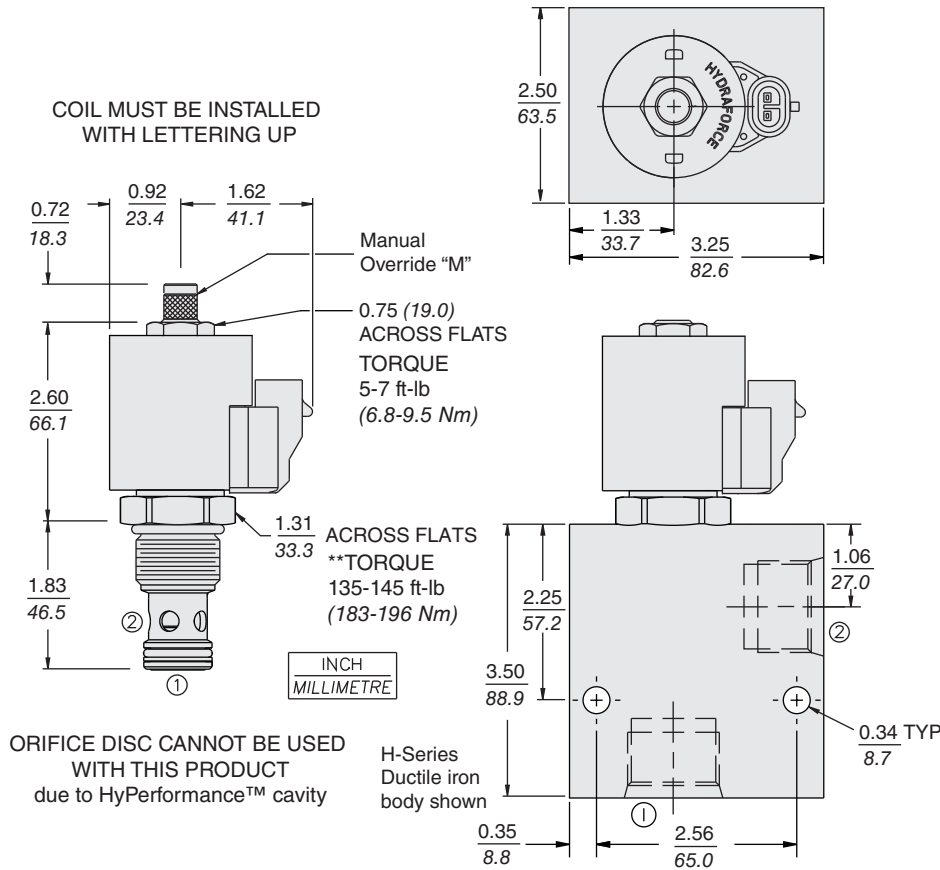
Cavity Tool: CT12-2XX; See page 8.600.1

Seal Kit: SK12-2U-0; See page 8.650.1

Coil Nut: Part No. 4553800

For E-Coils manufactured prior to 1-1-04, see page 3.400.1 for coil nut info.

DIMENSIONS



**Cartridge torque shown for ductile iron manifold. Torque 60-65 ft-lb (81-88 Nm) in aluminum. Aluminum housing is rated to 207 bar (3000 psi).

MATERIALS

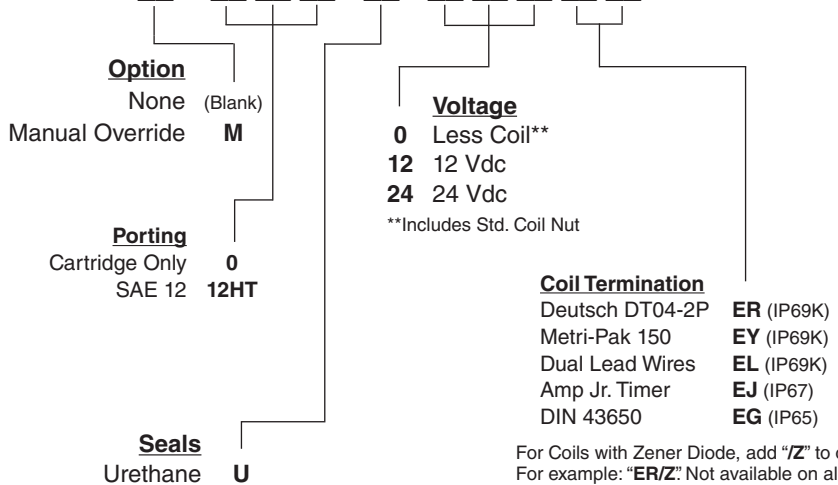
Cartridge: Weight: (without coil and nut) 0.28 kg (0.61 lb) Steel with hardened work surfaces. Corrosion-resistant zinc-nickel plated exposed surfaces. Urethane seals without back-up rings standard.

Ported Body: Weight: 2.62 kg (1.18 lb) H-series ductile iron. Rated to 350 bar (5075 psi). See page 8.012.1.

10-Size E-Coil: Weight: 0.41 kg (0.9 lb); Fully encapsulated with rugged external metal shell. Rated up to IP69K with integral connectors. See page 3.400.1.

TO ORDER

HSV12-28



For Coils with Zener Diode, add "Z" to option code. For example: "ER/Z". Not available on all models. See coil option info. on page 3.400.1

Consult factory for additional seal options.

Urethane seals recommended for pressures over 241 bar (3500 psi). Consult factory for additional seal options.