

NPV SERIES PINCH VALVES

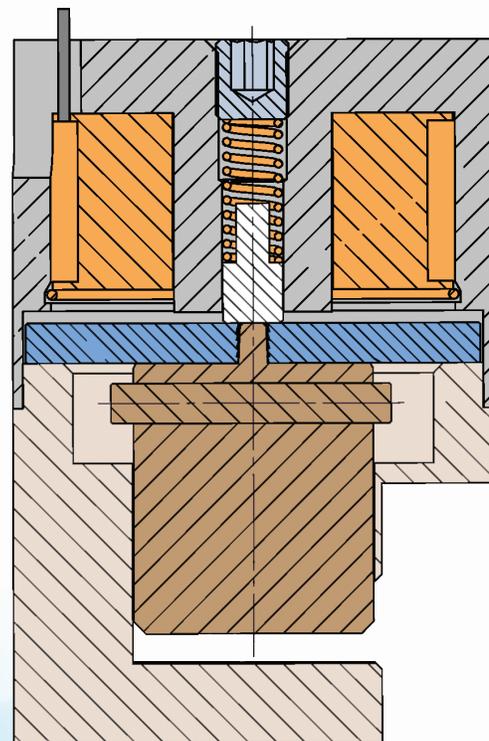


NPV series pinch valves are solenoid-operated devices that are designed to open and close tubes for controlling flow of liquids and gases. Whereas other valve types have internal passages that may cause small amounts of fluid to remain in the valve, pinch valves have no areas where fluid can become trapped. Energizing the solenoid retracts or attracts the plunger, which opens or closes the tube, while de-energizing the solenoid allows the plunger to return to its original state.

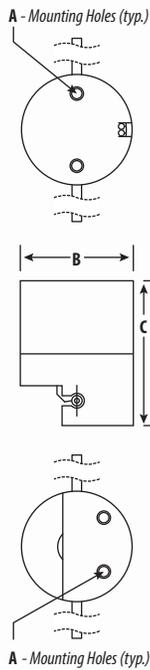
Clippard pinch valves have an unobstructed flow path with zero dead volume—only the inside of the tubing contacts the fluid. This makes them ideal for handling whole blood or other media with particulate matter.

- Unobstructed flow path
- Each valve comes with 12" (30 cm) of silicone tubing pre-installed
- Tubing is easily replaceable
- Low power consumption
- High cycle life
- Large variety of tubing sizes available

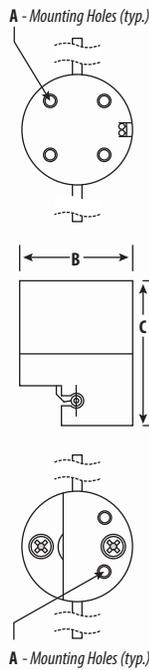
Connection	18" (45 cm) wire leads
Documentation	CE, RoHS
Function	2-way normally-open or normally-closed; 3-way, one tube normally-open, one tube normally-closed
Material, Wetted	Silicone tubing (<i>no wetted areas in valve</i>)
Max. Pressure	30 psig (2 bar)
Medium	Air, water, gas, or compatible fluids
Mount	#2-56 or #4-40 manifold (<i>M3 available</i>)
Operating Pressure	0 to 30 psig (0 to 2 bar) with standard medical / laboratory grade silicone tubing
Operating Temperature	-20 to 158°F (-29 to 70°C)
Response Time	5 to 50 ms
Voltage	12 or 24 VDC (<i>additional options available</i>)
Wattage	1.0 to 7.2 watts
More Details	clippard.com/link/npv-series



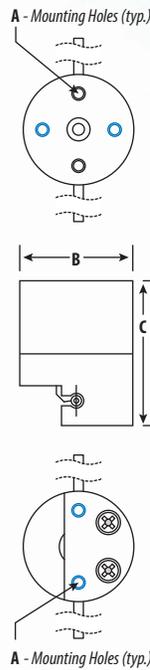
Model 1
Normally-Closed



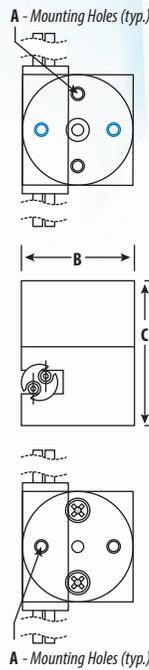
Models 2, 3, & 4
Normally-Closed



All Models
Normally-Open



All Models, 3-Way
1 Tube N.O., 1 Tube N.C.



■ All versions
■ Models 2, 3, & 4

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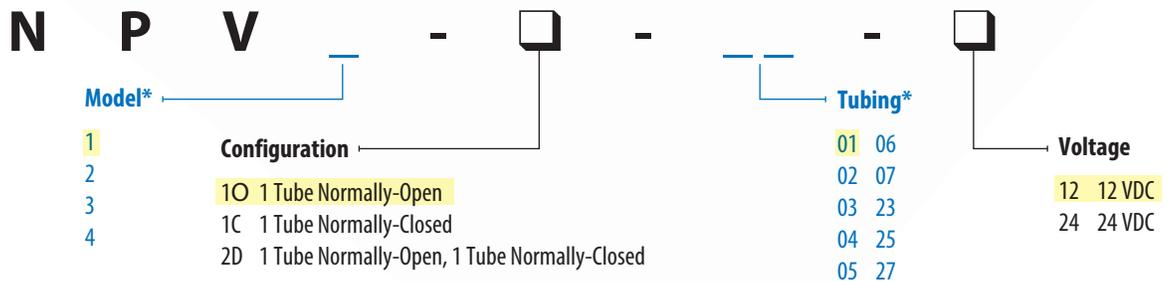
DIMENSIONS

Model	A	B	C
1	#2-56	0.750" (19.1)	1.000" to 1.625" (25.4 to 41.3)
2	#4-40	1.000" (25.4)	1.462" to 1.842" (25.4 to 46.8)
3	#4-40	1.250" (31.8)	1.842" to 2.313" (46.8 to 58.8)
4	#4-40	1.500" (38.1)	2.197" to 2.663" (55.8 to 67.6)

Dimensions shown are in inches (millimeters listed in parentheses).

Visit clippard.com for more detailed 2D and 3D drawings.

ORDERING INFORMATION



*Use the chart below to identify the appropriate **Model** and **Tubing** based on the desired specifications.

Tubing Type	Max. Pressure	Tubing I.D.	Tubing O.D.	Tubing Wall	Amps	Power	Model	Tubing
Medical/Laboratory Grade Silicone Tubing	30 psig (2 bar)	0.030" (0.8 mm)	0.065" (1.7 mm)	0.0175" (0.4 mm)	0.08	1.0 W	1	01
		1/32" (0.8 mm)	3/32" (2.4 mm)	1/32" (0.8 mm)	0.13	1.5 W	2	02
		1/16" (1.6 mm)	1/8" (3.2 mm)	1/32" (0.8 mm)	0.13	1.5 W	2	03
		1/16" (1.6 mm)	3/16" (4.8 mm)	1/16" (1.6 mm)	0.40	4.2 W	3	04
	20 psig (1.4 bar)	1/8" (3.2 mm)	1/4" (6.4 mm)	1/16" (1.6 mm)	0.40	4.2 W	3	05
		3/16" (4.8 mm)	5/16" (7.9 mm)	1/16" (1.6 mm)	0.60	7.2 W	4	06
Sanitary Food Grade Silicone Tubing	14 psig (1 bar)	1/16" (1.6 mm)	1/8" (3.2 mm)	1/32" (0.8 mm)	0.13	1.5 W	2	23
		1/8" (3.2 mm)	1/4" (6.4 mm)	1/6" (1.6 mm)	0.40	4.2 W	3	25
	9 psig (0.6 bar)	1/4" (6.4 mm)	3/8" (9.5 mm)	1/16" (1.6 mm)	0.60	7.2 W	4	27

Example Part Number:

NPV1-1O-01-12

For more info, scan the QR code or visit

clippard.com/link/npv-series

