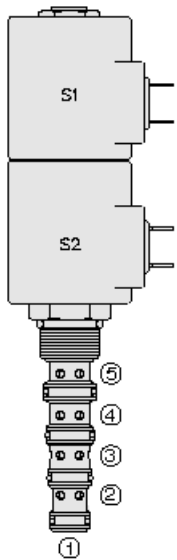




Overview



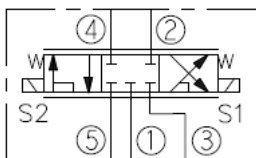
Description

This valve is a direct - acting 3 position, 5 port proportional directional control. With port 1 as a load sense port it is a screw in cartridge type for use with general purpose hydraulic fluids.

Features

- Fast response time.
- Integral load sensing.
- Hardened precision spool and cage for long life.
- Optional coil voltages and terminations
- Cartridges are voltage interchangeable.
- Optional waterproof E-Coils rated up to IP69K.

Symbol



Ratings

Pressure Ratings

| | |
|-----------------|---------------------|
| Pressure rating | 250 bar (3625 psi) |
| Proof pressure | 345 bar (5000 psi) |
| Burst pressure | 779 bar (11300 psi) |

Flow Ratings

| | |
|--------------------------|--|
| Flow rating | 22.7 lpm (6.0 gpm) |
| Maximum internal leakage | 1016 ml/min (62 in ³ /min) - Note: At 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

| | |
|----------------------|--|
| Corrosion protection | 960 hr salt spray per ASTM b117 |
| Response | 41 ms - Note: S1 nominal, pull-in |
| | 6 ms - Note: S1 nominal, drop-out |
| | 30 ms - Note: S2 nominal, pull-in |
| | 4 ms - Note: S2 nominal, drop-out |

Operating Parameters

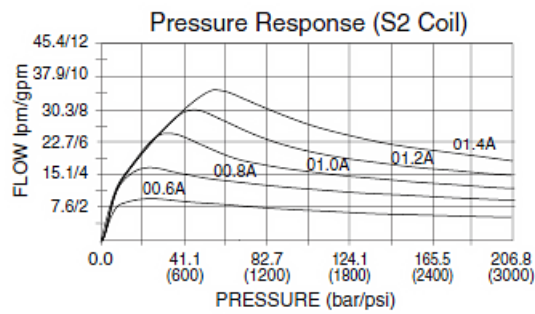
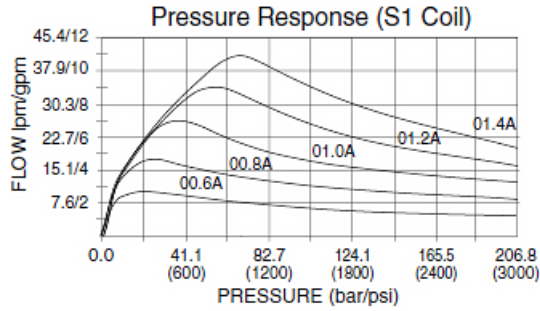
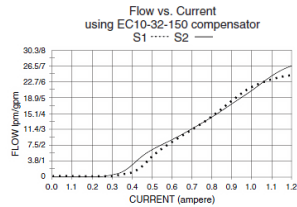
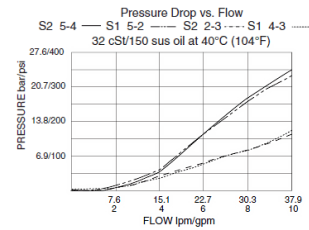
| | |
|---------------------------------------|--|
| Fluids | Mineral based or synthetic hydraulic fluid with lubricating properties |
| Fluid viscosity range | 7.4 to 420 cSt |
| Maximum operating contamination level | 20/18/14 per ISO 4406 |



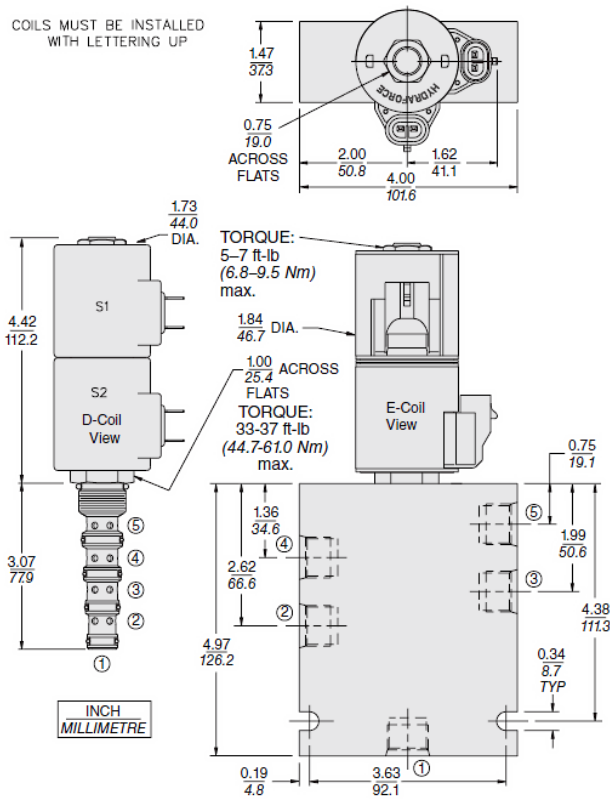
Properties

| | |
|------------------------------|---|
| Unit weight | 0.29 kg (0.64 lb) |
| Internal wetted surface area | 268 cm ² (41.5 in ²) |

Performance



Dimensions





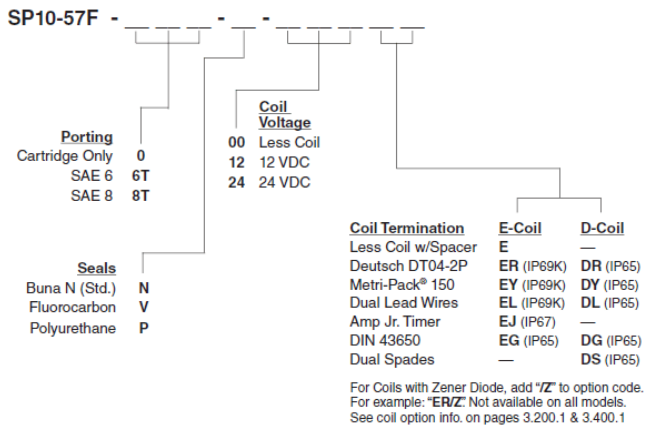
Installation Specifications

| | |
|-------------------------------|---|
| Cavity | VC10-5 |
| Cartridge installation torque | 44.7 to 50.2 N-m (33 to 37 ft-lb) 61.0 N-m (45 ft-lb) - Note: Maximum |
| Coil nut torque | 6.8 to 9.5 N-m (5 to 7 ft-lb) |
| Orientation restriction | None |

Accessories

| | |
|----------|---|
| Seal kit | SK10-5X-MMMM - Note: X = seal option |
| Housings | |
| Coils | |

Order Code



| POSITION | CODE | DESCRIPTION |
|----------|---------|---|
| | | SP10-57F-H-J-L |
| H | | Line Body |
| H | 0 | No Body |
| H | 6T | Aluminum SAE 6 |
| H | 8T | Aluminum SAE 8 |
| J | | Seal |
| J | N | Buna-N |
| J | V | Fluorocarbon |
| J | P | Polyurethane |
| J | U | PPDI Urethane |
| L | | Coil |
| L | 0 | No Coil, D-Coil Spacer |
| L | 0E | No Coil, E-Coil Spacer |
| L | 10DG | 10 VDC, D-Coil, DIN 43650 |
| L | 10DL | 10 VDC, D-Coil, Dual Lead Wires |
| 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 | 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 | 12DR | 12 VDC, D-Coil, Deutsch |



| POSITION | CODE | DESCRIPTION |
|----------|---------|--|
| 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 | 12ER | 12 VDC, E-Coil, Deutsch |
| L | 12EY | 12 VDC, E-Coil, Metri-Pack 150 |
| L | 20DS | 20 VDC, D-Coil, Dual Spade |
| L | 20ER | 20 VDC, E-Coil, Deutsch |
| 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 | 24DP | 24 VDC, D-Coil, 1/2" Conduit and Dual Lead Wires |
| L | 24DR | 24 VDC, D-Coil, Deutsch |
| 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 | 24ER | 24 VDC, E-Coil, Deutsch |
| L | 24EY | 24 VDC, E-Coil, Metri-Pack 150 |
| L | 36DS | 36 VDC, D-Coil, Dual Spade |