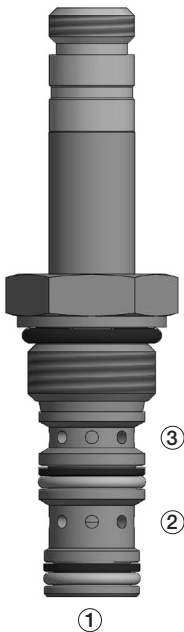
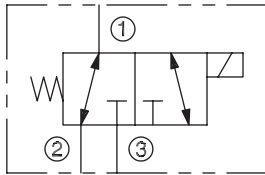


# DSV2-080-3

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

## SERIES 8



## DESCRIPTION

A cartridge valve designed as a three-way, spool-type, directional control valve.

## OPERATION

When de-energized, the DSV2-080-3 allows flow between ② and ①, while blocking flow at ③.

When energized, the cartridge's spool shifts to allow flow between ① and ③ while blocking flow at ②.

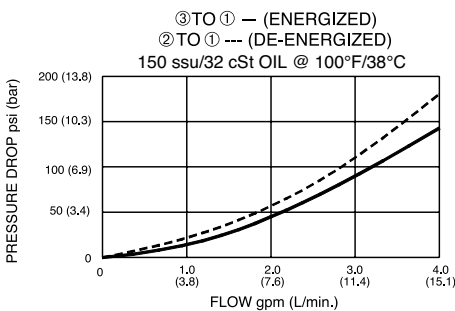
**Operation of Manual Override Option:** To override, push button in, twist counterclockwise and release. In this position, valve will remain detented in the shifted condition.

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

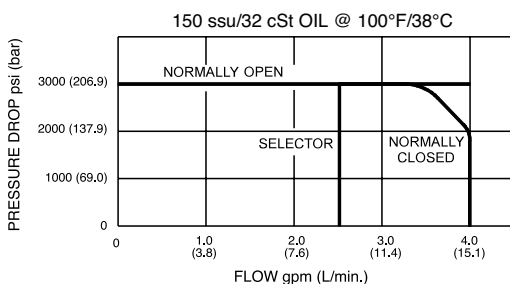
## FEATURES and BENEFITS

- 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.

## PRESSURE DROP VS. FLOW



## PERFORMANCE CHARACTERISTIC



## SPECIFICATIONS

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

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

Nominal flow 4 gpm (15.1 lpm)

**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 8: K-Coil see page 1.91.1; S-Coil see page 1.92.1.

**Coil Duty 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 40 m. sec. **Drop-Out:** 12 VDC 8 m. sec.

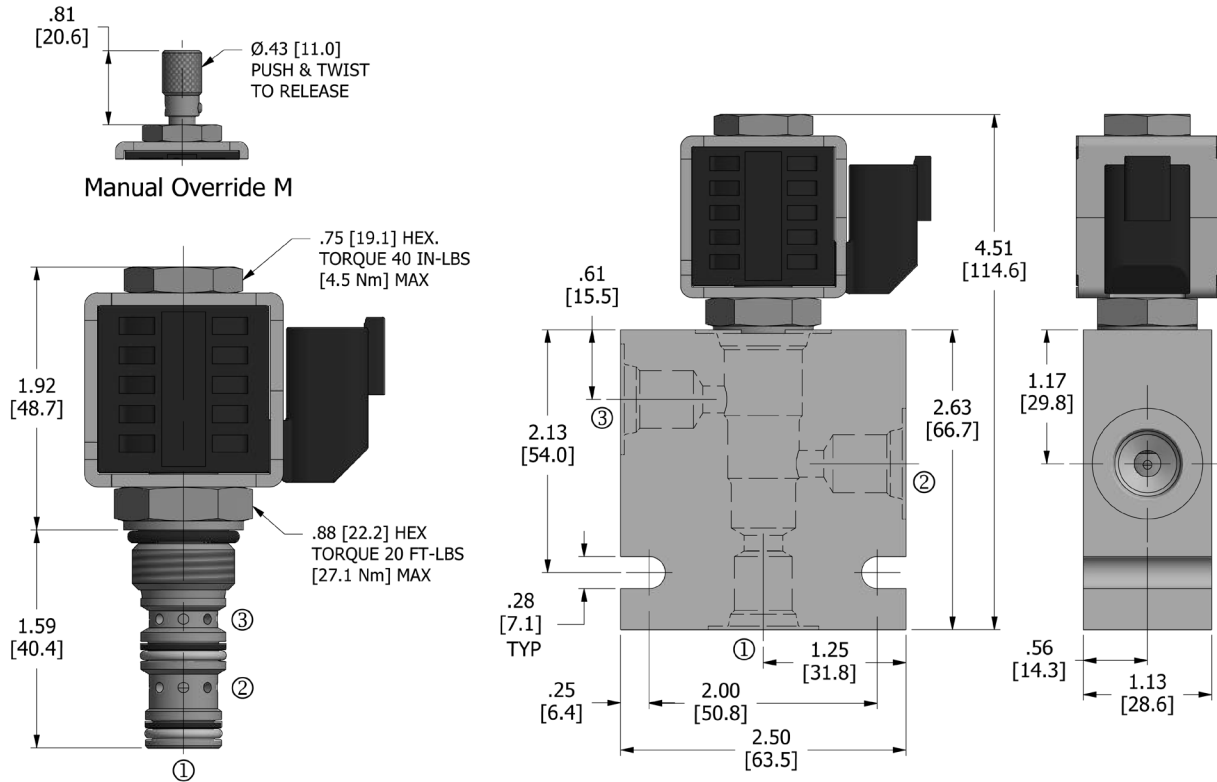
**Recommended Filtration:** ISO 17/15/13

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

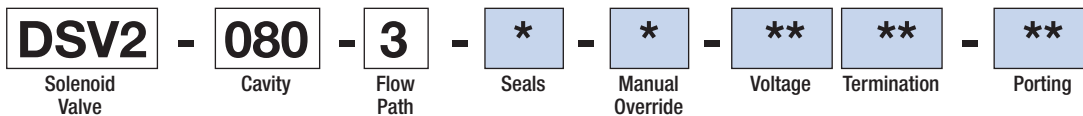
**Cavity/Cavity Tool:** 080-3, see page 11.08.3

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

## DIMENSIONS Inches [Millimeters]



## HOW TO ORDER



Seals		Seal Kit
<b>N</b>	Buna N	
<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†		
K-Coil External Frame	S-Coil Internal Frame	For internal diode – consult factory
omit	omit	Cartridge only w/nut
<b>DE</b>	<b>DS</b>	Dual Lead
<b>SE</b>	<b>SS</b>	Single Lead
<b>BE</b>	<b>BS</b>	Dual Spade
<b>AE</b>	<b>AS</b>	Single Spade
<b>EE</b>	<b>ES</b>	Single Stud
<b>UE</b> <i>IP69K</i>	<b>US</b>	Deutsch
<b>PE</b> <i>IP69K</i>		Metri-Pack
<b>JE</b> <i>IP69K</i>		Amp Junior Timer
	<b>HS</b>	DIN 43650
	<b>C</b>	Conduit
10234-41	10234-41	coil retainer nut

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

† 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.