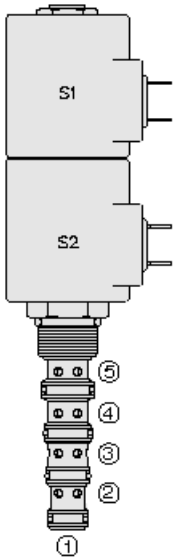




Overview



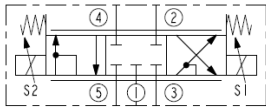
Description

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.
- Low flow option for maximum resolution
- 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	11.35 lpm (3.0 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	62 ms	- Note: S1 nominal, pull-in
	21 ms	- Note: S1 nominal, drop-out
	41 ms	- Note: S2 nominal, pull-in
	19 ms	- Note: S2 nominal, drop-out

Operating Parameters

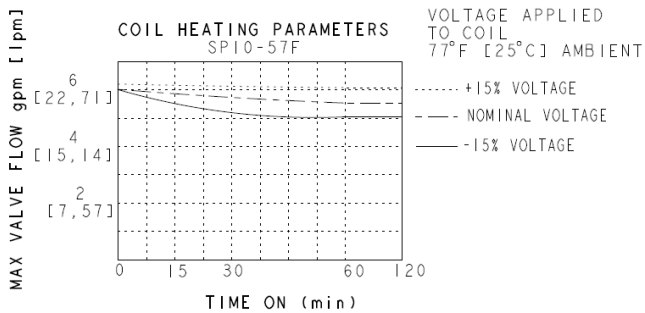
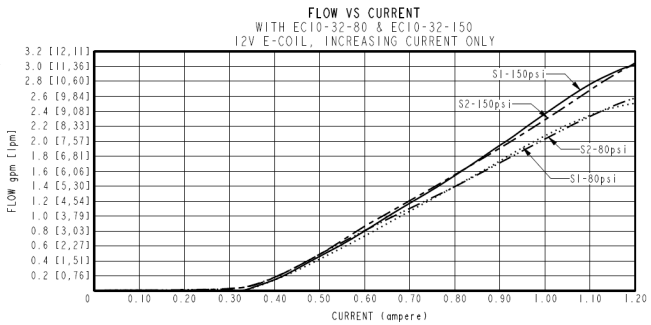
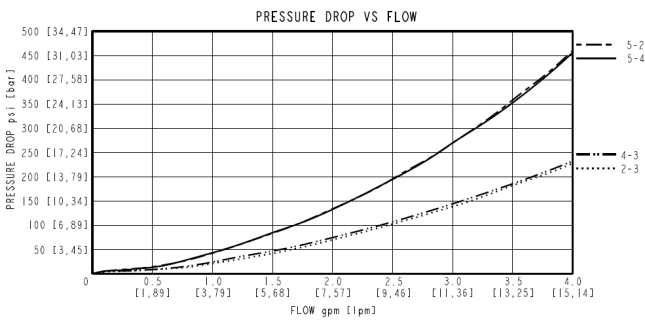
Fluids	Mineral based or synthetic hydraulic fluid with lubricating properties
Fluid viscosity range	7.4 to 420 cSt
Maximum operating contamination level	20/18/14 per ISO 4406



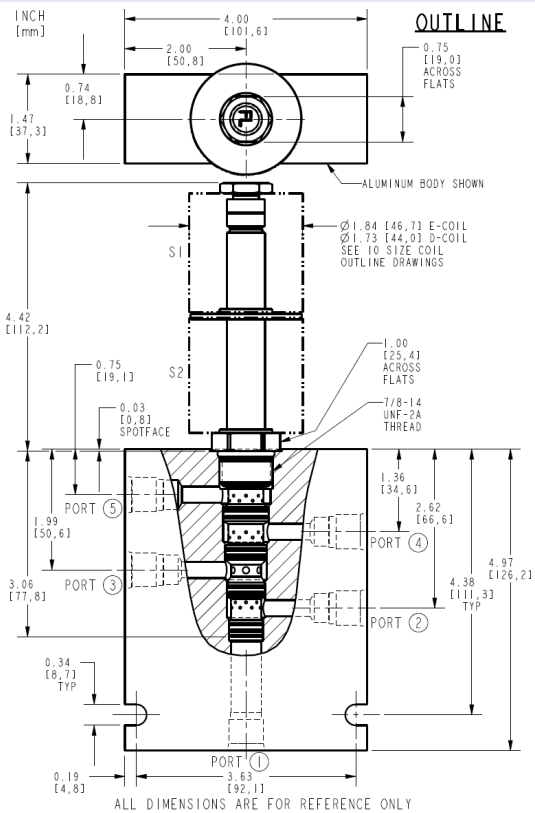
Properties

Unit weight	0.29 kg (0.64 lb)
Internal wetted surface area	281 cm ² (43.54 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

Order Code

ORDERING INFORMATION

SP10-57FL-X-X-XXXX

BASE MODEL NUMBER

PORTING

CARTRIDGE ONLY - 0

SEAL OPTION

BUNA N - N
 FLUOROCARBON - V
 POLYURETHANE - P

COIL VOLTAGE

LESS COIL - 00
 12 VDC COIL - 12
 24 VDC COIL - 24

COIL TERMINATIONS

E-COIL OPTIONS:
 METRI-PACK CONNECTOR - EY
 DEUTSCH CONNECTOR - ER
 D-COIL OPTIONS:
 (2) LEADWIRES 18"
 STANDARD LENGTH - DL
 DUAL SPADES SAE J858a - DS
 DIN 43650 - DG

Model Options

SP10-57FL-H-J-L

H Line Body

CODE	DESCRIPTION
0	No Body
6T	Aluminum SAE 6
8T	Aluminum SAE 8

J Seal

CODE	DESCRIPTION
N	Buna-N
V	Fluorocarbon
P	Polyurethane

L Coil

CODE	DESCRIPTION
0	No Coil, D-Coil Spacer
0E	No Coil, E-Coil Spacer
10DG	10 VDC, D-Coil, DIN 43650
10DL	10 VDC, D-Coil, Dual Lead Wires
10DS	10 VDC, D-Coil, Dual Spade
10EL	10 VDC, E-Coil, Dual Lead Wires
10ER	10 VDC, E-Coil, Deutsch



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