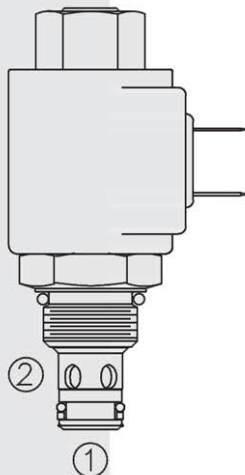


Part number:

## SOLENOID VALVES

### SF08-23 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 at high pressure.

#### OPERATION

When de-energized, the SF08-23 poppet lifts to open from 2 to 1. When energized, the cartridge acts as a check valve, blocking flow from 2 to 1 after overcoming the solenoid force (requires 3.4 to 10.3 bar / 50 to 150 psi).

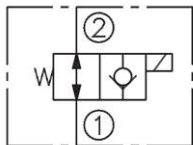
**Operation of Manual Override Option:** To override, push and hold override button.

#### FEATURES

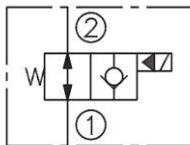
- Continuous-duty rated solenoid.
- Hardened seat for long life and low leakage.
- Optional coil voltages and terminations.
- Efficient wet-armature construction.
- Cartridges are voltage interchangeable.
- Unitized, molded coil design.
- Manual override option.
- Optional waterproof E-Coils rated up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

#### SYMBOLS

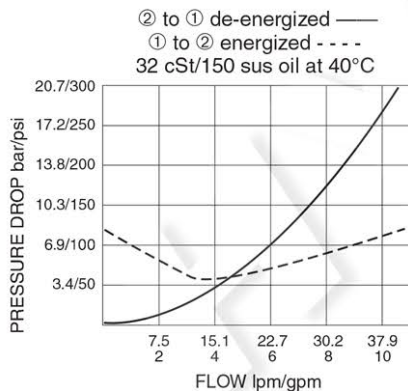
USASI:



ISO:



#### PERFORMANCE (Cartridge Only)



#### RATINGS

**Operating Pressure:** 345 bar (5000 psi)

**Flow:** See Performance Chart

**Internal Leakage:** 0.15 cc/minute (3 drops/minute) max. at 345 bar (5000 psi)

**Temperature:** -40 to 100°C with standard polyurethane seals

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

**Initial Coil Current Draw at 20°C:** Standard Coil: 1.2 amps at 12 VDC;

0.13 amps at 115 VAC (full wave rectified).

E-Coil: 1.4 amps at 12 VDC; 0.7 amps at 24 VDC

**Minimum Pull-in Voltage:** 85% of nominal at 345 bar (5000 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:** VC08-2; See page 9.108.1

**Cavity Tool:** CT08-2XX; See page 8.600.1

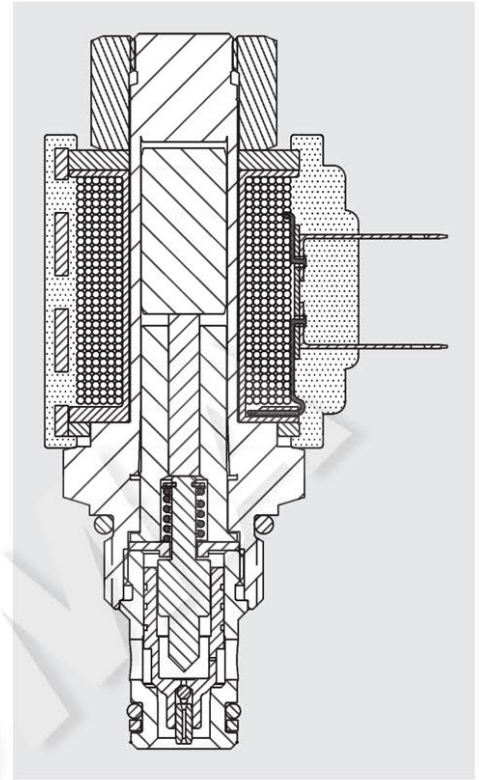
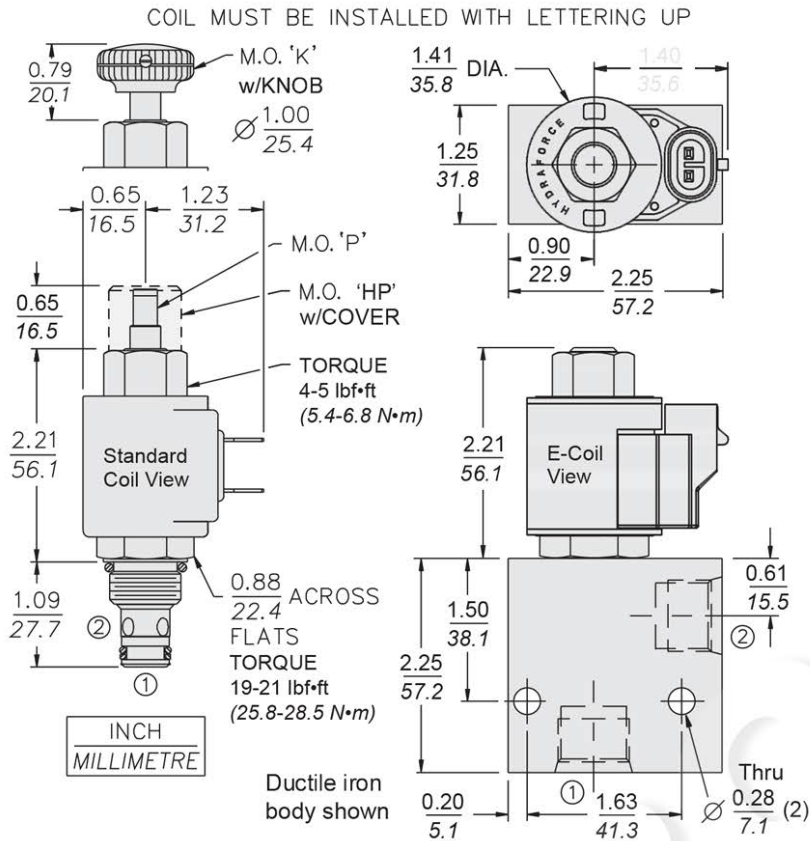
**Seal Kit:** SK08-2P-T; See page 8.650.1

**Coil Nut:** Part No. 7004410;

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

**Note:** This valve, the SF08-23, replaces the SV58-23 which is now obsolete. For more information consult factory.

## DIMENSIONS



## MATERIALS

**Cartridge:** Weight: 0.09 kg. (0.20 lbs.); Steel with hardened work surfaces. Zinc-plated exposed surfaces; Polyurethane cast O-rings and Fluorocarbon back-up standard.

**Ported Body:** Weight: 0.54 kg. (1.2 lbs.); Ductile iron standard; rated to 345 bar (5000 psi); See page 8.008.1.

**Standard Coil:** Weight: 0.11 kg. (0.25 lbs.); Unitized thermo-plastic encapsulated, Class H high temperature magnetwire; See page 3.200.1.

**E-Coil:** Weight: 0.14 kg. (0.3 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

### SF08-23

<b>Option</b>		<b>Voltage</b>		<b>Termination (VDC)</b>
None (Blank)		<b>Std. Coil</b>		<b>Std. Coil</b>
152 $\mu$ Screen	<b>S</b>	<b>0</b> Less Coil**		<b>DS</b> Dual Spades
Manual Override	<b>P</b>	<b>10</b> 10 VDC <sup>†</sup>		<b>DG</b> DIN 43650
Manual Override with Cover	<b>HP</b>	<b>12</b> 12 VDC		<b>DL</b> Leadwires (2)
Manual Override with Knob	<b>K</b>	<b>24</b> 24 VDC		<b>DL/W</b> Leads w/Weatherpak <sup>®</sup> Connectors
		<b>36</b> 36 VDC		<b>DR</b> Deutsch DT04-2P
		<b>48</b> 48 VDC		<b>Termination (VAC)</b>
		<b>24</b> 24 VAC		<b>Std. Coil</b>
		<b>115</b> 115 VAC		<b>AG</b> DIN 43650
		<b>230</b> 230 VAC		<b>AP</b> 1/2 in. Conduit
<b>Porting</b>		**Includes Std. Coil Nut		<b>Termination (VDC)</b>
Cartridge Only	<b>0</b>	<sup>†</sup> DS, DW or DL terminations only		<b>E-Coil</b>
<b>Aluminum</b>				<b>ER</b> Deutsch DT04-2P (IP69K Rated)
SAE 8	<b>8T</b>	<b>E-Coil</b>		<b>EY</b> Metri-Pack <sup>®</sup> 150 (IP69K Rated)
3/8 in. BSP*	<b>3B</b>	<b>10</b> 10 VDC		
<b>Ductile Iron</b>		<b>12</b> 12 VDC		
SAE 8	<b>8TD</b>	<b>20</b> 20 VDC		
3/8 in. BSP*	<b>3BD</b>	<b>24</b> 24 VDC		
*BSP Body; U.K. Mfr. Only				
<b>Seals</b>				
Polyurethane (Std.)	<b>P</b>			

Coils with internal diode are available. Consult factory.