



2.17

35SD10-20 TYPE

Solenoid Directional Valve

Rated pressure (bar / psi) 241 / 3500
 Peak flow (L/min / gpm) 56.8 / 15 (See performance chart)

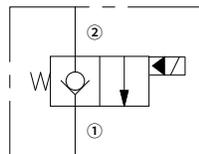
Features

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

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Symbol



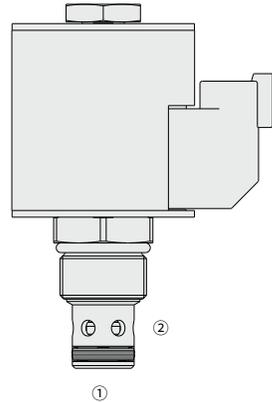
Description

A solenoid-operated, 2-way, normally closed, poppet-type, screw-in hydraulic cartridge valve, designed to function as a load holding or blocking valve in applications requiring low internal leakage.

Operation

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

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



Ordering Code

	35SD10-20	-	-	-	-	-	-	-	-	-	-
Option:	Blank										
None											
Cartridge only	0										
Seals:											
Buna N (Std.)						N					
Polyurethane						P					
Fluorocarbon						V					
Voltage Std. Coil:											
Less Coil	00										
10VDC	10										
12VDC	12										
20VDC	20										
24VDC	24										
Termination (VDC) E-Coil:											
Amp Junior Timer (IP67 Rated)	EJ										
Deutsch DT04-2P (IP69K Rated)	ER										
DIN 43650 (IP65 Rated)	EG										
Termination (VDC) D-Coil:											
Dual Spades (SAE J858a, IP65K Rated)	DS										

Materials

Cartridge:

Weight: 0.16 kg ; Steel with hardened work surfaces. Zinc-plated exposed surfaces; Buna N (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.

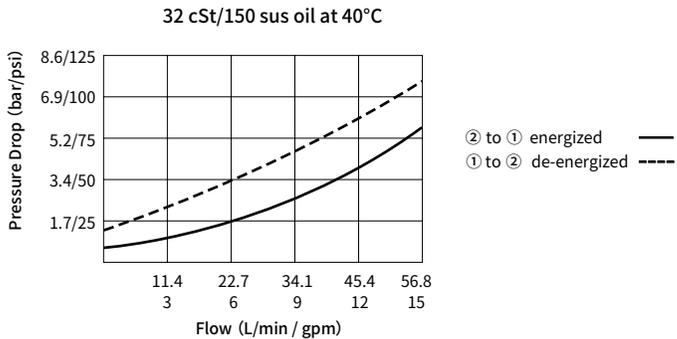
E-Coil:

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

Technical Data

Rated pressure	241 bar (3500 psi)	
Peak flow	56.8 L/min (15 gpm) ; See performance chart	
Internal leakage	≤ 0.15 mL/min (3 drops /min) @241 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 241 bar	
Cavity	VC10-2 (See technical reference)	
Fluid	Mineral-based or synthetics with lubricating properties	
Viscosity range	7.4 to 420 mm ² /s	
Temperature range	-40 to 100 °C (Buna N seals)	
	-54 to 107 °C (Polyurethane 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)

