**DESCRIPTION**
A solenoid-operated, four-way, three-position, direct-acting, spool-type, screw-in hydraulic cartridge valve.

**OPERATION**
When de-energized, the SV08-47E blocks flow at 3 and 4, while allowing flow from 2 to 1. When coil #1 (S1) is energized, the spool shifts to allow flow from 3 to 4 and 2 to 1. When coil #2 (S2) is energized flow is allowed from 2 to 3 and from 4 to 1.

In circuits where work port flows are unequal due to cylinder ratios, the higher return flow should be directed to port 2.

**Note:** While 1 may be fully pressurized, it is not intended for use as the valve's inlet.

**FEATURES**
- Continuous-duty rated solenoid.
- Hardened precision spool and cage for long life.
- Optional coil voltages and terminations.
- Efficient wet-armature construction.
- All ports may be fully pressurized.
- Cartridges are voltage interchangeable.
- Unitized, molded coil design.
- Industry common cavity.
- Optional waterproof E-Coils rated up to IP69K.

**RATINGS**

<table>
<thead>
<tr>
<th><strong>Operating Pressure:</strong></th>
<th>207 bar (3000 psi)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Flow:</strong></td>
<td>11.4 lpm (3 gpm) max.</td>
</tr>
<tr>
<td><strong>Internal Leakage:</strong></td>
<td>164 cc/minute (10 cu. in./minute) max. at 207 bar (3000 psi)</td>
</tr>
<tr>
<td><strong>Temperature:</strong></td>
<td>-40 to 120 °C with standard Buna seals</td>
</tr>
<tr>
<td><strong>Coil Duty Rating:</strong></td>
<td>Continuous from 85% to 115% of nominal voltage</td>
</tr>
<tr>
<td><strong>Initial Coil Current Draw at 20 °C:</strong></td>
<td>Standard Coil: 1.2 A at 12 Vdc; 0.13 A at 115 Vac (full wave rectified). E-Coil: 1.4 A at 12 Vdc; 0.7 A at 24 Vdc</td>
</tr>
<tr>
<td><strong>Minimum Pull-in Voltage:</strong></td>
<td>85% of nominal at 207 bar (3000 psi)</td>
</tr>
<tr>
<td><strong>Filtration:</strong></td>
<td>See page 9.010.1</td>
</tr>
<tr>
<td><strong>Fluids:</strong></td>
<td>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</td>
</tr>
<tr>
<td><strong>Installation:</strong></td>
<td>No restrictions; See page 9.020.1</td>
</tr>
<tr>
<td><strong>Cavity:</strong></td>
<td>VC08-4; See page 9.108.1</td>
</tr>
<tr>
<td><strong>Cavity Tool:</strong></td>
<td>CT08-4XX; See page 8.600.1</td>
</tr>
<tr>
<td><strong>Seal Kit:</strong></td>
<td>SK08-4X-MMM; See page 8.650.1</td>
</tr>
<tr>
<td><strong>Coil Nut:</strong></td>
<td>Part No. 7004400; Std D-Coil Spacer Part No. 7012940; E-Coil Spacer Part No. 4534720; D-Coil spacer will be provided unless an E is specified in the Coil Termination To Order section.</td>
</tr>
</tbody>
</table>
### DIMENSIONS

COILS MUST BE INSTALLED WITH LETTERING UP

<table>
<thead>
<tr>
<th>DIA</th>
<th>1.41</th>
<th>38.7</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1.13</td>
<td>28.7</td>
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<tr>
<td></td>
<td>1.25</td>
<td>37.8</td>
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<td>1.40</td>
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<td>2.50</td>
<td>63.5</td>
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<tr>
<td></td>
<td>0.65</td>
<td>16.5</td>
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<td>1.23</td>
<td>37.2</td>
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<tr>
<td></td>
<td>2.15</td>
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<td>77.0</td>
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<tr>
<td></td>
<td>3.35</td>
<td>85.1</td>
</tr>
</tbody>
</table>

**B** or **K**

Knob:

- **M** or **B**
- **K**

**E-Coil**

- **M** or **B**
- **K**

**Manual Override**

- **M**
- **B**
- **K**

**TORQUE**

- 4–5 lb-ft (5.4–6.8 Nm)
- 19–21 lb-ft (25.8–28.5 Nm)

### MATERIALS

**Cartridge:** Weight: 0.13 kg (0.28 lb); Steel with hardened work surfaces. Zinc-plated exposed surfaces; Buna N O-rings and back-ups standard.

**Standard Ported Body:** Weight: 0.27 kg (0.60 lb); Anodized high-strength 6061 T6 aluminum alloy, rated to 207 bar (3000 psi); Ductile iron bodies available; dimensions may differ. See page 8.008.1

**Standard Coil:** Weight each: 0.11 kg (0.25 lb); Unitized thermoplastic encapsulated, Class H high temperature magnet wire. See page 3.200.1

**E-Coil:** Weight: 0.14 kg (0.3 lb); Perfect wound, fully encapsulated with rugged external metal shell; Rated up to IP69K with integral connectors. See page 3.400.1

### TO ORDER

**SV08-47E**

- 1,000 Hour Salt Spray Coating
- Option:
  - None (Blank)
  - Manual Override **M**
  - Manual Override **B**
  - Manual Override **K**

For **Manual Override** options see page 1.001.1

**Porting**

- Cartridge Only 0
- SAE 6 6T
- 3/8 in. BSP* 3B

*BSP Body; U.K. Mfr. Only

**Voltage**

- **Std. D-Coil**
  - 00 Less Coil**
  - 10 10 Vdc
  - 12 12 Vdc
  - 20 20 Vdc
  - 24 24 Vdc
  - 36 36 Vdc
  - 48 48 Vdc
  - 115 115 Vac†
  - 230 230 Vac‡

**E-Coil**

- **E** 1/2" Conduit
- **D-Coil**
  - 115 115 Vac†
  - 230 230 Vac‡

**Coil Termination**

- Less Coil w/Spacer
- Deutsch DT04-2P
- Metri-Pack® 150
- Dual Lead Wires
- Amp Jr. Timer
- DIN 43650
- Dual Spades
- DIN 43650
- 1/2" Conduit

**Seals**

- Buna N (Std.)** N
- Fluorocarbon V

For Coils with Zener Diode, add "Z" to option code. For example: "ER/Z" Not available on all models. See coil option info. on pages 5.200.1 & 5.400.1