

# Clippard

## NPP Series 2/2 Miniature Pneumatic Pinch Valves



- Small, compact design
- Normally-Open or Normally-Closed styles
- Hygienic and easy to clean (replace tubes)
- Can handle whole blood and particulate matter
- Unobstructed flow path
- Each valve comes complete with 30 cm of selected tubing
- Wide variety of easily replaceable tubing sizes and materials available (see back)
- For optimum performance, all products are 100% tested

Clippard's **NPP Series Pneumatic Pinch Valves** are air-piloted devices designed to open or 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 of dead volume where fluid can become trapped. Only the inside of the tubing has contact with the fluid.

Common industries that utilize pinch valves for the benefit of isolating fluid from a mechanical valve include: drug dispensing, laboratory equipment, wastewater, medical devices, chemical, food and beverage equipment, ceramic/glass/plastic, and solids handling.

All NPP Series pinch valves ship with 12" of high quality tubing pre-installed. Standard options include medical grade or food grade silicone tubing, or polyurethane tubing. Custom valve configurations and additional tubing options are available (consult factory).

### SPECIFICATIONS

<b>Valve Type</b>	2/2, Normally-Open & Normally-Closed
<b>Medium</b>	Air, Water, Gas & Compatible Fluids
<b>Max. Pilot Pressure</b>	17 bar
<b>Tubing Pressure</b>	See chart below
<b>Mounting</b>	#4-40
<b>Temperature Range</b>	0 to 110°C
<b>Wetted Materials</b>	Medical or Food Grade Silicone, or Polyurethane
<b>RoHS Compliant</b>	

Read more online at [clippard.com/link/npp-tds](http://clippard.com/link/npp-tds)

### ORDERING INFORMATION

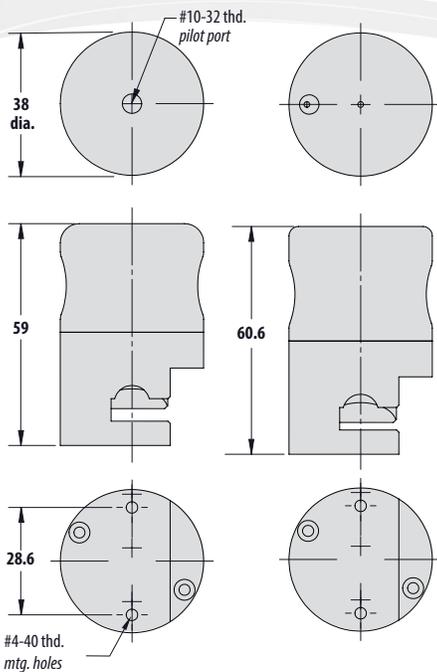
Tubing Type	Tubing Dimensions			Tubing Max. Pressure	Tubing No.	Normally-Open		Normally-Closed		Tubing Re-Order Part No.**
	I.D.	O.D.	Wall			Part Number	Min. to Close*	Part Number	Min. to Open	
Medical/ Laboratory Grade Silicone Tubing	1.6 mm	3.2 mm	0.8 mm	2.1 bar	03	NPP2-1O-03	1.1 bar	NPP2-1C-03	2.1 bar	SIH1-0402-NAS
	1.6 mm	4.8 mm	1.6 mm		04	NPP2-1O-04	2.8 bar	NPP2-1C-04		SIH1-0602-NAS
	3.2 mm	6.4 mm	1.6 mm	1.4 bar	05	NPP4-1O-05	0.7 bar	NPP4-1C-05	1.4 bar	SIH1-0804-NAS
	4.8 mm	7.9 mm	1.6 mm		06	NPP4-1O-06		NPP4-1C-06		SIH1-1006-NAS
	6.4 mm	9.5 mm	1.6 mm		07	NPP4-1O-07		NPP4-1C-07		SIH1-1208-NAS
Polyurethane Tubing	1.6 mm	3.2 mm	0.8 mm	7.2 bar	13	NPP2-1O-13	3.5 bar	NPP2-1C-13	4.5 bar	URH1-0402-CLT
	3.2 mm	6.4 mm	1.6 mm		15	NPP4-1O-15	3.1 bar	NPP4-1C-15		URH1-0804-CLT
Sanitary Food Grade Silicone Tubing	1.6 mm	3.2 mm	0.8 mm	1.0 bar	23	NPP2-1O-23	1.1 bar	NPP2-1C-23	2.1 bar	SFG1-0402-NAS
	3.2 mm	6.2 mm	1.6 mm		25	NPP4-1O-25	0.7 bar	NPP4-1C-25		SFG1-0402-NAS
	6.4 mm	9.5 mm	1.6 mm		27	NPP4-1O-27			NPP4-1C-27	1.4 bar

\*With max. pressure in tubing. \*\*Add -005 to order 1.5 m roll or -050 to order 15 m roll.

## DRAWINGS

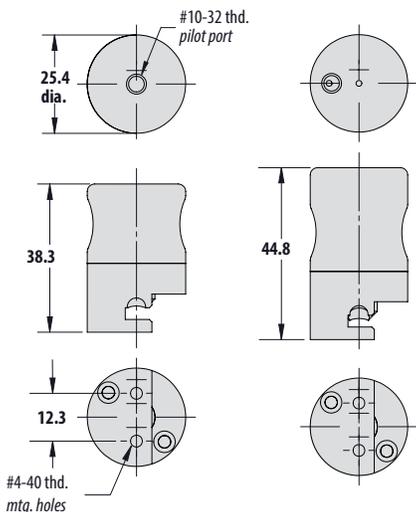
NPP2-10-XX

NPP1-1C-XX



NPP4-10-XX

NPP4-1C-XX



## MEDICAL / LABORATORY GRADE SILICONE TUBING

<b>Material</b>	Platinum-cured Silicone
<b>Durometer Hardness</b>	50 Shore A
<b>Tensile Strength</b>	95 mbar at break
<b>Elongation at Break</b>	815%
<b>Modulus at 200%</b>	20.6 bar
<b>Tear Strength</b>	0.030 kN/m

- Suitable for a variety of medical and laboratory applications
- Excellent flexibility
- Contains no organic plasticizers, phthalates or latex additives
- No peroxide cure chlorophenyl or PCB by-products
- Exceeds USP Class VI plastic test
- Meets ISO 10993 guidelines for body contact applications
- Manufactured to principles of FDA 21 CFR 210/211 cGMPs for pharmaceutical products
- Produced in an FDA-registered (CFN-1816403) and inspected healthcare facility

## SANITARY FOOD GRADE SILICONE TUBING

<b>Material</b>	Platinum-cured Silicone
<b>Durometer Hardness</b>	50 Shore A
<b>Tensile Strength</b>	100 mbar at break
<b>Elongation at Break</b>	770%
<b>Modulus at 200%</b>	19.3 bar
<b>Tear Strength</b>	0.023 kN/m

- Suitable for applications in the food and beverage industries where preservation of taste, aroma, and color are crucial
- Excellent flexibility
- Entirely non-toxic, non-hemolytic, and non-pyrogenic
- Meets USP Class VI Criteria and 3-A Sanitary Standards
- NSF 51 Standard
- FDA 21 CFR Part 177.2600 Criteria
- Complies with ISO 10993 guidelines for contact with blood (or other body fluids or tissue) for up to 30 days as listed in the FDA GP-84

## POLYURETHANE TUBING

<b>Material</b>	Polyurethane
<b>Durometer Hardness</b>	85 Shore A
<b>Static Burst Pressure</b>	Over 35 bar at 21°C

- Abrasion and chemical resistant
- Excellent flexibility
- UV stabilized
- Resin Compliance: NSF61, meets UL94MB, USPVI

Each valve includes 30 cm of tubing pre-installed. Tubing is also available separately in rolls of 1.5 m(-005) or 15 m(-050). Consult the Ordering Information chart (on reverse side) for part numbers.

PROFESSIONALLY DISTRIBUTED BY:

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