



3.1

# 35ED08-47D TYPE

## Proportional Directional Control Valve

Rated pressure (bar / psi) 240 / 3500

Rated flow (L/min / gpm) 11.4 / 3

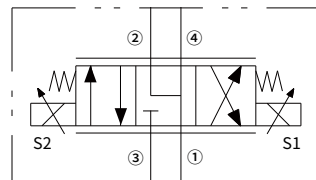
### Features

- Continuous-duty rated solenoids
- Efficient wet-armature construction
- Cartridges are voltage interchangeable
- Optional waterproof E-Coils rated up to IP69K
- Industry common cavity
- Continuous-duty rated coils
- Manual override options

### Contents

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

### Symbol



## Description

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

## Operation

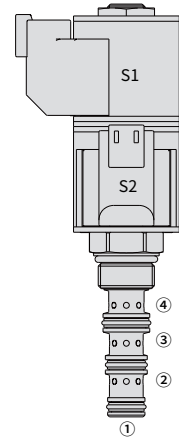
When de-energized, the 35ED08-47D blocks flow to ③, while allowing flow from ② to ①, and from ④ to ①.

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

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

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

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



## Ordering Code

35ED08-47D		-	-	-	-	-	-	-	-
<b>Option:</b>	None	Blank							
<b>Cartridge only</b>		0							
<b>Seals:</b>	Polyurethane (Std.)	P							
	Buna N	N							
	Fluorocarbon	V							
			<b>Voltage Std. Coil</b>					<b>Termination (VDC)</b>	
			Less Coil	00				<b>E-Coil:</b>	
			10VDC	10				Deutsch DT04-2P	ER
			12VDC	12				(IP69K Rated)	
			20VDC	20				Lead wires (2)	EL
			24VDC	24				(IP69K Rated)	
								<b>Termination (VDC)</b>	
								<b>D-Coil:</b>	
								Dual Spades	DS
								(SAE J858a, IP65K Rated)	
								DIN 43650	DG
								(IP65K Rated)	
								Lead wires (2)	DL
								(IP65K Rated)	

## Materials

### Cartridge:

Weight: 0.2 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.

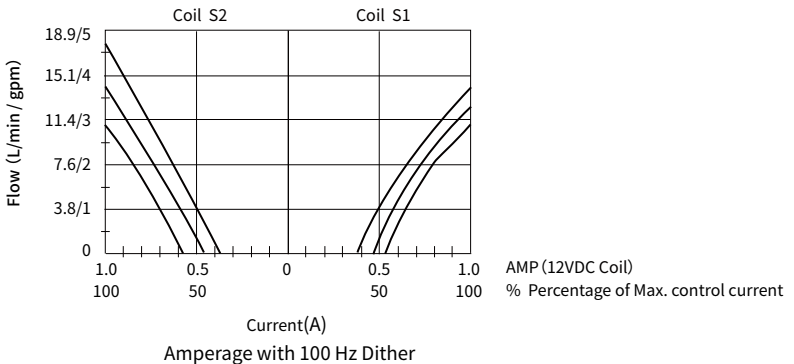
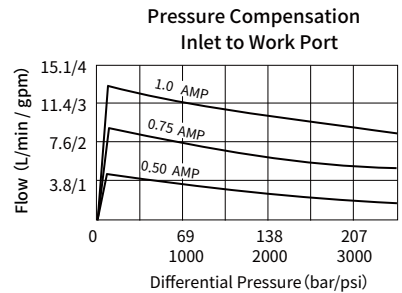
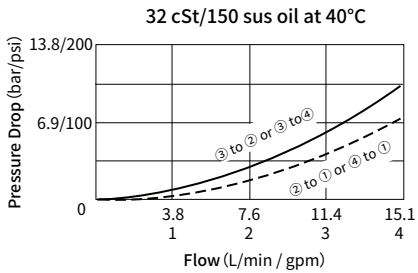
### E-Coil:

Weight: 0.14 kg ; Perfect wound, fully encapsulated with rugged external metal shell; Rated up to IP69K with Deutsch sockets.

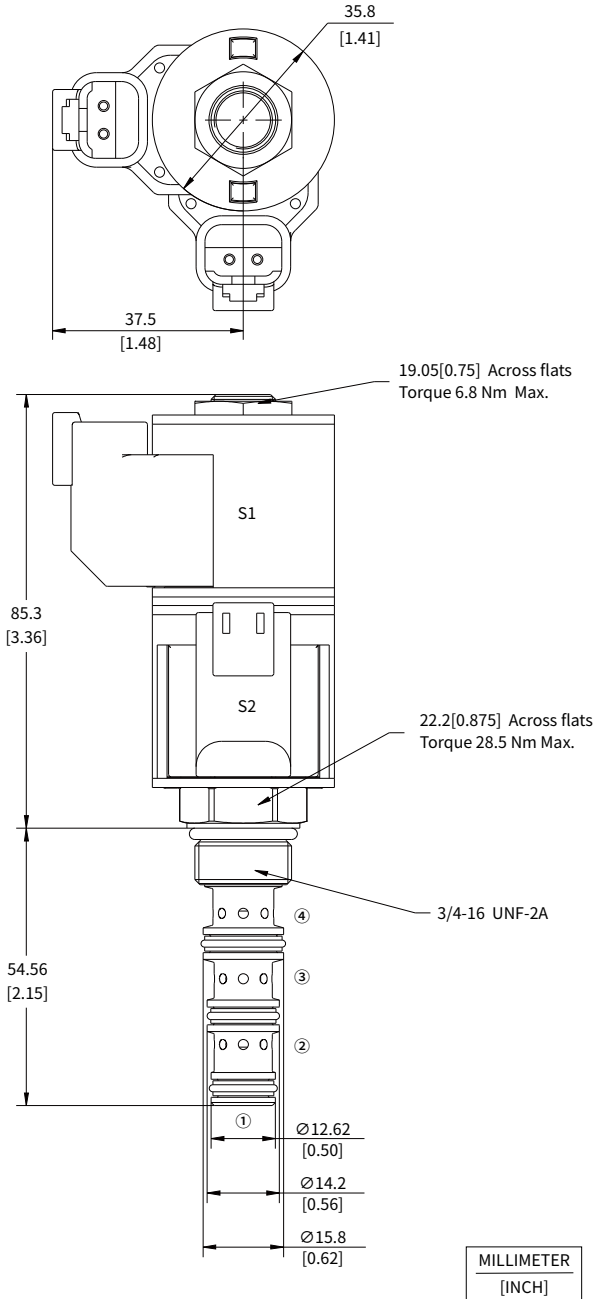
## Technical Data

Max. pressure	240 bar (3500 psi)
Peak flow	11.4 L/min (3 gpm)
Internal leakage	Per side ≤ 164 mL/min @ 207 bar
Hysteresis	Less than 7%
Max. control current	1.0 A (12V)
Flutter frequency	90-100 Hz
Coil duty rating	Standard coils and E-Coils: Continuous up to 115% of nominal voltage
Cavity	VC08-4 (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



MILLIMETER
[INCH]