## NIV SERIES MIXING VALVES



NIV series multi-channel gradient valves feature multiple 2-way, normally-closed PTFE media isolation valves connected around a central body. This unique design provides significant reduction in internal volume with enhanced mixing capabilities. Each actuator operates independently, allowing for flow of various media to be mixed or for one media to be split into multiple streams. These multi-channel gradient mixing valves are useful for solvent selection, stream splitting, flushing, and other automated applications.

- Individually controlled flow paths
- Mix flow from various media
- Split media into multiple streams

| Connection | $18^{\prime \prime}(45 \mathrm{~cm})$ wire leads |
| :--- | :--- |
| Flow Range | 5 to $60 \mathrm{I} / \mathrm{min}$ @ 30 psig (2 bar) air |
| Function | 2-way normally-closed |
| Material, Wetted | PTFE |
| Max. Flow | $60 \mathrm{I} / \mathrm{min}$ @ 30 psig (2 bar) air |
| Medium | Air, water, gas, or corrosive fluids |
| Mount | \#4-40 (metric also available) |
| Operating Temp. Range | -20 to $158^{\circ} \mathrm{F}\left(-29\right.$ to $\left.70^{\circ} \mathrm{C}\right)$ |
| Operating Pressure | Vac. to 30 psig (2 bar) |
| Ports | $1 / 4-28$ 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-mixing |

## Multiple Inputs with a Common Output, or Multiple Outputs with a Common Input



2-, 3-, \& 4-Valve Models


> 2-, 3-, \& 4-Valve Models
> 3-\& 4-Valve Models Only
> 4-Valve Model Only


DIMENSIONS

| Orifice | \# Valves | A | B | C | D | E | F |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | 2, 3, or 4 | $\begin{aligned} & 0.750 " \\ & (19.1) \end{aligned}$ | $\begin{aligned} & 1.250 " \\ & (31.8) \end{aligned}$ | $\begin{aligned} & 1.000 " \\ & (25.4) \end{aligned}$ | $\begin{aligned} & 1.250 " \\ & (31.8) \end{aligned}$ | $\begin{aligned} & 2.670 " \\ & (67.8) \end{aligned}$ | $\begin{aligned} & 0.400^{\prime \prime} \\ & (10.2) \end{aligned}$ |
|  | 6 | $\begin{aligned} & 0.750^{\prime \prime} \\ & (19.1) \end{aligned}$ |  | $\begin{aligned} & 1.000^{\prime \prime} \\ & (25.4) \end{aligned}$ | $\begin{aligned} & 2.165 " \\ & (55.0) \end{aligned}$ | $\begin{aligned} & 3.585 " \\ & (91.1) \end{aligned}$ | $\begin{aligned} & 0.800^{\prime \prime} \\ & (20.3) \end{aligned}$ |
| 2 | 2, 3, or 4 | $\begin{aligned} & 1.000 " \\ & (25.4) \end{aligned}$ | $\begin{aligned} & 1.500 " \\ & (38.1) \end{aligned}$ | $\begin{aligned} & 1.250 " 1 \\ & (31.8) \end{aligned}$ | $\begin{aligned} & 1.500 " \\ & (38.1) \end{aligned}$ | $\begin{aligned} & 3.362 " \\ & (85.4) \end{aligned}$ | $\begin{aligned} & 0.500^{\prime \prime} \\ & (12.7) \end{aligned}$ |
|  | 6 | $\begin{aligned} & 1.000^{\prime \prime} \\ & (25.4) \end{aligned}$ | - | $\begin{aligned} & 1.250^{\prime \prime} \\ & (31.8) \end{aligned}$ | $\begin{aligned} & 2.598 " \\ & (66.0) \end{aligned}$ | $\begin{aligned} & 4.460 " \\ & (113.3) \end{aligned}$ | $\begin{aligned} & 1.155^{\prime \prime} \\ & (29.3) \end{aligned}$ |
| 3 | 2, 3, or 4 | $\begin{aligned} & 1.250 " \\ & (31.8) \end{aligned}$ | $\begin{aligned} & 1.750 " \\ & (44.5) \end{aligned}$ | $\begin{aligned} & 1.375 " \\ & (34.9) \end{aligned}$ | $\begin{aligned} & 1.750 " \\ & (44.5) \end{aligned}$ | $\begin{aligned} & 4.100 " \\ & (104.1) \end{aligned}$ | $\begin{aligned} & 0.625^{\prime \prime} \\ & (15.9) \end{aligned}$ |
|  | 6 | $\begin{aligned} & 1.250^{\prime \prime} \\ & (31.8) \end{aligned}$ | - | $\begin{aligned} & 1.375^{\prime \prime} \\ & (34.9) \end{aligned}$ | $\begin{aligned} & 3.031 " \\ & (77.0) \end{aligned}$ | $\begin{aligned} & 5.381 " \\ & (136.7) \end{aligned}$ | $\begin{aligned} & 1.250^{\prime \prime} \\ & (31.8) \end{aligned}$ |
| 4 | 2, 3, or 4 | $\begin{aligned} & 1.500 " \\ & (38.1) \end{aligned}$ | $\begin{aligned} & 2.000 " \\ & (50.8) \end{aligned}$ | $\begin{aligned} & 1.625^{\prime \prime} \\ & (41.3) \end{aligned}$ | $\begin{aligned} & 2.000 " \\ & (50.8) \end{aligned}$ | $\begin{aligned} & 4.458 " \\ & (113.2) \end{aligned}$ | $\begin{aligned} & 0.625^{\prime \prime} \\ & (15.9) \end{aligned}$ |
|  | 6 | $\begin{aligned} & 1.500^{\prime \prime} \\ & (38.1) \end{aligned}$ | - | $\begin{aligned} & 1.625^{\prime \prime} \\ & (41.3) \end{aligned}$ | $\begin{aligned} & 3.464 " \\ & (88.0) \end{aligned}$ | $\begin{gathered} 6.013 " \\ (152.7) \end{gathered}$ | $\begin{aligned} & 1.250^{\prime \prime} \\ & (31.8) \end{aligned}$ |

Dimensions shown are in inches
(millimeters listed in parentheses).
Visit clippard.com for more detailed 2D and 3D drawings.

## ORDERING INFORMATION



Example Part Number:
NR1-2-12-G2

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

