

## 2-way, solenoid-operated directional spool valve

Capacity:  
12 gpm (45 L/min.)

Functional Group:

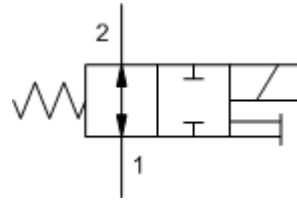
Products : Cartridges : Directional : 2 Way : Spool, Solenoid Operated

Model:

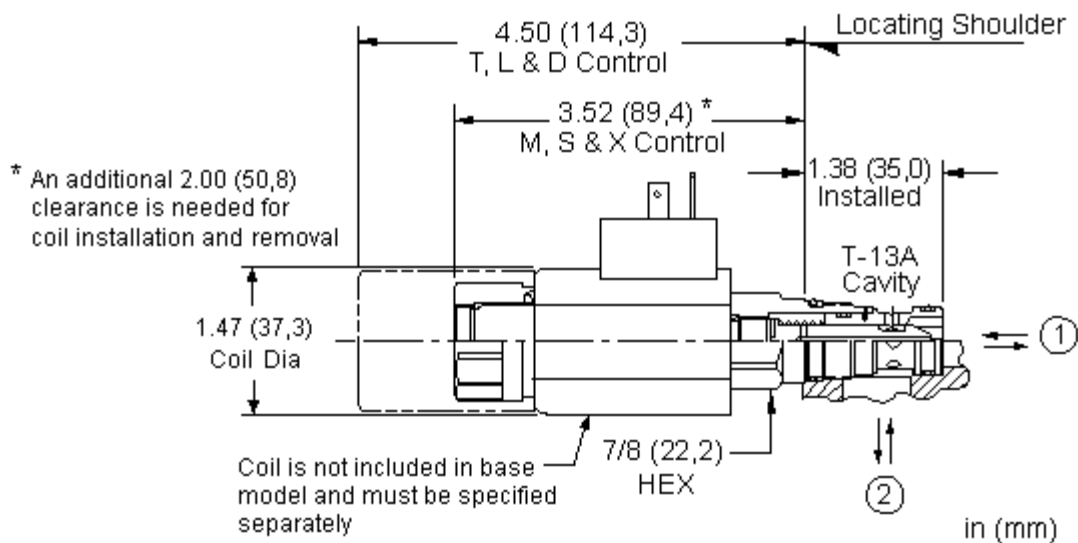
DLDA-MHV

### Product Description

This solenoid-operated, 2-position, 2-way cartridge is a direct-acting, balanced spool valve used to control the direction of flow in a hydraulic circuit. The valve is available in either a normally open or normally closed configuration.



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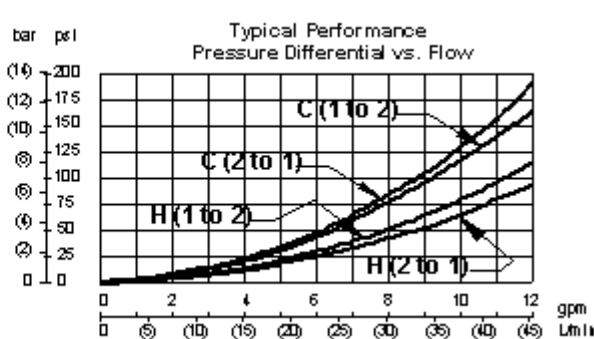
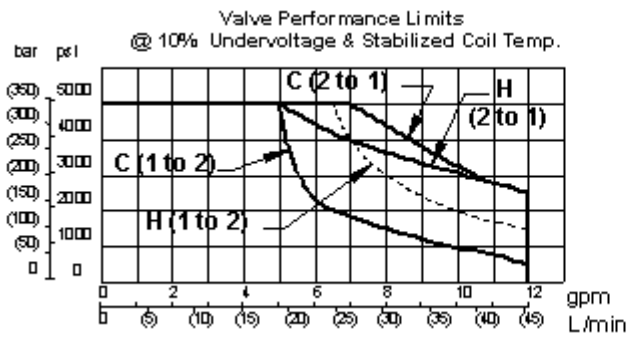
### Technical Features

- The solenoid tube assembly is fatigue rated for 5000 psi (350 bar) service.
- This cartridge is not equipped with a manual override; a manual override plus additional override options are available. See Option Selection below.
- A wide variety of coil termination and voltage options are available.
- 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.
- 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.

- Coils are interchangeable with other Sun Series 1 solenoid products and can be mounted on the tube in either direction.
- Depending on the connector, coils are rated up to IP69 thereby eliminating the need for an additional weatherization kit. See "Coil Technical Information" for more details.
- 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.

Technical Data

	U.S. Units	Metric Units
Cavity	T-13A	
Capacity	12 gpm	45 L/min.
Manual Override Force Requirement	22 lb@5000 psi	10 kg@350 bar
Manual Override Stroke	.10 in.	2,5 mm
Maximum Operating Pressure	5000 psi	350 bar
Maximum Valve Leakage at 110 SUS (24 cSt)	5 in <sup>3</sup> /min.@3000 psi	80 cc/min.@210 bar
Response Time - Typical	50 ms	
Series (from Cavity)	Series 1	
Switching Frequency	15000 cycles/hr	
Solenoid Tube Diameter	.75 in.	19 mm
Valve Hex Size	7/8 in.	22,2 mm
Valve Installation Torque	30 - 35 lbf ft	45 - 50 Nm
Model Weight	.50 lb	0,25 kg
Seal Kits	Buna: 990-413-007	
Seal Kits	Viton: 990-413-006	



DLDA-MHV

Control

Spool Configuration

External Material/Seal Material

M Manual Override +5.00

H Normally Open +0.00

V Viton +3.50

Stainless material/seal options not available for this model

Related Models

DLDAS

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