

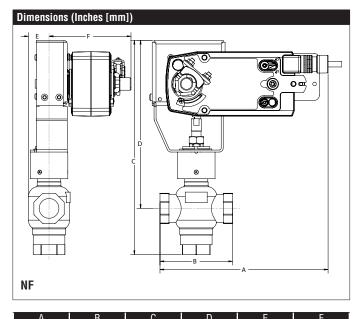
# G325B-L, 3-Way, Globe Valve, Bronze Trim, Mixing/Diverting



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	
G325B-L	SVB(X)	NFB(X)	SVKB(X)	

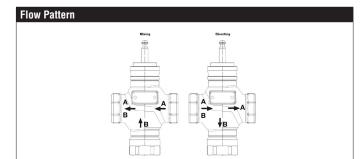


4.39" [112] 12.8" [325] 10.2" [259] 10.2" [259] 4 94" [125] 1 2" [31]

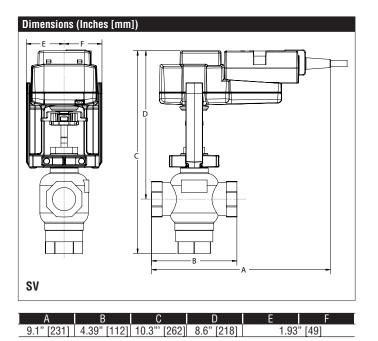
#### Piping

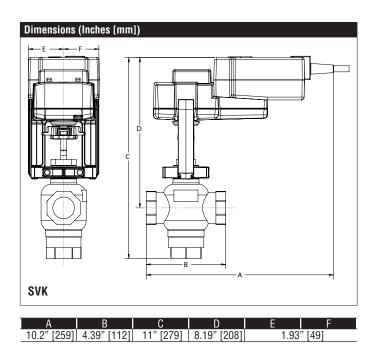
The valves should be mounted in a weather-protected area in a location that is within the ambient limits of the actuator. Allow sufficient room for valve with actuator and for service. The G2 and G3 preferred mounting position of the valve is with the valve stem vertical above the valve body, for maximum 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 DataServicechilled, hot water, up to 60% glycolFlow Characteristicmodified equal percentage, linear B to ABControllable Flow Rangestem up - open B to ABSize [mm]1" [25]End FittingNPT female endsBodybronzeStemstainless steelStem PackingEPDM O-ringSeatbronzePlugbrassBody Pressure Rating [psi]ANSI 250ANSI ClassANSI 250 (up to 400 psi below 150°F)Media Temperature Range20°F to 280°F [-7°C to 138°C](Water)35 psi (241 kPa)RangeabilityA-port 100:1, B-port 50:1Cv14LeakageANSI Class VI	Tested at Date	
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Stemstainless steelStem PackingEPDM 0-ringSeatbronzePlugbrassBody Pressure Rating [psi]ANSI 250ANSI ClassANSI 250 (up to 400 psi below 150°F)Media Temperature Range (Water)20°F to 280°F [-7°C to 138°C]Max Differential Pressure (Water)35 psi (241 kPa)RangeabilityA-port 100:1, B-port 50:1Cv14	End Fitting	NPT female ends
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Seat bronze   Plug brass   Body Pressure Rating [psi] ANSI 250   ANSI Class ANSI 250 (up to 400 psi below 150°F)   Media Temperature Range (Water) 20°F to 280°F [-7°C to 138°C]   Max Differential Pressure (Water) 35 psi (241 kPa)   Rangeability A-port 100:1, B-port 50:1   Cv 14	Stem	stainless steel
Plug brass   Body Pressure Rating [psi] ANSI 250   ANSI Class ANSI 250 (up to 400 psi below 150°F)   Media Temperature Range (Water) 20°F to 280°F [-7°C to 138°C]   Max Differential Pressure (Water) 35 psi (241 kPa)   Rangeability A-port 100:1, B-port 50:1   Cv 14	Stem Packing	EPDM O-ring
Body Pressure Rating [psi]ANSI 250ANSI ClassANSI 250 (up to 400 psi below 150°F)Media Temperature Range (Water)20°F to 280°F [-7°C to 138°C]Max Differential Pressure (Water)35 psi (241 kPa)RangeabilityA-port 100:1, B-port 50:1Cv14	Seat	bronze
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(Water) 35 psi (241 kPa)   Rangeability A-port 100:1, B-port 50:1   Cv 14	ANSI Class	ANSI 250 (up to 400 psi below 150°F)
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RangeabilityA-port 100:1, B-port 50:1Cv14	(Water)	
Cv 14	Max Differential Pressure (Water)	35 psi (241 kPa)
	Rangeability	A-port 100:1, B-port 50:1
Leakage ANSI Class VI	Cv	14
	Leakage	ANSI Class VI
Servicing repack kits available	Servicing	repack kits available













Technical Data		
Power Supply	24 VAC, ±20%, 50/60 Hz, 24 VDC, -10% /	
	+20%	
Power Consumption Running	3.5 W	
Power Consumption Holding	2.5 W	
Transformer Sizing	6 VA (class 2 power source)	
Electrical Connection	3ft [1m], 18 GA appliance cable with 1/2" conduit connector	
Overload Protection	electronic throughout 0° to 95° rotation	
Operating Range Y	2 to 10 VDC, 4 to 20 mA w/ ZG-R01 (500 Ω, 1/4 W resistor)	
Feedback Output U	2 to 10 VDC, 0.5 mA max	
Angle of Rotation	95°,	
Torque motor	Min. 90 in-lbs [10 Nm]	
Direction of Rotation (Motor)	reversible with built-in switch	
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)	95 sec	
Running Time (Fail-Safe)	<20 sec @ -4°F to 122°F [-20°C to 50°C],	
	<60 sec @ -22°F [-30°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	
Housing Material	zinc coated metal and plastic casing	
Agency Listings†	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)	
Servicing	maintenance free	
Quality Standard	ISO 9001	
Weight	4.2 lb [1.9 kg]	
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†Rated Impulse Voltage 800V, Type of Action 1.AA.B, Control Pollution Degree 3.



### Wiring Diagrams

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# 🔀 INSTALLATION NOTES

A Actuators with appliance cables are numbered.

Provide overload protection and disconnect as required.

Actuators may also be powered by 24 VDC.

Only connect common to negative (-) leg of control circuits.

A 500  $\Omega$  resistor (ZG-R01) converts the 4 to 20 mA control signal to 2 to 10 VDC.

Actuators may be connected in parallel if not mechanically linked. Power consumption and input impedance must be observed.

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.

