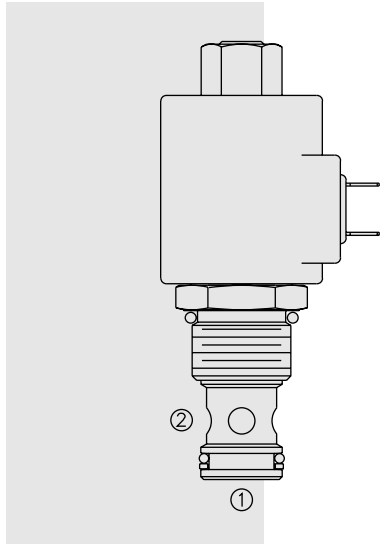


SOLENOID VALVES

SV12-23 Poppet, 2-Way, Normally Open



DESCRIPTION

A solenoid-operated, 2-way, normally open, poppet-type, screw-in hydraulic cartridge valve, designed to function as a load holding or blocking valve in applications requiring low internal leakage.

OPERATION

When de-energized, the SV12-23 allows bidirectional flow from ② to ①.

When energized, the valve's poppet closes to block flow from ② to ①. In this mode, the cartridge allows free reverse flow from ① to ② after overcoming the solenoid force (requires 3.4 to 10.3 bar [50 to 150 psi]).

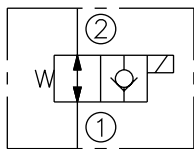
Operation of Manual Override Option: To override, push and hold override button.

FEATURES

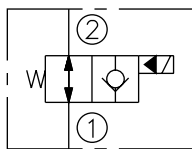
- Continuous-duty rated solenoid.
- Hardened seat for long life and low leakage.
- Optional coil voltages and terminations.
- Efficient wet-armature construction.
- Cartridges are voltage interchangeable.
- Unitized, molded coil design.
- Manual override option.
- Optional waterproof E-Coils rated up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

SYMBOLS

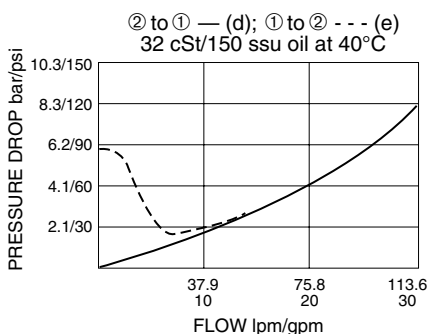
USASI:



ISO:



PERFORMANCE (Cartridge Only)



RATINGS

Operating Pressure: 240 bar (3500 psi)

Flow: See Performance Chart

Internal Leakage: 0.15 cc/minute (3 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

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 207 bar (3000 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: VC12-2; See page 9.112.1

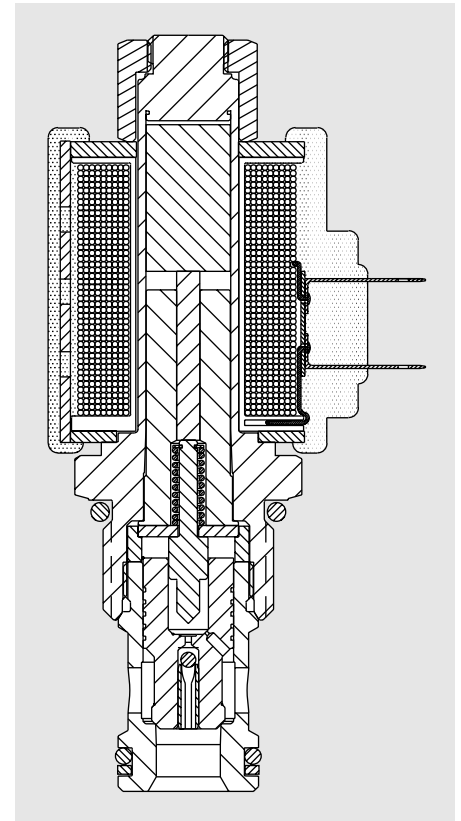
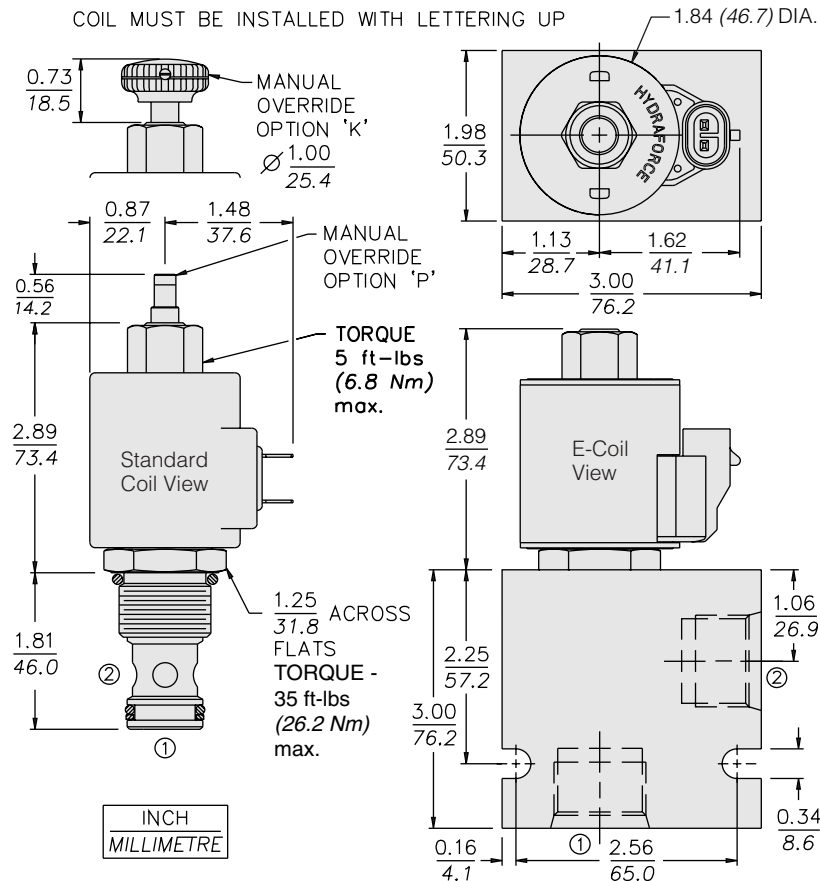
Cavity Tool: CT12-2XX; See page 8.600.1

Seal Kit: SK12-2X-T; See page 8.650.1

Coil Nut: Part No. 7004420;

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

DIMENSIONS



MATERIALS

Cartridge: Weight: 0.25 kg. (0.55 lbs.); Steel with hardened work surfaces. Zinc-plated exposed surfaces. Buna N O-rings and polyester elastomer back-up standard.

Standard Ported Body: Weight: 0.57 kg. (1.25 lbs.); Anodized high-strength 6061 T6 aluminum alloy, rated to 240 bar (3500 psi); See page 8.012.1. Ductile iron and steel bodies available; dimensions may differ; 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. (0.9 lbs.); 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

SV12-23

<p>Options</p> <p>None (Blank)</p> <p>Manual Override without Knob P</p> <p>Manual Override with Knob K</p> <p>Porting</p> <p>Cartridge Only 0</p> <p>SAE 10 10T</p> <p>SAE 12 12T</p> <p>SAE 16 16T</p> <p>3/4 in. BSP* 6B</p> <p>1 in. BSP* 8B</p> <p>*BSP Body; U.K. Mfrs. Only</p> <p>Seals</p> <p>Buna N (Std.) N</p> <p>Fluorocarbon V</p>	<p>Voltage Std. Coil</p> <p>0 Less Coil**</p> <p>10 10 VDC†</p> <p>12 12 VDC</p> <p>24 24 VDC</p> <p>36 36 VDC</p> <p>48 48 VDC</p> <p>24 24 VAC</p> <p>115 115 VAC</p> <p>230 230 VAC</p> <p>**Includes Std. Coil Nut</p> <p>† DS, DW or DL terminations only</p> <p>E-Coil</p> <p>10 10 VDC</p> <p>12 12 VDC</p> <p>20 20 VDC</p> <p>24 24 VDC</p>	<p>Termination (VDC) Std. Coil</p> <p>DS Dual Spades</p> <p>DG DIN 43650</p> <p>DL Leadwires (2)</p> <p>DL/W Leads w/Weatherpak® Connectors</p> <p>DR Deutsch DT04-2P</p> <p>Termination (VAC) Std. Coil</p> <p>AG DIN 43650</p> <p>AP 1/2 in. Conduit</p> <p>Termination (VDC) E-Coil</p> <p>ER Deutsch DT04-2P (IP69K Rated)</p> <p>EY Metri-Pack® 150 (IP69K Rated)</p> <p>Coils with internal diode are available. Consult factory.</p>
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