



2.38

35SD12-21 TYPE

Solenoid Directional Valve

Rated pressure (bar / psi)	240 / 3500
Peak flow (L/min / gpm)	113.6 / 30 (See performance chart)

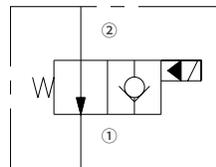
Features

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

Contents

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

Symbol



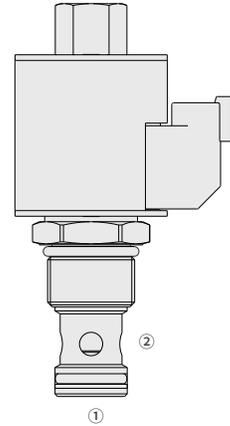
Description

A solenoid-operated, 2-way, normally open, 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 energized, the 35SD12-21 acts as a check valve, allowing flow to pass from ① to ②, while blocking flow in the reverse direction.

When de-energized, the poppet lifts to open the ② to ① flow path after overcoming the solenoid force. In this mode, flow from ① to ② is severely restricted.



Ordering Code

35SD12-21	<input type="checkbox"/>	-	<input type="checkbox"/>	-	<input type="checkbox"/>	-	<input type="checkbox"/>					
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				
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, IP65K Rated)											

Materials

Cartridge:

Weight: 0.29 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:

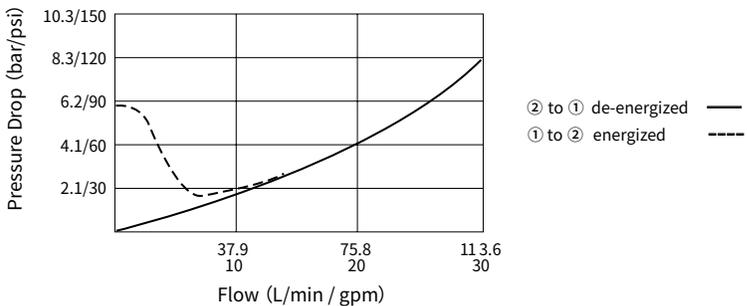
Weight: 0.45 kg; Perfect wound, fully encapsulated with rugged external metal shell; Rated up to IP69K with Deutsch sockets.

Technical Data

Rated pressure	240 bar (3500 psi)	
Peak flow	See performance chart	
Internal leakage	≤ 3 drops/min@240 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 207 bar	
Cavity	VC12-2 (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)

32 cSt/150 sus oil at 40°C



Dimensions

(Dimensions in mm)

