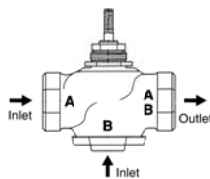




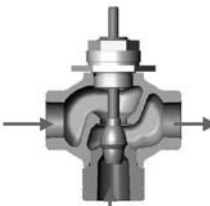
Technical Data		G3	G3...D
Service		chilled or hot water, 60% glycol	
Flow characteristic		linear	
Action		stem up - open B to AB	stem up - open B to AB
Sizes		½" to 2"	
End fitting		NPT female ends	
Materials			
Body		bronze	
Seat		bronze	
Stem		stainless steel	
Plug		brass	
Packing		spring loaded TFE	
Disc		none	
ANSI Class		ANSI 250 (up to 400 psi below 150°F)	
Leakage		ANSI III	
Media temperature			
Water		20°F to 250°F (-7°C to 120°C)	
Maximum ΔP*		A port- 87 psi (600 kPa)	35 psi (241 kPa)
Water		B port- 35 psi (241 kPa)	
Rangeability		500:1	
		*(50% or more open)	

G3...(D) 3-way Flow Patterns

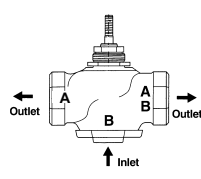
G3 3-way Mixing Valve



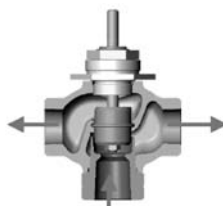
Stem Up- Open B to AB



G3...D 3-way Diverting Valve



Stem Up- Open B to AB



Note: Flow B to A travels through center of plug (as shown).

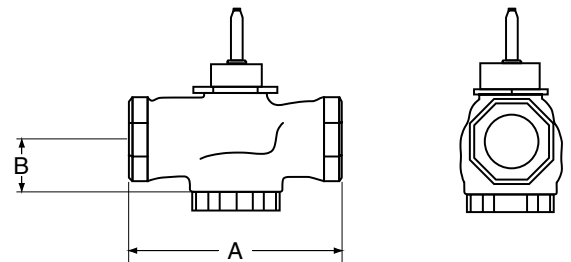
Application

This valve is typically used in Air Handling Units on heating or cooling coils and Fan Coil Unit heating or cooling coils. Some other common applications include Unit Ventilators, VAV Box reheat coils and bypass loops. This valve is suitable for use in a hydronic system with constant or variable flow.

3-way valves are available with mixing or diverting flow patterns.

Valve Nominal Size			Type	Suitable Actuators		
C _v	Inches	DN [mm]	3-way NPT	Non-Spring	Spring	
2.2	½	15	G314	LM Series	NV Series	LF Series
4.4	½	15	G315(D)			
7.5	¾	20	G320(D)	NM	NF	NVF Series
14	1	25	G325(D)			
20	1¼	32	G332(D)	AM Series	AF(X) Series	NVF Series
28	1½	40	G340(D)			
41	2	50	G350			
40	2	50	G350(D)			

Dimensions



D078-3W

Valve Body	Valve Nominal Size		Dimensions (Inches [mm])	
	Inches	DN [mm]	A	B
G314	½"	15	3.06" [78]	1.37" [35]
G315(D)	½"	15	3.06" [78]	1.37" [35]
G320(D)	¾"	20	3.62" [92]	1.68" [43]
G325(D)	1"	25	4.62" [117]	1.56" [40]
G332(D)	1¼"	32	4.62" [117]	1.62" [41]
G340(D)	1½"	40	5.37" [137]	1.62" [41]
G350(D)	2"	50	6.12" [156]	1.87" [48]

Piping

The valves should be mounted in a weather-protected area in a location that is within the ambient limits of the actuator. Allow sufficient room for valve with actuator and for service. For the NV Series, allow 6" for cover removal and 12" for complete actuator removal. The G2(S) and G3(D) preferred mounting position of the valve is with the valve stem vertical above the valve body, for maximum life. However, the assemblies can be mounted with the valve stem vertical or horizontal in relation to the pipe. The actuators should never be mounted underneath the valve, as condensation can build up and result in a failure of the actuators. Do not reverse flow direction.

NV(D)24-3 US Actuators, On/Off, Floating Point



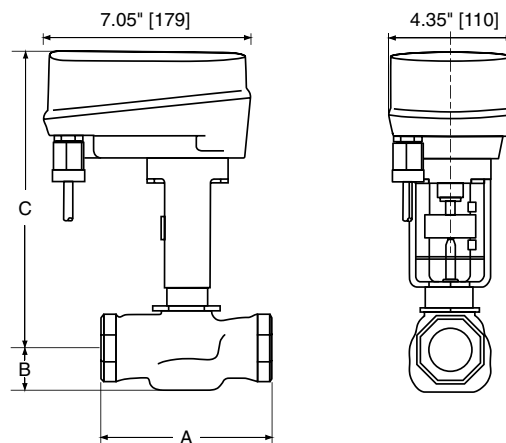
Models

NV24-3 US
NVD24-3 US

Technical Data	
Power supply	24 VAC ± 20% 50/60 Hz 24 VDC ± 10%
Nominal Voltage Range	19.2...28.8 VAC, 21.6...28.8 VDC
Power consumption	3 W
Transformer sizing	5 VA (Class 2 power source)
Electrical connection	□ 3 ft [1m] 18 GA plenum rated cable ½" conduit connector
Overload protection	electronic throughout stroke
Control	On/Off, Floating Point
Maximum stroke	¾" [20mm]
Force	
NV24-3 US	225 lbf [1000 N]
NVD24-3 US	90 lbf [400 N]
Position indication	stroke indicator on bracket
Manual override	3/16" hex, 5mm hex or phillips screwdriver
Running time	20mm/150 seconds, independent of load
Humidity	5 to 95% RH non-condensing
Ambient temperature	32°F to 122°F [0°C to 50°C]
Storage temperature	20°F to 250°F [-7°C to 120°C]
Housing	NEMA 2/IP54 with cable entry down
Housing material	UL94-5V (flammability rating)
Agency listings†	CE, UL 60730-1, CSA C22.2 No. 139 certified
EMC	CE acc. to 89/336/EEC
Mode of operation	Type 1 to UL 60730-1
Noise level	<52 dB(A)
Quality standard	ISO 9001

Dimensions with G2... Series 2-Way Valve

Assembly using UNV-001 Bracket

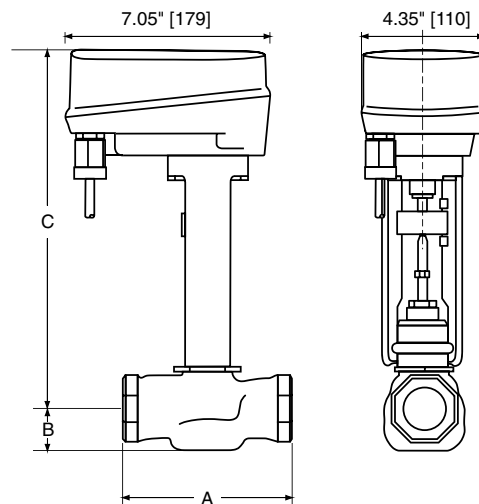


D031

Valve Body	Valve Nominal Size		Dimensions (Inches [mm])		
	Inches	DN [mm]	A	B	C
G2	1/2"	15	3.00" [76]	1.06" [27]	9.75" [248]
G2	3/4"	20	3.62" [92]	1.06" [27]	9.75" [248]
G2	1"	25	4.62" [117]	1.12" [29]	10.43" [265]
G2	1-1/4"	32	4.62" [117]	1.37" [35]	10.43" [265]
G2	1-1/2"	40	5.37" [137]	1.50" [38]	10.50" [267]
G2	2"	50	6.12" [156]	1.56" [40]	10.81" [275]

Dimensions with G2...S Series 2-Way Valve

Assembly using UNV-035 Bracket (Bracket is 1.563" longer than UNV-001)

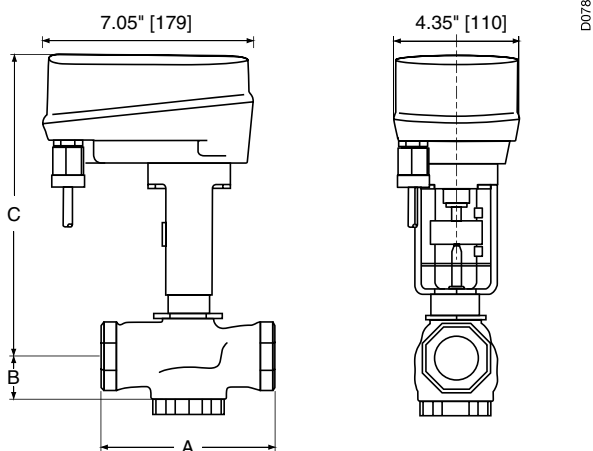


D056

Valve Body	Valve Nominal Size		Dimensions (Inches [mm])		
	Inches	DN [mm]	A	B	C
G2S	1/2"	15	3.00" [76]	1.06" [27]	11.31" [287]
G2S	3/4"	20	3.62" [92]	1.06" [27]	11.31" [287]
G2S	1"	25	4.62" [117]	1.12" [29]	12.00" [305]
G2S	1-1/4"	32	4.62" [117]	1.37" [35]	12.00" [305]
G2S	1-1/2"	40	5.37" [137]	1.50" [38]	12.06" [306]
G2S	2"	50	6.12" [156]	1.56" [40]	12.37" [314]

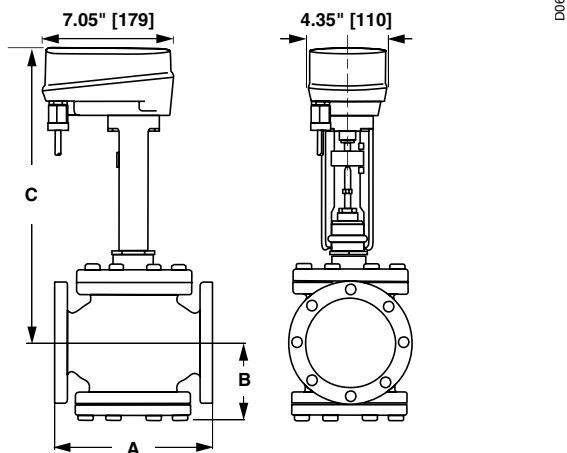
M40026 - 07/10 - Subject to change. © Belimo Aircontrols (USA), Inc.

Dimensions with G3...(D) Series 3-Way Valve



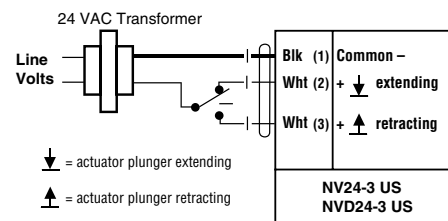
Valve Body	Valve Nominal Size		Dimensions (Inches [mm])		
	Inches	DN [mm]	A	B	C
G3(D)	1/2"	15	3.00" [76]	1.37" [35]	9.75" [248]
G3(D)	1/2"	15	3.00" [76]	1.37" [35]	9.75" [248]
G3(D)	3/4"	20	3.62" [92]	1.68" [43]	9.75" [248]
G3(D)	1"	25	4.62" [117]	1.56" [40]	9.81" [249]
G3(D)	1-1/4"	32	4.62" [117]	1.62" [41]	10.06" [256]
G3(D)	1-1/2"	40	5.37" [137]	1.62" [41]	9.18" [234]
G3(D)	2"	50	6.12" [156]	1.87" [48]	9.25" [235]

Dimensions with G6...C ANSI 125 Series 2-Way Valve



Valve Body	Valve Nominal Size		Dimensions (Inches [mm])		
	Inches	DN [mm]	A	B	C
G6C ANSI 125	2-1/2"	65	9.00" [229]	4.75" [120]	15.00" [381]
G6C ANSI 125	3"	80	10.00" [254]	5.37" [137]	15.43" [392]

Wiring Diagrams



On/Off or Floating Point Control

	Non-Spring Return						Spring Return					
	NVD	NV	NVG	LM	NM	AM	NVFD	NVF	LF	NF	AF	AFX
2-way												
G212(S)	250			250			250		250			
G213(S)	250			250			250		250			
G214(S)	250			250			250		250			
G215(S)	250			250			250		250			
G219(S)	250			250			250		185			
G220(S)	250			250			250		185			
G224(S)		250			250			207		250		
G225(S)		250			250			207		250		
G232(S)		162			158			130		158		
G240(S)		110	160			230		88			169	230
G250(S)		58	190			127		47			93	127
3-way Mixing												
G314	250			250			250		250			
G315	250			250			250		250			
G320	250			250			250		250			
G325		250			168			207		250		
G332		162			105			130		158		
G340		110				169		88			169	230
G350		58				93		47			93	127
3-way Diverting												
G315D	250			250			250		250			
G320D	250			250			250		250			
G325D	250				250		250			250		
G332D		250			250			250		250		
G340D		250				250		250			250	250
G350D		250				250		250			250	250