

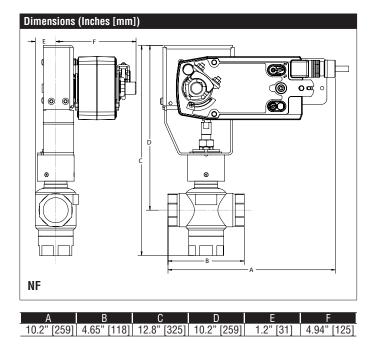
# G332B-M, 3-Way, Globe Valve, Bronze Trim, Mixing/Diverting



#### 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 system with constant or variable flow. These 3-way valves can be used for both Mixing and Diverting depending on the piping configuration.

Suitable Actuators						
	Non-Spring	Spring	Electronic Fail-Safe			
G332B-M	SVB(X)	NFB(X)	SVKB(X)			



### Piping

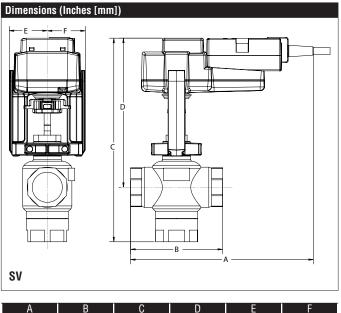
The valves should be mounted in a weather-protected area in a location that is within the ambient limits of the actuator. Allow sufficient room for valve with actuator and for service. The G2 and G3 preferred mounting position of the valve is with the valve stem vertical above the valve body, for maximum 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.

Technical Data			
Service	chilled, hot water, up to 60% glycol		
Flow Characteristic	modified equal percentage, linear B to AB		
Controllable Flow Range	stem up - open B to AB		
Size [mm]	1.25" [32]		
End Fitting	NPT female ends		
Body	bronze		
Stem	stainless steel		
Stem Packing	EPDM O-ring		
Seat	bronze		
Plug	brass		
Body Pressure Rating [psi]	ANSI 250		
ANSI Class	ANSI 250 (up to 400 psi below 150°F)		
Media Temperature Range	20°F to 280°F [-7°C to 138°C]		
(Water)			
Max Differential Pressure (Water)	35 psi (241 kPa)		
Rangeability	A-port 100:1, B-port 50:1		
Cv	20		
Leakage	ANSI Class VI		
Servicing	repack kits available		
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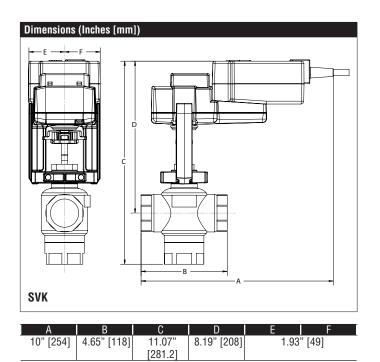
# Flow Pattern



# G332B-M, 3-Way, Globe Valve, Bronze Trim, Mixing/Diverting



A	В	C	D D	E	F
9.2" [234]	4.65" [118]	10.3" [262]	8.5" [216]	1.93	" [49]



# NFBUP-S-X1 On/Off, Spring Return, 24 to 240 VAC





Technical Data			
Power Supply	24240 VAC, -20% / +10%, 50/60 Hz,		
	24125 VDC, ±10%		
Power Consumption Running	6 W		
Power Consumption Holding	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	(2) 3ft [1m], 18 GA appliance cables with		
	1/2" conduit connectors		
Overload Protection	electronic throughout 0° to 95° rotation		
Angle of Rotation	95°,		
Torque motor	Min. 90 in-lbs [10 Nm]		
Direction of Rotation (Motor)	reversible with CW/CCW mounting		
Direction of Rotation (Fail-Safe)	reversible with CW/CCW mounting		
Position Indication	visual indicator, 0° to 95° (0° is full spring		
	return position)		
Manual Override	5 mm hex crank (3/16" Allen), supplied		
Running Time (Motor)	<75 sec		
Running Time (Fail-Safe)	<20 sec @ -4°F to 122°F [-20°C to 50°C],		
	<60 sec @ -49°F [-45°C]		
Ambient Humidity	max. 95% RH non-condensing		
Ambient Temperature Range	-22°F to 122°F [-30°C to 50°C]		
Storage Temperature Range	-40°F to 176°F [-40°C to 80°C]		
Housing	NEMA 2, IP54, UL Enclosure Type 2		
Agency Listings†	UL 873 listed, CSA C22.2 No. 24 certified		
Noise Level (Motor)	<50 dB (A)		
Noise Level (Fail-Safe)	<62 dB (A)		
Servicing	maintenance free		
Quality Standard	ISO 9001		
Weight	4.4 lb [2 kg]		
Auxiliary switch	2 x SPDT, 3A resistive (0.5A inductive) @		
5	250 VAC, one set at 10°, one adjustable 10°		
	to 90°		

†Rated Impulse Voltage 4kV, Type of Action 1.AA.B, Control Pollution Degree 3.



#### Wiring Diagrams

## 🔀 INSTALLATION NOTES

Actuators with appliance cables are numbered.

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

Provide overload protection and disconnect as required.

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interlock control, fan startup, etc.
Apply only AC line voltage or only UL-Class 2 voltage to the terminals of
auxiliary switches. Mixed or combined operation of line voltage/safety
extra low voltage is not allowed.

Two built-in auxiliary switches (2x SPDT), for end position indication,

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

## 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.

