G240B-N, 2-Way, Globe Valve, Bronze Trim

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 re-heat coils and bypass loops. This valve is suitable for use in hydronic systems with variable flow. Bronze and stainless steel trim valves can be used for steam applications, depending on actuator and close-off combinations.

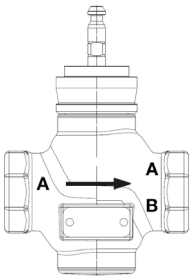
Suitable Actuators

	Non-Spring	Spring	Electronic fail-safe
G240B-N	LVB(X)	NF	LVKB(X)

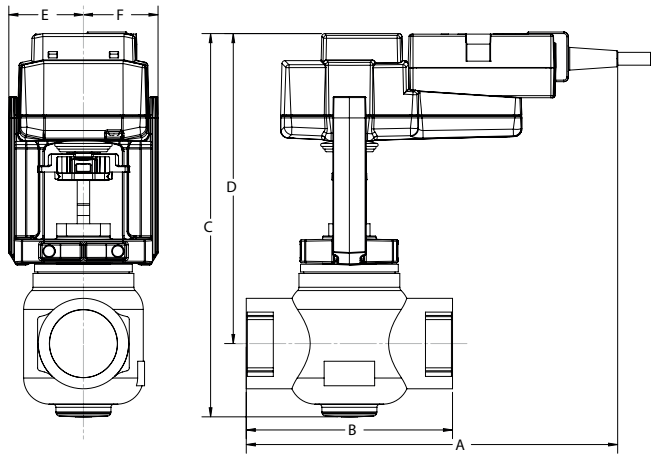
Technical Data

Media	chilled or hot water, up to 60% glycol, steam
Flow characteristic	modified equal percentage
Controllable flow range	stem up - open A – AB
Valve Size [mm]	1.5” [40]
Pipe connection	NPT female ends
Housing	Bronze
Stem	stainless steel
Stem seal	EPDM O-ring
Seat	Bronze
Closing element	brass
Body Pressure Rating	ANSI Class 250, up to 400 psi below 150°F
ANSI Class	250
Maximum Inlet Pressure (Steam)	35 psi [241 kPa]
Max Differential Pressure (Steam)	20 psi [103 kPa]
Rangeability Sv	100:1
Cv	28
Weight	5.7 lb [2.6 kg]
Media Temp Range (water)	20...280°F [-7...138°C]
Leakage rate	ANSI Class VI
Maintenance	repack kits available

Flow Pattern



Dimensions (Inches [mm])



LV

A	B	C	D	E	F
9.6” [244]	5.3” [135]	9.9” [252]	8.5” [216]	1.9” [48]	

Safety Notes

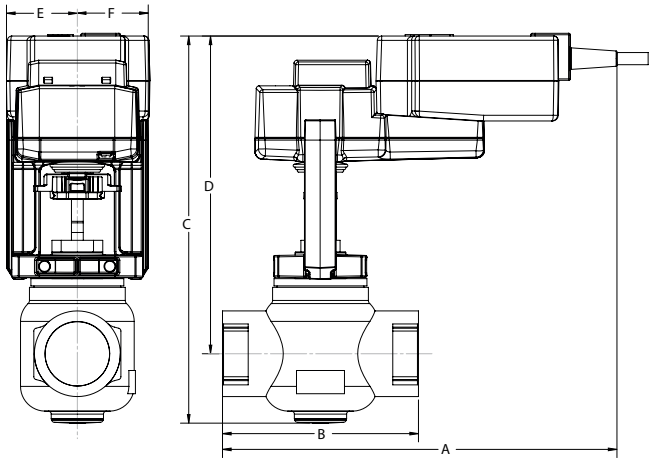
⚠ WARNING: For Belimo Products sold in California, these Products do or may contain chemicals which are known to the State of California to cause cancer and or birth defects or other reproductive harms. For more information see www.p65warnings.ca.gov.

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. The G2 and G3 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.

G240B-N, 2-Way, Globe Valve, Bronze Trim

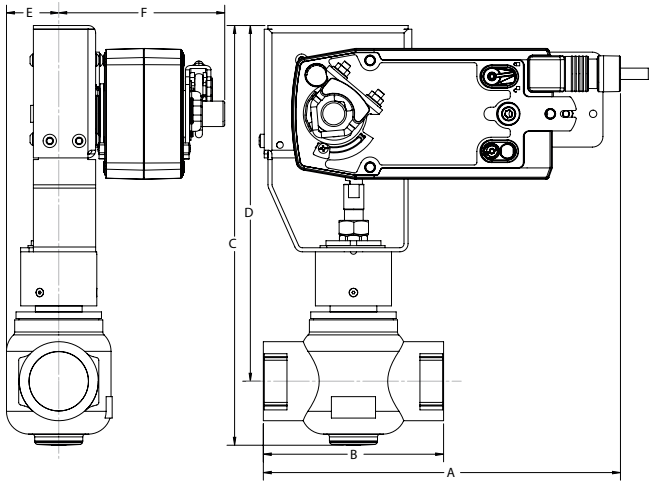
Dimensions (Inches [mm])



LVK

A	B	C	D	E	F
10.7” [273]	5.3” [135]	10.5” [267]	8.6” [218]	1.9” [48]	

Dimensions (Inches [mm])



NF

A	B	C	D	E	F
10.5” [267]	5.3” [135]	12.4” [314]	10.5” [267]	1.5” [39]	4.9” [125]

NFBUP-X1

On/Off, Spring Return, 24 to 240 VAC

Technical Data	
Power Supply	24...240 VAC, -20% / +10%, 50/60 Hz, 24...125 VDC, ±10%
Power consumption in operation	6 W
Power consumption in rest position	2.5 W
Transformer sizing	6 VA @ 24 VAC (class 2 power source), 6.5 VA @ 120 VAC, 9.5 VA @ 240 VAC
Electrical Connection	18 GA appliance cable, 3 ft [1 m], with 1/2" conduit connector
Overload Protection	electronic throughout 0° to 95° rotation
Angle of rotation	95°,
Torque motor	90 in-lb [10 Nm]
Direction of rotation motor	reversible with CW/CCW mounting
Direction of motion fail-safe	reversible with CW/CCW mounting
Position indication	Mechanical
Manual override	5 mm hex crank (3/16" Allen), supplied
Running Time (Motor)	<75 s
Running time fail-safe	<20 s @ -4...122°F [-20...50°C], <60 s @ -22°F [-30°C]
Ambient humidity	max. 95% r.H., non-condensing
Ambient temperature	-22...122°F [-30...50°C]
Storage temperature	-40...176°F [-40...80°C]
Degree of Protection	IP54, NEMA 2, UL Enclosure Type 2
Housing material	Galvanized steel and plastic housing
Agency Listing	cULus acc. to UL60730-1A/-2-14, CAN/CSA E60730-1:02, CE acc. to 2004/108/EC and 2006/95/EC
Noise level, motor	50 dB(A)
Noise level, fail-safe	62 dB(A)
Maintenance	maintenance-free
Quality Standard	ISO 9001
Weight	4.2 lb [1.9 kg]

†Rated Impulse Voltage 800V, Type of action 1.AA, Control Pollution Degree 3

Safety Notes

⚠ WARNING: For Belimo Products sold in California, these Products do or may contain chemicals which are known to the State of California to cause cancer and or birth defects or other reproductive harms. For more information see www.p65warnings.ca.gov.

Wiring Diagrams

⚠ WARNING! LIVE ELECTRICAL COMPONENTS!

During installation, testing, servicing and troubleshooting of this product, it may be necessary to work with live electrical components. Have a qualified licensed electrician or other individual who has been properly trained in handling live electrical components perform these tasks. Failure to follow all electrical safety precautions when exposed to live electrical components could result in death or serious injury.

INSTALLATION NOTES

(A) Actuators with appliance cables are numbered.

(UP) Universal Power Supply (UP) models can be supplied with 24 VAC up to 240 VAC, or 24 VDC up to 125 VDC.

(1) Provide overload protection and disconnect as required.

◆ Meets cULus requirements without the need of an electrical ground connection.