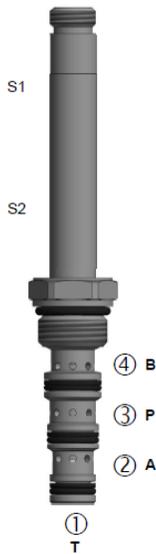
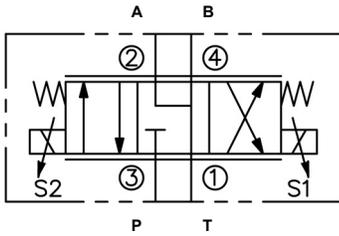


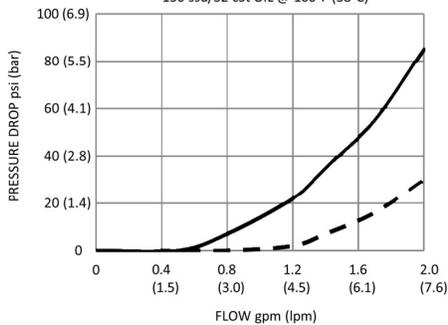
# DPV-080-34M-N-L

Four-Way, Three-Position, Motor Center Proportional Solenoid Valve

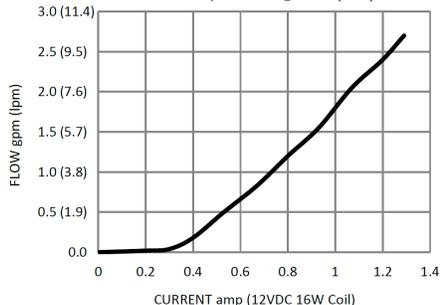
## SERIES 8



**PRESSURE DROP VS FLOW**  
 ——— ③ TO ② OR ③ TO ④ (ENERGIZED)  
 - - - ④ TO ① OR ② TO ①  
 150 ssu/32 cSt OIL @ 100°F (38°C)



**FLOW VS CURRENT (3500 psi load)**  
 ——— ③ TO ② OR ③ TO ④  
 150 ssu/32 cSt OIL @ 100°F (38°C)



## DESCRIPTION

A cartridge valve designed as a three-position, four-way proportional solenoid valve.

## OPERATION

When de-energized, the valve allows flow between port-1, port-2 and port-4, with port-3 blocked. When the upper coil (S1) is energized, flow is allowed from port-3 to port-4, and from port-2 to port-1. When the lower coil (S2) is energized flow is allowed from port-3 to port-2, and from port-4 to port-1.

Initial meter-in flow begins at a nominal 0.3 amp on a 12 VDC system, full flow of 2 gpm at 1.0 to 1.1 amp. The valve functions with industry - common controllers which provide PWM current input to 1.2 amps at 12 VDC.

**Operation of Manual Override Option:** To override, pull the knurled knob to activate the "S1" coil function, or push the knurled knob to activate the "S2" coil function. Release the knurled knob to return to the center position.

## FEATURES and BENEFITS

- PWM Duty Cycle, Ramp Time, Current Limit, Dither Frequency and Amplitude, can be provided by consulting the factory.
- Continuous-duty solenoid
- Hardened precision spool and sleeve for long life
- Efficient wet-armature construction
- Manual override option
- Industry common cavity

## SPECIFICATIONS

**Operating Pressure:** 3500 psi (241 bar)

**Flow:** See PRESSURE DROP VS. FLOW graph  
 Nominal flow 2 gpm (7.6 lpm)

**Internal Leakage:** (Per land) 10 in<sup>3</sup>/min (164 ml/min) max  
 at 3000 psi (207 bar)

**Hysteresis:** Less than 7%

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

**Coil:** 12 VDC only, Series 8: K-Coil see page 1.91.1

**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)

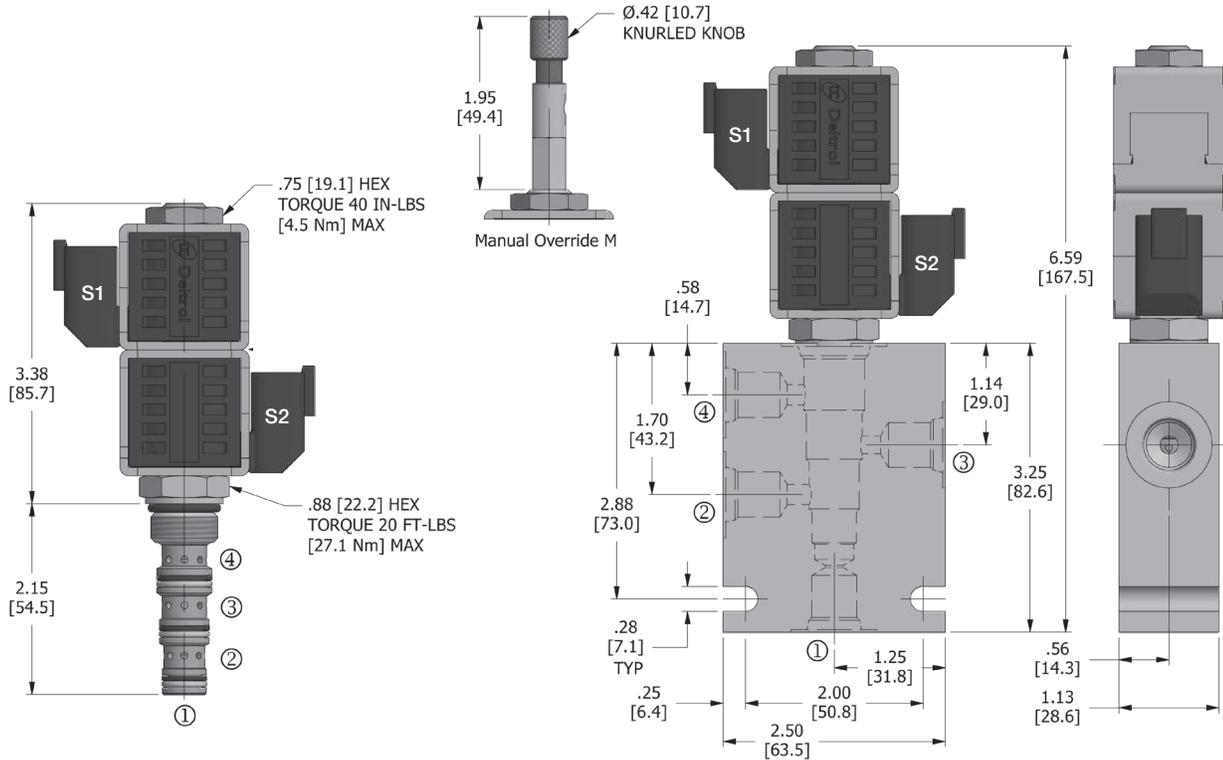
**Recommended Filtration:** Critical Application ISO 17/15/13

**Fluids:** Mineral-based fluids.

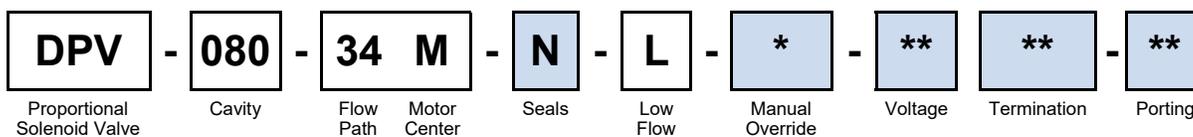
For other fluid compatibility, consult factory.

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

## DIMENSIONS Inches [Millimeters]



## HOW TO ORDER



Seals	
<b>N</b>	Buna N

Voltage	
omit	Cartridge only w/hut
<b>D1</b>	DC 12 Volt
<b>D2</b>	DC 24 Volt

Termination	
omit	Cartridge only w/hut
<b>UE</b>	Deutsch

Porting		
omit	Cartridge only	In-Line Body w/o Cartridge
<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

Manual Override	
<b>M</b>	Manual Override

† Other options available—consult factory  
 Valve, Coil, and In-Line Body 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.