

Part number:

**HYDROMA**

HYDRAULICKÉ SYSTÉMY

**HIDROMA  
SYSTEMS**

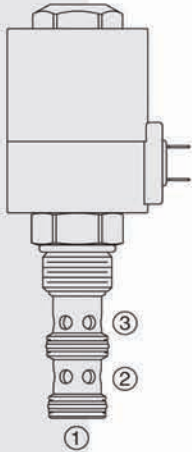
UKŁADY HYDRAULICZNE

**HYDROMA**

ГИДРАВЛИЧЕСКИЕ СИСТЕМЫ

## SOLENOID VALVES

### 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/minute (25 cu. in./minute) at 240 bar (3500 psi)

**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: 90 msec Drop-Out: 17 msec; Indication of shift with nominal voltage: Pull-In: 130 msec; Drop-Out: 128 msec per NFPA/T3.5.30-19xx

**Initial Coil Current Draw at 20 °C:** 2.6 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

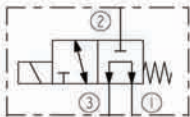
**Cavity:** VC12-3; See page 9.112.1

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

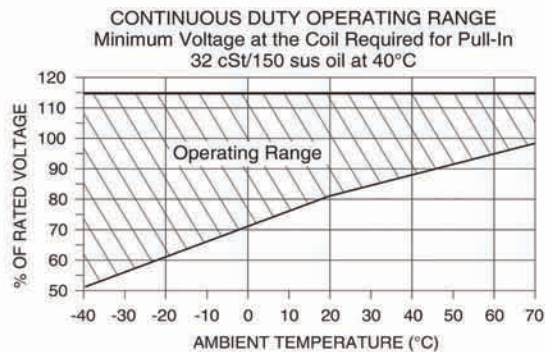
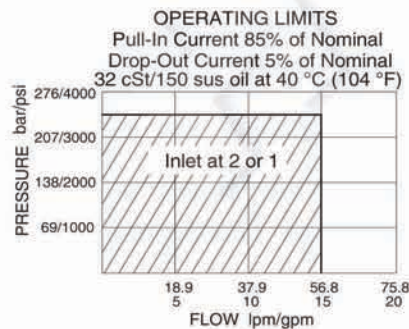
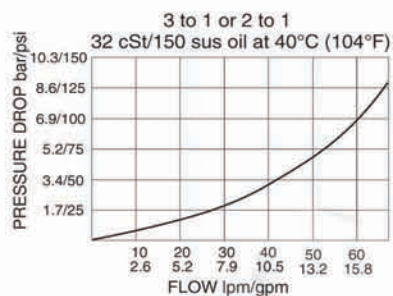
**Seal Kit:** SK12-3X-MM; See page 8.650.1

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

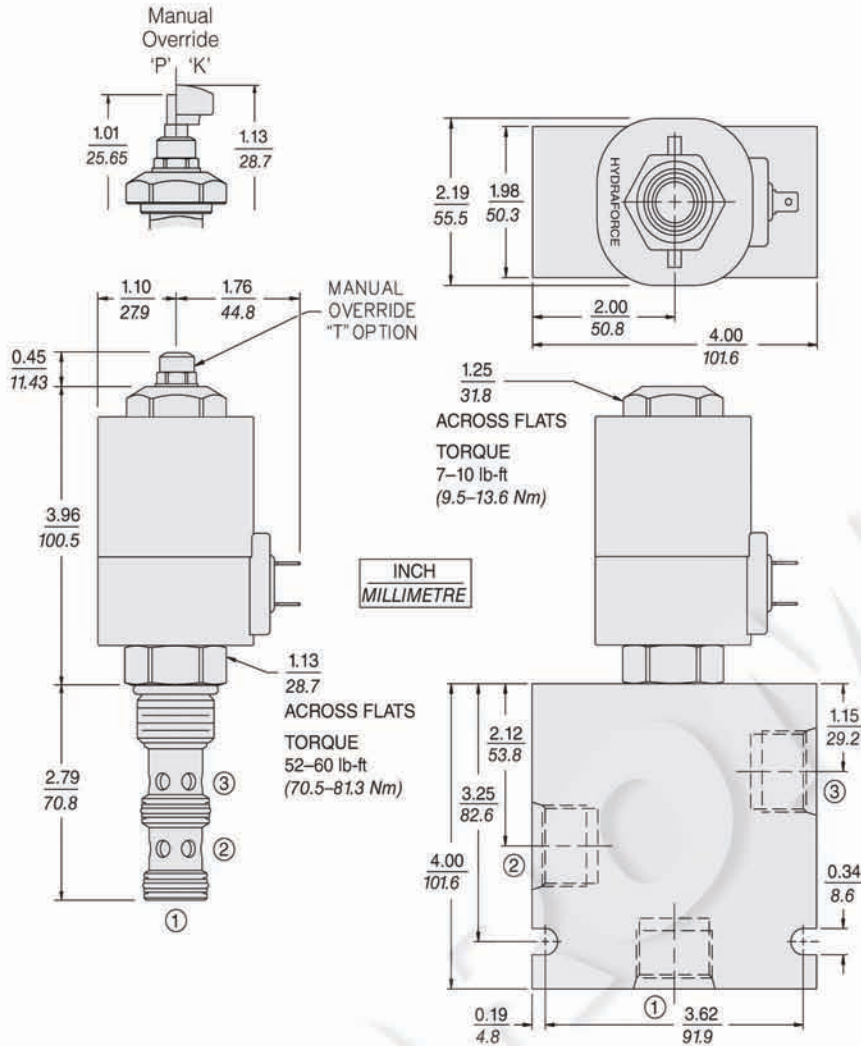
#### ISO SYMBOL



#### 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 avail-  
able; 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.