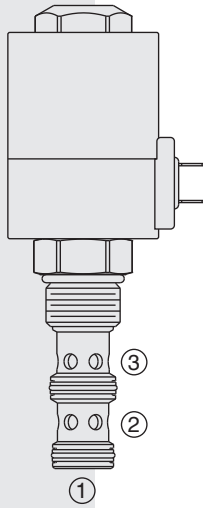


SV12-33 Spool, 2-Position, 3-Way



DESCRIPTION

A solenoid-operated, two-position, three-way, direct-acting spool-type, screw-in hydraulic cartridge valve, intended as a bidirectional blocking valve.

OPERATION

When de-energized, the SV12-33 allows flow between ③ and ① while blocking flow at ②. When energized, the spool shifts to allow flow between ② and ① while blocking flow at ③. While port ① may be fully pressurized, it is not intended to be used as the inlet.

FEATURES

- Bidirectional operation.
- Continuous-duty rated solenoid.
- Hardened spool and cage for long life.
- Optional coil voltages and terminations.
- All ports may be fully pressurized.
- Heavy-duty waterproof E-Coils rated up to IP69K.

RATINGS

Operating Pressure: 240 bar (3500 psi) max.

Proof Pressure: 483 bar (7,000 psi) max

Burst Pressure: 690 bar (10,000 psi) max

Flow Rating: See Performance Chart

Leakage: 410 cc/min (25 in³/min) 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: 45 msec Drop-Out: 20 msec; Indication of shift with nominal voltage: Pull-In: 100 msec; Drop-Out: 100 msec per NFPA/T3.5.30-19xx

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

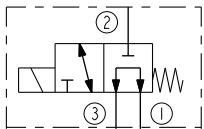
Cavity: VC12-3; See page 9.112.1

Cavity Tool: CT12-3XX; See page 8.600.1

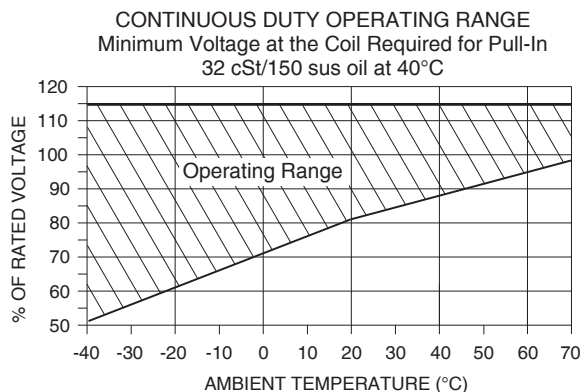
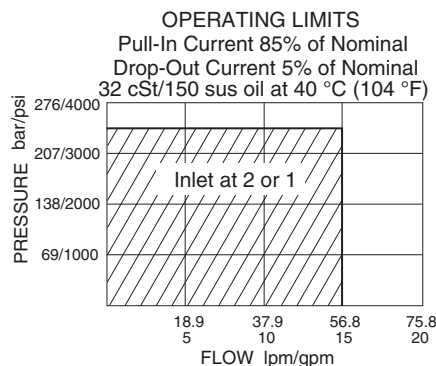
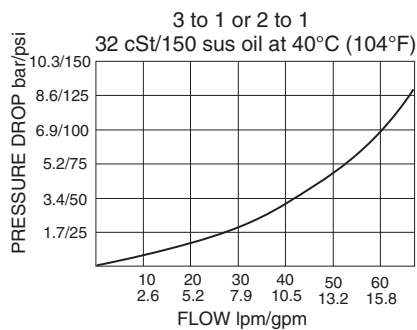
Seal Kit: SK12-3X-MM; See page 8.650.1

E-Coil Nut: Part No. 7085180

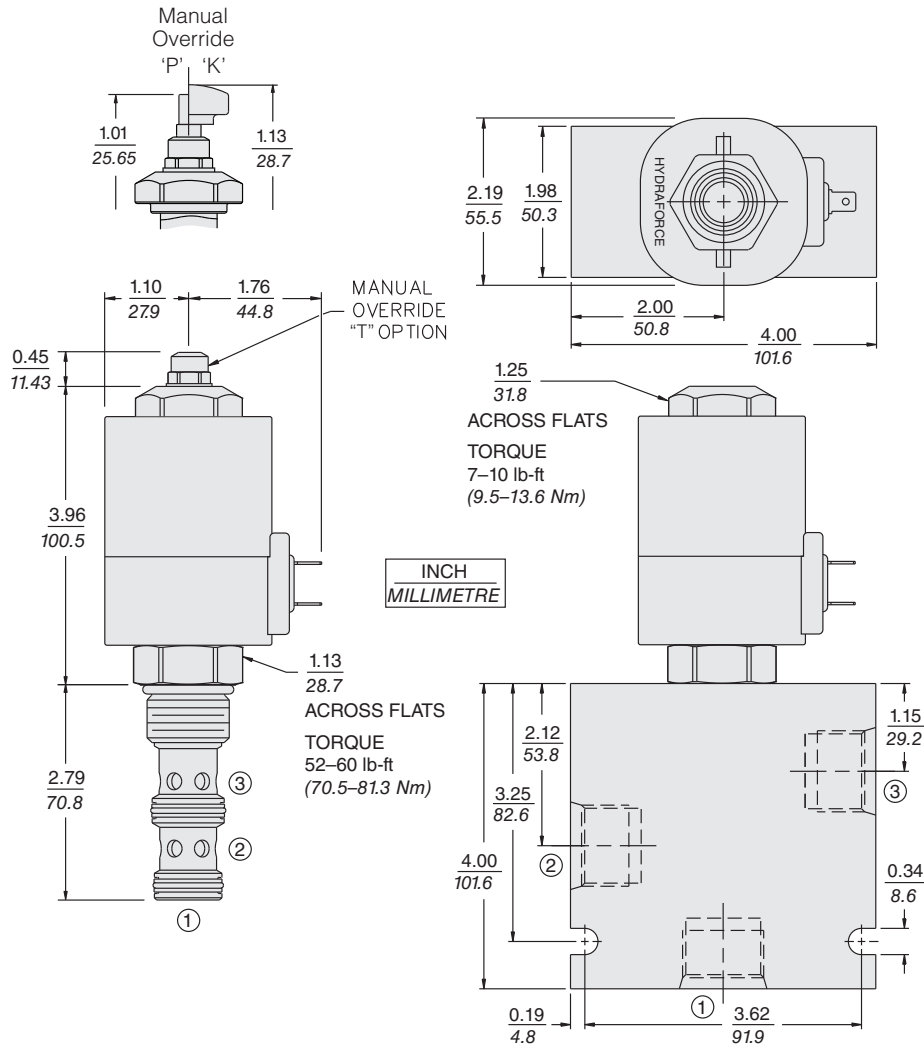
ISO SYMBOL



PERFORMANCE (Cartridge Only)



DIMENSIONS



MATERIALS

Cartridge: Weight: 0.39 kg (0.87 lb)
Steel with hardened work surfaces.
Zinc-plated exposed surfaces.
Buna N O-rings and TFE back-ups standard.

Standard Ported Body: Weight: 0.98 kg (2.15 lb)
Anodized high-strength aluminum alloy, rated to 207 bar (3000 psi). Ductile iron bodies available; dimensions may differ. See page 8.012.1.

E-Coil: Weight: 0.87 kg (1.92 lb) Fully encapsulated with rugged external metal shell.

Rated up to IP69K with integral connectors. See page 3.400.1.

TO ORDER

SV12-33

Manual Override

- No Override Blank
- Push **P**
- Push with Knob **K**
- Threaded with Detent **T**

Porting

- Cartridge Only **0**
- SAE 12 **12T**
- 3/4 in. BSP* **6B**

*BSP Body; U.K. Mfrs. Only

Seals

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

Terminations (Vdc)

- EL** Leadwires (2), IP65 Rated
- ES** Dual Spades, IP65 Rated
- EG** DIN 43650, IP65 Rated
- EW** Leads w/Weather-Pack® Connector, IP65 Rated
- EY** Metri-Pack® 150 Connector, IP69K Rated
- ER** Deutsch Connector IP69K Rated

Voltage

- 0** Less Coil
- 12** 12 Vdc
- 24** 24 Vdc

Coils with internal diode are available. Consult factory.

Other coil voltages may be available for OEM applications. Consult factory.