



2.42

# 50SD58-40 TYPE

## Solenoid Directional Valve

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

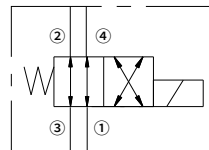
### Features

- 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).

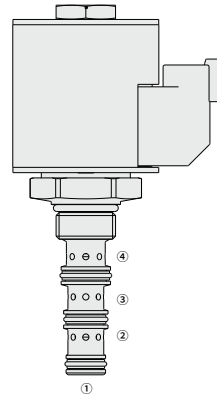
## Operation

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	-	-	-	-	-	-	-	-
<b>Option:</b>	Blank								
None									
<b>Cartridge only</b>	0								
<b>Seals:</b>									
Polyurethane (Std.)			P						
Buna N			N						
Fluorocarbon			V						
<b>Voltage Std. Coil:</b>									
Less Coil				00					
10VDC				10					
12VDC				12					
20VDC				20					
24VDC				24					
<b>Termination (VDC)</b>									
<b>E-Coil:</b>									
Amp Junior Timer								EJ	
(IP67 Rated)									
Deutsch DT04-2P								ER	
(IP69K Rated)									
DIN 43650								EG	
(IP65 Rated)									
<b>Termination (VDC)</b>									
<b>D-Coil:</b>									
Dual Spades								DS	
(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.

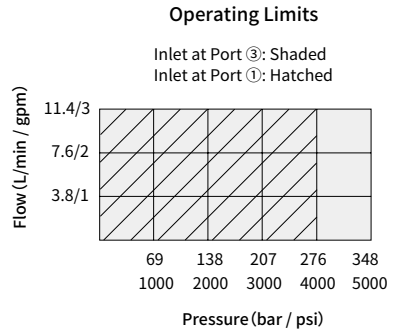
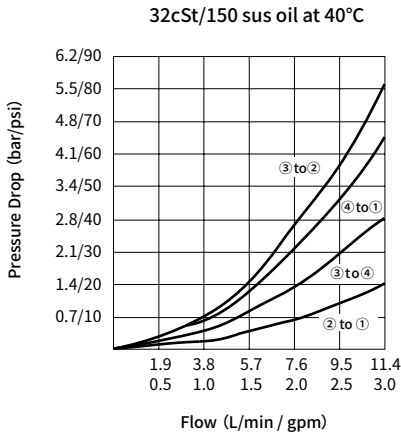
### E-Coil:

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 <sup>2</sup> /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 )

