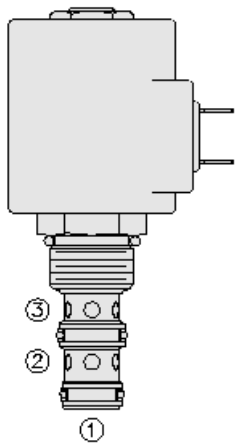




Overview



Description

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

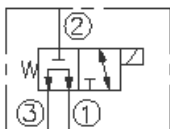
Operation

When de-energized, the SV10-33 allows flow from port 3 to port 1, while blocking flow at port 2. When energized, the cartridges spool shifts from port 1 to port 2, while blocking at port 3. Except under low flow conditions, inlet flow source at port 1 is not recommended.

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



Ratings

Pressure Ratings

| | |
|-----------------|--------------------|
| Pressure rating | 207 bar (3000 psi) |
| Proof pressure | 350 bar (5075 psi) |

Flow Ratings

| | | |
|--------------------------|------------------------|-----------------------------------|
| Flow rating | 18.9 lpm (5 gpm) | - Note: Maximum, see chart |
| Maximum internal leakage | 5 in ³ /min | - Note: Max at 207 bar (3000 psi) |

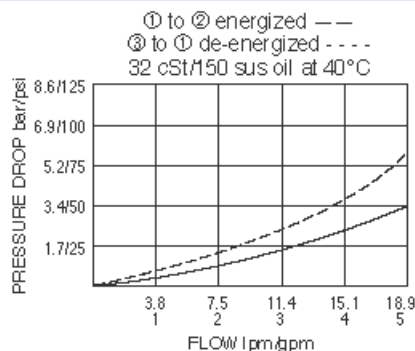
Temperature Ratings

| | | |
|-----------------------------|-------------------------------|---------------------------------|
| Operating fluid temperature | -40 to 120 °C (-40 to 250 °F) | - Note: With buna N seals |
| | -30 to 205 °C (-20 to 400 °F) | - Note: With fluorocarbon seals |

Properties

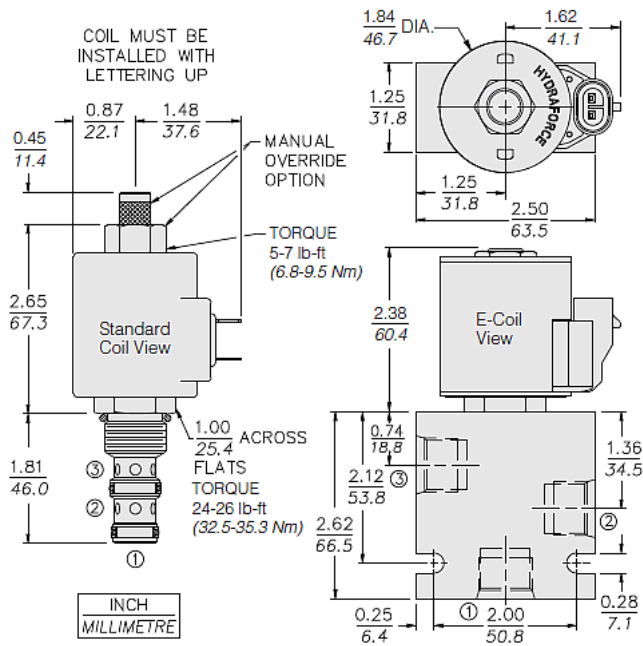
| | |
|-----------|---|
| Materials | steel with hardened work surfaces zinc-plated exposed |
|-----------|---|

Performance





Dimensions



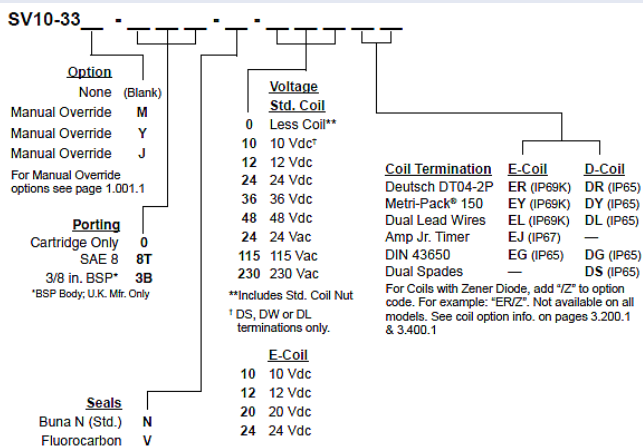
Installation Specifications

| | |
|-------------------------------|-----------------------------------|
| Cavity | VC08-2 |
| Cartridge installation torque | 32.5 to 35.3 N-m (24 to 26 ft-lb) |
| Coil nut torque | 6.8 to 9.5 N-m (5 to 7 ft-lb) |

Accessories

| | |
|----------|------------|
| Seal kit | SK10-3X-MM |
| Housings | |
| Coils | |

Order Code



| POSITION | CODE | DESCRIPTION |
|----------|-------|---|
| | | SV10-33E-H-J-L |
| E | | Manual Override |
| E | BLANK | NONE |
| E | J | Momentary Pull Override, #10-32 threads |
| E | M | Two Position Override, Red Knurled Knob |
| E | Y | Momentary Pull Override, Red Knurled Knob |
| H | | Line Body |



| POSITION | CODE | DESCRIPTION |
|----------|----------|---|
| H | 0 | No Body |
| H | 6T | Aluminum SAE 6 |
| H | 8T | Aluminum SAE 8 |
| H | 6TD | Ductile Iron SAE 6 |
| H | 8TD | Ductile Iron SAE 8 |
| H | 3B | Aluminum BSPP 3/8" (3) |
| H | 3BD | Ductile Iron BSPP 3/8" (3) |
| J | | Seal |
| J | N | Buna-N |
| J | V | Fluorocarbon |
| J | P | Polyurethane |
| J | U | PPDI Urethane |
| L | | Coil |
| L | 0 | No Coil |
| L | 10DG | 10 VDC, D-Coil, DIN 43650 |
| L | 10DL | 10 VDC, D-Coil, Dual Lead Wires |
| L | 10DR/D | 10 VDC, D-Coil, Deutsch with Diode |
| L | 10DS | 10 VDC, D-Coil, Dual Spade |
| L | 10EL | 10 VDC, E-Coil, Dual Lead Wires |
| L | 10ER | 10 VDC, E-Coil, Deutsch |
| L | 10ER/Z | 10 VDC, E-Coil, Deutsch with Zener Diode |
| L | 12DG | 12 VDC, D-Coil, DIN 43650 |
| L | 12DL | 12 VDC, D-Coil, Dual Lead Wires, 18 inches long |
| L | 12DL/36 | 12 VDC, D-Coil, Dual Lead Wires, 36 inches long |
| L | 12DL/W | 12 VDC, D-Coil, Dual Lead Wires with Weatherpak |
| L | 12DL/W/D | 12 VDC, D-Coil, Dual Lead Wires with Weatherpak with Diode |
| L | 12DR | 12 VDC, D-Coil, Deutsch |
| L | 12DR/D | 12 VDC, D-Coil, Deutsch with Diode |
| L | 12DR/Z | 12 VDC, D-Coil, Deutsch with Zener Diode |
| L | 12DS | 12 VDC, D-Coil, Dual Spade |
| L | 12EG | 12 VDC, E-Coil, DIN 43650 |
| L | 12EJ | 12 VDC, E-Coil, AMP Jr. |
| L | 12EL | 12 VDC, E-Coil, Dual Lead Wires, 18 inches long |
| L | 12EL/36 | 12 VDC, E-Coil, Dual Lead Wires, 36 inches long |
| L | 12EL/W/Z | 12 VDC, E-Coil, Dual Lead Wires with WeatherPak and Zener Diode |
| L | 12EL/Z | 12 VDC, E-Coil, Dual Lead Wires with Zener Diode |
| L | 12ER | 12 VDC, E-Coil, Deutsch |
| L | 12ER/Z | 12 VDC, E-Coil, Deutsch with Zener Diode |
| L | 12EY | 12 VDC, E-Coil, Metri-Pack 150 |
| L | 12EY/Z | 12 VDC, E-Coil, Metri-Pack 150 with Zener Diode |
| L | 20DR/D | 20 VDC, D-Coil, Deutsch with Diode |
| L | 20DS | 20 VDC, D-Coil, Dual Spade |
| L | 20ER | 20 VDC, E-Coil, Deutsch |



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