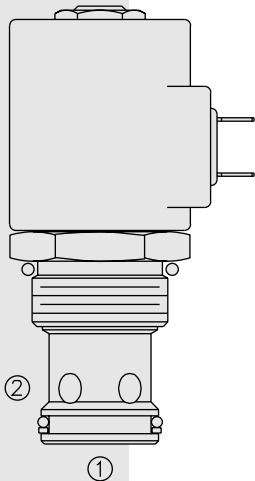


SOLENOID VALVES

SV16-22 Poppet, 2-Way, Normally Closed



DESCRIPTION

A solenoid-operated, 2-way, normally closed, 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 **SV16-22** acts as a check valve, allowing flow from ① to ②, while blocking flow from ② to ①.

When energized, the poppet lifts to open the ② to ① flow path. In this mode, flow is also allowed from ① to ②.

Operation of Manual Override Option: To override, push button in, twist counter-clockwise 180° and release. In this position, the valve will remain open.

To return to normal operation, push button in, twist clockwise 180° and release. Override will be detented in this position.

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.
- Industry common cavity.

RATINGS

Operating Pressure: 207 bar (3000 psi); Under certain operating conditions, this valve may be used at higher pressures; consult factory.

Proof Pressure: 390 bar (5700 psi)

Flow: See Performance Chart

Internal Leakage: 0.15 cc/minute (3 drops/minute) max. at 207 bar (3000 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: VC16-2; See page 9.116.1

Cavity Tool: CT16-2XX; See page 8.600.1

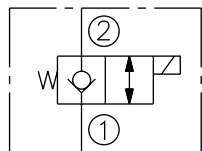
Seal Kit: SK16-2X-T; See page 8.650.1

Coil Nut: Part No. 7004400;

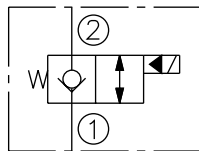
For E-coils manufactured prior to 1-1-04, see page 3.400.1 for coil nut info.

SYMBOLS

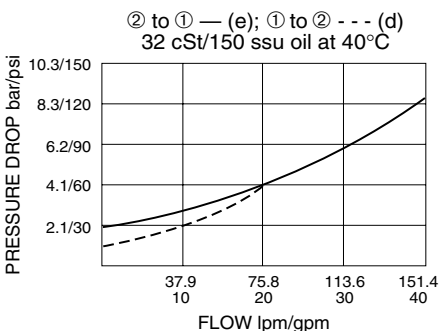
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ISO:

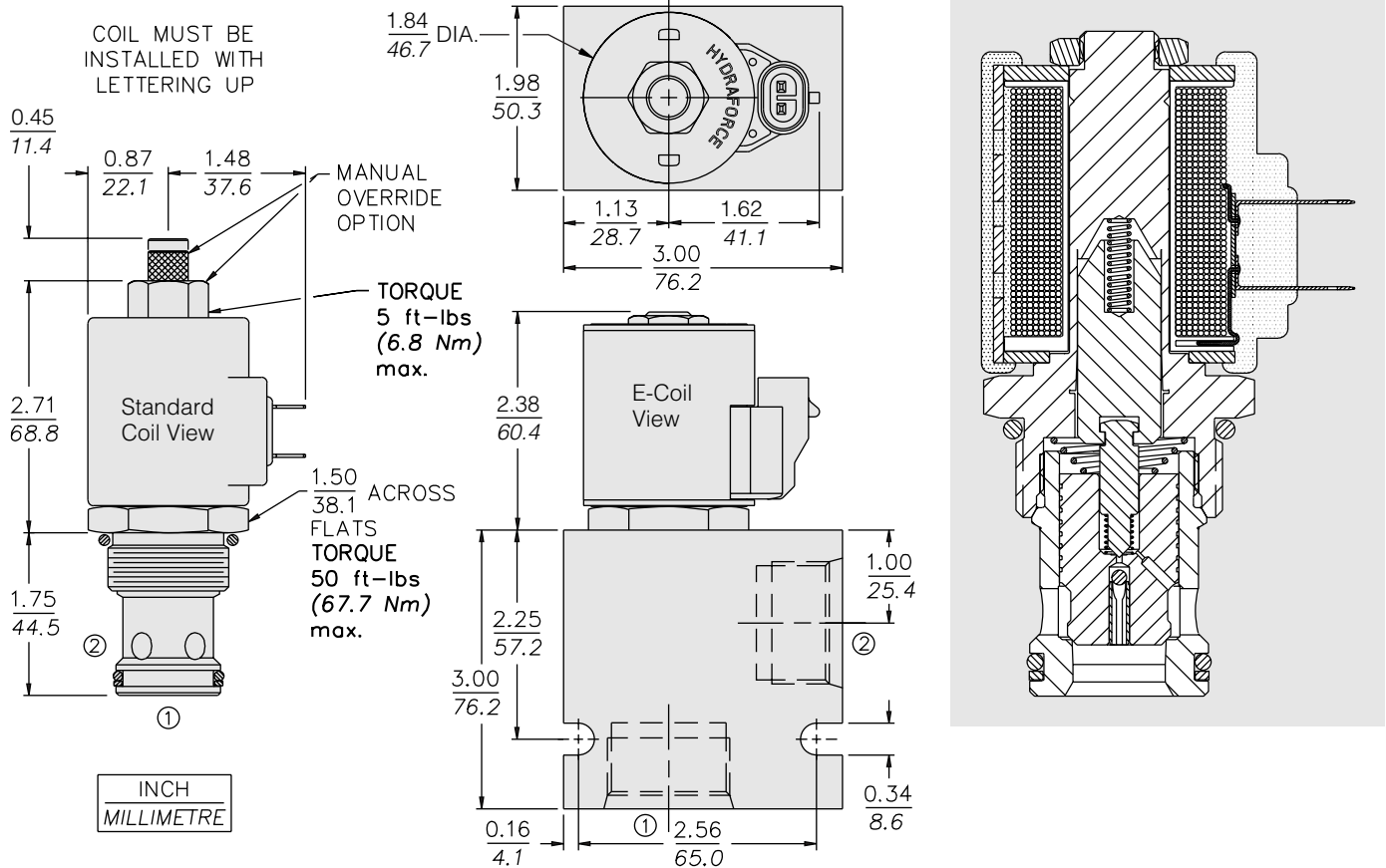


PERFORMANCE (Cartridge Only)



SV16-22

DIMENSIONS



MATERIALS

Cartridge: Weight: 0.31 kg. (0.69 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 8.016.1. 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

SV16-22		-	-	-	-	-
Option	None (Blank)					
Manual Override	M					
Manual Override	Y					
Manual Override	J					
For Manual Override options see page 1.001.1						
Porting						
Cartridge Only	0					
SAE 12	12T					
SAE 16	16T					
3/4 in. BSP*	6B					
1 in. BSP*	8B					
*BSP Body; U.K. Mfr. Only						
Seals						
Buna N (Std.)	N					
Fluorocarbon	V					
Voltage						
Std. Coil						
0 Less Coil**						
10 10 VDC†						
12 12 VDC						
24 24 VDC						
36 36 VDC						
48 48 VDC						
24 24 VAC						
115 115 VAC						
230 230 VAC						
**Includes Std. Coil Nut						
† DS, DW or DL terminations only						
Termination (VDC)						
Std. Coil						
DS Dual Spades						
DG DIN 43650						
DL Leadwires (2)						
DL/W Leads w/Weatherpak® Connectors						
DR Deutsch DT04-2P						
Termination (VAC)						
Std. Coil						
AG DIN 43650						
AP 1/2 in. Conduit						
Termination (VDC)						
E-Coil						
ER Deutsch DT04-2P (IP69K Rated)						
EY Metri-Pack® 150 (IP69K Rated)						

Coils with internal diode are available. Consult factory.