



PIV Series PEEK Media Isolation Valves



The **Clippard PIV 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 PEEK body and PTFE diaphragm, making this series ideal for use with corrosive media.

A unique feature of the PIV 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 multi-functional 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.

- Low power consumption
- Multiple Pressure Range Options
- Bidirectional
- Minimal dead volume
- All wetted areas PEEK body and PTFE diaphragm
- 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 USA. ISO 9001

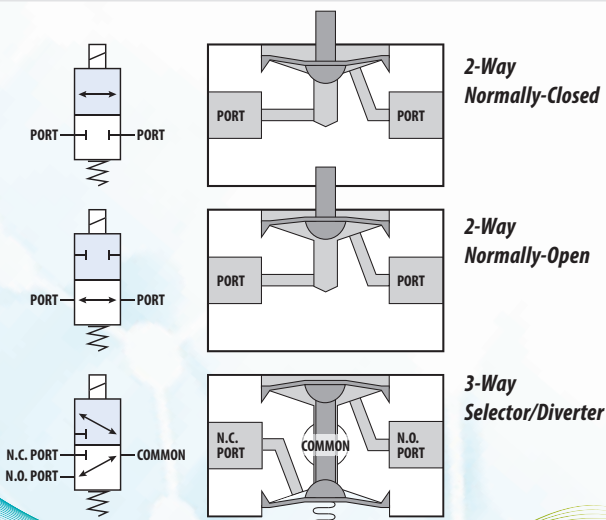
Industries and applications that commonly use these types of valves to isolate gas or liquid include: drug dispensing, laboratory equipment, analytical, chemical analysis, sampling, life science/biotech, genetic research, gas chromatography, spectrometry, DNA synthesizing, blood analyzing, printing,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

SPECIFICATIONS

Valve Function	2-Way Normally-Closed, 2-Way Normally-Open, 3-Way Selector/Diverter
Medium	Air, water, gas, or compatible fluids
Operating Temperature	158°F (70°C)
Operating Pressure	Vac. to 30 psig (2 bar) or 100 psig (6.9 bar) (additional options available*)
Flow Rate	6 to 60 l/min. air @ 30 psig
Wattage	1.0 to 7.2 watts
Response Time	5 to 20 ms typ.
Connector	18" wire leads (45 cm)
Voltage	12 or 24 VDC (additional options available*)
Ports	#10-32, 1/4-28 UNF or 1/8 NPS
Mount	#2-56, #4-40 or Manifold (0.118 thru hole)
Material, Wetted	PEEK (PTFE diaphragm and PPS body also available*)

Read more online at clippard.com/link/piv

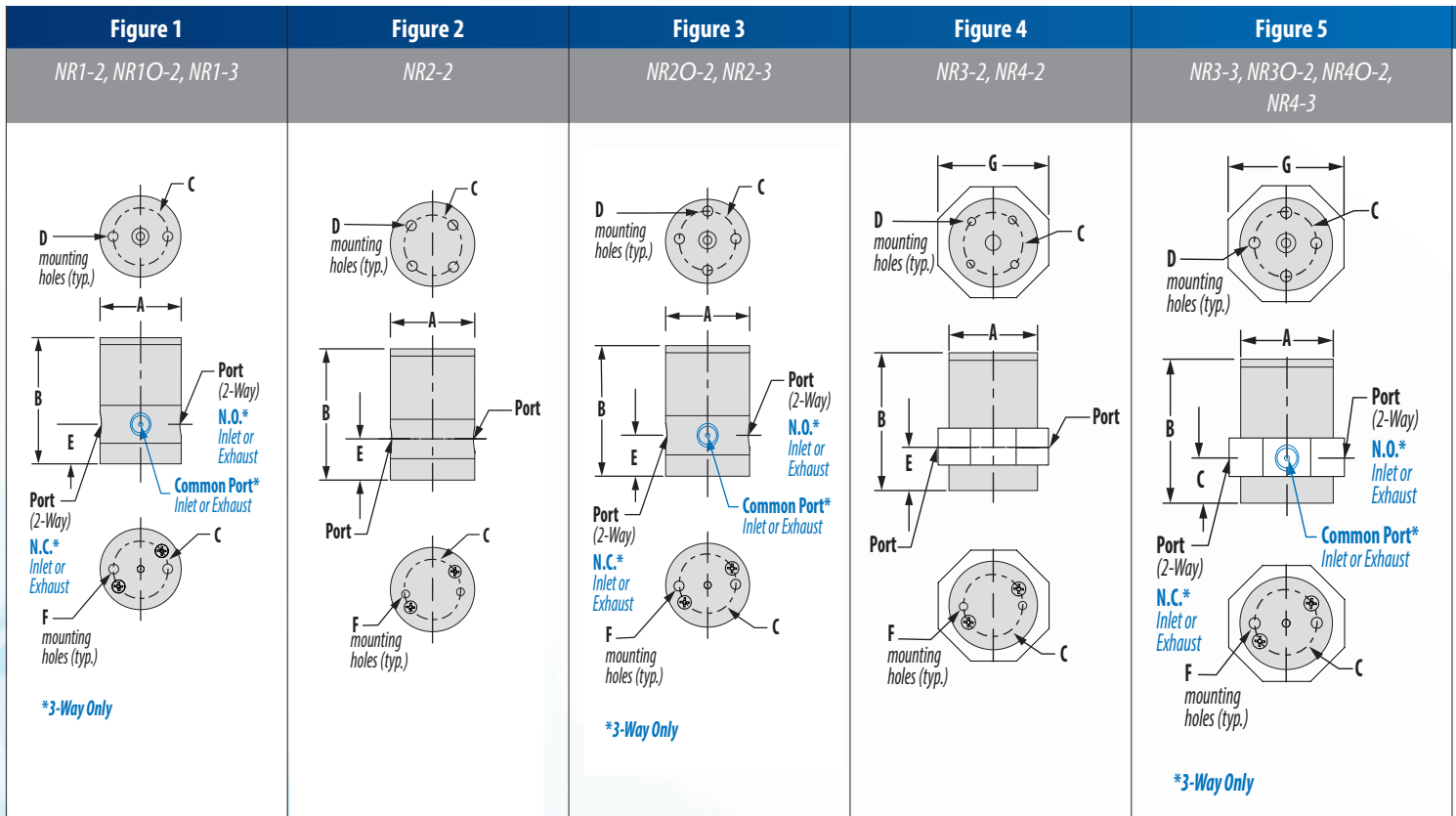
* Contact Clippard for additional information



STANDARD VALVES

Type	Orifice	Flow @ 30 psig	Ports	Fig.	Standard Valve Dimensions—See Figures 1-5, below							Part Number	
					A	B	C	D	E	F	G	12 VDC	24 VDC
2-Way, Normally-Closed	0.040"	6 l/min	#10-32	1	0.750"	1.155"	0.500"	#2-56 x 0.094" deep	0.363"	#2-56 x 0.188" deep	n/a	NR1-2-12-P/H	NR1-2-24-P/H
	0.062"	16 l/min	1/4-28	2	1.000"	1.488"	0.687"	#4-40 x 0.125" deep	0.450"	#4-40 x 0.250" deep	n/a	NR2-2-12-P/H	NR2-2-24-P/H
	0.093"	38 l/min	1/4-28	4	1.250"	1.863"	0.884"		0.500"		1.500"	NR3-2-12-P/H	NR3-2-24-P/H
	0.156"	60 l/min	1/8 NPS	4	1.500"	2.088"	1.125"	0.562"	1.750"	NR4-2-12-P/H	NR4-2-24-P/H		
2-Way, Normally-Open	0.040"	6 l/min	#10-32	1	0.750"	1.163"	0.500"	#2-56 x 0.094" deep	0.363"	#2-56 x 0.188" deep	n/a	NR1O-2-12-P/H	NR1O-2-24-P/H
	0.062"	16 l/min	1/4-28	3	1.000"	1.493"	0.687"	#4-40 x 0.125" deep	0.450"	#4-40 x 0.250" deep	n/a	NR2O-2-12-P/H	NR2O-2-24-P/H
	0.093"	38 l/min	1/4-28	5	1.250"	1.814"	0.884"		0.500"		1.500"	NR3O-2-12-P/H	NR3O-2-24-P/H
	0.156"	60 l/min	1/8 NPS	5	1.500"	2.039"	1.125"	0.562"	1.750"	NR4O-2-12-P/H	NR4O-2-24-P/H		
3-Way, Selector/Diverter	0.040"	6 l/min	#10-32	1	0.750"	1.161"	0.500"	#2-56 x 0.094" deep	0.363"	#2-56 x 0.188" deep	n/a	NR1-3-12-P/H	NR1-3-24-P/H
	0.062"	16 l/min	1/4-28	3	1.000"	1.492"	0.687"	#4-40 x 0.125" deep	0.450"	#4-40 x 0.250" deep	n/a	NR2-3-12-P/H	NR2-3-24-P/H
	0.093"	28 l/min	1/4-28	5	1.250"	1.814"	0.884"		0.500"		1.500"	NR3-3-12-P/H	NR3-3-24-P/H
	0.156"	60 l/min	1/8 NPS	5	1.500"	2.039"	1.125"	0.562"	1.750"	NR4-3-12-P/H	NR4-3-24-P/H		

STANDARD VALVE DRAWINGS



MANIFOLD VALVES

Fig.	Manifold Dimensions—See Figures 6-8, below								Part Number	
	A	B	C	D	E	F	G	H	12 VDC	24 VDC
7	0.750"	1.154"	0.362"	1.250"	0.875"	0.875"	0.188"	0.438"	NR1-2M-12-P/H	NR1-2M-24-P/H
7	1.000"	1.487"	0.450"	1.250"	1.125"	1.000"	0.250"	0.500"	NR2-2M-12-P/H	NR2-2M-24-P/H
7	1.250"	1.862"	0.500"	1.625"	1.375"	1.250"	0.313"	0.625"	NR3-2M-12-P/H	NR3-2M-24-P/H
7	1.500"	2.087"	0.563"	1.875"	1.625"	1.500"	0.375"	0.750"	NR4-2M-12-P/H	NR4-2M-24-P/H
8	0.750"	1.162"	0.362"	1.250"	0.875"	0.875"	0.188"	0.438"	NR1O-2M-12-P/H	NR1O-2M-24-P/H
8	1.000"	1.491"	0.450"	1.250"	1.125"	1.000"	0.250"	0.500"	NR2O-2M-12-P/H	NR2O-2M-24-P/H
8	1.250"	1.813"	0.500"	1.625"	1.375"	1.250"	0.313"	0.625"	NR3O-2M-12-P/H	NR3O-2M-24-P/H
8	1.500"	2.038"	0.563"	1.875"	1.625"	1.500"	0.375"	0.750"	NR4O-2M-12-P/H	NR4O-2M-24-P/H
6	0.750"	1.162"	0.362"	1.250"	0.875"	0.875"	0.188"	0.438"	NR1-3M-12-P/H	NR1-3M-24-P/H
6	1.000"	1.491"	0.450"	1.250"	1.125"	1.000"	0.250"	0.500"	NR2-3M-12-P/H	NR2-3M-24-P/H
6	1.250"	1.813"	0.500"	1.625"	1.375"	1.250"	0.313"	0.625"	NR3-3M-12-P/H	NR3-3M-24-P/H
6	1.500"	2.038"	0.563"	1.875"	1.625"	1.500"	0.375"	0.750"	NR4-3M-12-P/H	NR4-3M-24-P/H

MANIFOLD VALVE DRAWINGS

Figure 6 (3-Way)	Figure 7 (2-Way N.C.)	Figure 8 (2-Way N.O.)
NR1-3M, NR2-3M, NR3-3M, NR4-3M	NR1-2M, NR2-2M, NR3-2M, NR4-2M	NR1O-2M, NR2O-2M, NR3O-2M, NR4O-2M

ORDERING INFORMATION

Unit	Orifice - Ports - Flow @ 30 psig	Function	Mount	Voltage	Operating Pressure
Imperial	NR1 0.040" - #10-32 - 6 l/min	-2 2-Way Normally-Closed	(blank) In-Line Threaded M Manifold	-12 12 VDC -24 24 VDC	-P Vac. to 30 psig -H Vac. to 100 psig
	NR2 0.062" - 1/4-28 UNF - 16 l/min	O-2 2-Way, Normally-Open			
	NR3 0.095" - 1/4-28 UNF - 38 l/min	-3 3-Way Fully-Ported			
	NR4 0.156" - 1/8" NPS - 60 l/min				
Example Part No. NR2-2-12-P					

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
- Calculators
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