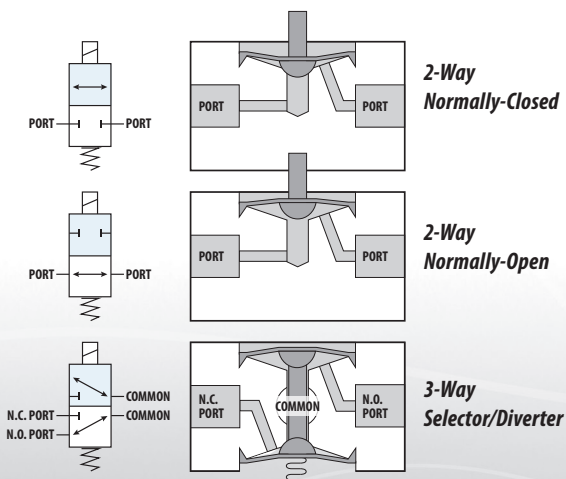




NIV Series PTFE Media Isolation Valves



- 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 9001:2015



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 minimal 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 psig
Flow	10 to 60 l/min
Max. Pressure Range	28" Hg to 30 psig
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, or Manifold Mount
Wetted Materials	PTFE
CE, RoHS Compliant	

Read more online at 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
2-Way, Normally-Closed	0.040"	#10-32	1	0.750"	1.155"	0.500"	#2-56 x 0.094" deep	0.363"	0.500"	#2-56 x 0.188" deep	n/a	NR1-2-12	NR1-2-24
	0.062"	1/4-28	2	1.000"	1.488"	0.486"	#4-40 x 0.125" deep	0.450"	0.687"	#4-40 x 0.250" deep	n/a	NR2-2-12	NR2-2-24
	0.093"	1/4-28	4	1.250"	1.863"	0.626"		0.500"	0.884"		1.500	NR3-2-12	NR3-2-24
	0.156"	1/8 NPS	4	1.500"	2.088"	0.796"		0.562"	1.125"		1.750	NR4-2-12	NR4-2-24
2-Way, Normally-Open	0.040"	#10-32	1	0.750"	1.163"	0.500"	#2-56 x 0.094" deep	0.363"	0.500"	#2-56 x 0.188" deep	n/a	NR1O-2-12	NR1O-2-24
	0.062"	1/4-28	3	1.000"	1.493"	0.486"	#4-40 x 0.125" deep	0.450"	0.687"	#4-40 x 0.250" deep	n/a	NR2O-2-12	NR2O-2-24
	0.093"	1/4-28	5	1.250"	1.814"	0.884"		0.500"	0.884"		1.500	NR3O-2-12	NR3O-2-24
	0.156"	1/8 NPS	5	1.500"	2.039"	1.125"		0.562"	1.125"		1.750	NR4O-2-12	NR4O-2-24
3-Way, Selector/Diverter	0.040"	#10-32	1	0.750"	1.161"	0.500"	#2-56 x 0.094" deep	0.363"	0.500"	#2-56 x 0.188" deep	n/a	NR1-3-12	NR1-3-24
	0.062"	1/4-28	3	1.000"	1.492"	0.687"	#4-40 x 0.125" deep	0.450"	0.687"	#4-40 x 0.250" deep	n/a	NR2-3-12	NR2-3-24
	0.093"	1/4-28	5	1.250"	0.884"	0.884"		0.500"	0.884"		1.500	NR3-3-12	NR3-3-24
	0.156"	1/8 NPS	5	1.500"	1.125"	1.125"		0.562"	1.125"		1.750	NR4-3-12	NR4-3-24

STANDARD VALVE DRAWINGS

Figure 1	Figure 2	Figure 3	Figure 4	Figure 5
NR1-2, NR1O-2, NR1-3	NR2-2	NR2O-2, NR2-3	NR3-2, NR4-2	NR3-3, NR3O-2, NR4O-2, NR4-3
Port (2-Way) N.O.* Inlet or Exhaust Common Port* Inlet or Exhaust Port (2-Way) N.C.* Inlet or Exhaust *3-Way Only	Port (2-Way) N.O.* Inlet or Exhaust Common Port* Inlet or Exhaust Port (2-Way) N.C.* Inlet or Exhaust *3-Way Only	Port (2-Way) N.O.* Inlet or Exhaust Common Port* Inlet or Exhaust Port (2-Way) N.C.* Inlet or Exhaust *3-Way Only	Port (2-Way) N.O.* Inlet or Exhaust Common Port* Inlet or Exhaust Port (2-Way) N.C.* Inlet or Exhaust *3-Way Only	Port (2-Way) N.O.* Inlet or Exhaust Common Port* Inlet or Exhaust Port (2-Way) N.C.* Inlet or Exhaust *3-Way Only

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	0.750"	1.155"	0.354"	#2-56 x 0.094 deep	0.362"	0.354"	#2-56 x 0.180" deep	1.250"	0.875"	0.875"	0.625"	0.438"	—	NR1-2M-12	NR1-2M-24
7	1.000"	1.487"	0.687"	#4-40 x 0.125 deep	0.450"	0.486"	#4-40 x 0.250" deep	1.250"	1.125"	1.000"	0.750"	0.500"	—	NR2-2M-12	NR2-2M-24
7	1.250"	1.862"	0.885"		0.500"	0.625"		1.625"	1.625"	1.250"	0.938"	0.625"	—	NR3-2M-12	NR3-2M-24
7	1.500"	2.087"	1.126"		0.563"	0.795"		1.875"	1.875"	1.500"	1.125"	0.750"	—	NR4-2M-12	NR4-2M-24
6	0.750"	1.163"	0.354"	#2-56 x 0.094 deep	0.362"	0.354"	#2-56 x 0.180" deep	1.250"	0.875"	0.875"	0.625"	0.438"	—	NR1O-2M-12	NR1O-2M-24
9	1.000"	1.491"	0.486"	#4-40 x 0.125 deep	0.450"	0.486"	#4-40 x 0.250" deep	1.250"	1.125"	1.000"	0.750"	0.500"	—	NR2O-2M-12	NR2O-2M-24
9	1.250"	1.813"	0.625"		0.500"	0.625"		1.625"	1.625"	1.250"	0.938"	0.625"	—	NR3O-2M-12	NR3O-2M-24
9	1.500"	2.038"	0.795"		0.563"	0.795"		1.875"	1.875"	1.500"	1.125"	0.750"	—	NR4O-2M-12	NR4O-2M-24
6	0.750"	1.162"	0.354"	#2-56 x 0.094 deep	0.362"	0.500"	#2-56 x 0.180" deep	1.250"	0.875"	0.875"	0.625"	0.438"	0.250"	NR1-3M-12	NR1-3M-24
8	1.000"	1.491"	0.486"	#4-40 x 0.125 deep	0.450"	0.486"	#4-40 x 0.250" deep	1.250"	1.125"	1.000"	0.750"	0.500"	0.250"	NR2-3M-12	NR2-3M-24
8	1.250"	1.813"	0.625"		0.500"	0.625"		1.625"	1.625"	1.250"	0.938"	0.625"	0.313"	NR3-3M-12	NR3-3M-24
8	1.500"	2.038"	0.795"		0.500"	0.795"		1.875"	1.875"	1.500"	1.125"	0.750"	0.375"	NR4-3M-12	NR4-3M-24

INTEGRATED MANIFOLD VALVE DRAWINGS

Figure 6	Figure 7	Figure 8	Figure 9
NR1-2M, NR1O-2M, NR1-3M	NR2-2M, NR3-2M, NR4-2M	NR2-3M, NR3-3M, NR4-3M	NR2O-2M, NR3O-2M, NR4O-2M

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