



2.34

# 35SD10-47D TYPE

## Solenoid Directional Valve

Rated pressure (bar / psi) 240 / 3500  
 Peak flow (L/min / gpm) 23 / 6

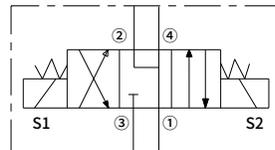
### Features

- 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, motor spool, screw-in hydraulic cartridge valve.

## Operation

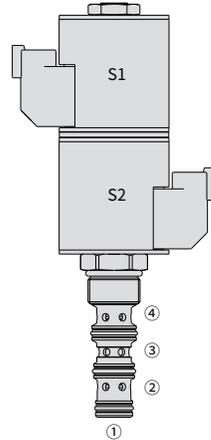
When de-energized, the valve blocks flow to ③, while allowing flow from ② to ①, and from ④ to ①.

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

35SD10-47D  -  -  -

### Option:

None

Blank

### Cartridge only

0

### Seals:

Polyurethane (Std.)

Buna N

Fluorocarbon

### Voltage Std. Coil:

Less Coil 00

10VDC 10

12VDC 12

20VDC 20

24VDC 24

P  
N  
V

### Termination (VDC)

#### E-Coil:

Amp Junior Timer  
(IP67 Rated)

Deutsch DT04-2P  
(IP69K Rated)

DIN 43650  
(IP65 Rated)

EJ

ER

EG

### Termination (VDC)

#### D-Coil:

Dual Spades

(SAE J858a, IP65K Rated)

DS

## 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.

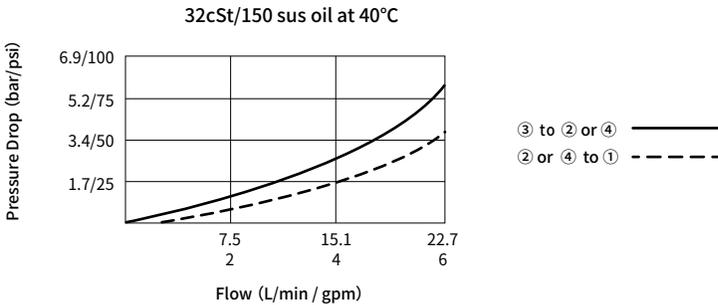
### E-Coil:

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	23 L/min (6 gpm)	
Internal leakage	≤ 328 mL/min@207 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	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 20/18/14, and level 17/15/13 is recommended to prolong the service life	

## Performance (Cartridge Only)



## Dimensions

