**SV08-30  Spool, 3-Way**

**DESCRIPTION**
A solenoid-operated, 3-way, direct-acting, spool-type, screw-in hydraulic directional valve.

**OPERATION**
When de-energized, the SV08-30 allows flow from ② to ① while blocking flow at ③. When energized, the cartridge’s spool shifts to open from ③ to ②, while blocking flow out ①. While port ① may be fully pressurized, it is not intended to be used as the inlet.

**Operation of Manual Override Option:** To override, push button in and twist counterclockwise 180°. The internal spring will push the button out. In this position, the valve may be only partially shifted. To assure full override shift, pull the button out to its fullest extension and hold it in this position.

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

**FEATURES**
- Manual override option.
- Screen option.
- 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.
- All ports may be fully pressurized.
- Optional waterproof E-Coils rated up to IP69K.
- Unitized, molded coil design.
- Fully guided spool.

**RATINGS**

**Operating Pressure:** 207 bar (3000 psi)
**Proof Pressure:** 240 bar (3500 psi) without manual override option
**Burst Pressure:** 620 bar (9000 psi) without manual override option
**Flow Rating:** See Performance Chart

**Internal Leakage:**
- Port ③ (De-energized): 82 cc/minute (5 cu. in./minute) max. at 207 bar (3000 psi);
- Port ① (Energized): 164 cc/minute (10 cu. in./minute) max. at 207 bar (3000 psi)

**Temperature:**
- -40 to 100 °C (-40 to 212 °F) with standard Buna seals;
- -26 to 204 °C (-15 to 400 °F) with fluorocarbon seals;
- -54 to 107 °C (-65 to 225 °F) with polyurethane and urethane 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 ms; De-energized: 12 ms

**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:** See Note on Dimension Drawing

**Cavity:** VC08-3; See page 9.108.1
**Cavity Tool:** CT08-3XX; See page 8.600.1
**Seal Kit:** SK08-3X-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.
SV08-30

DIMENSIONS

COIL MUST BE INSTALLED WITH LETTERING UP

MANUAL OVERRIDE OPTION

0.63 ACROSS 15.9 FLATS
TORQUE 4-5 lb-ft (5.4-6.8 Nm)

TORQUE 19-21 lb-ft (25.8-28.5 Nm) Max 40 lb-ft (54 Nm) Alum.

ORIFICE DISC MAY NOT BE USED WITH THIS PRODUCT.

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MATERIALS

Cartridge: Weight: 0.13 kg (0.29 lb); Steel with hardened work surfaces. Zinc-plated exposed surfaces; Buna N seals standard.

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

Standard Coil: Weight: 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 for all E-Coil retrofit applications.

TO ORDER

Override Option

None (Blank)
Manual Override M

For Manual Override options see page 1.001.1

Screen Option

None (Blank)
Screen S

Porting

Cartridge Only 0
SAE 4 4T
SAE 6 6T
1/4 in. BSP* 2B
SAE 6 (Ductile) 6TD
*BSP Body; U.K. Mfr. Only

Seals

Buna N (Std.) N
Fluorocarbon V
Polyurethane P
Urethane U

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.