

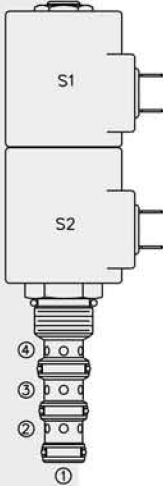
Part number:

**HYDROMA**  
HYDRAULICKÉ SYSTÉMY

**HIDROMA**  
SYSTEMS  
UKŁADY HYDRAULICZNE

**HYDROMA**  
ГИДРАВЛИЧЕСКИЕ СИСТЕМЫ

# SV10-47D Spool, 4-Way, 3-Position, "Motor Spool"



## DESCRIPTION

A solenoid-operated, 4-way, 3-position, direct-acting, spool-type, motor spool, screw-in hydraulic cartridge valve.

## OPERATION

When de-energized, the **SV10-47D** blocks flow to 3, while allowing flow from 2 to 1, and from 4 to 1. When coil #1 is energized, flow is allowed from 3 to 4, and from 2 to 1. When coil #2 is energized, flow is allowed from 3 to 2, 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.

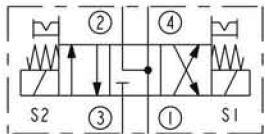
**Note:** While 1 may be fully pressurized, it is not intended for use as the valve's inlet.

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

## FEATURES

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

## ISO SYMBOL



## RATINGS

**Operating Pressure:** 250 bar (3625 psi); **Proof Pressure:** 344 bar (5000 psi)

**Burst Pressure:** 779 bar (11,300 psi)

**Flow:** 23 lpm (6 gpm) max.

**Internal Leakage:** 328 ml/minute (20 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 seals

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

**Initial Coil Current Draw at 20 °C:** Standard Coil: 1.67 A at 12 Vdc;

0.18 A at 115 Vac (full wave rectified).

E-Coil: 1.7 A at 12 Vdc; 0.85 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:** VC10-4; See page 9.110.1; **Cavity Tool:** CT10-4XX; See page 8.600.1

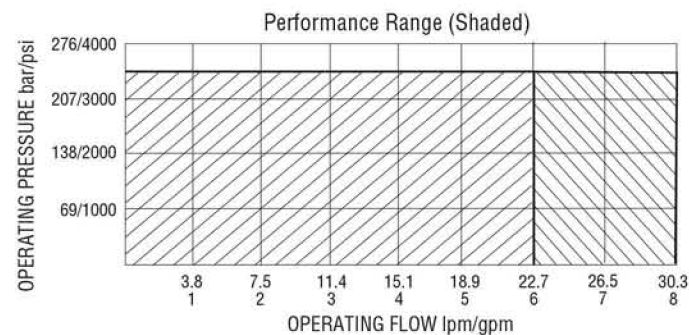
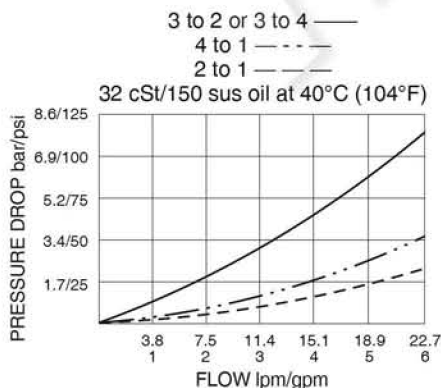
**Seal Kit:** SK10-4X-MMM; See page 8.650.1

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

**Coil Spacer:** Std. D-Coil Spacer Part No. 7009286; E-Coil Spacer Part No. 4539700;

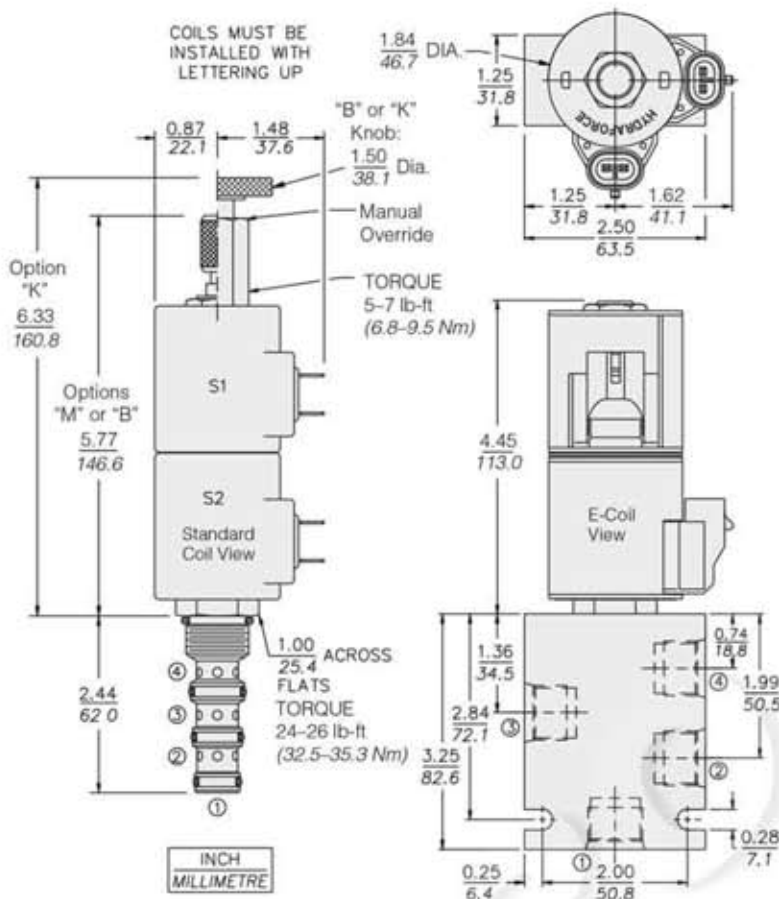
If cartridge is ordered "Less Coil," D-Coil spacer will be provided unless an E is specified in the Coil Termination To Order section.

## PERFORMANCE (Cartridge Only)



**NOTE:** Consult factory if operating flow above 22.7 lpm (6 gpm) is with oil viscosity over 420 cSt and/or valve is operated continuously (100% duty cycle).

## DIMENSIONS



## MATERIALS

**Cartridge:** Weight: 0.25 kg (0.55 lb); Steel with hardened work surfaces. Zinc-plated exposed surfaces; Buna N O-rings and back-ups standard.

**Standard Ported Body:** Weight: 0.36 kg (0.80 lb); Anodized high-strength aluminum alloy, rated to 207 bar (3000 psi); Ductile iron bodies available; dimensions may differ. See page 8.010.1.

**Standard Coil:** Weight each: 0.27 kg (0.60 lb); Unitized thermoplastic encapsulated, Class H high temperature magnet wire. See page 3.200.1

**E-Coil:** Weight: 0.41 kg (0.9 lb); Perfect wound, fully encapsulated with rugged external metal shell; Rated up to IP69K with integral connectors. See page 3.400.1

## TO ORDER

