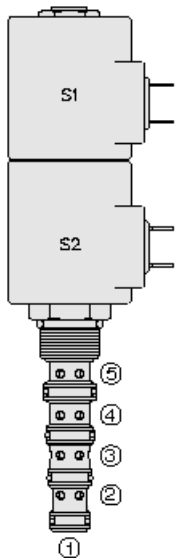




Overview



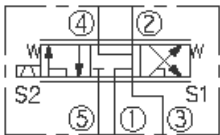
Description

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

Features

- Continuous-duty rated solenoid.
- Hardened precision spool and cage for long life.
- Optional coil voltages and terminations.
- Manual override option.
- Optional waterproof E-Coils rated up to IP69K.
- Cartridges are voltage interchangeable.

Symbol



Ratings

Pressure Ratings

Pressure rating	250 bar (3625 psi)
Proof pressure	345 bar (5000 psi)
Burst pressure	655 bar (9500 psi)

Flow Ratings

Flow rating	22.7 lpm (6.0 gpm)	- Note: SP10-58D
	18.9 lpm (5.0 gpm)	- Note: SP10-58DM
Maximum internal leakage	20 in ³ /min	- Note: SP10-58D max at 207 bar (3000 psi)
	15 in ³ /min	- Note: SP10-58DM max 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

Operating Parameters

Fluids	Mineral based or synthetic hydraulic fluid with lubricating properties
Fluid viscosity range	10 to 420 cSt
Maximum operating contamination level	20/18/14 per ISO 4406

Properties

Unit weight	0.29 kg (0.64 lb)	- Note: SP10-58D
	0.33 kg (0.73 lb)	- Note: SP10-58DM
Internal wetted surface area	271 cm ² (42 in ²)	



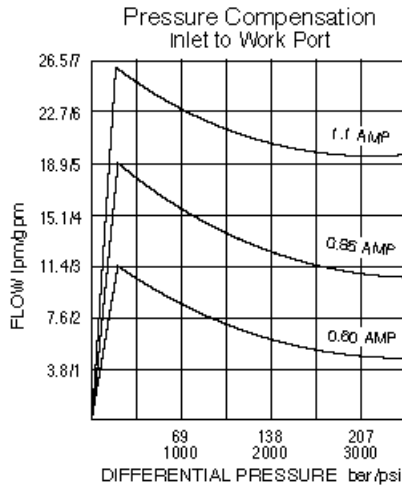
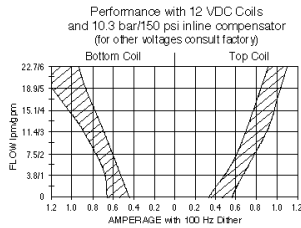
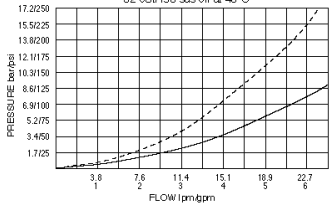
Electrical Parameters

Maximum operating current

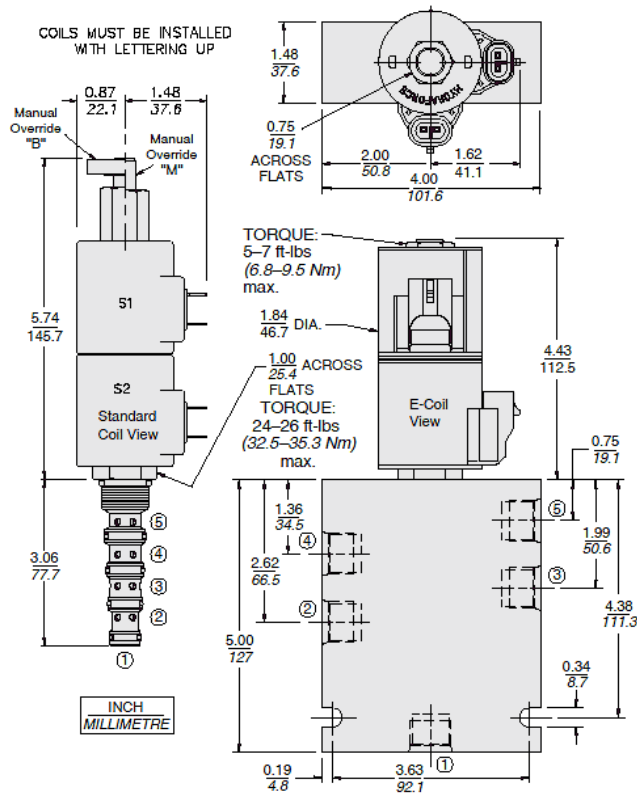
- **Note:** See chart

Performance

③ to ④ or ⑤ to ⑥ at 100% current, S1 or S2 energized; - - - - -
④ to ③ or ⑥ to ⑤ at 100% current, S1 or S2 energized; - - - - -
32 cSt/150 sus oil at 40°C



Dimensions



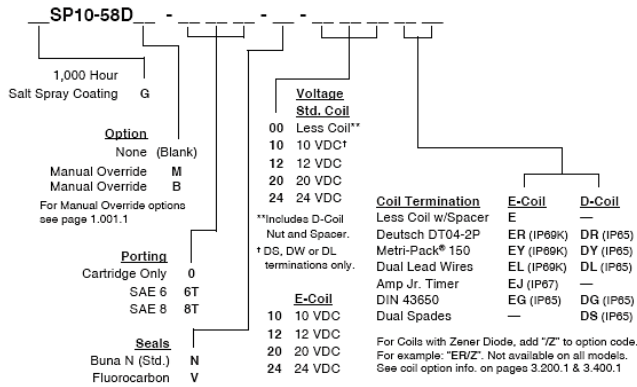
Installation Specifications

Cavity	VC10-5
Cartridge installation torque	32.5 to 35.3 N-m (24 to 26 ft-lb)
Maximum allowable torque	61 N-m (45 ft-lb)
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
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Order Code



Model Options

SP10-58DE-H-J-L

E Manual Override

CODE	DESCRIPTION
B	Momentary Push/Pull Override, 1.5" Diameter Aluminum Knob
BLANK	NONE
K	Three Position Override, 1.5" Diameter Aluminum Knob
M	Momentary Push/Pull Override, Red Knurled Knob

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
U	PPDI Urethane

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
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



CODE	DESCRIPTION
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