



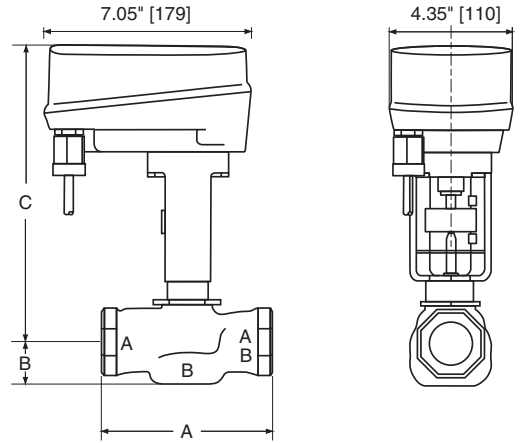
Models

NVF24-MFT US	Spring Up
NVF24-MFT-E US	Spring Down
NVFD24-MFT US	Spring Up
NVFD24-MFT-E US	Spring Down

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	5.5 W
Transformer sizing	10 VA (Class 2 power source)
Electrical connection	3 ft, 18 GA plenum rated cable ½" conduit connector
Overload protection	electronic throughout stroke
Control Signal Y	2 to 10 VDC (V-10001 default), PWM available
Operating range	2 to 10 VDC 4 to 20 mA (w/500 Ω, ¼ W resistor) ZG-R01
Input impedance	100k Ω for 2 to 10 VDC (0.1 mA) 500 Ω for 4 to 20 mA 1500 Ω for PWM, On/Off and Floating Point
Operating range	2 to 10 VDC
Maximum stroke	¾" [20mm]
Plunger	NVF...24-MFT US: spring up NVF...24-MFT-E US: spring down
Force	NVFD24-MFT(-E) US: 90 lpf [400 N] NVF24-MFT(-E) US: 180 lpf [800 N]
Position indication	stroke indicator on bracket
Manual override	3/16" hex, 5mm hex or phillips screwdriver
Running time	motor: 150 seconds, independent of load and stroke spring: 30 seconds at ¾" [20mm] stroke
Humidity	5 to 95% RH non-condensing
Ambient temperature	32°F to 122°F [0°C to 50°C]
Storage temperature	-40°F to 176°F [-40°C to 80°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
Software	Class A to UL 60730-1
Mode of operation	Type 1 to UL 60730-1
Noise level	<35 dB(A)
Quality standard	ISO 9001

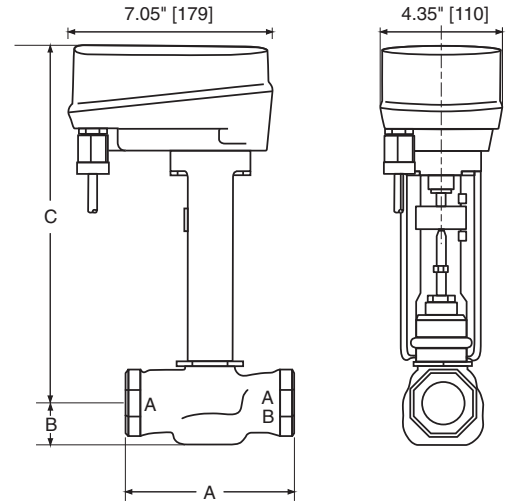
Dimensions with G2... Series 2-Way Valve Assembly using UNV-001 Bracket



D081

Valve Body	Valve Nominal Size		Dimensions (Inches [mm])		
	Inches	DN [mm]	A	B	C
G212(S)-G215(S)	½"	15	3.06" [78]	1.06" [27]	9.75" [248]
G219(S)-G220(S)	¾"	20	3.62" [92]	1.06" [27]	9.75" [248]
G224(S)-G225(S)	1"	25	4.62" [117]	1.12" [29]	10.43" [265]
G232(S)	1¼"	32	4.62" [117]	1.37" [35]	10.43" [265]
G240(S)	1½"	40	5.37" [137]	1.50" [38]	10.50" [267]
G250(S)	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)

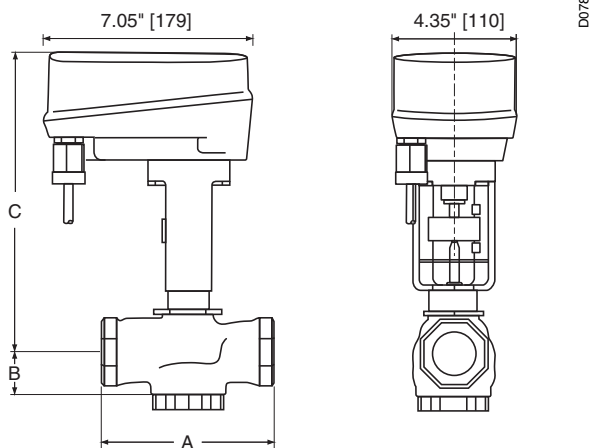


D086

Valve Body	Valve Nominal Size		Dimensions (Inches [mm])		
	Inches	DN [mm]	A	B	C
G212(S)-G215(S)	½"	15	3.06" [78]	1.06" [27]	11.31" [287]
G219(S)-G220(S)	¾"	20	3.62" [92]	1.06" [27]	11.31" [287]
G224(S)-G225(S)	1"	25	4.62" [117]	1.12" [29]	12.00" [305]
G232(S)	1¼"	32	4.62" [117]	1.37" [35]	12.00" [305]
G240(S)	1½"	40	5.37" [137]	1.50" [38]	12.06" [306]
G250(S)	2"	50	6.12" [156]	1.56" [40]	12.37" [314]

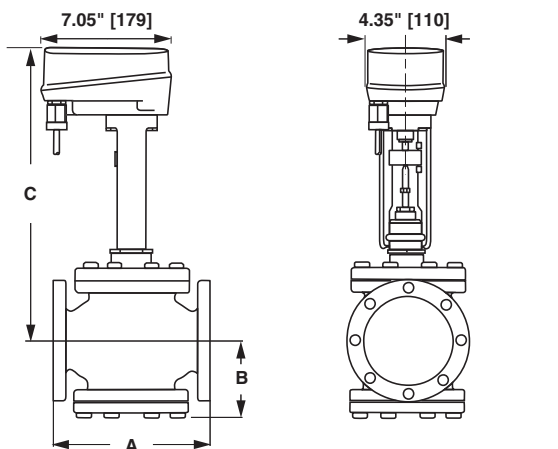
K20938 - 09/08 - Subject to change. © Belimo Aircontrols (USA), Inc.

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



Valve Body	Valve Nominal Size		Dimensions (Inches [mm])		
	Inches	DN [mm]	A	B	C
G314	1/2"	15	3.06" [78]	1.37" [35]	9.75" [248]
G315(D)	1/2"	15	3.06" [78]	1.37" [35]	9.75" [248]
G320(D)	3/4"	20	3.62" [92]	1.68" [43]	9.75" [248]
G325(D)	1"	25	4.62" [117]	1.56" [40]	9.81" [249]
G332(D)	1 1/4"	32	4.62" [117]	1.62" [41]	10.06 [256]
G340(D)	1 1/2"	40	5.37" [137]	1.62" [41]	9.18" [234]
G350(D)	2"	50	6.12" [156]	1.87" [48]	9.25" [235]

Dimensions with G6...C(S) Series 2-Way Valve with NVF24-MFT(-E) US

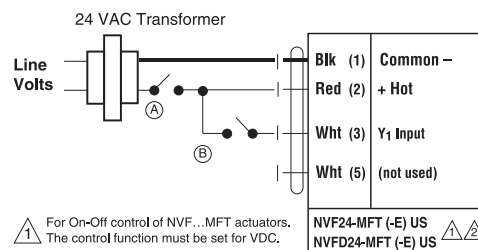


Valve Body	Valve Nominal Size		Dimensions (Inches [mm])		
	Inches	DN [mm]	A	B	C
G665C(S)	2 1/2"	[65]	9.00" [229]	4.75" [120]	15.00" [381]
G680C(S)	3"	[80]	10.00" [254]	5.37" [137]	15.43" [392]
G665LCS	2 1/2"	[65]	9.00" [229]	4.75" [120]	15.00" [381]
G680LCS	3"	[80]	10.00" [254]	5.37" [137]	15.43" [392]

Piping

The valve 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. Allow 6" for cover removal and 12" for complete actuator removal. The assembly can be mounted with the actuator 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.

Wiring Diagrams



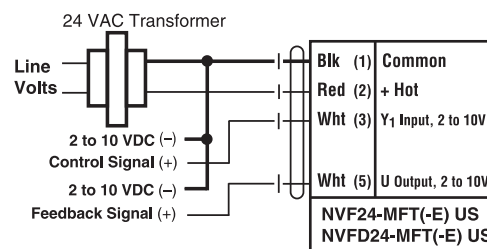
1 For On-Off control of NVF...MFT actuators. The control function must be set for VDC.

2 V-40... configurations do not require programming.

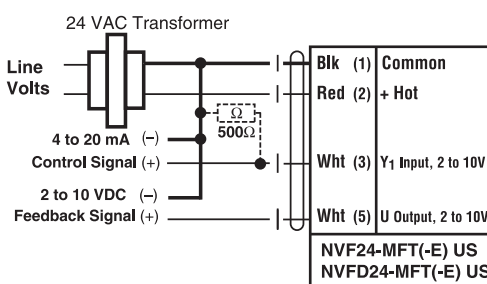
	Actuator		Control Switch Location	Correct LED Indication
	"Open" (Switch Selectable)	"Closed" (Switch Selectable)		
OFF/ON Drive "open" Spring "closed"	150 sec. (MFT selectable)	30 sec. Spring return	(A)	Flashing Red
OFF/ON Drive "open" Drive "closed"	150 sec. (MFT selectable)	150 sec. (MFT selectable)	(B)	Steady Green

If the switch location "A" is selected, the switch in location "B" is not required. If the switch location "B" is selected, the switch in location "A" is not required.

On/Off control



2 to 10 VDC



4 to 20 mA

Spring Return Actuators Model Designation

