SV12-60 Spool, 2-Position, 6-Way

DESCRIPTION
A solenoid-operated, 2-position, 6-way, direct-acting spool-type, screw-in hydraulic cartridge valve. It is intended for use as a selector valve in selector or series/parallel drive circuits.

OPERATION
When de-energized, the SV12-60 allows bi-directional flow between 5 and 6, and between 1 and 2, while blocking flow at 3 and 4. When energized, the spool shifts to allow bidirectional flow between 4 and 5 and between 3 and 2, while blocking flow at 1 and 6.

FEATURES
• Bi-directional flow.
• Heavy-duty water-resistant E-Coils rated up to IP69K.
• Hardened spool and cage for long life.
• Optional coil voltages and terminations.
• All ports may be fully pressurized.
• External metal-shell coil design.

RATINGS
Operating Pressure: 240 bar (3500 psi) max.
Proof Pressure: 483 bar (7000 psi) max.
Burst Pressure: 690 bar (10000 psi) max.
Flow: Up to 34.1 lpm (9 gpm)
Leakage: 295 ml/minute (18 in³/minute) at 240 bar (3500 psi)
Transition: Open
Temperature: -40 to 100 °C (-40 to 212 °F) with Buna N seals; -26 to 204 °C (-15 to 400 °F) with fluorocarbon seals.
Coil Duty Rating: See Chart
Response Time: Pull-In: 135 ms Drop-Out: 30 ms Indication of shift with nominal voltage
Pull-In: 140 ms Drop-Out: 60 ms Per NFPA T3.5.30-19xx.
Initial Coil Current Draw at 20 °C: 2.8 A at 12 Vdc
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: VC12-6; See page 9.112.1
Cavity Tool: CT12-6XX; See page 8.600.1
Seal Kit: SK12-6X-MMMMM; See page 8.650.1
E-Coil Nut: Part No. 7085180

ISO SYMBOL

PERFORMANCE (Cartridge Only)

32 cSt/150 sus oil at 40 °C

FLOW lpm/gpm

PRESSURE DROP bar/psi

32 cSt/150 sus oil at 40 °C

OPERATING LIMITS
Pull-In Current 85% of Nominal Series/Parallel: ////; Selector: \\

CONTINUOUS DUTY OPERATING RANGE
Minimum Voltage at the Coil Required for Pull-In
32 cSt/150 sus oil at 40 °C

% OF RATED VOLTAGE

FLOW lpm/gpm

AMBIENT TEMPERATURE (C)
DIMENSIONS

MATERIALS

Cartridge: Weight: 0.54 kg (1.20 lb); Steel with hardened work surfaces. Zinc-plated exposed surfaces; Buna N O-rings and TFE back-ups standard.

Standard Ported Body: Anodized high-strength aluminum alloy, rated to 207 bar (3000 psi); See page 8.012.1.

E-Coil: Weight: 1.36 kg (3.0 lb); Fully encapsulated with rugged external metal shell; Rated up to IP69K with integral connectors; See page 3.400.1.

TO ORDER

SV12-60

- Option
  - None (Blank)
  - Manual Override P
  - Manual Override T
  - Manual Override K

For manual override options, see page 1.001.1

- Porting
  - Cartridge Only 0
  - SAE 8 8T

- Voltage
  - 0 Less Coil
  - 12 12 Vdc
  - 24 24 Vdc

- Seals
  - Buna N (Std.) N
  - Fluorocarbon V

Terminations

- EG DIN 43650 Connector
- EL Dual Lead Wires, IP65 Rated
- ER Deutsch DT04-2P Connector, IP69K Rated
- ES Dual Spades IP65 Rated
- EW Leads w/Weather-Pack® Connector, IP65 Rated
- EY Metri-Pack® 150 Connector, IP69K Rated

Coils with internal diode are available. Consult factory.
Other coil voltages may be available for OEM applications. Consult factory.