



2.3

50SD08-20 TYPE

Solenoid Directional Valve

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

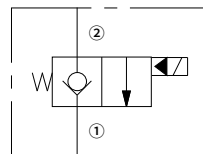
Features

- Continuous-duty rated coil
- Cartridges are voltage interchangeable
- Optional waterproof E-Coils rated up to IP69K
- Industry common cavity
- Hardened parts for long life and low leakage

Contents

Description	02
Operation	02
Ordering code	02
Materials	02
Technical data	03
Performance	03
Dimensions	04

Symbol



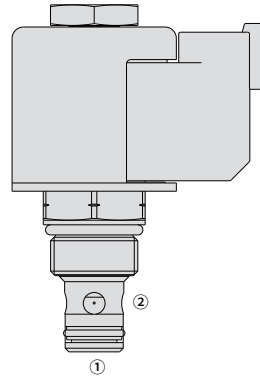
Description

A solenoid-operated, 2-way, normally closed, piloted poppet-type, screw-in hydraulic cartridge valve, intended to act as a blocking or load-holding device for low flow circuits.

Operation

When de-energized, the valve acts as a check valve, allowing flow from ① to ②, while blocking flow from ② to ①.

When energized, the cartridge's poppet lifts to open the ② to ① flow path. In this mode, flow from ① to ② is severely restricted.



Ordering Code

	50SD08-20	<input type="text"/>	-	<input type="text"/>	-	<input type="text"/>	-	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
Option:	None	Blank										
Cartridge Only		0										
Seals:	Polyurethane (Std.)			P								
	Buna N			N								
	Fluorocarbon			V								
						Voltage						
						Std. Coil:						
						Less Coil	00					
						10VDC	10					
						12VDC	12					
						20VDC	20					
						24VDC	24					
						28VDC	28					
										Termination (VDC)		
										E-Coil:		
										Deutsch DT04-2P	ER	
										(IP69K Rated)		
										Lead wires (2)	EL	
										(IP69K Rated)		
										Termination (VDC)		
										D-Coil:		
										Dual Spades	DS	
										(SAE J858a, IP65K Rated)		
										DIN 43650	DG	
										(IP65K Rated)		
										Lead wires (2)	DL	
										(IP65K Rated)		

Materials

Cartridge:

Weight: 0.09 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.

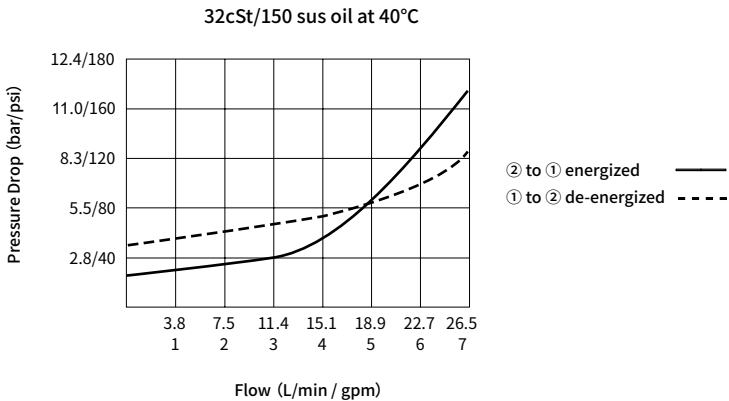
E-Coil:

Weight: 0.14 kg; Perfect wound, fully encapsulated with rugged external metal shell; Rated up to IP69K with Deutsch sockets.

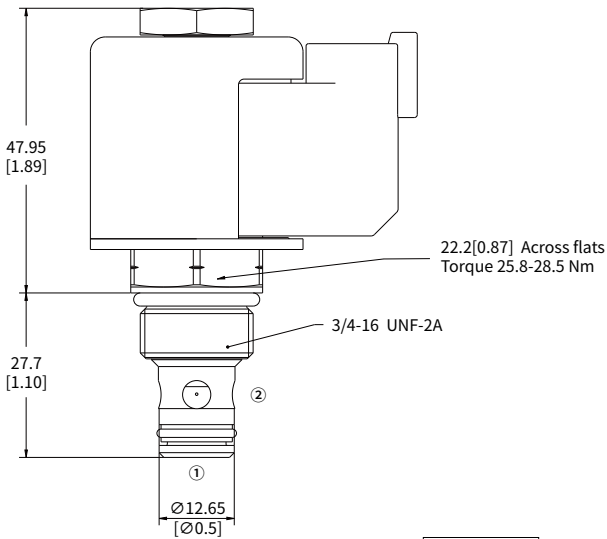
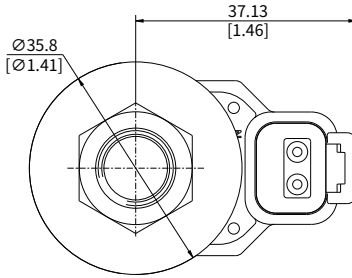
Technical Data

Rated pressure	345 bar (5000 psi)	
Peak flow	See performance chart	
Internal leakage	≤ 0.15 mL/min (3 drops/min) @ 345 bar	
Coil duty rating	Continuous from 85% to 115% of nominal voltage	
Initial coil current draw at 20°C	E-Coil	1.4 A at 12VDC; 0.7 A at 24VDC
	D-Coil	1.2 A at 12VDC; 0.6 A at 24VDC
Minimum pull-in voltage	85% of nominal at 345 bar	
Cavity	VC08-2 (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



MILLIMETER
[INCH]