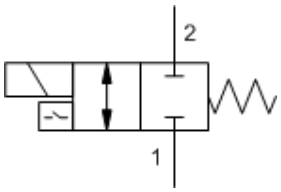
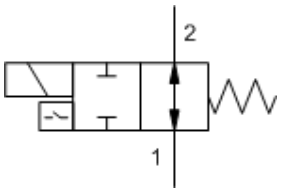
2-way, solenoid-operated directional spool valve with position switch

SERIES 1 / CAPACITY: 45 L/min. / CAVITY: T-13A

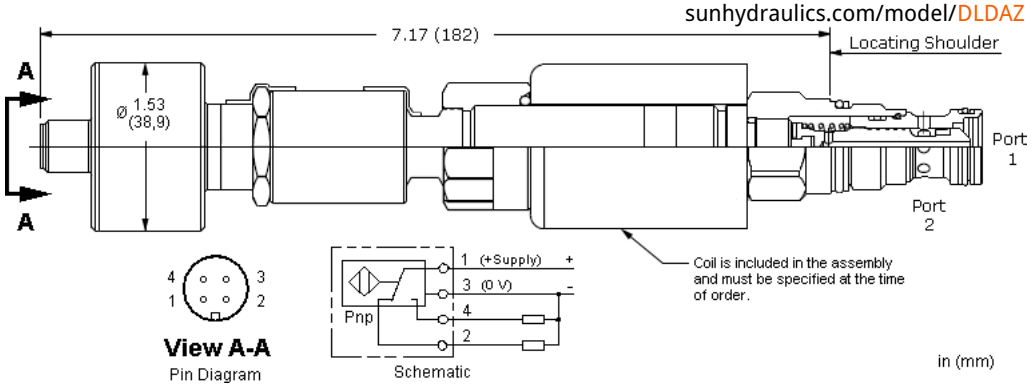
sunhydraulics.com/model/DLDAZ



Z-Control, C-Spool



Z-Control, H-Spool



This solenoid-operated 2-way, 2-position cartridge is a direct-acting, balanced spool directional valve. The valve is available in either a normally open or normally closed configuration.

The position switch provides confirmation that the valve is in the spring biased positionClick Here for the position sensor pin diagram

TECHNICAL DATA

NOTE: DATA MAY VARY BY CONFIGURATION. SEE CONFIGURATION SECTION.

Cavity	T-13A
Series	1
Capacity	45 L/min.
Maximum Operating Pressure	350 bar
Maximum Valve Leakage at 110 SUS (24 cSt)	80 cc/min.@210 bar
Response Time - Typical	50 ms
Switching Frequency	15,000 max. cycles/hr
Solenoid Tube Diameter	19 mm
Valve Hex Size	22,2 mm
Valve Installation Torque	41 - 47 Nm
Seal kit - Cartridge	Buna: 990413007
Seal kit - Cartridge	Viton: 990413006
Model Weight	0.93 kg.

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SWITCH SPECIFICATIONS

Supply Voltage	20-30 VDC
Operating Temperature Range	-25 to 80 °C
Vibration	≥ 50g, 0-500 impulses/sec
Shock	>50 g, 1ms
Reverse Polarity Protection	Yes
Maximum Output Load	≤ 400 mA, Duty Ratio 100%
Short Circuit Protection	Yes, Load Short Unlimited
Turn On Time	≤ 25 ms
Hysteresis	≤ .002 in.
Thermal Shift - 0 to 80 °C ≤ ±	0,1 mm
EMC	DIN EN 61000-6-1/2/3/4
Connector	M12 X 1 (4) Pin
Connector Environment Rating	IP65

NOTES An additional 2.00 inches (50,8 mm) beyond the valve extension is needed for coil installation and removal.

CONFIGURATION OPTIONS

Model Code Example: DLDAZCN224

SPOOL CONFIGURATION (C)	SEAL MATERIAL (N)	COIL * (224)
C Normally Closed	**N** Buna-N	**224** DIN 43650-Form A, 24 VDC
H Normally Open	**V** Viton	**212** DIN 43650-Form A, 12 VDC
		912 Deutsch DT04-2P, 12 VDC
		924 Deutsch DT04-2P, 24 VDC

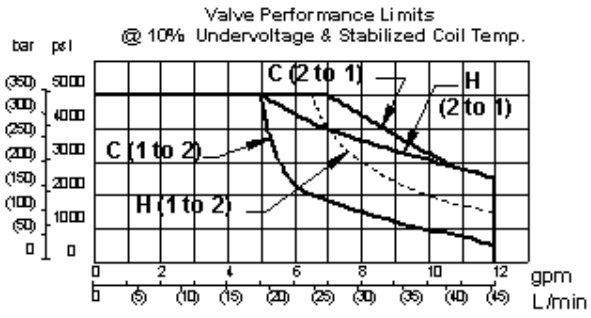
* Additional coil options are available

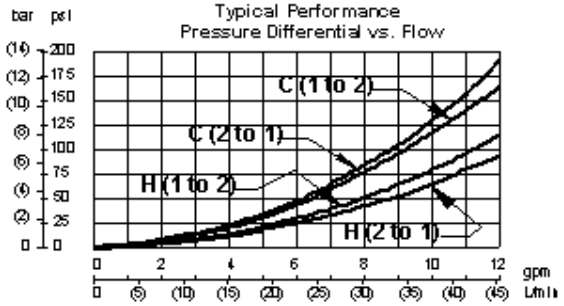
TECHNICAL FEATURES

- A coil must be ordered with this cartridge. This cartridge is supplied as a sealed, factory set unit and is not field serviceable. If the assembly requires changes or service it needs to be returned to the factory. Any tampering will violate the product warranty.
- Position switch is CE approved.
- When torquing this cartridge into its cavity, a crow's foot wrench or similar will be required since the position switch precludes the use of a deep socket wrench.
- The solenoid tube assembly is fatigue rated for 5000 psi (350 bar) service.
- This valve is direct actuated and requires no minimum hydraulic pressure for operation.
- This valve utilizes a wet armature design. This means that the working fluid surrounds the armature and is exposed to the heat generated by the coil. This can be a factor if the coil is energized for long periods of time. Some fluids, notably water/glycol mixtures, break down at these temperatures over time and form varnishes that will affect the function of the cartridge.
- A wide variety of coil termination and voltage options are available, with and without surge protection. See the CONFIGURATION section.
- The solenoid's unique magnetic design results in a high efficiency solenoid, yielding high spool actuating force per Watt expended, leading to reliable valve shifting.
- Incorporates the Sun floating style construction to minimize the possibility of internal parts binding due to excessive installation torque and/or cavity/cartridge machining variations.

PERFORMANCE CURVES

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RELATED MODELS

- DLDA 2-way, solenoid-operated directional spool valve
- DLDAS 2-way, soft shift, solenoid-operated directional spool valve

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