



2.49

50SD58-40 TYPE

Solenoid Directional Valve

Rated pressure (bar / psi)	345 / 5000
Peak flow (L/min / gpm)	11 / 3 (See performance chart)

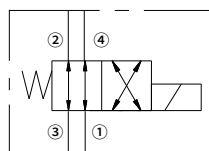
Features

- Continuous-duty rated coil
- Cartridges are voltage interchangeable
- Optional waterproof E-Coils rated up to IP69K
- Efficient wet-armature construction
- Hardened parts for long life

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Symbol



Description

A solenoid-operated, 4-way, 2-position, direct-acting spool-type, screw-in hydraulic cartridge valve designed for high pressure operation up to 345 bar (5000 psi).

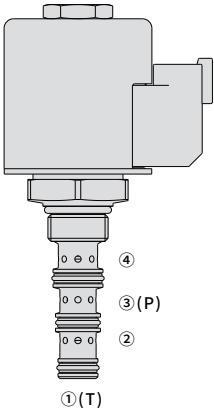
Operation

When de-energized, the valve flow paths are ③ to ② , and ④ to ① .

When energized, the valve's spool shifts to open ③ to ④ , and ② to ① .

All ports are open at cross-over.

Note: Port ① must be connected to tank. Valve cannot withstand more than 276 bar (4000 psi) at the inlet of port ① .



Ordering Code

50SD58-40					
Option:					
None					
Blank					
Cartridge only					
0					
Voltage Std. Coil:					
Less Coil					
10VDC					
12VDC					
20VDC					
24VDC					
28VDC					
Termination (VDC)					
E-Coil:					
Amp Junior Timer					
(IP67 Rated)					
Deutsch DT04-2P					
(IP69K Rated)					
DIN 43650					
(IP65 Rated)					
Termination (VDC)					
D-Coil:					
Dual Spades					
(SAE J858a, IP65K Rated)					

Materials

Cartridge:

Weight: 0.18 kg; Steel with hardened work surfaces. Zinc-plated exposed surfaces; Polyurethane (Std.) seal.

Standard Ported Body:

Anodized high-strength aluminum alloy, rated to 240 bar; Ductile iron and steel bodies available; Dimensions may differ, consult factory.

Standard Coil: Consult factory.

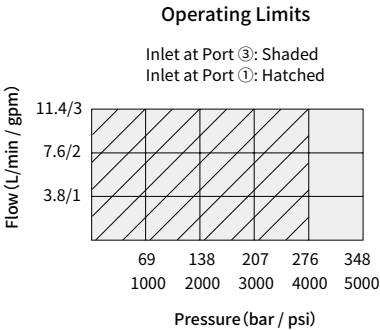
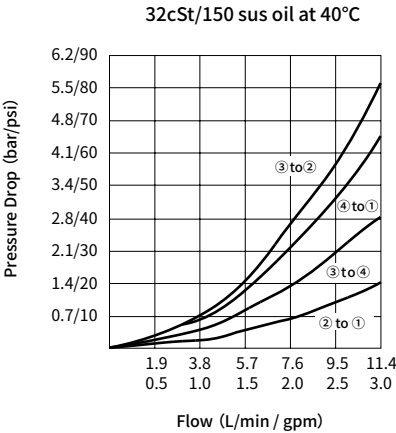
E-Coil:

Weight: 0.41 kg; Perfect wound, fully encapsulated with rugged external metal shell; Rated up to IP69K with Deutsch sockets.

Technical Data

Rated pressure		345 bar (5000 psi)
Peak flow		See performance chart
Internal leakage		≤ 180 mL/min@345 bar
Coil duty rating		Continuous from 85% to 115% of nominal voltage
Initial coil current draw at 20°C	E-Coil	1.7 A at 12VDC; 0.85 A at 24VDC
	D-Coil	1.67 A at 12VDC; 0.83 A at 24VDC
Minimum pull-in voltage		85% of nominal at 345 bar
Cavity		VC08-4 (See technical reference)
Fluid		Mineral-based or synthetics with lubricating properties
Viscosity range		7.4 to 420 mm ² /s
Temperature range	-54 to 107 °C (Polyurethane seals)	
	-40 to 100 °C (Buna N seals)	
	-26 to 204 °C (Fluorocarbon seals)	
Degree of fluid contamination		The minimum pollution level is ISO4406 level 18/16/13, and level 15/13/11 is recommended to prolong the service life

Performance (Cartridge Only)



Dimensions

(Dimensions in mm)

