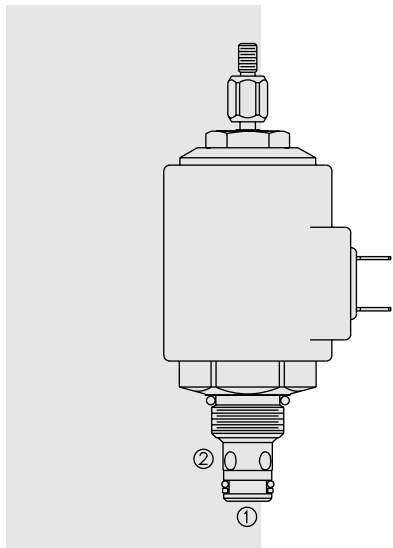


# SOLENOID VALVES

## SV38-20J Poppet, 2-Way, Normally Closed



### DESCRIPTION

A solenoid-operated, 2-way, normally closed, piloted poppet-type, screw-in hydraulic cartridge valve, intended to act as a blocking or load-holding device for low flow circuits having manual override requirements.

### OPERATION

When de-energized, the **SV38-20J** acts as a check valve, allowing flow from ① to ②, while blocking flow from ② to ①.

When energized, the cartridge's poppet lifts to open the ② to ① flow path. In this mode, flow from ① to ② is severely restricted.

**Operation of Manual Override Option:** To manually override, pull and hold the knurled knob. This override is not detented. The pull force required is approximately 20 lbs. The "J" option includes a male 10-32 thread for a cable attachment. If a cable is used, the internal valve spring may not provide enough force to overcome internal cable friction. An external means of returning the cable must be provided by the user.

### FEATURES

- Continuous-duty rated coil.
- Hardened seat for long life and low leakage.
- Optional coil voltages and terminations.
- Cartridges are voltage interchangeable.
- Unitized, molded coil design.
- Manual override option.
- Optional waterproof E-Coils rated up to IP69K.
- Industry common cavity.
- Compact size.

### RATINGS

**Operating Pressure:** 207 bar (3000 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:** VC08-2; See page 9.108.1

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

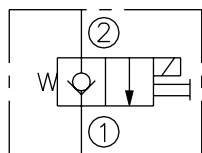
**Seal Kit:** SK08-2X-T; See page 8.650.1

**Coil Nut:** Part No. 7004380;

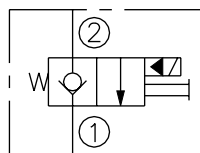
For E-coils manufactured prior to 1-1-04, see page 3.400.1 for coil nut info.

### SYMBOLS

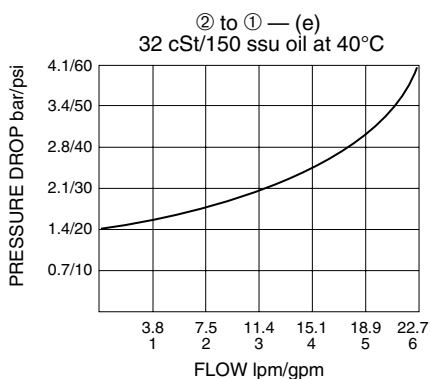
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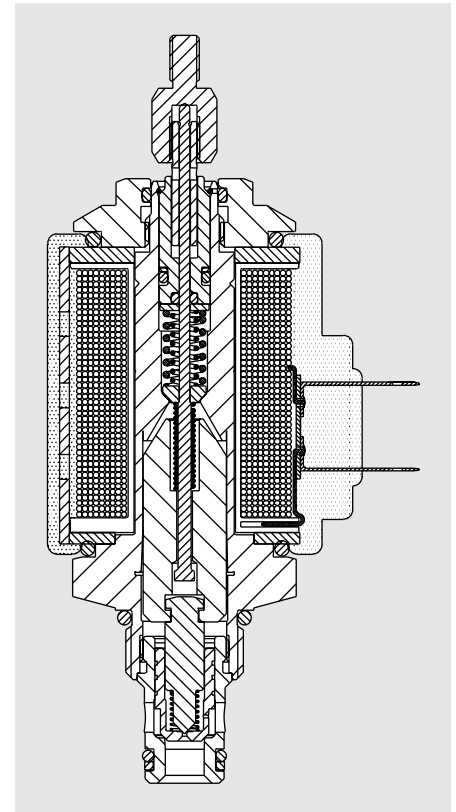
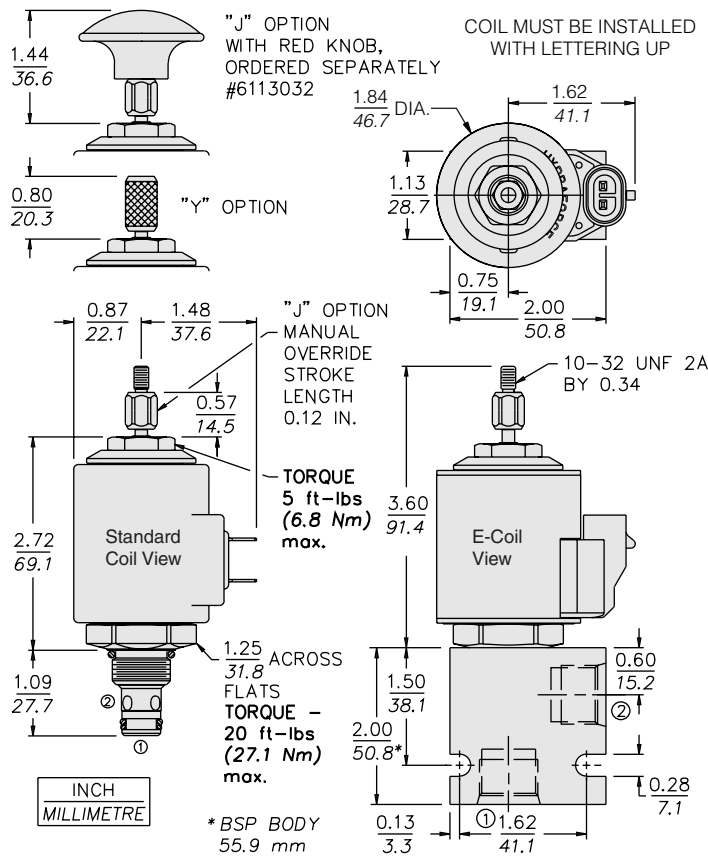


### PERFORMANCE (Cartridge Only)



# SV38-20J

## DIMENSIONS



## MATERIALS

**Cartridge:** Weight: 0.09 kg. (0.20 lbs.); Steel with hardened work surfaces. Zinc-plated exposed surfaces; Buna N O-rings and back-ups 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 8.008.1. 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

### SV38-20 J -

<b>Option</b>	<b>Porting</b>	<b>Seals</b>	<b>Voltage</b>	<b>Termination (VDC)</b>
*Standard <b>J</b>	Cartridge Only <b>0</b>	Buna N (Std.) <b>N</b>	<b>Std. Coil</b>	<b>Std. Coil</b>
150 $\mu$ Screen <b>S</b>	SAE 4 <b>4T</b>	Fluorocarbon <b>V</b>	<b>0</b> Less Coil**	<b>DS</b> Dual Spades
*Cable Release <b>Y</b>	SAE 6 <b>6T</b>		<b>10</b> 10 VDC†	<b>DG</b> DIN 43650
*See Page 1.001.1	SAE 8 <b>8T</b>		<b>12</b> 12 VDC	<b>DL</b> Leadwires (2)
	1/4 in. BSP* <b>2B</b>		<b>24</b> 24 VDC	<b>DL/W</b> Leads w/Weatherpak® Connectors
	3/8 in. BSP* <b>3B</b>		<b>36</b> 36 VDC	<b>DR</b> Deutsch DT04-2P
			<b>48</b> 48 VDC	
			<b>24</b> 24 VAC	<b>Termination (VAC)</b>
			<b>115</b> 115 VAC	<b>Std. Coil</b>
			<b>230</b> 230 VAC	<b>AG</b> DIN 43650
			**Includes Std. Coil Nut	<b>AP</b> 1/2 in. Conduit
			† DS, DW or DL terminations only	<b>Termination (VDC)</b>
			<b>E-Coil</b>	<b>E-Coil</b>
			<b>10</b> 10 VDC	<b>ER</b> Deutsch DT04-2P (IP69K Rated)
			<b>12</b> 12 VDC	<b>EY</b> Metri-Pack® 150 (IP69K Rated)
			<b>20</b> 20 VDC	
			<b>24</b> 24 VDC	

Coils with internal diode are available. Consult factory.