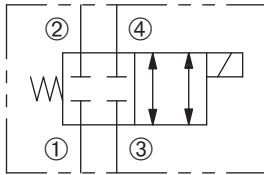


# DSV2-100-4NC

Four-Way, Two-Position,  
Spool-Type Solenoid Valve

## SERIES 10



### DESCRIPTION

A cartridge valve designed as a four-way, spool-type, directional control valve with all ports normally-closed. This valve is commonly used in a circuit to allow flow to and from a double-acting cylinder or motor.

### OPERATION

When de-energized, the DSV2-100-4NC flow paths are blocked. When energized, the cartridge's spool shifts and allows flow from ③ to ④ and from ② to ①.

**Operation of Manual Override Option:** To override, push button in, twist counterclockwise and release. In this position, valve will remain detented in the shifted condition.

To return to normal operation, push button in, twist clockwise and release. Override will be detented in this position.



### FEATURES and BENEFITS

- Continuous-duty solenoid.
- Hardened precision spool and sleeve for long life.
- Efficient wet-armature construction.
- Cartridges are voltage interchangeable.
- Optional coil voltages and terminations.
- Manual override option.
- Industry common cavity.

### SPECIFICATIONS

**Operating Pressure:** 3000 psi (207 bar)

**Flow:** See PRESSURE DROP VS. FLOW graph.

Nominal flow 6 gpm (22.7 lpm) max. at

**Internal Leakage:** (Per land) 5 in<sup>3</sup>/min (82 cc/min) max. at 3000 psi (207 bar)

**Temperature:** -30°F to +250°F (-35°C to +120°C)

**Coil:** Series 10: K-Coil see page 1.93.1; S-Coil see page 1.94.1.

**Coil Duty Rating:** Continuous from 85% to 110% of rated voltage.

**Current Draw:** 12 VDC is 1.8 amps.

**Minimum Pull-In Voltage:** 85% of rated voltage at 3000 psi (207 bar)

**Response Time:** 80% of final change of state with 100% voltage supplied at 100% of nominal flow rating.

**Pull-In:** 12 VDC 100 m. sec. **Drop-Out:** 12 VDC 85 m. sec.

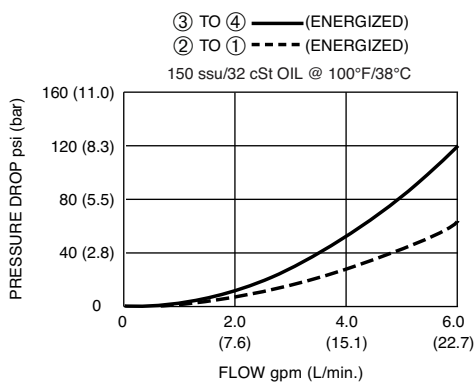
**Recommended Filtration:** ISO 17/15/13

**Fluids:** Mineral-based fluids. For other fluid compatibility, consult factory.

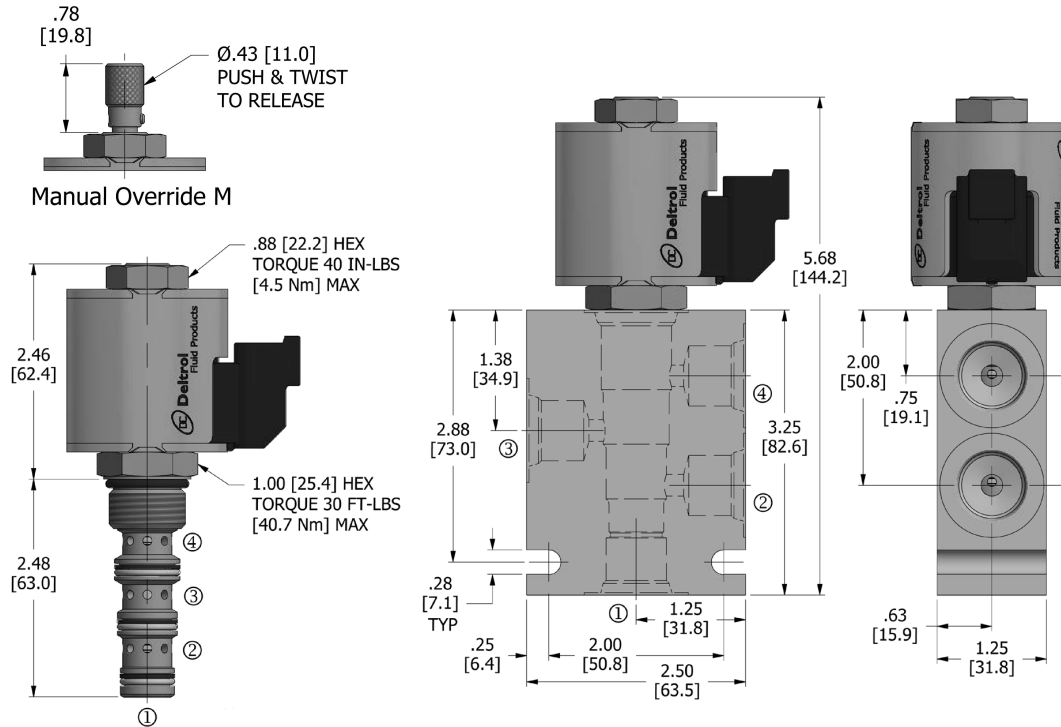
**Cavity/Cavity Tool:** 100-4, see page 11.10.4

**In-Line Body Material:** Anodized 6061T6 aluminum alloy rated at 3000 psi (207 bar).

### PRESSURE DROP VS. FLOW



## DIMENSIONS Inches [Millimeters]



## HOW TO ORDER

**DSV2** - **100** - **4** **NC** - \* - \* - \*\* - \*\* - \*\*

Solenoid Valve    Cavity    Flow Path    Normally Closed    Seals    Manual Override    Voltage    Termination    Porting

Seals		Seal Kit
N	Buna N	
V	Viton	

Manual Override	
omit	No manual override
M	Manual override

Voltage†	
omit	Cartridge only w/nut
D1	DC 12 Volt
D2	DC 24 Volt
D9	DC 20 Volt
D10	DC 10 Volt
A5	AC 120 Volt
A6	AC 240 Volt

Termination†		
K-Coil External Frame	S-Coil Internal Frame	For internal diode – consult factory
omit	omit	Cartridge only w/nut
DE	D	Dual Lead
SE	S	Single Lead
BE	B	Dual Spade
AE		Single Spade
EE	E	Single Stud
UE IP69K		Deutsch
PE IP69K		Metri-Pack
JE IP69K		Amp Junior Timer
KE		Kostal
HE	H	DIN 43650
	C	Conduit

Porting†			In-Line Body w/o Cartridge
omit	Cartridge only		
2N	1/4 PTF		B-100-4-2N
3N	3/8 PTF		B-100-4-3N
6T	SAE 6		B-100-4-6T
8T	SAE 8		B-100-4-8T

10243-72 10243-72 coil retainer nut

† Other options available – consult factory

Valve, Coil, and In-Line Body are supplied individually and need to be assembled. For a completed assembly consult the factory.

All variations may not be configurable. Minimum order quantities may be required on other models. Contact Deltrol Fluid Products for complete details.