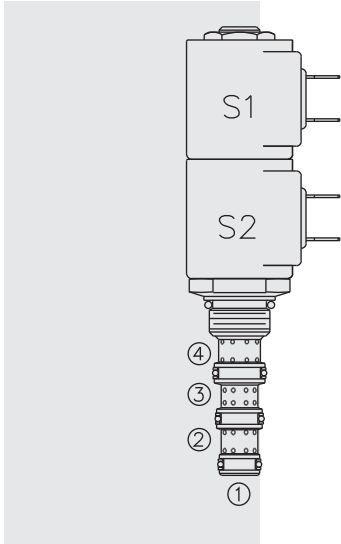


# SV08-47A Spool, 4-Way, 3-Position, Tandem Center



## DESCRIPTION

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

## OPERATION

When de-energized, the **SV08-47A** blocks cylinder ports, while allowing flow from 3 to 1. When coil #1 is energized, flow is allowed from 3 to 2, and from 4 to 1. When coil #2 is energized, flow is allowed from 3 to 4, and from 2 to 1.

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

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

Operation of Manual Override Option: To override, push the knurled knob to activate the coil #2 (S2) function; pull the knob to activate the coil #1 (S1) function.

## 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.
- Manual override option.
- Optional waterproof E-Coils rated up to IP69K.

## RATINGS

**Operating Pressure:** 210 bar (3000 psi)

**Flow:** 11.4 lpm (3.0 gpm) max.

**Internal Leakage:** 278 cc/minute (17 cu. in./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: 1.2 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

**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:** VC08-4; See page 9.108.1

**Cavity Tool:** CT08-4XX; See page 8.600.1

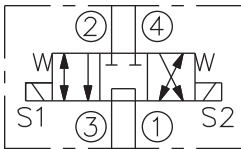
**Seal Kit:** SK08-4X-MMM; See page 8.650.1

**Coil Nut:** Part No. 7004400; **Manual Override Coil Nut:** Part No. 4528180;

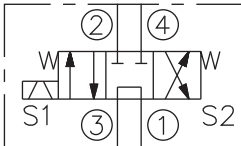
**Coil Spacer:** Std D-Coil Spacer Part No. 7012940; E-Coil Spacer Part No. 4534720; If cartridge is ordered "Less Coil," D-Coil spacer will be provided unless an E is specified in the Coil Termination To Order section.

## SYMBOLS

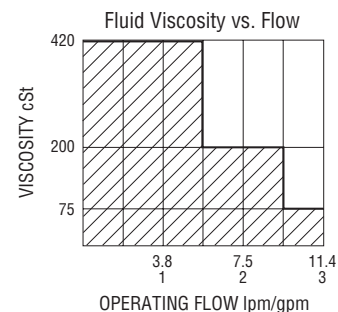
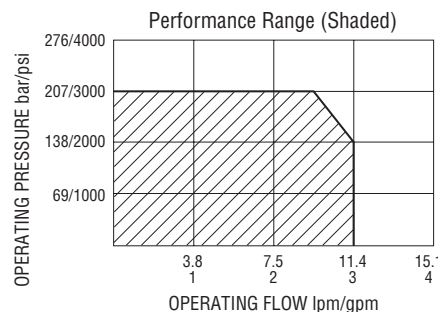
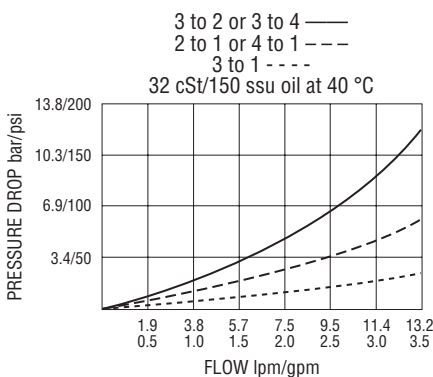
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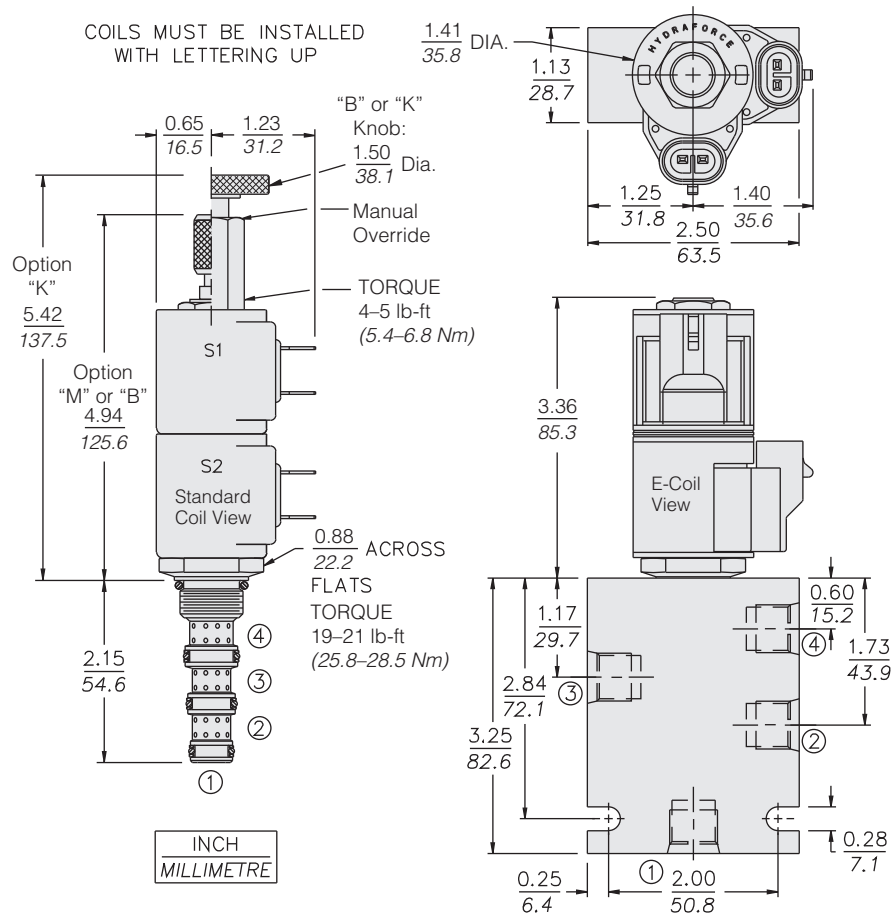
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## PERFORMANCE (Cartridge Only)



**DIMENSIONS**



**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**

**SV08-47A** - - - - -

1,000 Hour Salt Spray Coating **G**

**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

**Seals**

Buna N (Std.) **N**

Fluorocarbon **V**

**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

**24** 24 Vac††

**115** 115 Vac††

**230** 230 Vac††

\*\*Includes D-Coil Nut and Spacer.

† DS, DW or DL terminations only.

†† AC Volt Only

**E-Coils:** 10, 12, 20, 24 Vdc only.

**Coil Termination**

Less Coil w/Spacer **E**

Deutsch DT04-2P **ER** (IP69K)

Metri-Pack® 150 **EY** (IP69K)

Dual Lead Wires **EL** (IP69K)

Amp Jr. Timer **EJ** (IP67)

DIN 43650 **EG** (IP65)

Dual Spades **—**

DIN 43650 **—**

1/2" Conduit **—**

**E-Coil**

**D-Coil**

**DR** (IP65)

**DY** (IP65)

**DL** (IP65)

**—**

**DG** (IP65)

**DS** (IP65)

**AG** (IP65)††

**AP** (IP65)††

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 3.200.1 & 3.400.1