



1.22

35SD10-20 TYPE

Solenoid Directional Valve

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

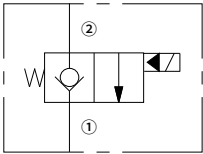
Features

- 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



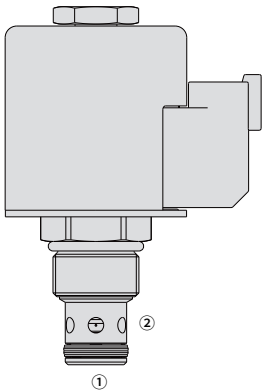
Description

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:									
None									
		Blank							
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							
28VDC		28							
Termination (VDC)									
E-Coil:									
Amp Junior Timer		EJ							
(IP67 Rated)									
Deutsch DT04-2P		ER							
(IP69K Rated)									
DIN 43650		EG							
(IP65 Rated)									
Termination (VDC)									
D-Coil:									
Dual Spades		DS							
(SAE J858a, IP65 Rated)									

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.

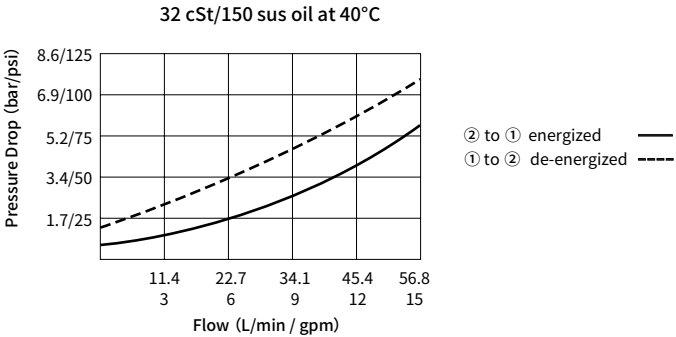
E-Coil:

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 20/18/14, and level 17/15/13 is recommended to prolong the service life

Performance (Cartridge Only)



Dimensions

(Dimensions in mm)

