

# Clippard

## NIV Series PTFE Media Isolation Valves



- Low power consumption
- Compact, lightweight design
- Bidirectional
- Minimal dead volume
- All wetted areas PTFE
- Ideal for use with corrosive media
- High cycle life
- Fast response time
- CE, RoHS Compliant
- Proudly made in the U.S.A.
- ISO 9001

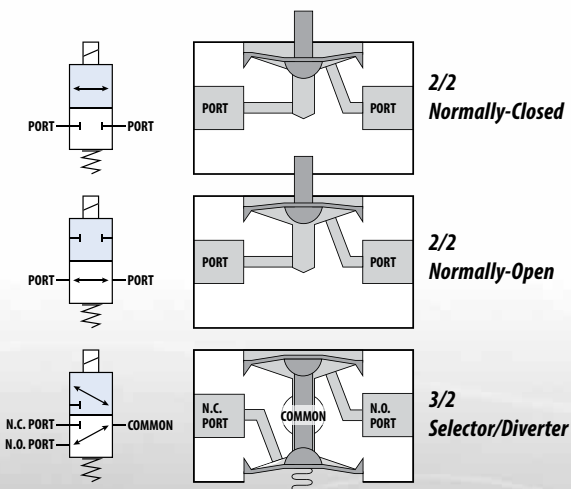
The **Clippard NIV Series Media Isolation Valve** is a solenoid-operated device that uses a flexible diaphragm to isolate the actuation mechanism from the fluid path. Media isolation valves are commonly used for a wide variety of applications, including those that require precise, repeatable dispensing of media for analytical instrumentation. All wetted areas of the valve are PTFE, making this series ideal for use with corrosive media.

A unique feature of the NIV Series is the one-piece valve stem that functions as a sealing membrane while also supporting and centralizing the poppet in the seating area. This multifunctional poppet/diaphragm/stem results in a simplified design with fewer parts (only two for the 2/2 and three for the 3/2), longer life and zero dead volume. Choose from four orifice sizes available as 2/2 Normally-Closed, 2/2 Normally-Open, or 3/2 Selector/Diverter. Special configurations available by request.

Industries and applications that commonly use these types of valves to isolate gas or liquid include: drug dispensing, laboratory equipment, analytical, chemical analysis, sampling, life science/biotech, genetic research, gas chromatography, spectrometry, DNA synthesizing, blood analyzing, printing, diagnostic equipment, fermentation, water treatment and more.

### SPECIFICATIONS

<b>Valve Type</b>	2/2 Normally-Closed, 2/2 Normally-Open, 3/2 Selector/Diverter
<b>Medium</b>	Air, water, gas, compatible fluids
<b>Max. Coil Temp. Rating</b>	70°C
<b>Operating Pressure</b>	Vacuum to 2 bar
<b>Flow</b>	10 to 60 l/min
<b>Max. Pressure Range</b>	71 cm Hg to 2 bar
<b>Power Consumption</b>	1.0 to 7.2 watts
<b>Response Time</b>	5 to 20 ms
<b>Electrical Connections</b>	45 cm wire leads
<b>Voltage</b>	12 or 24 VDC
<b>Ports</b>	#10-32, 1/4-28 or 1/8 NPS
<b>Mounting</b>	#2-56, #4-40
<b>Wetted Materials</b>	PTFE
<b>CE, RoHS Compliant</b>	

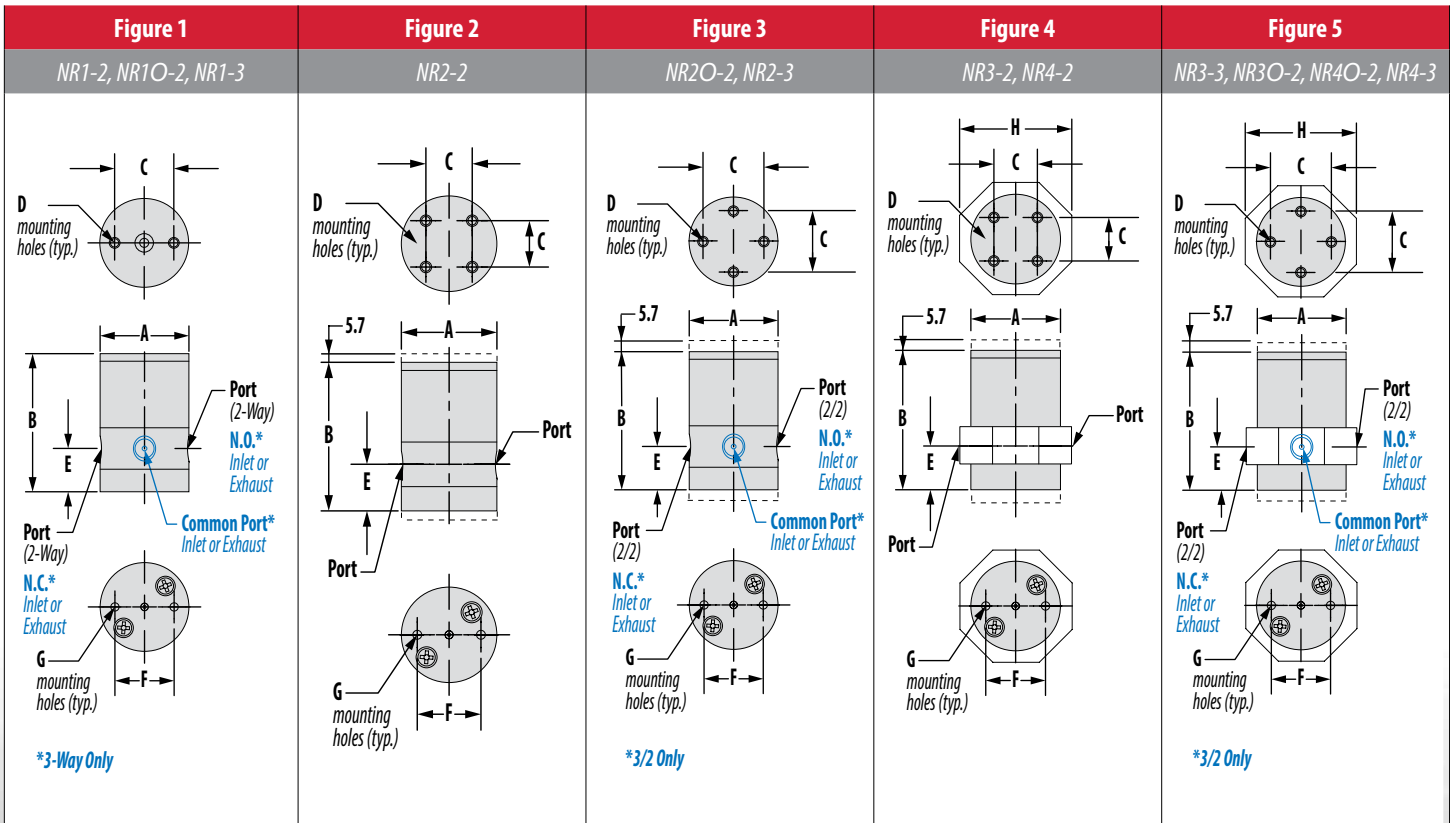


Read more online at [clippard.com/link/niv-tds](http://clippard.com/link/niv-tds)

## STANDARD VALVES

Configuration	Orifice	Ports	Fig.	Standard Valve Dimensions—See Figures 1-6, below								Part Number	
				A	B	C	D	E	F	G	H	12 VDC	24 VDC
<b>2/2 Normally-Closed</b>	1.0	#10-32	1	19.0	29.3	12.7	#2-56 x 2.4 deep	9.2	12.7	#2-56 x 4.8 deep	n/a	NR1-2-12	NR1-2-24
	1.6	1/4-28	2	25.4	37.8	12.3	#4-40 x 3.2 deep	11.4	17.5	#4-40 x 6.4 deep	n/a	NR2-2-12	NR2-2-24
	2.4	1/4-28	4	31.8	47.3	15.9		12.7	22.5		38.1	NR3-2-12	NR3-2-24
	4.0	1/8 NPS	4	38.1	53.0	20.2		14.2	28.6		44.4	NR4-2-12	NR4-2-24
<b>2/2 Normally-Open</b>	1.0	#10-32	1	19.0	29.5	12.7	#2-56 x 2.4 deep	9.2	12.7	#2-56 x 4.8 deep	n/a	NR1O-2-12	NR1O-2-24
	1.6	1/4-28	3	25.4	37.9	12.3	#4-40 x 3.2 deep	11.4	17.4	#4-40 x 6.4 deep	n/a	NR2O-2-12	NR2O-2-24
	2.4	1/4-28	5	31.8	46.1	22.5		12.7	22.5		38.1	NR3O-2-12	NR3O-2-24
	4.0	1/8 NPS	5	38.1	51.8	28.6		14.3	28.6		44.4	NR4O-2-12	NR4O-2-24
<b>3/2 Selector/Diverter</b>	1.0	#10-32	1	19.0	29.5	12.7	#2-56 x 2.4 deep	9.2	12.7	#2-56 x 4.8 deep	n/a	NR1-3-12	NR1-3-24
	1.6	1/4-28	3	25.4	37.9	17.4	#4-40 x 3.2 deep	11.4	17.4	#4-40 x 6.4 deep	n/a	NR2-3-12	NR2-3-24
	2.4	1/4-28	5	31.8	46.1	22.5		12.7	22.5		38.1	NR3-3-12	NR3-3-24
	4.0	1/8 NPS	5	38.1	51.8	28.6		14.3	28.6		44.4	NR4-3-12	NR4-3-24

## STANDARD VALVE DRAWINGS

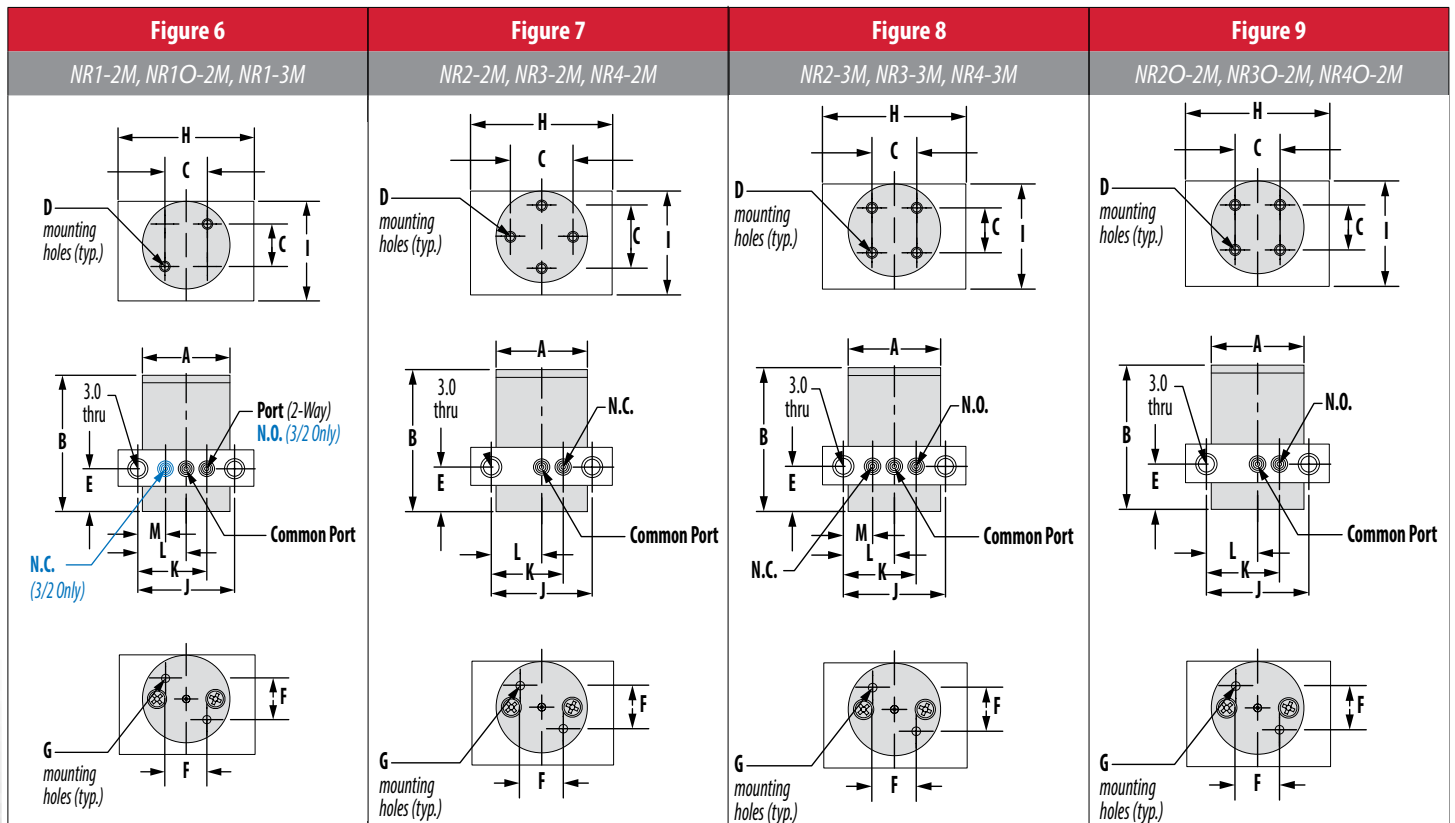


## INTEGRATED MANIFOLD VALVES

Fig.	Integrated Manifold Dimensions—See Figures 1-6, below													Part Number	
	A	B	C	D	E	F	G	H	I	J	K	L	M	12 VDC	24 VDC
6	19.0	29.3	9.0	#2-56 x 2.4 deep	9.2	9.0	#2-56 x 4.8 deep	31.8	22.2	22.2	15.9	11.1	—	NR1-2M-12	NR1-2M-24
7	25.4	37.8	17.4	#4-40 x 3.2 deep	11.4	12.3	#4-40 x 6.4 deep	31.8	28.6	25.4	19.1	12.7	—	NR2-2M-12	NR2-2M-24
7	31.8	47.3	22.5		12.7	15.9		41.3	41.3	31.8	23.8	15.9	—	NR3-2M-12	NR3-2M-24
7	38.1	53.0	28.6		14.3	20.2		47.6	47.6	38.1	28.6	19.1	—	NR4-2M-12	NR4-2M-24
6	19.0	29.5	9.0	#2-56 x 2.4 deep	9.2	9.0	#2-56 x 4.8 deep	31.8	22.2	22.2	15.9	11.1	—	NR1O-2M-12	NR1O-2M-24
9	25.4	37.9	12.3	#4-40 x 3.2 deep	11.4	12.3	#4-40 x 6.4 deep	31.8	28.6	25.4	19.1	12.7	—	NR2O-2M-12	NR2O-2M-24
9	31.8	46.1	15.9		12.7	15.9		41.3	41.3	31.8	23.8	15.9	—	NR3O-2M-12	NR3O-2M-24
9	38.1	51.8	20.2		14.3	20.2		47.6	47.6	38.1	28.6	19.1	—	NR4O-2M-12	NR4O-2M-24
6	19.0	29.5	9.0	#2-56 x 2.4 deep	9.2	12.7	#2-56 x 4.8 deep	31.8	22.2	22.2	15.9	11.1	6.4	NR1-3M-12	NR1-3M-24
8	25.4	37.9	12.3	#4-40 x 3.2 deep	11.4	12.3	#4-40 x 6.4 deep	31.8	28.6	25.4	19.1	12.7	6.4	NR2-3M-12	NR2-3M-24
8	31.8	46.1	15.9		12.7	15.9		41.3	41.3	31.8	23.8	15.9	8.0	NR3-3M-12	NR3-3M-24
8	38.1	51.8	20.2		12.7	20.2		47.6	47.6	38.1	28.6	19.1	9.5	NR4-3M-12	NR4-3M-24

Unless otherwise noted, all measurements shown are in millimeters.

## INTEGRATED MANIFOLD VALVE DRAWINGS



**ADDITIONAL RESOURCES AVAILABLE  
ONLINE AT CLIPPARD.COM**

- 2D & 3D files
- Product configurators
- Calculators
- Videos, whitepapers, and more
- Download Clippard's Full-Line Product Catalog
- Locate your nearest Clippard Distributor
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