**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.

**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;

If cartridge is ordered "Less Coil," D-Coil spacer will be provided unless an E is specified in the Coil Termination To Order section.
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) M
Manual Override B
Manual Override K

For Manual Override options see page 1.001.1

Porting
Cartridge Only 6
3/8 in. BSP 3B

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.

E-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

E-Coil
ER (IP69K)
ER (IP69K)
EL (IP69K)
EL (IP69K)
EJ (IP67)
EG (IP65)
EG (IP65)
EG (IP65)

D-Coil
DR (IP65)
DY (IP65)
DL (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.