



M-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
- Low leak design
- Custom body, materials, threads and pressures available
- Proudly made in the U.S.A. ISO 9001

The **Clippard M-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 M-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 minimal 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.

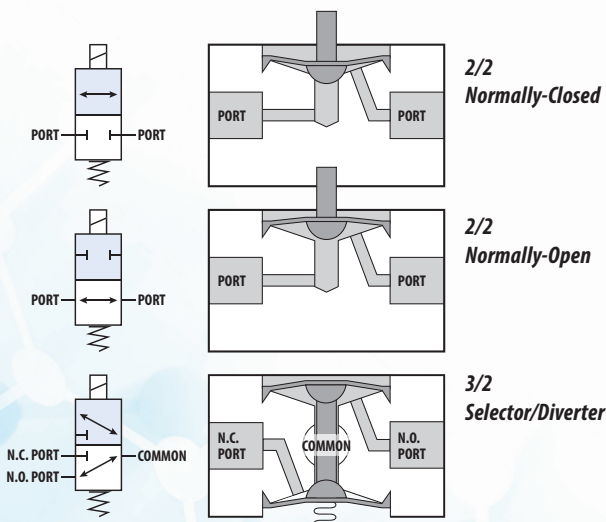
Industries and applications that commonly use these types of valves to isolate gas or liquid include: drug dispensing, laboratory equipment, analytical, chemical analysis, sampling, life science/biotech, genetic research, gas chromatography, spectrometry, DNA synthesizing, blood analyzing, printing,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

SPECIFICATIONS

Valve Type	2/2 Normally-Closed, 2/2 Normally-Open, 3/2 Selector/Diverter
Medium	Air, water, gas, compatible fluids
Max. Coil Temp. Rating	70°C
Operating Pressure	Vacuum to 2 bar (additional options available*)
Flow	6 to 58 l/min. air @ 2 bar
Power Consumption	1.0 to 7.2 watts
Response Time	5 to 20 ms typ.
Electrical Connections	450 mm wire leads
Voltage	12 or 24 VDC (additional options available*)
Ports	#10-32, 1/4-28, G1/8 or Manifold
Mounting	M2, M3 or Manifold (3 mm thru hole)
Wetted Materials	PTFE (Peek, PCTFE & PPS available*)
CE, RoHS Compliant	

* Contact Clippard for additional information

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



STANDARD VALVES

Type	Orifice	Flow @ 2 bar	Ports	Fig.	Standard Valve Dimensions—See Figures 1-5, below						Part Number	
					A	B	C	D	E	F	12 VDC	24 VDC
2/2 Normally-Closed	1.0	6 l/min	#10-32	1	19.1	40.4	13.0	M2x0.4 5.5 mm deep	14.7	n/a	M-NR1-2-12	M-NR1-2-24
	1.6	16 l/min	1/4-28	2	25.4	50.5	18.0	M3x0.5 6.3 mm deep	17.8	n/a	M-NR2-2-12	M-NR2-2-24
	2.4	38 l/min	1/4-28	4	31.8	58.4	23.0	M3x0.5 5.5 mm deep	18.2	38.1	M-NR3-2-12	M-NR3-2-24
	4.0	58 l/min	G1/8	4	38.1	64.1	29.0	M3x0.5 5.5 mm deep	19.8	44.5	M-NR4-2-12	M-NR4-2-24
2/2 Normally-Open	1.0	6 l/min	#10-32	1	19.1	40.6	13.0	M2x0.4 5.5 mm deep	14.7	n/a	M-NR1O-2-12	M-NR1O-2-24
	1.6	16 l/min	1/4-28	3	25.4	50.6	18.0	M3x0.5 6.3 mm deep	17.8	n/a	M-NR2O-2-12	M-NR2O-2-24
	2.4	38 l/min	1/4-28	5	31.8	57.1	23.0	M3x0.5 5.5 mm deep	18.2	38.1	M-NR3O-2-12	M-NR3O-2-24
	4.0	58 l/min	G1/8	5	38.1	62.8	29.0	M3x0.5 5.5 mm deep	19.8	44.5	M-NR4O-2-12	M-NR4O-2-24
3/2 Selector/Diverter	1.0	6 l/min	#10-32	1	19.1	40.6	13.0	M2x0.4 5.5 mm deep	14.7	n/a	M-NR1-3-12	M-NR1-3-24
	1.6	16 l/min	1/4-28	3	25.4	50.6	18.0	M3x0.5 6.3 mm deep	17.8	n/a	M-NR2-3-12	M-NR2-3-24
	2.4	28 l/min	1/4-28	5	31.8	57.1	23.0	M3x0.5 5.5 mm deep	18.2	38.1	M-NR3-3-12	M-NR3-3-24
	4.0	58 l/min	G1/8	5	38.1	62.8	29.0	M3x0.5 5.5 mm deep	19.8	44.5	M-NR4-3-12	M-NR4-3-24

STANDARD VALVE DRAWINGS

Figure 1	Figure 2	Figure 3	Figure 4	Figure 5
M-NR1-2, M-NR1O-2, M-NR1-3	M-NR2-2	M-NR2O-2, M-NR2-3	M-NR3-2, M-NR4-2	M-NR3-3, M-NR3O-2, M-NR4O-2, M-NR4-3

MANIFOLD VALVES

Type	Orifice	Flow @ 2 bar	Fig.	Manifold Dimensions—See Figures 6-8, below								Part Number	
				A	B	C	D	E	F	G	H	12 VDC	24 VDC
2/2 Normally-Closed	1.0	6 l/min	6	19.1	29.3	9.2	31.8	22.2	22.2	4.8	11.1	NR1-2M-12	NR1-2M-24
	1.6	16 l/min	7	25.4	37.8	11.3	31.8	28.6	25.4	6.4	12.7	NR2-2M-12	NR2-2M-24
	2.4	38 l/min	7	31.8	47.3	12.7	41.3	34.9	31.8	8.0	15.9	NR3-2M-12	NR3-2M-24
	4.0	58 l/min	7	38.1	53.0	14.3	47.6	41.3	38.1	9.5	19.1	NR4-2M-12	NR4-2M-24
2/2 Normally-Open	1.0	6 l/min	6	19.1	29.5	9.2	31.8	22.2	22.2	4.8	11.1	NR1O-2M-12	NR1O-2M-24
	1.6	16 l/min	8	25.4	37.9	11.3	31.8	28.6	25.4	6.4	12.7	NR2O-2M-12	NR2O-2M-24
	2.4	38 l/min	8	31.8	46.1	12.7	41.3	34.9	31.8	8.0	15.9	NR3O-2M-12	NR3O-2M-24
	4.0	58 l/min	8	38.1	51.8	14.3	47.6	41.3	38.1	9.5	19.1	NR4O-2M-12	NR4O-2M-24
3/2 Selector/Diverter	1.0	6 l/min	6	19.1	29.5	9.2	31.8	22.2	22.2	4.8	11.1	NR1-3M-12	NR1-3M-24
	1.6	16 l/min	6	29.4	37.9	11.3	31.8	28.6	25.4	6.4	12.7	NR2-3M-12	NR2-3M-24
	2.4	28 l/min	6	31.8	46.1	12.7	41.3	34.9	31.8	8.0	15.9	NR3-3M-12	NR3-3M-24
	4.0	58 l/min	6	38.1	51.8	14.3	47.6	41.3	38.1	9.5	19.1	NR4-3M-12	NR4-3M-24

MANIFOLD VALVE DRAWINGS

Figure 6 (3/2)	Figure 7 (2/2 N.C.)	Figure 8 (2/2 N.O.)
<i>NR1-3M, NR2-3M,</i>	<i>NR1-2M, NR2-2M,</i>	<i>NR1O-2M, NR2O-2M,</i>

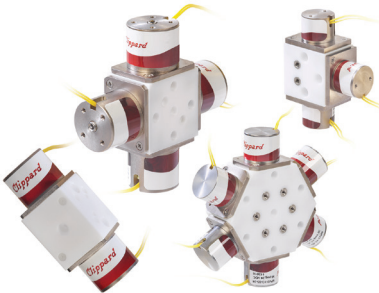
ORDERING INFORMATION

Unit	Orifice / Ports	Type	Mounting	Voltage	Operating Pressure
(blank) Imperial	M-NR1 1.0 mm / #10-32	-2 2/2 Normally-Closed	(blank) Std. (threaded)	-12 12 VDC	(blank) Vac. to 2 bar
M- Metric (standard valves only)	M-NR2 1.6 mm / 1/4-28	0-2 2/2 Normally-Open	M Manifold	-24 24 VDC	
	M-NR3 2.4 mm / 1/4-28	-3 3/2 Selector / Diverter			
	M-NR4 4.0 mm / G1/8				

Example Part No. M-NR20-2-12

On-Line Configurator Available

Solenoid-Operated PTFE Media Gradient Isolation Valves



Mixing isolation valves combine multiple solenoids into a single compact unit. The valve incorporates up to six separate sources of media into one stream that is integral to a single block. They feature independent

inlets and one common outlet, or one common inlet and multiple independent outlets. Compatible with corrosive and aggressive medium, these valves are useful for solvent selection, stream splitting, flushing, mixing, diverting, blending, indexing and other automated applications.

Read more online at clippard.com/link/nivg

Solenoid-Operated & Pneumatic Pinch Valves



Pinch valves are an excellent alternative to traditional mechanical valves when media contamination is a concern, as they interact with medical grade tubing, and never touch

the material being dispensed. Clippard's compact NPV series offers four styles with multiple size, tubing and pressure options making them ideal for pharmaceutical, laboratory, wastewater, medical, and chemical industries, among others. Features include high flow, low power consumption, high cycle life, quick response and more.

Read more online at clippard.com/link/npv

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- Product configurators
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