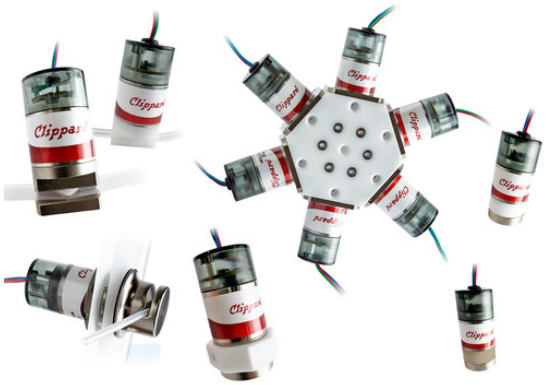
NPV Electronic Pinch Valves

NPV4L-2D-06-12



The NPV Series Pinch Valve is a solenoid-operated device that is designed to open and close tubes for controlling flow of liquids and gases. Other valve types have internal passages that may cause small amounts of fluid to remain in the valve. Pinch valves have no areas or dead volume where fluid can become trapped. Only the inside of the tubing contacts the fluid. Energizing the solenoid retracts or attracts the plunger, which opens or closes the tube. De-energizing the solenoid will allow the plunger to return to its original state.

Applications Form	Applications Form
Circuitry Option	Hit & Hold
Connection	18" (45 cm) Wire Leads
Data Sheet	Data Sheet, Hit & Hold Info, State Feedback Info, Panel Mount Info
Documentation	CE, RoHs (Download)
Function	3-Way Dual Tube (1 N-O, 1 N-C)
Hit Time	115 ± 30 ms
Hold Voltage PWM Freq.	Approx. 25 kHz
LED Indicators	Power status (green), trigger status (blue), warning (red-indicates for over 3.75 A or short circuit), Feedback Status (yellow)
Life Cycle	±1,000,000
Material, Tubing	Sanitary Platinum-Cured Silicone
Material, Wetted	Silicone Tubing (no wetted areas in valve)
Max PSI	20 psig (1.4 bar)
Medium	Air, Water, Gas & Compatible Fluids
Mount	In-Line
Mounting	#2-56 or #4-40 manifold. M3 also available.
Operating Pressure	0 to 30 psig (0 to 2 bar) with standard medical/lab grade silicone tubing
Operating Temperature Range	-20 to 158°F (-29 to 70°C)
Product Line Brochure	Isolation Valves
Response Time	50 ms
Thread Depth	#4-40 (max. 0.125")
Trigger Input	3.3 to 24 VDC. 10 mA @ 24 VDC
Tubing	3/16" ID-5/16" OD, Medical
Tubing, Durometer Hardness	50 Shore A
Tubing, Elongation at Break	815%
Tubing, Length	Comes with 12" (30 cm) of selected tubing. Additional tubing available separately.
Tubing, Modulus at 200%	299 psi (21 bar)
Tubing, Tear Strength	263 ppi
Tubing, Tensile Strength at Break	1,388 psi (96 bar)
Tubing, Wall Thickness	0.0625" (1.6 mm)
Unit	Imperial
Voltage	12 VDC
Wattage	7.2 Watts