# NIV SERIES PTFE VALVES



RoHS · 100% TESTED · made in the USA · CE · M *Available in Metric*
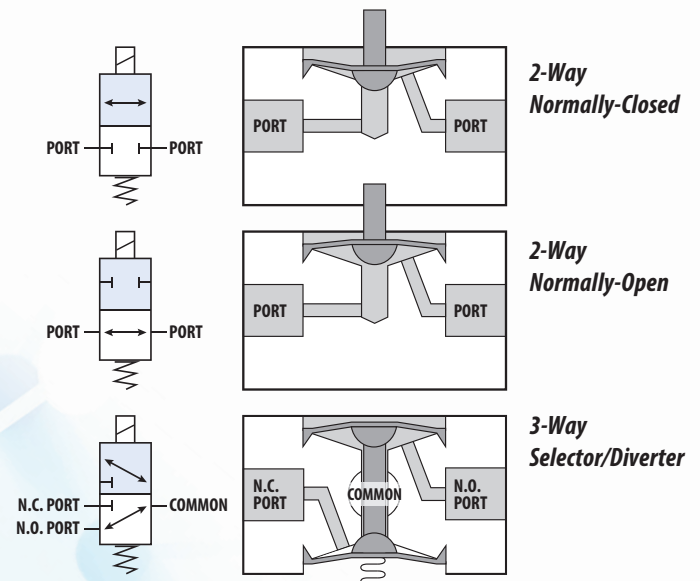
The NIV series media isolation valve is a solenoid-operated device that utilizes a flexible diaphragm to isolate the actuation mechanism from the fluid path. This unique, multifunctional valve stem results in a simplified design with fewer parts, longer life and minimal dead volume. In addition, all wetted areas of the NIV series are PTFE, making it ideal for use with corrosive media.
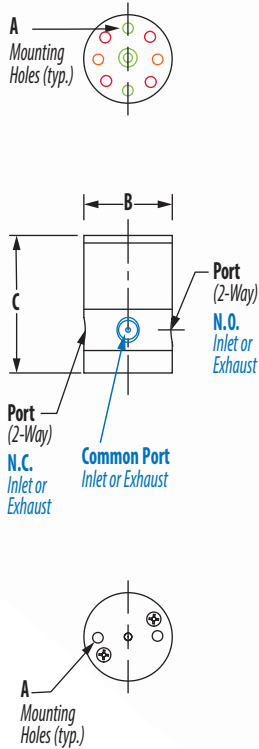
| | |
|---|---|
| **Connection** | 18" (45 cm) wire leads |
| **Documentation** | CE, RoHS |
| **Flow Range** | 5 to 60 l/min @ 30 psig (2 bar) air |
| **Function** | 2-way normally-closed or normally-open, 3-way selector/diverter |
| **Material, Wetted** | PTFE, FKM |
| **Max. Flow** | 60 l/min @ 30 psig (2 bar) air |
| **Medium** | Air, water, gas, or compatible fluids |
| **Mount** | #2-56, #4-40, or manifold (0.118" thru hole) |
| **Operating Temp. Range** | -20 to 158˚F (-29 to 70˚C) |
| **Operating Pressure** | Vac. to 30 psig (2 bar) |
| **Ports** | #10-32, 1/4-28 UNF, or 1/8 NPS |
| **Response Time** | 5 to 50 ms typical |
| **Voltage** | 12 to 24 VDC *(additional options available)* |
| **Wattage** | 1.0 to 7.2 watts |
| **More Details** | **clippard.com/link/niv-series** |

- **Low power consumption**
- **Compact, lightweight design**
- **Bidirectional**
- **Minimal dead volume**
- **Fully flushable**
- **All wetted areas PTFE**
- **Ideal for use with corrosive media**
- **High cycle life**
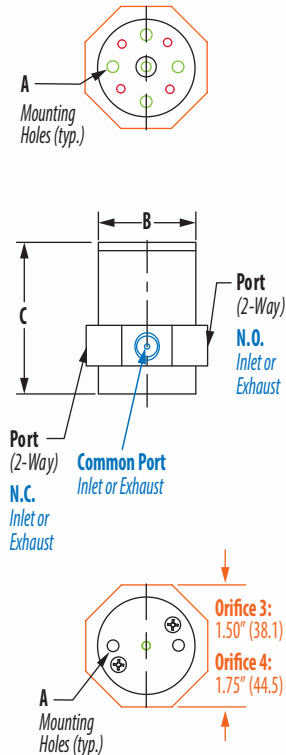- **Fast response time**
- **Proudly made in the USA**



*2-Way Normally-Closed*

*2-Way Normally-Open*

*3-Way Selector/Diverter*

## Orifice 1 & 2
### *All In-Line Versions*

**A**
*Mounting Holes (typ.)*

**B**

**C**

**Port (2-Way)**
**N.C.** *Inlet or Exhaust*

**Common Port** *Inlet or Exhaust*

**Port (2-Way)**
**N.O.** *Inlet or Exhaust*

**A**
*Mounting Holes (typ.)*

- ■ *All versions*
- ■ *3-Way only*
- ■ *Orifice 1 only*
- ■ *Orifice 2: 2-Way Normally-Closed only*
- ■ *Orifice 2: 2-Way Normally-Open & 3-Way*

## Orifice 3 & 4
### *All In-Line Versions*

**A**
*Mounting Holes (typ.)*

**B**

**C**

**Port (2-Way)**
**N.C.** *Inlet or Exhaust*

**Common Port** *Inlet or Exhaust*

**Port (2-Way)**
**N.O.** *Inlet or Exhaust*

**A**
*Mounting Holes (typ.)*

**Orifice 3:** 1.50" (38.1)
**Orifice 4:** 1.75" (44.5)

- ■ *All versions*
- ■ *3-Way only*
- ■ *Orifice 3 & 4 only*
- ■ *2-Way Normally-Closed only*
- ■ *2-Way Normally-Open & 3-Way*

## Orifice 1, 2, 3, & 4
### *All Manifold Mount Versions*

**D**

**E**

**B**

**C**

**N.O.**

**N.C.**

**Common Port**
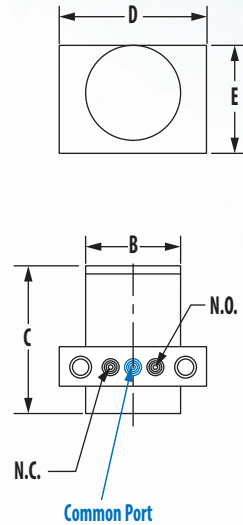
- ■ *All versions*
- ■ *3-Way Only*

## DIMENSIONS

| Orifice | A | B | C | D | E |
|---|---|---|---|---|---|
| 1 | #2-56 | 0.750" (19.1) | 1.154" to 1.162" (29.3 to 29.5) | 1.250" (25.4) | 0.875" (22.2) |
| 2 | #4-40 | 1.000" (25.4) | 1.487" to 1.492" (37.8 to 37.9) | 1.250" (31.8) | 1.125" (28.6) |
| 3 | #4-40 | 1.250" (31.8) | 1.813" to 1.863" (46.1 to 47.3) | 1.625" (41.3) | 1.375" (34.9) |
| 4 | #4-40 | 1.500" (38.1) | 2.038" to 2.088" (51.8 to 53.0) | 1.875" (47.6) | 1.625" (41.3) |

*Dimensions shown are in inches (millimeters listed in parentheses).*

*Visit clippard.com for more detailed 2D and 3D drawings.*

# ORDERING INFORMATION

☐ **N R** ☐ ☐ ☐ **-** ☐

**Unit**
| (blank) | Imperial |
| M- | Metric |

**Orifice***
| 1 | 0.040" (1.0 mm)—#10-32 ports, 6 l/min |
| 2 | 0.062" (1.6 mm)—1/4-28 UNF ports, 16 l/min |
| 3 | 0.095" (2.4 mm)—1/4-28 UNF ports, 38 l/min |
| 4 | 0.156" (4.0 mm)—1/8 NPS ports, 60 l/min |

**Function**
| -2 | 2-Way, Normally-Closed |
| O-2 | 2-Way, Normally-Open |
| -3 | 3-Way Selector/Diverter |

**Mount**
| (blank) | In-Line, Threaded |
| M | Manifold |

**Voltage**
| 12 | 12 VDC |
| 24 | 24 VDC |

*\*Flow @30 psig (2 bar)*
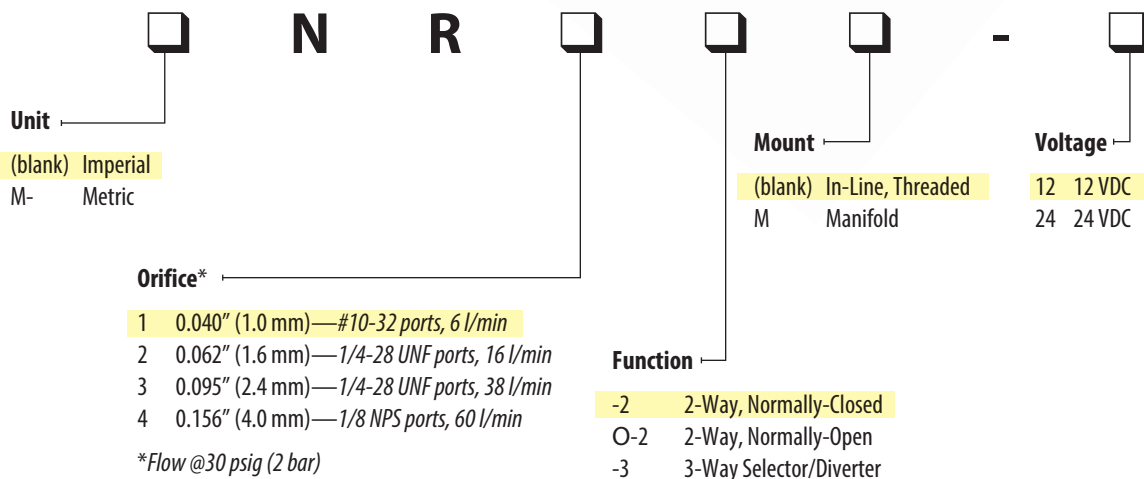
**Example Part Number:**
NR1-2-12

*For more info, scan the QR code or visit*
**clippard.com/link/niv-series**

**877-245-6247** | clippard.com