# **DPV1N**





|--|

## PROPORTIONAL SOLENOID VALVE

Solenoid valve with flow rates adjustable between 0% and 100% rating.

#### Applications

- Beverage machines
- Vending equipment
- Water purification
- equipment
- Potable water applications

#### Features

- NSF Certified
- Polyethersulfone body
- Class F (155°C) construction
- Suitable for water and air

| Electrical Specifications                                     |   |
|---|---|
| Coil Voltages   | 12, 24, 36 VDC - Pulse Width Modulation input at 200 Hz (1) |
| Coil Power  | 13 Watts at 100% Voltage                                    |
| Coil Terminals  | 0.25" Quick connect spade terminals                         |
| Duty Cycle  | Continuous  |
| Coil Treatment  | Polyester encapsulated                                      |
| Insulation Class  | Class F (155° C)  |
| Ambient Temperature   | 25° C   |
| Mechanical Specifications                                     |   |
| Media   | Water, air  |
| Media Temperature   | Up to 200° F [93° C] (2)                                    |
| Operating Pressure  | See Chart (2)   |
| Burst Pressure  | 450 psi   |
| Inlet / Outlet Connections<br>(See page 4 for assembly notes) | 5/16" [8mm], 1/4", 6mm Jaco Compression Fittings (2)        |
| Mounting  | 2 #8-32 tapped holes on frame                               |
| Valve Body Material   | PES - Polyethersulfone                                      |
| Seal Material   | EPDM  |
| Product Weight  | 8.5 oz.   |
| Agency Certifications   | NSF   |

(1) The actual frequency and other control logic variables must be optimized in the intended application.

(2) Operating pressures and fluid temperatures are regulated by the tubing type selected as well as ambient and fluid temperatures, type of fluid, and conditions of mechanical abuse. All fitting sizes should be tested by the customer in their particular application.

1 of 4

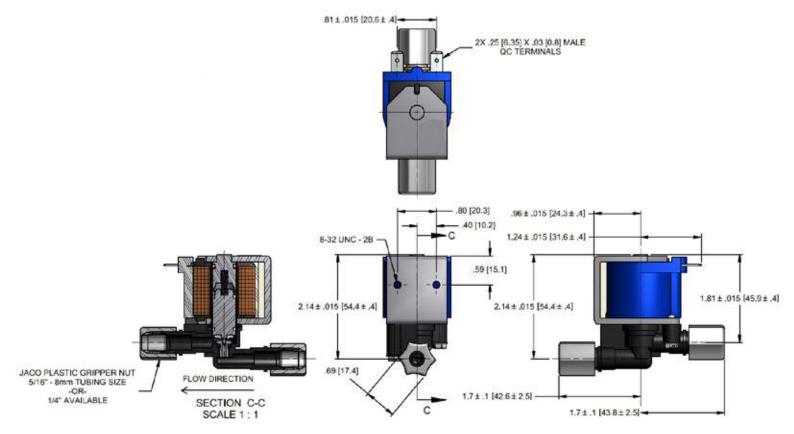
©2012 Deltrol Controls - A Division of Deltrol Corp. 2740 South 20th Street Milwaukee, WI 53215 USA | P: 414.671.6800 | F: 414.671.6809 | www.deltrol-controls.com | sales@deltrol.com



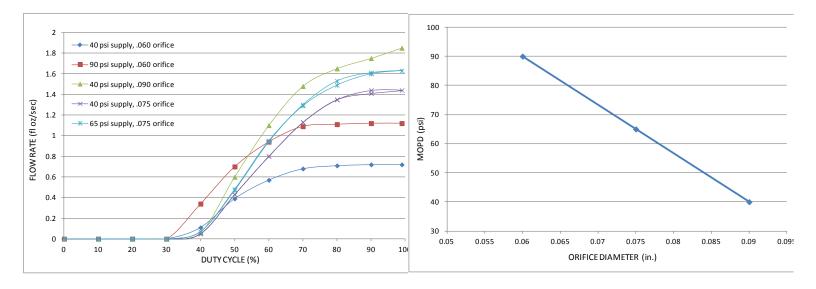


## **Dimensional Drawing**

Units: Inches [mm]



### **Performance Data**



Specifications subject to change without notice

2 of 4

Rev 09/04/12

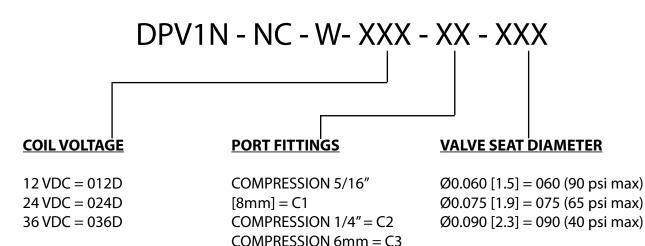
©2012 Deltrol Controls - A Division of Deltrol Corp. 2740 South 20<sup>th</sup> Street Milwaukee, WI 53215 USA | P: 414.671.6800 | F: 414.671.6809 | www.deltrol-controls.com | sales@deltrol.com





Rev 09/04/12

#### **Ordering Information**



#### **Part Numbers**

| Part No.               | Orifice Size   | Tube Size   | Coil Voltage | MOPD             | Max Water Flow |
|------------------------|----------------|-------------|--------------|------------------|----------------|
| DPV1N-NC-W-012D-C1-060 | Ø0.060 [1.5mm] | Ø5/16 [8mm] | 12 VDC       | 90 psi [6.2 bar] | 1.1 fl oz/sec  |
| DPV1N-NC-W-024D-C1-060 | Ø0.060 [1.5mm] | Ø5/16 [8mm] | 24 VDC       | 90 psi [6.2 bar] | 1.1 fl oz/sec  |
| DPV1N-NC-W-036D-C1-060 | Ø0.060 [1.5mm] | Ø5/16 [8mm] | 36 VDC       | 90 psi [6.2 bar] | 1.1 fl oz/sec  |
| DPV1N-NC-W-012D-C2-060 | Ø0.060 [1.5mm] | Ø1/4        | 12 VDC       | 90 psi [6.2 bar] | 1.1 fl oz/sec  |
| DPV1N-NC-W-024D-C2-060 | Ø0.060 [1.5mm] | Ø1/4        | 24 VDC       | 90 psi [6.2 bar] | 1.1 fl oz/sec  |
| DPV1N-NC-W-036D-C2-060 | Ø0.060 [1.5mm] | Ø1/4        | 36 VDC       | 90 psi [6.2 bar] | 1.1 fl oz/sec  |
| DPV1N-NC-W-012D-C3-060 | Ø0.060 [1.5mm] | Ø6mm        | 12 VDC       | 90 psi [6.2 bar] | 1.1 fl oz/sec  |
| DPV1N-NC-W-024D-C3-060 | Ø0.060 [1.5mm] | Ø6mm        | 24 VDC       | 90 psi [6.2 bar] | 1.1 fl oz/sec  |
| DPV1N-NC-W-036D-C3-060 | Ø0.060 [1.5mm] | Ø6mm        | 36 VDC       | 90 psi [6.2 bar] | 1.1 fl oz/sec  |
| DPV1N-NC-W-012D-C1-075 | Ø0.075 [1.9mm] | Ø5/16 [8mm] | 12 VDC       | 65 psi [4.5 bar] | 1.6 fl oz/sec  |
| DPV1N-NC-W-024D-C1-075 | Ø0.075 [1.9mm] | Ø5/16 [8mm] | 24 VDC       | 65 psi [4.5 bar] | 1.6 fl oz/sec  |
| DPV1N-NC-W-036D-C1-075 | Ø0.075 [1.9mm] | Ø5/16 [8mm] | 36 VDC       | 65 psi [4.5 bar] | 1.6 fl oz/sec  |
| DPV1N-NC-W-012D-C2-075 | Ø0.075 [1.9mm] | Ø1/4        | 12 VDC       | 65 psi [4.5 bar] | 1.6 fl oz/sec  |
| DPV1N-NC-W-024D-C2-075 | Ø0.075 [1.9mm] | Ø1/4        | 24 VDC       | 65 psi [4.5 bar] | 1.6 fl oz/sec  |
| DPV1N-NC-W-036D-C2-075 | Ø0.075 [1.9mm] | Ø1/4        | 36 VDC       | 65 psi [4.5 bar] | 1.6 fl oz/sec  |
| DPV1N-NC-W-012D-C3-075 | Ø0.075 [1.9mm] | Ø6mm        | 12 VDC       | 65 psi [4.5 bar] | 1.6 fl oz/sec  |
| DPV1N-NC-W-024D-C3-075 | Ø0.075 [1.9mm] | Ø6mm        | 24 VDC       | 65 psi [4.5 bar] | 1.6 fl oz/sec  |
| DPV1N-NC-W-036D-C3-075 | Ø0.075 [1.9mm] | Ø6mm        | 36 VDC       | 65 psi [4.5 bar] | 1.6 fl oz/sec  |

# **DPV1N**



| Part No.               | Orifice Size   | Tube Size   | Coil Voltage | MOPD              | Max Water Flow |
|------------------------|----------------|-------------|--------------|-------------------|----------------|
| DPV1N-NC-W-012D-C1-090 | Ø0.090 [2.3mm] | Ø5/16 [8mm] | 12 VDC       | 40 psi [2.75 bar] | 1.7 fl oz/sec  |
| DPV1N-NC-W-024D-C1-090 | Ø0.090 [2.3mm] | Ø5/16 [8mm] | 24 VDC       | 40 psi [2.75 bar] | 1.7 fl oz/sec  |
| DPV1N-NC-W-036D-C1-090 | Ø0.090 [2.3mm] | Ø5/16 [8mm] | 36 VDC       | 40 psi [2.75 bar] | 1.7 fl oz/sec  |
| DPV1N-NC-W-012D-C2-090 | Ø0.090 [2.3mm] | Ø1/4        | 12 VDC       | 40 psi [2.75 bar] | 1.7 fl oz/sec  |
| DPV1N-NC-W-024D-C2-090 | Ø0.090 [2.3mm] | Ø1/4        | 24 VDC       | 40 psi [2.75 bar] | 1.7 fl oz/sec  |
| DPV1N-NC-W-036D-C2-090 | Ø0.090 [2.3mm] | Ø1/4        | 36 VDC       | 40 psi [2.75 bar] | 1.7 fl oz/sec  |
| DPV1N-NC-W-012D-C3-090 | Ø0.090 [2.3mm] | Ø6mm        | 12 VDC       | 40 psi [2.75 bar] | 1.7 fl oz/sec  |
| DPV1N-NC-W-024D-C3-090 | Ø0.090 [2.3mm] | Ø6mm        | 24 VDC       | 40 psi [2.75 bar] | 1.7 fl oz/sec  |
| DPV1N-NC-W-036D-C3-090 | Ø0.090 [2.3mm] | Ø6mm        | 36 VDC       | 40 psi [2.75 bar] | 1.7 fl oz/sec  |

#### **Compression Fittings (Jaco)** - Information taken from Jaco Mfg.'s website www.jacomfg.com.

Installation instructions for Jaco tube fittings:

- 1. Cut the tubing end squarely and remove the internal and external burrs.
- 2. Insert the tubing through the back of the nut all the way through the nut assembly to the tube stop in the valve body. If the tubing does not enter the nut easily, loosen the nut one turn and then insert the tubing all the way to the tube stop in the valve body.
- 3. Turn the nut hand tight.
- 4. Wrench tighten the nut 1-1/2 2 turns.
- 5. All nuts must be retightened when the system reaches projected operating temperature.

Note: Squeaking sound when tightening nut is normal.