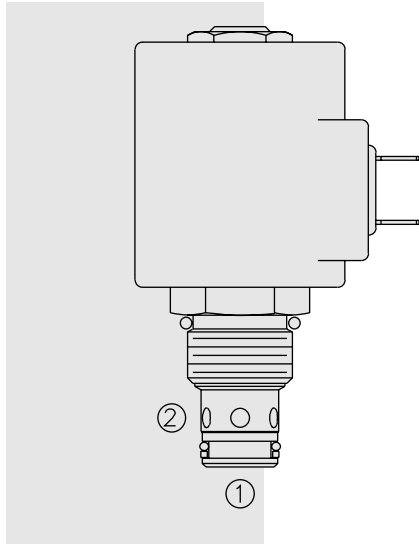


SOLENOID VALVES

SV10-28 Poppet, 2-Way, N.C., Bi-Directional Blocking



DESCRIPTION

A solenoid-operated, 2-way, normally closed, internally piloted, poppet-type, bi-directional blocking, screw-in hydraulic cartridge valve, designed for low leakage in load-holding applications.

OPERATION

When de-energized, the **SV10-28** blocks flow in both directions. When energized, the valve's poppet opens on its seat, allowing flow from ② to ① or ① to ②.

FEATURES

- Continuous-duty rated coil.
- Optional coil voltages and terminations.
- Cartridges are voltage interchangeable.
- Optional waterproof E-Coils rated up to IP69K.
- Hardened seat for long life and low leakage.
- Industry common cavity.

RATINGS

Operating Pressure: 240 bar (3500 psi)

Flow: 75.7 lpm (20 gpm)

Internal Leakage: 0.25 cc/minute (5 drops/minute) max. at 240 bar (3500 psi)

Temperature: -40 to 120°C with standard Buna seals

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

Response Time: First indication of change of state with 100% voltage supplied at 80% of nominal flow rating: Energized: 40 msec.; De-energized: 32 msec.

Initial Coil Current Draw at 20°C: Standard Coil: 1.67 amps at 12 VDC; 0.18 amps at 115 VAC (full wave rectified). E-Coil: 2.0 amps at 12 VDC; 1.0 amps at 24 VDC

Minimum Pull-in Voltage: 85% of nominal at 240 bar (3500 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 ssu)

Installation: No restrictions; See page 9.020.1

Cavity: VC10-2; See page 9.110.1

Cavity Tool: CT10-2XX; See page 8.600.1

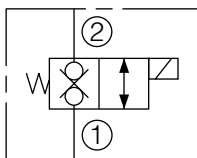
Seal Kit: SK10-2X-T; See page 8.650.1

Coil Nut: Part No. 7004400;

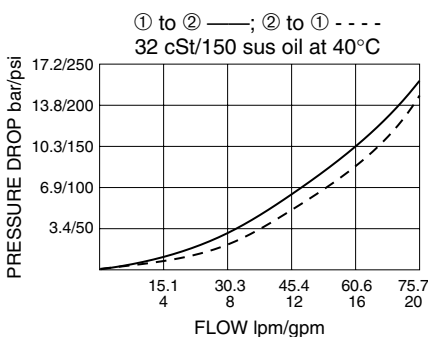
For E-coils manufactured prior to 1-1-04, see page 3.400.1 for coil nut info.

SYMBOLS

USASI/ISO:

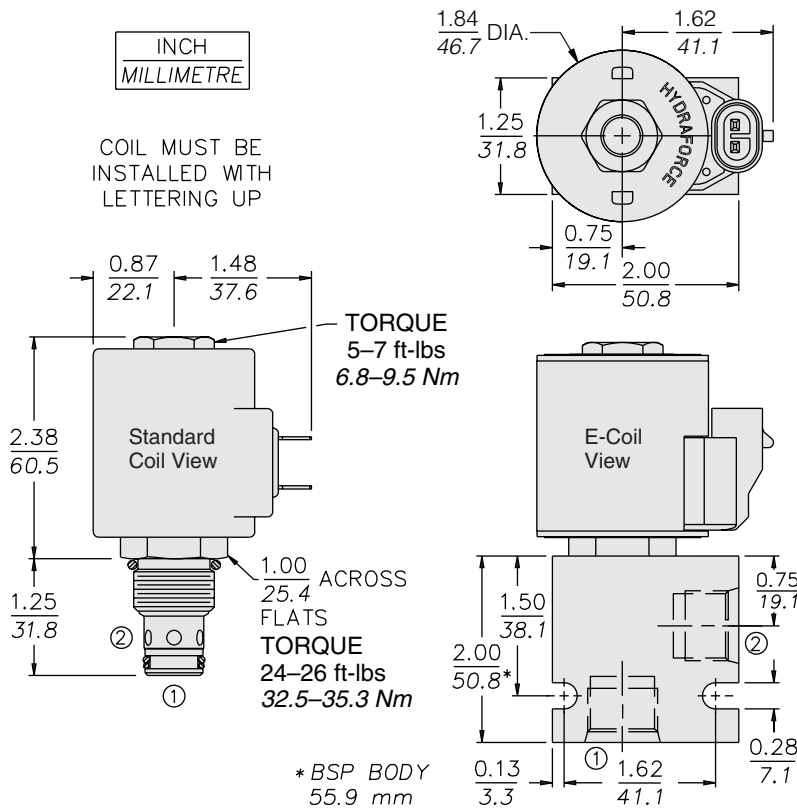


PERFORMANCE (Cartridge Only)



SV10-28

DIMENSIONS



MATERIALS

Cartridge: Weight: 0.16 kg. (0.35 lbs.); Steel with hardened work surfaces. Zinc-plated exposed surfaces. Buna N O-rings and polyester elastomer back-up standard.

Standard Ported Body: Weight: 0.16 kg. (0.35 lbs.); Anodized high-strength 6061 T6 aluminum alloy, rated to 240 bar (3500 psi); See page 8.010.1. Ductile iron and steel bodies available; consult factory.

Standard Coil: Weight: 0.27 kg. (0.60 lbs.); Unitized thermoplastic encapsulated, Class H high temperature magnetwire; See page 3.200.1.

E-Coil: Weight: 0.41 kg. (0.90 oz.); Fully encapsulated with rugged external metal shell; Rated up to IP69K with integral connectors; **Note: See page 3.400.1 for all E-Coil retrofit applications.**

TO ORDER

SV10-28 -		Termination (VDC) Std. Coil	
Porting	0	0	DS Dual Spades
Cartridge Only	6T	10 10 VDC [†]	DG DIN 43650
SAE 6	8T	12 12 VDC	DL Leadwires (2)
SAE 8	2B	24 24 VDC	DL/W Leads w/Weatherpak [®] Connectors
1/4 in. BSP*	3B	36 36 VDC	DR Deutsch DT04-2P
3/8 in. BSP*	4B	48 48 VDC	
1/2 in. BSP*		24 24 VAC	Termination (VAC) Std. Coil
*BSP Body; U.K. Mfr. Only		115 115 VAC	AG DIN 43650
		230 230 VAC	AP 1/2 in. Conduit
		**Includes Std. Coil Nut	Termination (VDC) E-Coil
Seals	N	† DS, DW or DL terminations only	ER Deutsch DT04-2P (IP69K Rated)
Buna N (Std.)	V		EY Metri-Pack [®] 150 (IP69K Rated)
Fluorocarbon		E-Coil	
		10 10 VDC	
		12 12 VDC	
		20 20 VDC	
		24 24 VDC	

Coils with internal diode are available. Consult factory.