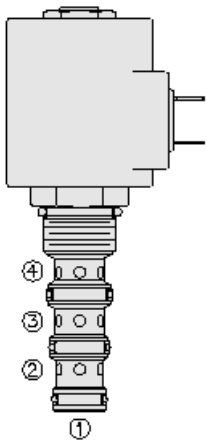




Overview



Description

A solenoid-operated, 4 port, 2 position, direct-acting, spool-type, screw-in hydraulic cartridge valve. When de-energized, .

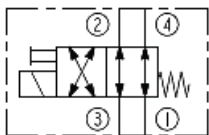
Operation

The SV10-40X allows flow from port 3 to port 2, as well as from port 4 to port 1. When energized, the spool shifts to open port 3 to port 4 and port 2 to port 1.

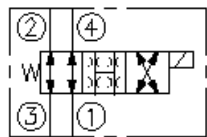
Features

- Continuous-duty rated coil.
- Hardened precision spool and cage for long life.
- Optional coil voltages and terminations.
- Efficient wet-armature construction.
- Cartridges are voltage interchangeable.
- All ports may be fully pressurized.
- Unitized, molded coil design.
- Manual override option.
- Optional waterproof E&E Coils rated up to IP69K.
- Industry-common cavity.

Symbol



TRANSITION:



Ratings

Pressure Ratings

| | |
|-----------------|--------------------|
| Pressure rating | 207 bar (3000 psi) |
| Proof pressure | 276 bar (4000 psi) |
| Burst pressure | 621 bar (9000 psi) |

Flow Ratings

| | |
|--------------------------|---|
| Flow rating | 23 lpm (6 gpm) |
| Maximum internal leakage | 82 ml/min (5 in ³ /min) - Note: Tested at port 3 (de-energized) out port 1 with ports 2 and 4 blocked 207 bar (3000 psi) |

Temperature Ratings

| | | |
|-----------------------------|-------------------------------|--|
| Operating fluid temperature | -40 to 100 °C (-40 to 212 °F) | - Note: With buna N seals |
| | -26 to 204 °C (-15 to 400 °F) | - Note: With fluorocarbon seals |
| | -54 to 107 °C (-65 to 225 °F) | - Note: With polyurethane seals |
| Storage temperature | -40 to 70 °C (-40 to 160 °F) | |
| Ambient temperature | -40 to 70 °C (-40 to 160 °F) | |

Other Ratings

| | | |
|----------------------|---|--|
| Response | 36 ms | - Note: Energized (first indication of change of state with 100% voltage applied to the coil with flow at 23 lpm (6 gpm) |
| | 20 ms | - Note: De-energized (first indication of change of state with 100% voltage applied to the coil with flow at 23 lpm (6 gpm) |
| Corrosion protection | 960 hr salt spray per ASTM b117 (gsv10-40x) | |



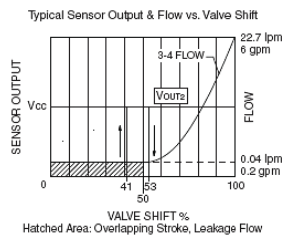
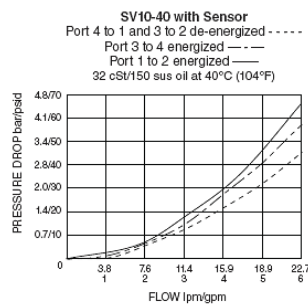
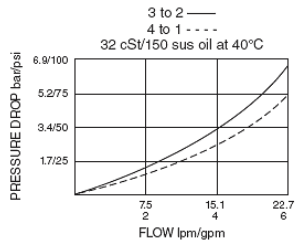
Operating Parameters

| | | |
|---------------------------------------|--|--|
| Fluids | Mineral based or synthetic hydraulic fluid with lubricating properties | |
| Fluid viscosity range | 7.4 to 420 cSt | |
| Maximum operating contamination level | 20/18/14 per ISO 4406 | |

Properties

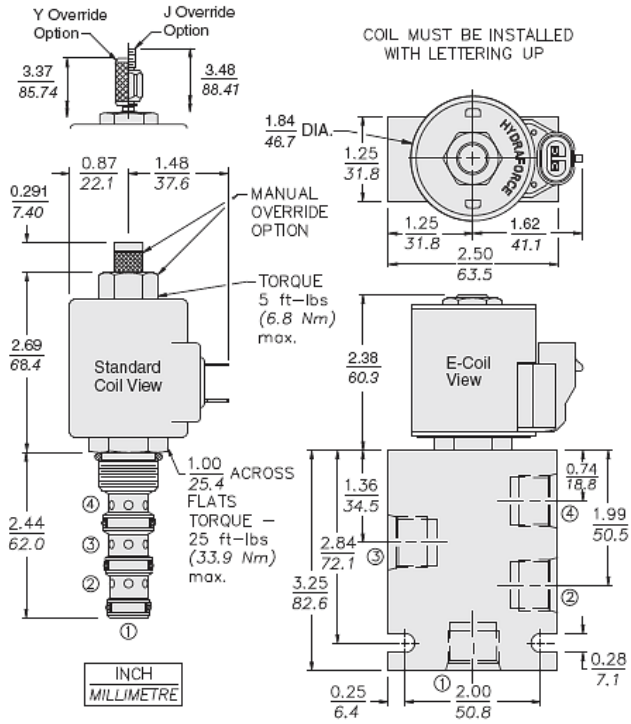
| | | |
|------------------------------|---|--------------------------|
| Unit weight | 0.18 kg (0.40 lb) | - Note: (sv10-40) |
| Internal wetted surface area | 163 cm ² (25.3 in ²) | - Note: (sv10-40) |

Performance





Dimensions



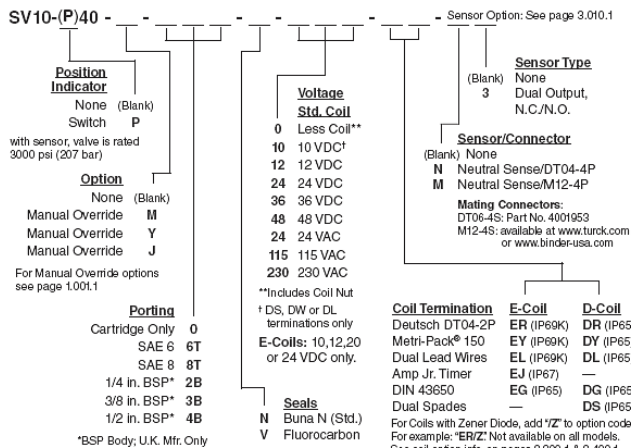
Installation Specifications

| | |
|-------------------------------|-----------------------------------|
| Cavity | VC10-4 |
| Cartridge installation torque | 32.5 to 35.3 N-m (24 to 26 ft-lb) |
| Maximum allowable torque | 54.2 N-m (40 ft-lb) |
| Coil nut torque | 6.8 to 9.5 N-m (5 to 7 ft-lb) |
| Orientation restriction | None |

Accessories

Seal kit SK10-4X-MMM - Note: X = seal option

Order Code



Model Options

SV10-A40E-H-J-L-M

A Position Sensor Option

| CODE | DESCRIPTION |
|------|---------------------------|
| 40 | Standard |
| P40 | Position Indicator Switch |



E Manual Override

| CODE | DESCRIPTION |
|-------|---|
| BLANK | NONE |
| J | Momentary Pull Override, #10-32 threads |
| M | Two Position Override, Red Knurled Knob |
| Y | Momentary Pull Override, Red Knurled Knob |

H Line Body

| CODE | DESCRIPTION |
|------|--------------------|
| 0 | No Body |
| 6T | Aluminum SAE 6 |
| 8T | Aluminum SAE 8 |
| 6TD | Ductile Iron SAE 6 |

J Seal

| CODE | DESCRIPTION |
|------|---------------|
| N | Buna-N |
| V | Fluorocarbon |
| P | Polyurethane |
| U | PPDI Urethane |

L Coil

| CODE | DESCRIPTION |
|----------|---|
| 0 | No Coil |
| 10DG | 10 VDC, D-Coil, DIN 43650 |
| 10DL | 10 VDC, D-Coil, Dual Lead Wires |
| 10DR/D | 10 VDC, D-Coil, Deutsch with Diode |
| 10DS | 10 VDC, D-Coil, Dual Spade |
| 10EL | 10 VDC, E-Coil, Dual Lead Wires |
| 10ER | 10 VDC, E-Coil, Deutsch |
| 10ER/Z | 10 VDC, E-Coil, Deutsch with Zener Diode |
| 12DG | 12 VDC, D-Coil, DIN 43650 |
| 12DL | 12 VDC, D-Coil, Dual Lead Wires, 18 inches long |
| 12DL/36 | 12 VDC, D-Coil, Dual Lead Wires, 36 inches long |
| 12DL/W | 12 VDC, D-Coil, Dual Lead Wires with Weatherpak |
| 12DL/W/D | 12 VDC, D-Coil, Dual Lead Wires with Weatherpak with Diode |
| 12DR | 12 VDC, D-Coil, Deutsch |
| 12DR/D | 12 VDC, D-Coil, Deutsch with Diode |
| 12DR/Z | 12 VDC, D-Coil, Deutsch with Zener Diode |
| 12DS | 12 VDC, D-Coil, Dual Spade |
| 12EG | 12 VDC, E-Coil, DIN 43650 |
| 12EJ | 12 VDC, E-Coil, AMP Jr. |
| 12EL | 12 VDC, E-Coil, Dual Lead Wires, 18 inches long |
| 12EL/36 | 12 VDC, E-Coil, Dual Lead Wires, 36 inches long |
| 12EL/W/Z | 12 VDC, E-Coil, Dual Lead Wires with WeatherPak and Zener Diode |



| CODE | DESCRIPTION |
|----------|---|
| 12EL/Z | 12 VDC, E-Coil, Dual Lead Wires with Zener Diode |
| 12ER | 12 VDC, E-Coil, Deutsch |
| 12ER/Z | 12 VDC, E-Coil, Deutsch with Zener Diode |
| 12EY | 12 VDC, E-Coil, Metri-Pack 150 |
| 12EY/Z | 12 VDC, E-Coil, Metri-Pack 150 with Zener Diode |
| 20DR/D | 20 VDC, D-Coil, Deutsch with Diode |
| 20DS | 20 VDC, D-Coil, Dual Spade |
| 20ER | 20 VDC, E-Coil, Deutsch |
| 24AG | 24 VDC, D-Coil, DIN 43650 |
| 24AP | 24 VDC, D-Coil, 1/2" Conduit and Dual Lead Wires |
| 24DG | 24 VDC, D-Coil, DIN 43650 |
| 24DL | 24 VDC, D-Coil, Dual Lead Wires |
| 24DL/W | 24 VDC, D-Coil, Dual Lead Wires with Weatherpak |
| 24DL/W/D | 24 VDC, D-Coil, Dual Lead Wires with Weatherpak with Diode |
| 24DP | 24 VDC, D-Coil, 1/2" Conduit and Dual Lead Wires |
| 24DR | 24 VDC, D-Coil, Deutsch |
| 24DR/D | 24 VDC, D-Coil, Deutsch with Diode |
| 24DS | 24 VDC, D-Coil, Dual Spade |
| 24EG | 24 VDC, E-Coil, DIN 43650 |
| 24EJ | 24 VDC, E-Coil, AMP Jr. |
| 24EL | 24 VDC, E-Coil, Dual Lead Wires, 18 inches long |
| 24EL/36 | 24 VDC, E-Coil, Dual Lead Wires, 36 inches long |
| 24EL/W/Z | 24 VDC, E-Coil, Dual Lead Wires with WeatherPak and Zener Diode |
| 24ER | 24 VDC, E-Coil, Deutsch |
| 24ER/Z | 24 VDC, E-Coil, Deutsch with Zener Diode |
| 24EY | 24 VDC, E-Coil, Metri-Pack 150 |
| 24EY/Z | 24 VDC, E-Coil, Metri-Pack 150 with Zener Diode |
| 36DS | 36 VDC, D-Coil, Dual Spade |
| 115AG | 115 VAC, D-Coil, DIN 43650 |
| 115AP | 115 VAC, D-Coil, 1/2" Conduit and Dual Lead Wires |
| 230AG | 230 VAC, D-Coil, DIN 43650 |
| 230AP | 230 VAC, D-Coil, 1/2" Conduit and Dual Lead Wires |

M Position Sensor Termination

| CODE | DESCRIPTION |
|-------|---|
| BLANK | No Position Sensor |
| M3 | Neutral Sense, M12-4P, Dual Output NC/NO |
| N3 | Neutral Sense, DT04-4P, Dual Output NC/NO |