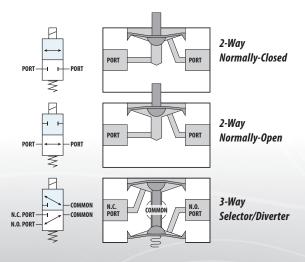


# **NIV Series Media Isolation Valves**



- · 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 9001:2008



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. Temperature Range	70°C			
Operating Pressure	Vacuum to 30 psi			
Flow	10 to 60 L/min			
Max. Pressure Range	28" Hg to 30 psi			
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 NSPC			
Mounting	#2-56, #4-40			
Wetted Materials	PTFE			
CE, RoHS Compliant				

#### CLIPPARD INSTRUMENT LABORATORY, INC.

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## **Dimensions**

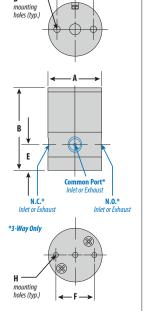
Valve	Orifice Size	Ports	Part Number	Dimensions								F:
Туре				A	В	C	D	E	F	G	Н	Fig.
2-Way N.C.	0.040	#10-32	NR1-2	0.750	1.155	0.500	#2-56 x 0.094 deep	0.363	0.500	n/a	#2-56 x 0.188 deep	1
	0.062	1/4-28	NR2-2	1.000	1.488	0.486	#4-40 x 0.125 deep	0.450	0.687	n/a	#4-40 x - 0.250 deep	2
	0.093	1/4-28	NR3-2	1.250	1.863	0.626		0.500	0.884	1.500		4
	0.156	1/8 NPSC	NR4-2	1.500	2.088	0.796		0.562	1.125	1.750		4
2-Way N.O.	0.040	#10-32	NR10-2	0.750	1.163	0.500	#2-56 x 0.094 deep	0.363	0.500	n/a	#2-56 x 0.188 deep	1
	0.062	1/4-28	NR20-2	1.000	1.493	0.486	#4-40 x 0.125 deep	0.450	0.687	n/a	#4-40 x - 0.250 deep	3
	0.093	1/4-28	NR30-2	1.250	1.814	0.884		0.500	0.884	1.500		5
	0.156	1/8 NPSC	NR40-2	1.500	2.039	1.125		0.562	1.125	1.750		5
3-Way	0.040	#10-32	NR1-3	0.750	1.161	0.500	#2-56 x 0.094 deep	0.363	0.500	n/a	#2-56 x 0.188 deep	1
	0.062	1/4-28	NR2-3	1.000	1.492	0.687	#4-40 x 0.125 deep	0.450	0.687	n/a		3
	0.093	1/4-28	NR3-3	1.250	1.814	0.884		0.500   0.884   1.500	#4-40 x 0.250 deep	5		
	0.156	1/8 NPSC	NR4-3	1.500	2.038	1.125		0.562	1.125	1.750	0.230 acep	5

## **Coil Chart**

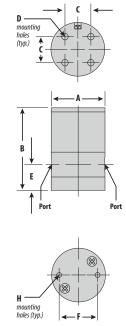
	Model	Power	Voltage	Amps
	NR1	1.0 W	12 VDC	0.08
	INVI	1.0 00	24 VDC	0.04
	NR2	1.5 W	12 VDC	0.13
		1.5 W	24 VDC	0.06
	NR3	4.2 W	12 VDC	0.40
	CAN	4.2 VV	24 VDC	0.18
	NR4	7.2 W	12 VDC	0.60
	INN4	7.2 VV	24 VDC	0.30

Unless otherwise noted, all measurements shown are in inches.

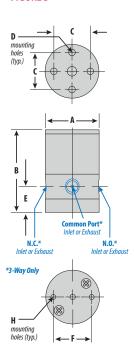
#### FIGURE 1



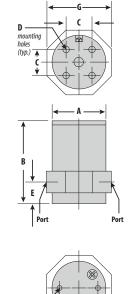
#### FIGURE 2



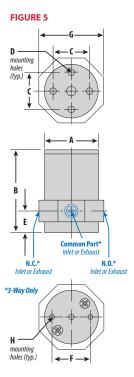
#### FIGURE 3



#### FIGURE 4



mounting holes (typ.)



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