



2.30

# 35SD10-47A TYPE

## Solenoid Directional Valve

Rated pressure (bar / psi)	240 / 3500
Peak flow (L/min / gpm)	19 / 5

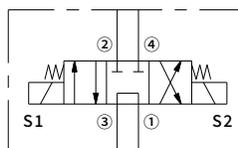
### Features

- 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

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### Symbol



## Description

A solenoid-operated, 4-way, 3-position, direct-acting, spool-type, open center, screw-in hydraulic cartridge valve.

## Operation

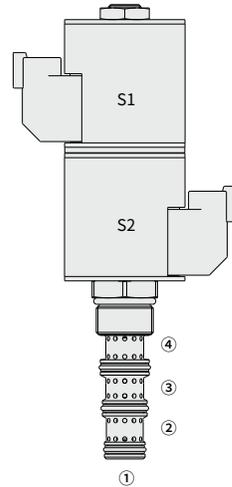
When de-energized, the valve cylinder ports are open and common to ③ and ① .

When coil #1(S1) is energized, flow is allowed from ③ to ④ , and from ② to ① .

When coil #2(S2) is energized, flow is allowed from ③ to ② , and from ④ to ① .

In circuits where work port flows are unequal due to cylinder ratios, the higher return flow should be directed to port ② .

While ① may be fully pressurized, it is not intended for use as the valve's inlet.



## Ordering Code

35SD10-47A	<input type="checkbox"/>	-	<input type="checkbox"/>	-	<input type="checkbox"/>	-	<input type="checkbox"/>				
<b>Option:</b>	None	Blank									
<b>Cartridge only</b>		0									
<b>Seals:</b>	Polyurethane (Std.)		P								
	Buna N		N								
	Fluorocarbon		V								
				<b>Voltage</b>							
				<b>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: 0.30 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.

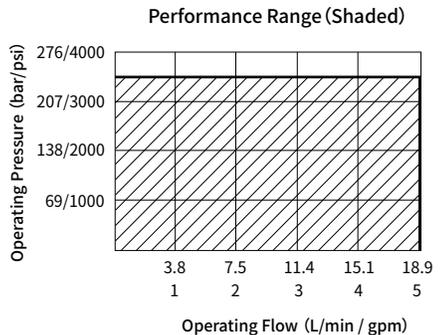
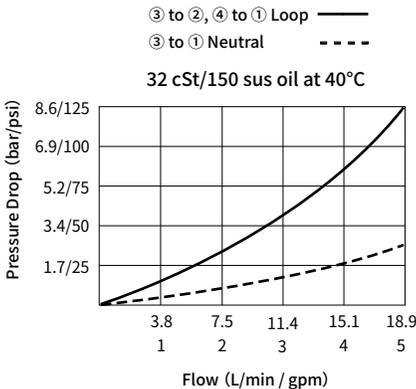
### E-Coil:

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

## Technical Data

Rated pressure		240 bar (3500 psi)
Peak flow		19 L/min (5 gpm)
Internal leakage		≤ 328 mL/min@240 bar
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 240 bar
Coil duty rating		Continuous from 85% to 115% of nominal voltage
Cavity		VC10-4 (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)

