

Clippard

NIV Series PTFE Media Isolation Valves



- Low power consumption
- Compact, lightweight design
- Bidirectional
- Zero 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 9001:2008

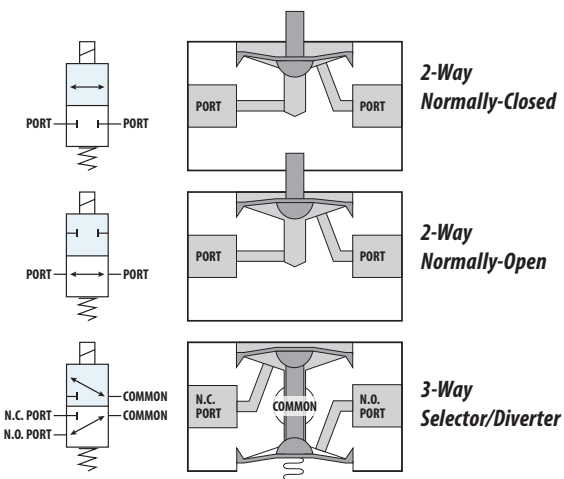
The **Clippard NIV Series Media Isolation Valve** is a solenoid-operated device that uses a flexible diaphragm to isolate the actuation mechanism from the fluid path. Media isolation valves are commonly used for a wide variety of applications, including those that require precise, repeatable dispensing 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-Way and three for the 3-Way), longer life and zero dead volume. Choose from four orifice sizes available as 2-Way Normally-Closed, 2-Way Normally-Open, or 3-Way 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

Valve Type	2-Way Normally-Closed, 2-Way Normally-Open, 3-Way Selector/Diverter
Medium	Air, water, gas, compatible fluids
Max. Coil Temp. Rating	158°F
Operating Pressure	Vacuum to 30 psi
Flow	10 to 60 L/min
Max. Pressure Range	28" Hg to 30 psi
Power Consumption	1.0 to 7.2 watts
Response Time	5 to 20 ms
Electrical Connections	18" wire leads
Voltage	12 or 24 VDC
Ports	#10-32, 1/4-28 or 1/8 NPS
Mounting	#2-56, #4-40
Wetted Materials	PTFE
CE, RoHS Compliant	



Read more online at clippard.com/link/niv-tds

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Dimensions

Valve Type	Orifice Size	Ports	Dimensions								Fig.	Part Number	
			A	B	C	D	E	F	G	H		12 VDC	24 VDC
2-Way N.C.	0.040	#10-32	0.750	1.155	0.500	#2-56 x 0.094 deep	0.363	0.500	n/a	#2-56 x 0.188 deep	1	NR1-2-12	NR1-2-24
	0.062	1/4-28	1.000	1.488	0.486	#4-40 x 0.125 deep	0.450	0.687	n/a	#4-40 x 0.250 deep	2	NR2-2-12	NR2-2-24
	0.093	1/4-28	1.250	1.863	0.626		0.500	0.884	1.500		4	NR3-2-12	NR3-2-24
	0.156	1/8 NPS	1.500	2.088	0.796		0.562	1.125	1.750		4	NR4-2-12	NR4-2-24
2-Way N.O.	0.040	#10-32	0.750	1.163	0.500	#2-56 x 0.094 deep	0.363	0.500	n/a	#2-56 x 0.188 deep	1	NR10-2-12	NR10-2-24
	0.062	1/4-28	1.000	1.493	0.486	#4-40 x 0.125 deep	0.450	0.687	n/a	#4-40 x 0.250 deep	3	NR20-2-12	NR20-2-24
	0.093	1/4-28	1.250	1.814	0.884		0.500	0.884	1.500		5	NR30-2-12	NR30-2-24
	0.156	1/8 NPS	1.500	2.039	1.125		0.562	1.125	1.750		5	NR40-2-12	NR40-2-24
3-Way	0.040	#10-32	0.750	1.161	0.500	#2-56 x 0.094 deep	0.363	0.500	n/a	#2-56 x 0.188 deep	1	NR1-3-12	NR1-3-24
	0.062	1/4-28	1.000	1.492	0.687	#4-40 x 0.125 deep	0.450	0.687	n/a	#4-40 x 0.250 deep	3	NR2-3-12	NR2-3-24
	0.093	1/4-28	1.250	1.814	0.884		0.500	0.884	1.500		5	NR3-3-12	NR3-3-24
	0.156	1/8 NPS	1.500	2.038	1.125		0.562	1.125	1.750		5	NR4-3-12	NR4-3-24

Coil Chart

Model	Power	Voltage	Amps
NR1	1.0 W	12 VDC	0.08
		24 VDC	0.04
NR2	1.5 W	12 VDC	0.13
		24 VDC	0.06
NR3	4.2 W	12 VDC	0.40
NR4	7.2 W	12 VDC	0.60
		24 VDC	0.30

Unless otherwise noted, all measurements shown are in inches.

FIGURE 1

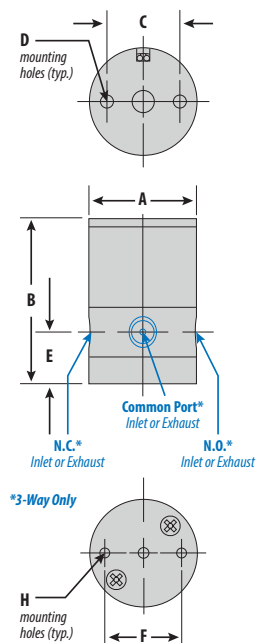


FIGURE 2

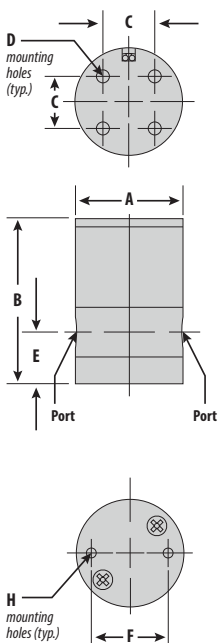


FIGURE 3

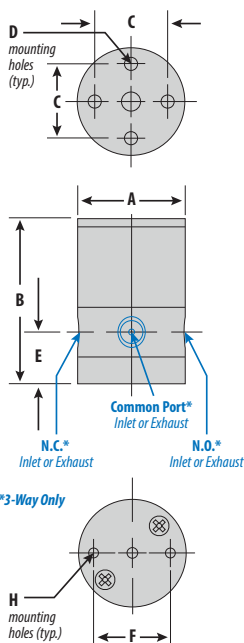


FIGURE 4

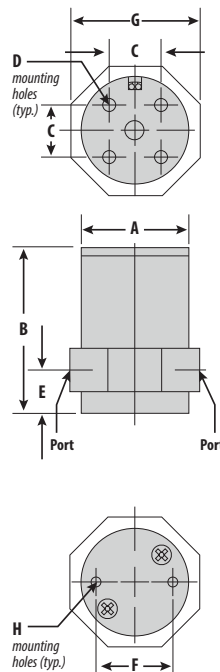
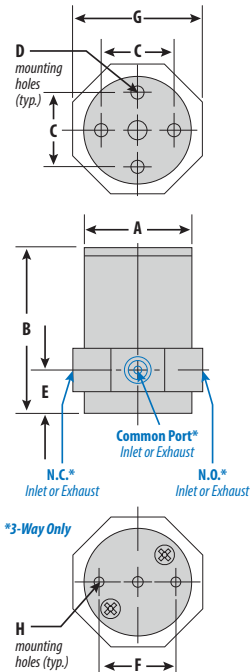


FIGURE 5



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