### DESCRIPTION
A solenoid-operated, 3-way, direct-acting, spool-type, screw-in hydraulic directional valve designed for high pressure operation up to 345 bar (5000 psi).

### OPERATION
When de-energized, the SV58-30 allows flow from ② to ➀ while blocking flow at ③.
When energized, the cartridge’s spool shifts to open from ③ to ②, while blocking flow out ①.

**Note:** Port ① must be connected to tank. Valve cannot withstand more than 276 bar (4000 psi) at the inlet of port ①.

### FEATURES
- Continuous-duty rated solenoid.
- Hardened precision spool and cage for long life.
- Optional coil voltages and terminations.
- Efficient wet-armature construction.
- Cartridges are voltage interchangeable.
- Optional waterproof E-Coils rated up to IP69K.
- Utilized, molded coil design.
- Fully guided spool.
- Compact size.

### RATINGS
**Operating Pressure:** 345 bar (5000 psi)
**Flow:** See Performance Chart

**Internal Leakage:**
- Port ③ (De-energized): 131 ml/minute (8 cu. in./minute) max. at 345 bar (5000 psi);
- Port ① (Energized): 279 ml/minute (17 cu. in./minute) max. at 345 bar (5000 psi)

**Temperature:** -40 to 120°C with standard Buna seals;
- -26 to 204°C with Fluorocarbon seals; -54 to 107°C with Polyurethane seals

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

**Response Time:** First indication of change of state with 100% voltage supplied at 80% of nominal flow rating:
- Energized: 22 msec.;
- De-energized: 12 msec.

**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 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 sus); See Temperature and Oil Viscosity, page 9.060.1

**Installation:** No restrictions; See page 9.020.1

**Cavity:** VC08-3, Variation “A”; See page 9.108.1

**Cavity Tool:** CT08-3XX; See page 8.600.1

**Seal Kit:** SK58-3X-MM; 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.
**DIMENSIONS**

1. **Coil MUST BE INSTALLED WITH LETTERING UP**

2. **TORQUE 4 – 5 ft-lbs (5.4 – 6.8 Nm)**

3. **TORQUE 19 – 21 ft-lbs (25.8 – 28.5 Nm)**

**MATERIALS**

**Cartridge:** Weight: 0.15 kg. (0.32 lbs.); 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 lbs.); Anodized high-strength 6061 T6 aluminum alloy, rated to 207 bar (3000 psi); Ductile iron bodies available; dimensions may differ. See page 8.008.11

**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.); Perfect wound, fully encapsulated with rugged external metal shell; Rated up to IP69K with integral connectors. See page 3.400.1 for all E-Coil retrofit applications.

**TO ORDER**

**SV58-30**

- **Option**
  - None (Blank)

- **Porting**
  - Cartridge Only
  - SAE 6
  - 1/4 in. BSP*
  - 2B
  - *BSP Body; U.K. Mfr. Only

- **Seals**
  - Buna N (Std.)
  - Fluorocarbon
  - Polyurethane
  - Polyurethane seals are required for operation over 241 bar/3500 psi.

- **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

**Termination (VDC)**

- Std. D-Coil
  - DS Dual Spades
  - DG DIN 43650
  - DL Leadwires (2)
  - DL/W Leads w/Weatherpak® Connectors
  - DR Deutsch DT04-2P

**Termination (VAC)**

- Std. D-Coil
  - AG DIN 43650
  - AP 1/2 in. Conduit

**Termination (VDC)**

- E-Coil
  - EG DIN 43650 – IP65/IP67
  - EJ Amp Junior Timer – IP69K
  - EL Leadwires (2) – IP69K
  - ER Deutsch DT04-2P – IP69K
  - EY Metri-Pack® 150 – IP69K

**Note:** This is an 08-size valve which fits an 08-size cavity, but uses a 10-size coil.