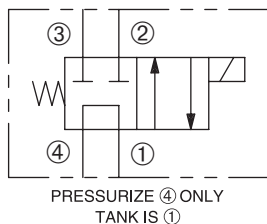


# DSV2-080-4TC

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



## SERIES 8



## DESCRIPTION

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

## OPERATION

When de-energized, the DSV2-080-4TC allows flow from ④ to ① and is blocked at ② and ③.

When energized, the cartridge's spool shifts and allows flow from ④ to ③ 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.

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

**Current Draw:** 12 VDC is 1.3 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 45 m. sec. **Drop-Out:** 12 VDC 11 m. sec.

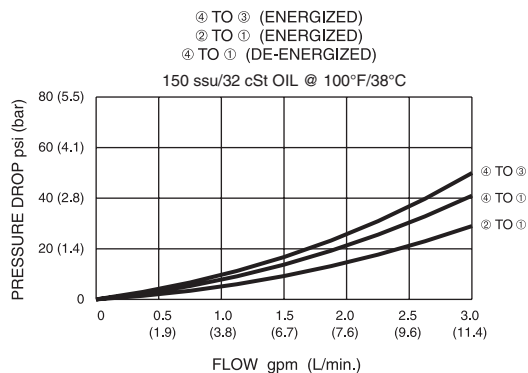
**Recommended Filtration:** ISO 17/15/13

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

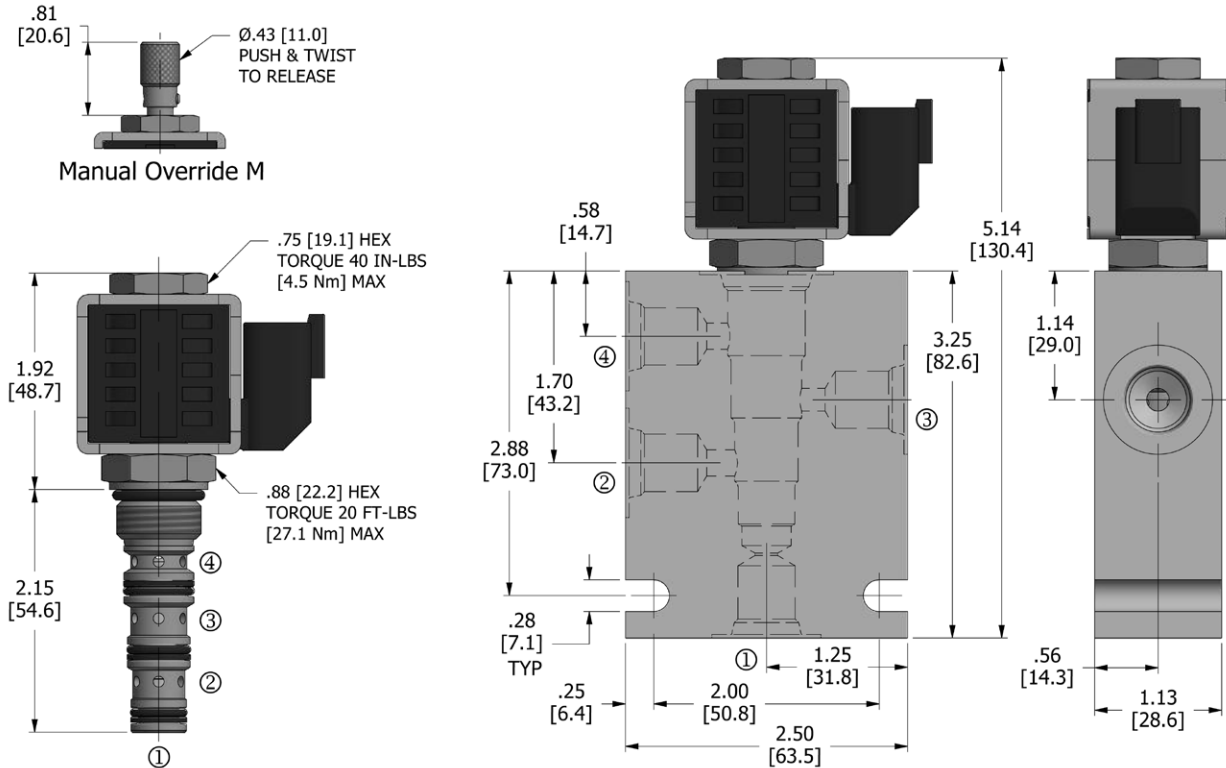
**Cavity/Cavity Tool:** 080-4, see page 11.08.4

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

## PRESSURE DROP VS. FLOW



## DIMENSIONS Inches [Millimeters]



## HOW TO ORDER

<b>DSV2</b>	-	<b>080</b>	-	<b>4</b>	-	<b>TC</b>	-	<b>*</b>	-	<b>*</b>	-	<b>**</b>	-	<b>**</b>	-	<b>**</b>
Solenoid Valve		Cavity		Flow Path		Tandem Center		Seals		Manual Override		Voltage		Termination		Porting

Seals		Seal Kit
<b>N</b>	Buna N	DSK-080-4-N-A
<b>V</b>	Viton	

Manual Override	
omit	No manual override
<b>M</b>	Manual override

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

Termination†	
omit	Cartridge only w/nut
<b>DE</b>	Double Lead
<b>SE</b>	Single Lead
<b>HS</b>	Hirschmann®
<b>CS</b>	Conduit
<b>BE</b>	Double Spade
<b>EE</b>	Single Stud
<b>UE</b>	Deutsch
<b>PE</b>	Metri-Pack
<b>JE</b>	Amp Junior Timer

Porting†		In-Line Body w/o Cartridge
omit	Cartridge only w/nut	
<b>2N</b>	1/4 PTF	B-080-4-2N
<b>3N</b>	3/8 PTF	B-080-4-3N
<b>4T</b>	SAE 4	B-080-4-4T
<b>6T</b>	SAE 6	B-080-4-6T

† Other options available – consult factory

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