



3.3

36ED10-47D TYPE

Proportional Directional Control Valve

Rated pressure (bar / psi) 250 / 3625

Rated flow (L/min / gpm) 22.7 / 6

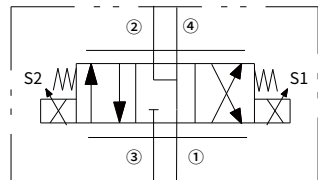
Features

- 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

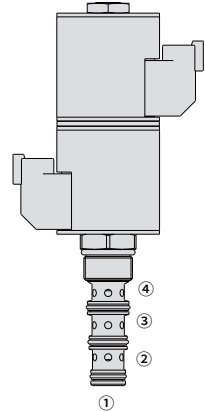
A proportional solenoid-operated, 4-way, 3-position, spool-type, motor spool, screw-in hydraulic cartridge valve.

Operation

When de-energized, the 36ED10-47D blocks flow to ③ while allowing flow from ② to ①, and from ④ to ①. When coil S1 is energized flow is allowed from ③ to ④ and from ② to ①.

When coil S2 is energized flow is allowed from ③ to ② and from ④ to port ①. Initial meter-in flow begins at a nominal 0.4 amp on a 12 VDC system. Full flow of 6 gpm occurs at 1.1 to 1.2 amp on a 12 VDC system. Each coil has its own metering characteristics, which are quite similar (see performance chart). 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

36ED10-47D		-	-	-	-	-	-	-	-
Option:	None	Blank							
Cartridge only		0							
Seals:	Polyurethane (Std.)	P							
	Buna N	N							
	Fluorocarbon	V							
	Voltage								
	Std. Coil								
	Less Coil	00							
	10VDC	10							
	12VDC	12							
	20VDC	20							
	24VDC	24							
	Termination (VDC)								
	E-Coil:								
	Amp Junior Timer (IP67 Rated)	EJ							
	Deutsch DT04-2P (IP69K Rated)	ER							
	DIN 43650 (IP65 Rated)	EG							
	Termination (VDC)								
	D-Coil:								
	Dual Spades (SAE J858a, IP65K Rated)	DS							

Materials

Cartridge:

Weight: 0.3 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.

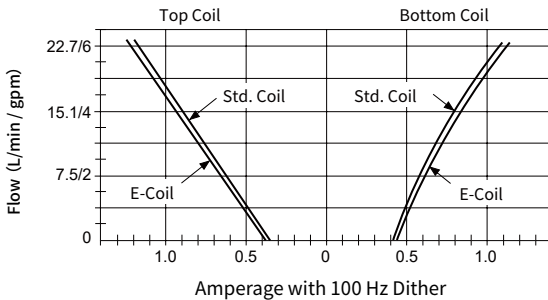
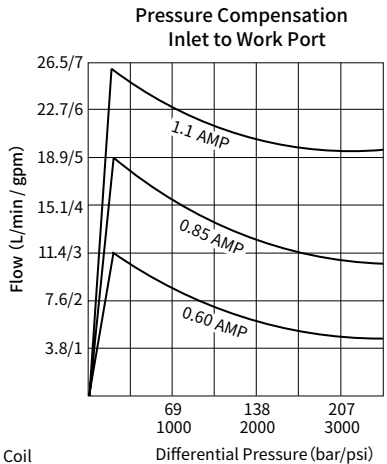
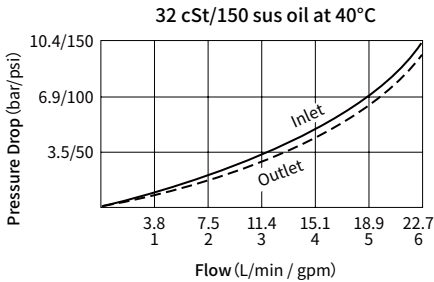
E-Coil:

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

Technical Data

Max. pressure	250 bar (3625 psi)
Peak flow	22.7 L/min (6 gpm)
Internal leakage	Per side ≤ 246 mL/min @ 207 bar
Hysteresis	Less than 10%, with a flow rate between 1-5.5 gpm
Maximum control current	1.2A (12V)
Flutter frequency	100 Hz
Coil duty rating	Standard coils and E-Coils: Continuous up 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 ² /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

