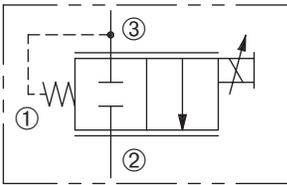


# DPV-100-2NC

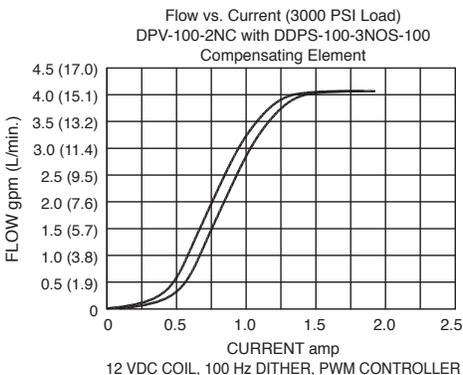
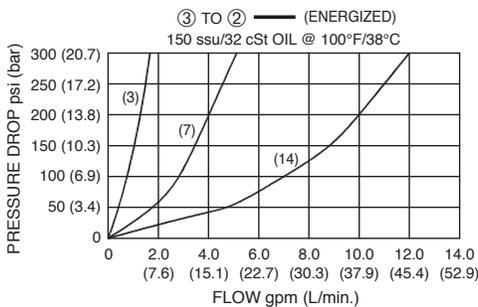
Normally-Closed,  
Proportional, Flow Control Valve

## SERIES 10



① Plug

### PRESSURE DROP VS. FLOW



### DESCRIPTION

A cartridge valve designed as a normally closed, spool-type, proportional valve for use with a compensating element to provide an electrically variable pressure-compensated flow control.

### OPERATION

As electrical current is applied to the coil, the spool will gradually shift from closed to open as current increases to 2 amps maximum. Flow will pass from port ③ to port ② up to 300 psi differential.

Port ① is plugged.

The valve can also function as a differential control for load sense applications.

The valve functions with industry-common controllers which provide PWM current input to 2 amps @ 12 VDC.

#### OPERATION OF MANUAL OVERRIDE:

To override, push button in to activate.

To return to normal function, release button.

### FEATURES and BENEFITS

- Valve controllers along with portable controller programming devices to vary PWM Duty Cycle, Ramp Time, Current Limit, Dither Frequency and Amplitude, can be provided by consulting the factory.
- Hardened precision spool and sleeve for long life.
- Efficient wet-armature construction.
- Cartridges are voltage interchangeable.
- Optional coil voltages and terminations.
- Industry common cavity.

### SPECIFICATIONS

#### Coil Specifications:

##### 12 Volt System

Resistance 4.0 ohms @ 20°C

Threshold Current 300 ± 70mA

Max. Control Current 1500 ± 200mA

##### 24 Volt System

Resistance 16.0 ohms @ 20°C

Threshold Current 150 ± 35mA

Max. Control Current 750 ± 100mA

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

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

Nominal flow 14 gpm (53.0 lpm)

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

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

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

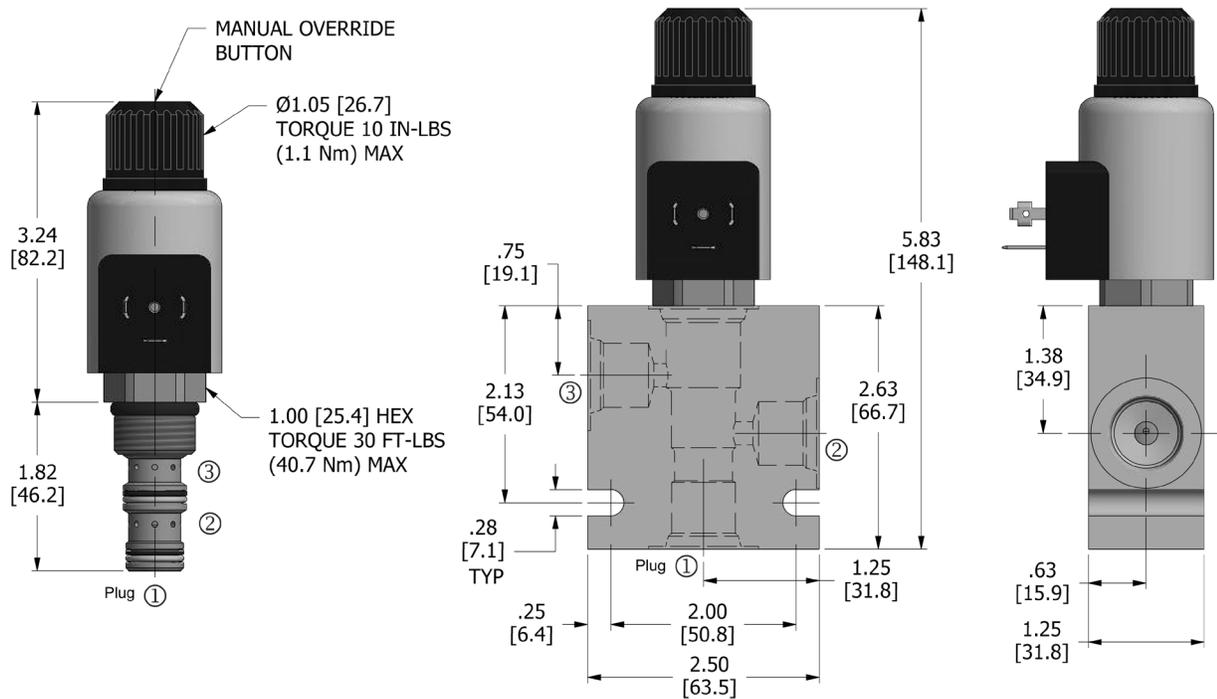
**Recommended Filtration:** ISO 16/12

**Fluids:** Mineral-based fluids.

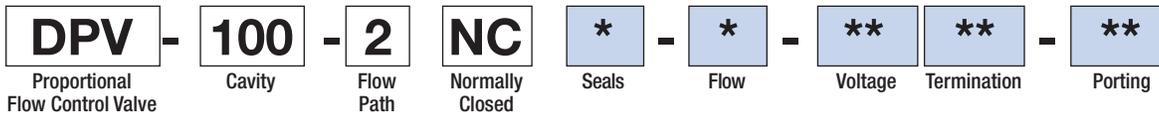
**Cavity/Cavity Tool:** 100-3, see page 11.10.3

**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	

Flow	
<b>3</b>	3 gpm (11.4 lpm)
<b>7</b>	7 gpm (26.5 lpm)
<b>14</b>	14 gpm (53.0 lpm)

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

Termination	
omit	Cartridge only w/nut
<b>H</b>	DIN 43650
10224-77	coil retainer nut

Porting <sup>†</sup>		In-Line Body w/o Cartridge
omit	Cartridge only	
<b>6T</b>	SAE 6	B-100-3-6T
<b>8T</b>	SAE 8	B-100-3-8T

<sup>†</sup> 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.