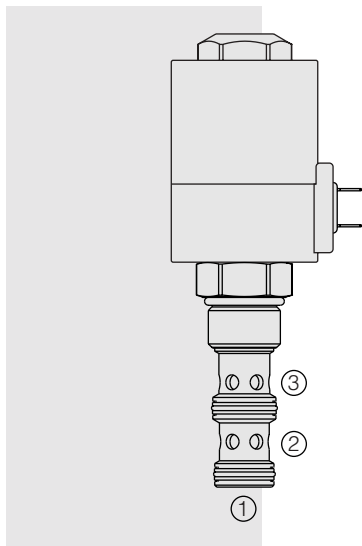


# SOLENOID VALVES

## SV12-31 Spool, 3-Way



### DESCRIPTION

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

### OPERATION

When de-energized, the **SV12-31** allows flow between ② and ① while blocking flow at ③. When energized, the spool shifts to allow flow between ① and ③ while blocking flow at ②.

### FEATURES

- 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.

**Flow:** See Performance Chart

**Leakage:** 410 cc/minute (25 cu. in./minute) at 240 bar (3500 psi)

**Temperature:** -40 to 120°C with Buna N seals

**Coil Duty Rating:** See Chart

**Response Time:** Pull-In: 100 msec; Drop-Out: 100 msec

**Initial Coil Current Draw at 20°C:** 2.8 amps 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 ssu)

**Installation:** No restrictions; See page 9.020.1

**Cavity:** VC12-3; See page 9.112.1

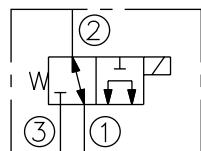
**Cavity Tool:** CT12-3XX; See page 8.600.1

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

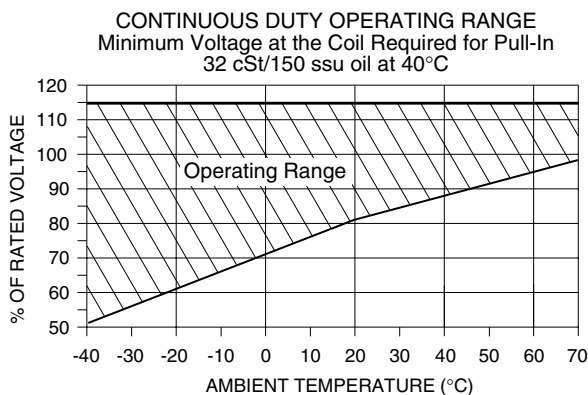
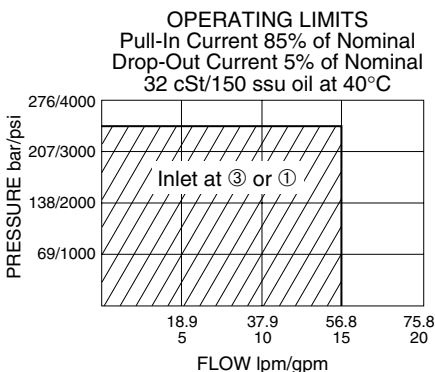
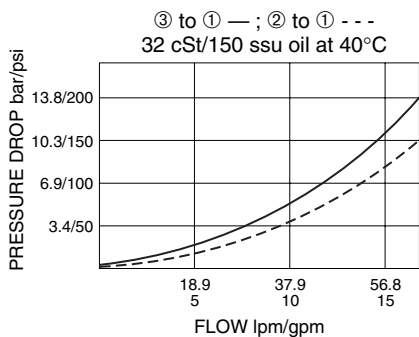
**E-Coil Nut:** Part No. 7085180

### SYMBOLS

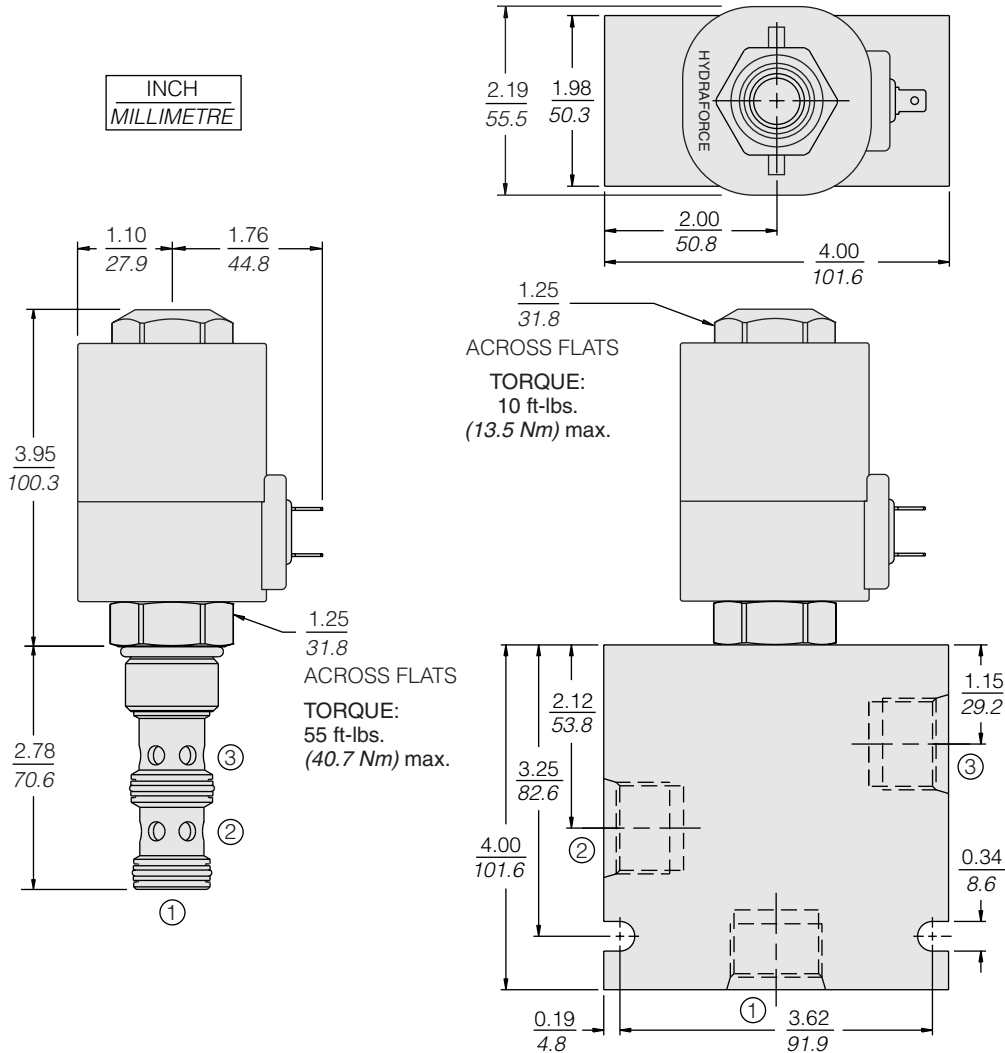
#### USAS/ISO:



### PERFORMANCE (Cartridge Only)



**DIMENSIONS**



**MATERIALS**

**Cartridge:** Weight: 0.29 kg. (0.65 lbs.); 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 lbs.); Anodized high-strength 6061 T6 aluminum alloy, rated to 240 bar (3500 psi); See page 8.012.1. Ductile iron and steel bodies available; dimensions may differ; consult factory.

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

**TO ORDER**

