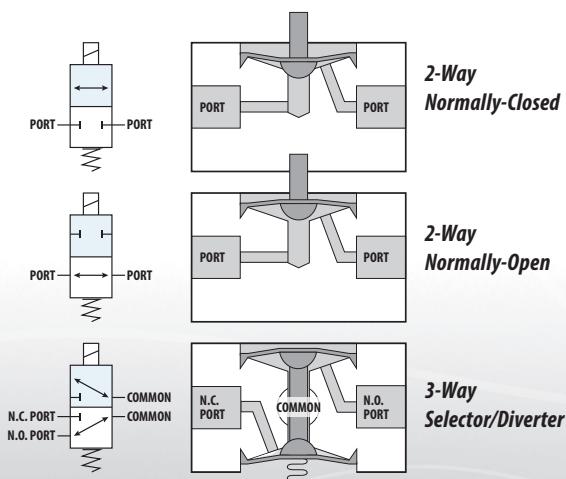


Clippard

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 9001:2015



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

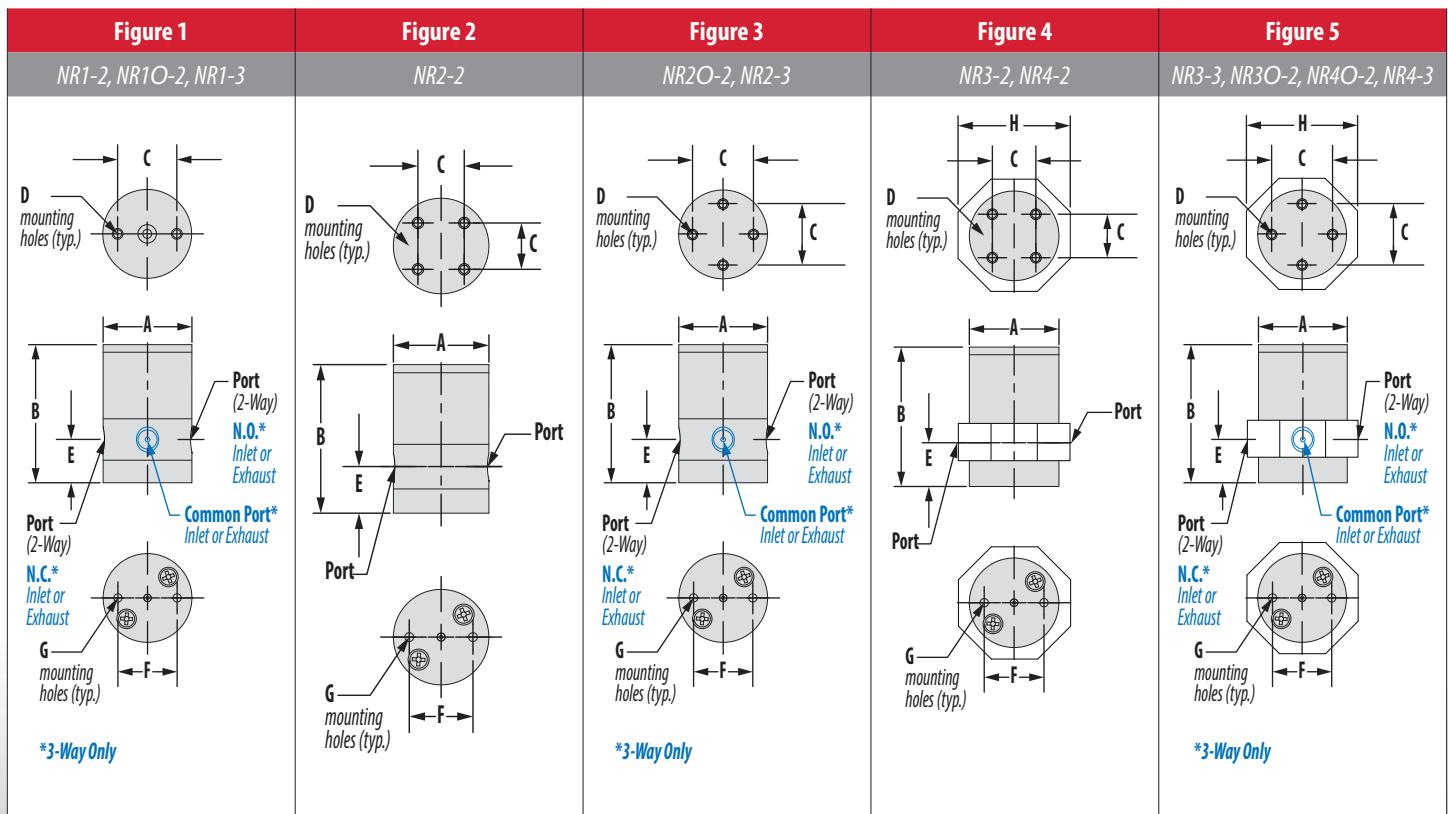
| | |
|-------------------------------|--|
| Valve Type | 2-Way Normally-Closed, 2-Way Normally-Open, 3-Way Selector/Diverter |
| Medium | Air, water, gas, compatible fluids |
| Max. Coil Temp. Rating | 158°F |
| Operating Pressure | Vacuum to 30 psig |
| Flow | 10 to 60 l/min |
| Max. Pressure Range | 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 UNF 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 2 4 4 | 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 | | 1.000" | 1.488" | 0.486" | | 0.450" | 0.687" | | n/a | NR2-2-12 | NR2-2-24 |
| | 0.093" | 1/4-28 | | 1.250" | 1.863" | 0.626" | #4-40 x 0.125" deep | 0.500" | 0.884" | #4-40 x 0.250" deep | 1.500 | NR3-2-12 | NR3-2-24 |
| | 0.156" | 1/8 NPS | | 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 3 5 5 | 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 | | 1.000" | 1.493" | 0.486" | | 0.450" | 0.687" | | n/a | NR2O-2-12 | NR2O-2-24 |
| | 0.093" | 1/4-28 | | 1.250" | 1.814" | 0.884" | #4-40 x 0.125" deep | 0.500" | 0.884" | #4-40 x 0.250" deep | 1.500 | NR3O-2-12 | NR3O-2-24 |
| | 0.156" | 1/8 NPS | | 1.500" | 2.039" | 1.125" | | 0.562" | 1.125" | | 1.750 | NR4O-2-12 | NR4O-2-24 |
| 3-Way, Selector/Divertor | 0.040" | #10-32 | 1 3 5 5 | 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 | | 1.000" | 1.492" | 0.687" | | 0.450" | 0.687" | | n/a | NR2-3-12 | NR2-3-24 |
| | 0.093" | 1/4-28 | | 1.250" | 1.814" | 1.814" | #4-40 x 0.125" deep | 0.500" | 0.884" | #4-40 x 0.250" deep | 1.500 | | |
| | 0.156" | 1/8 NPS | | 1.500" | 2.039" | 2.039" | | 0.562" | 1.125" | | 1.750 | | |

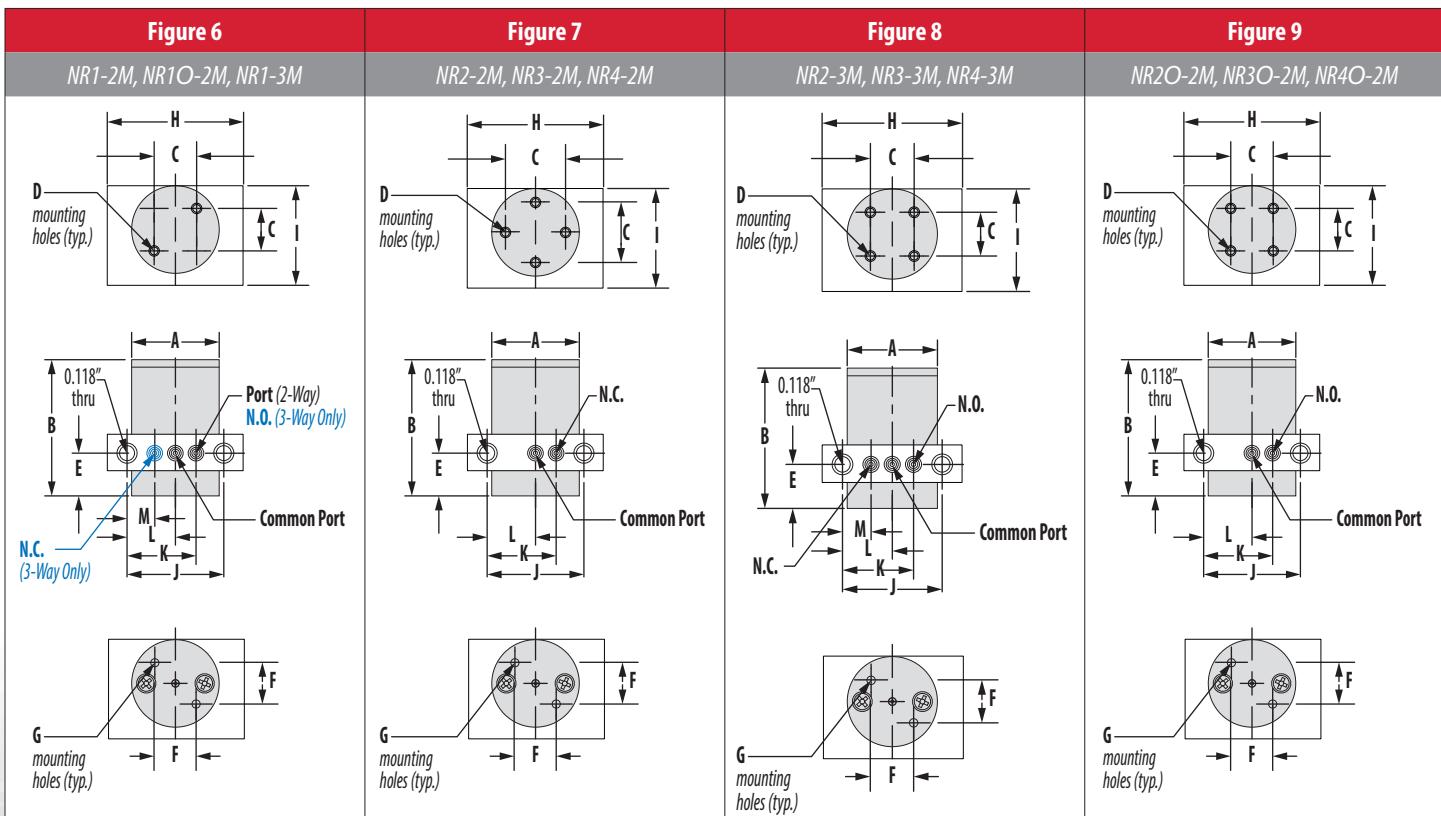
STANDARD VALVE DRAWINGS



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 | 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" | | 0.450" | 0.486" | | 1.250" | 1.125" | 1.000" | 0.750" | 0.500" | — | NR2-2M-12 | NR2-2M-24 |
| 7 | 1.250" | 1.862" | 0.885" | #4-40 x 0.125 deep | 0.500" | 0.625" | #4-40 x 0.250" deep | 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" | | 0.450" | 0.486" | | 1.250" | 1.125" | 1.000" | 0.750" | 0.500" | — | NR2O-2M-12 | NR2O-2M-24 |
| 9 | 1.250" | 1.813" | 0.625" | #4-40 x 0.125 deep | 0.500" | 0.625" | #4-40 x 0.250" deep | 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" | | 0.450" | 0.486" | | 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" | #4-40 x 0.125 deep | 0.500" | 0.625" | #4-40 x 0.250" deep | 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



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