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# **36SD10-47E** TYPE Solenoid Directional Valve

Rated pressure (bar / psi) Peak flow (L/min / gpm) 250 / 3625 30.2 / 8 (See performance char

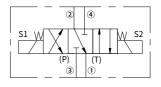
## Features

- · 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, 4-way, 3-position, direct-acting, spool-type, screw-in hydraulic cartridge valve.

## Operation

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

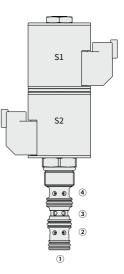
When coil #1 (S1) is energized, the spool shifts to allow flow from (3) to (4) and (2) to (1) .

When coil #2 (S2) is energized flow is allowed from 2 to 3 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  ${\rm (2)}$  .

While  ${\rm \textcircled{O}}$  may be fully pressurized, it is not intended for use as the valve's inlet.

## **Ordering Code**



(SAE J858a, IP65K Rated)

36SD10-47E				
Option:				
None Blank	Voltage Std. Coil:		Termination (VDC) E-Coil:	
Cartridge only 0	Less Coil 10VDC	00 10	Amp Junior Timer (IP67 Rated)	EJ
Seals:	12VDC 20VDC	12 20	Deutsch DT04-2P	ER
Polyurethane (Std.)	P 24VDC	20 24	(IP69K Rated) DIN 43650	EG
	N V		(IP65 Rated)	
			Termination (VDC) D-Coil:	
			Dual Spades	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.

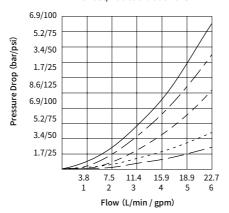
#### E-Coil:

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

## **Technical Data**

Rated pressure		250 bar (3625 psi)		
Peak flow		30.2 L/min (8 gpm) (See performance chart)		
Internal leakage		≤ 328 mL/min@250 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 250 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 18/16/13, and level 15/13/11 is recommended to prolong the service life		

### Performance (Cartridge Only)



32cSt/150 sus oil at 40°C

# Dimensions

#### (Dimensions in mm)



