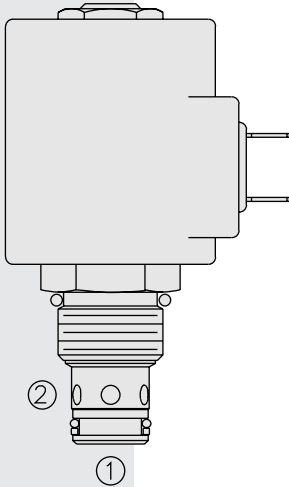


SV10-22 Poppet, 2-Way, Normally Closed



DESCRIPTION

A solenoid-operated, 2-way, normally closed, poppet-type, screw-in hydraulic cartridge valve, designed for low leakage blocking and load holding applications.

OPERATION

When de-energized, the **SV10-22** acts as a check valve, allowing flow to pass from 1 to 2, while blocking flow from 2 to 1. With the sensor option, the neutral sensor will signal ON or HIGH.

When energized, the 2 to 1 flow path opens. In this mode, flow is also allowed from 1 to 2. With the sensor option, the neutral sensor will signal LOW or OFF.

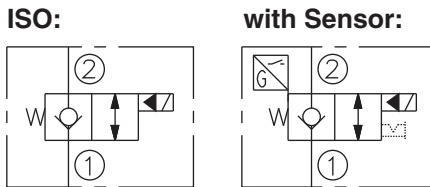
Operation of Manual Override Option: To override, push button in, twist counter-clockwise 180° and release. In this position, the valve will remain open.

To return to normal operation, push button in, twist clockwise 180° and release. Override will be detented in this position.

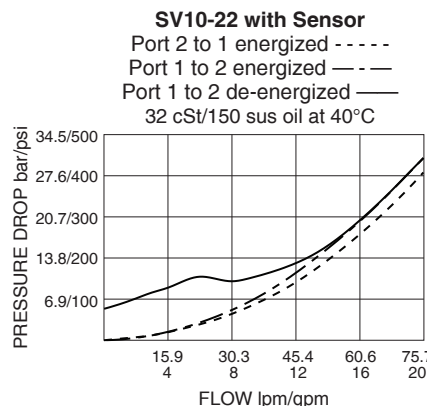
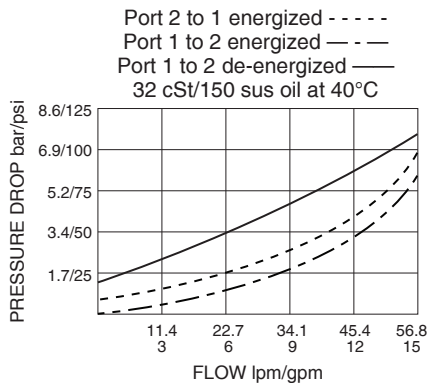
FEATURES

- Continuous-duty rated solenoid.
- Hardened seat for long life and low leakage.
- Optional coil voltages and terminations.
- Efficient wet-armature construction.
- Cartridges are voltage interchangeable.
- Optional waterproof E-Coils rated up to IP69K.
- Manual override option.
- Unitized, molded coil design.
- Industry common cavity.

SYMBOLS



PERFORMANCE (Cartridge Only)



RATINGS

Operating Pressure: 240 bar (3500 psi)

Proof Pressure: 350 bar (5075 psi)

Flow: 56.8 lpm (15 gpm); see performance chart

Internal Leakage: 0.15 cc/minute (3 drops/minute) max. at 240 bar (3500 psi)

Temperature: with standard Buna N seals: -40 to 100 °C (-40 to 212 °F);
 with Fluorocarbon seals: -26 to 204 °C (-15 to 400 °F)

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

Response Time: First indication of change of state with 100% voltage supplied at 80% of nominal flow rating: Energized: 40 msec.; De-energized: 32 msec.
 Response Time with Sensor: 68 ms pull-in, 50 ms drop-out

Initial Coil Current Draw at 20°C: Standard Coil: 1.67 amps at 12 Vdc;
 0.18 amps at 115 Vac (full wave rectified).
 E-Coil: 1.7 amps at 12 Vdc; 0.85 amps at 24 Vdc

Minimum Pull-in Voltage: 85% of nominal at 240 bar (3500 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

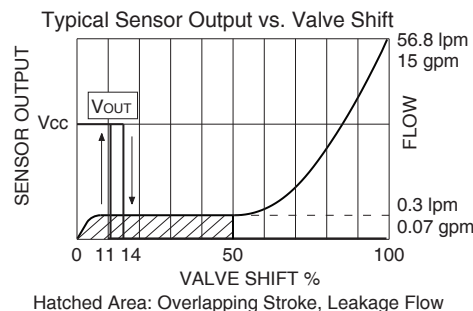
Installation: No restrictions; See page 9.020.1

Cavity: VC10-2; See page 9.110.1

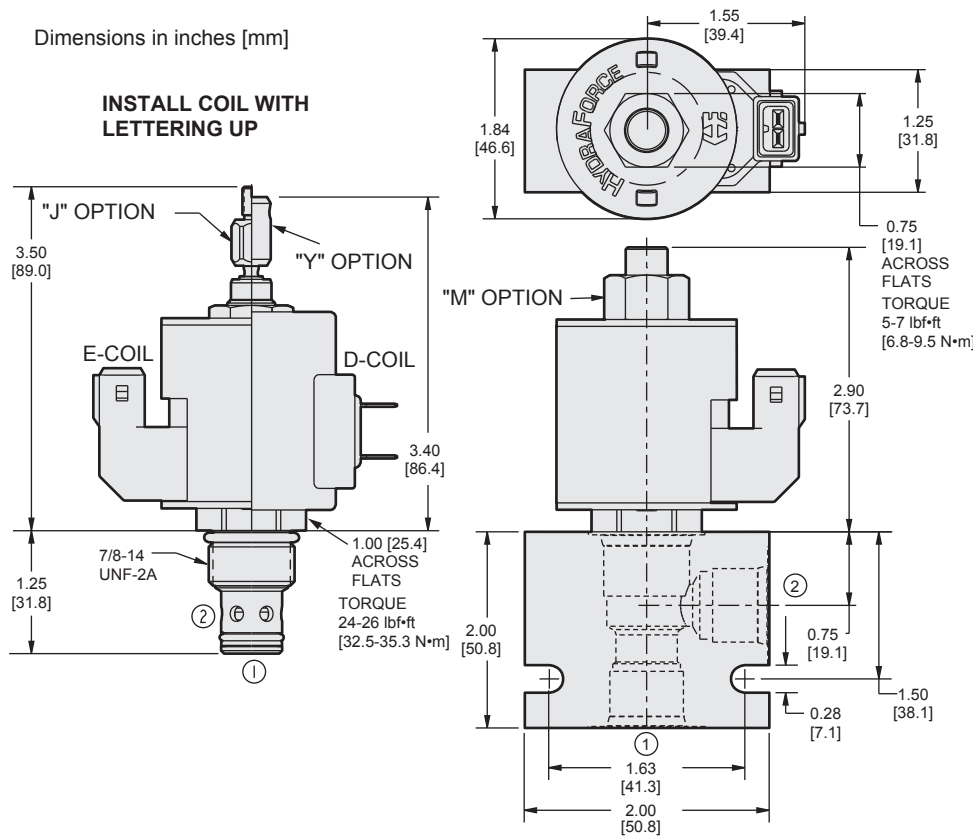
Cavity Tool: CT10-2XX; See page 8.600.1

Seal Kit: SK10-2X-T; See page 8.650.1

Coil Nut: Part No. 7004400



DIMENSIONS



Dimensions will differ significantly with Sensor Option; see page 3.010.1.

MATERIALS

Cartridge: Weight: 0.17 kg (0.37 lb); Weight with Sensor option: 0.49 kg (1.07 lb); Steel with hardened work surfaces. Zinc-plated exposed surfaces. Buna N O-rings and polyester elastomer back-up standard.

Standard Ported Body: Weight: 0.16 kg (0.35 lb); Anodized high-strength 6061 T6 aluminum alloy, rated to 207 bar (3000 psi). Ductile iron bodies available; Dimensions may differ. See page 8.010.1.

D-Coil: Weight: 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); Fully encapsulated with rugged external metal shell. Rated up to IP69K with integral connectors. See page 3.400.1.

TO ORDER

SV10-(P)22(A)

<p>Position Indicator</p> <p>None (Blank)</p> <p>Switch P</p> <p>Restricted Flow A</p> <p>with sensor, valve is rated 3000 psi (207 bar)</p> <p>Option</p> <p>None (Blank)</p> <p>Screen S</p> <p>Manual Override M</p> <p>Manual Override Y</p> <p>Manual Override J</p> <p>For Manual Override options see page 1.001.1</p> <p>Porting</p> <p>Cartridge Only 0</p> <p>SAE 8 8T</p> <p>3/8 in. BSP* 3B</p> <p>*BSP Body; U.K. Mfr. Only</p>	<p>Voltage Std. Coil</p> <p>0 Less Coil**</p> <p>10 10 Vdc†</p> <p>12 12 Vdc</p> <p>24 24 Vdc</p> <p>36 36 Vdc</p> <p>48 48 Vdc</p> <p>24 24 Vac</p> <p>115 115 Vac</p> <p>230 230 Vac</p> <p>**Includes Coil Nut</p> <p>† DS, DW or DL terminations only</p> <p>E-Coils: 10, 12, 20 or 24 Vdc only.</p> <p>Seals</p> <p>N Buna N (Std.)</p> <p>V Fluorocarbon</p>	<p>— Sensor Option: See page 3.010.1</p> <p>(Blank) None</p> <p>3 Dual Output, N.C./N.O.</p> <p>Sensor Type</p> <p>(Blank) None</p> <p>N Neutral Sense/DT04-4P</p> <p>M Neutral Sense/M12-4P</p> <p>Sensor/Connector</p> <p>(Blank) None</p> <p>N Neutral Sense/DT04-4P</p> <p>M Neutral Sense/M12-4P</p> <p>Mating Connectors:</p> <p>DT06-4S: Part No. 4001953</p> <p>M12-4S: available at www.turck.com or www.binder-usa.com</p> <p>Coil Termination</p> <p>Deutsch DT04-2P ER (IP69K) DR (IP65)</p> <p>Metri-Pack® 150 EY (IP69K) DY (IP65)</p> <p>Dual Lead Wires EL (IP69K) DL (IP65)</p> <p>Amp Jr. Timer EJ (IP67) —</p> <p>DIN 43650 EG (IP65) DG (IP65)</p> <p>Dual Spades — DS (IP65)</p> <p>For Coils with Zener Diode, add "Z" to option code. For example: "ER/Z". Not available on all models. See coil option info. on pages 3.200.1 & 3.400.1</p>
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