

G350B-N, 3-Way, Globe Valve, Bronze Trim, Mixing/Diverting

chilled, hot water, up to 60% glycol

stem up - open B to AB

NPT female ends

stainless steel

EPDM O-ring

2" [50]

bronze

bronze

ANSI 250

35 psi (241 kPa)

ANSI Class VI

brass

41

modified equal percentage, linear B to AB

ANSI 250 (up to 400 psi below 150°F)

20°F to 280°F [-7°C to 138°C]

A-port 100:1, B-port 50:1



Technical Data Service

Size [mm]

End Fitting

Stem Packing

ANSI Class

Rangeability

(Water)

Cv

Body

Stem

Seat

Plug

Flow Characteristic

Controllable Flow Range

Body Pressure Rating [psi]

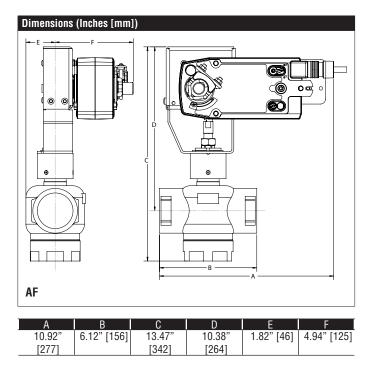
Media Temperature Range

Max Differential Pressure (Water)

Application

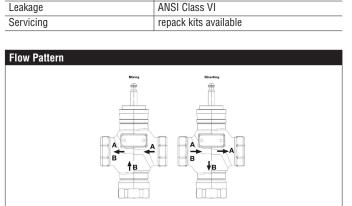
This valve is typically used in Air handling units on heating or cooling coils, and fan coil unit heating or cooling coils. Some other common applications include Unit Ventilators, VAV box re-heat coils and bypass loops. This valve is suitable for use in hydronic system with constant or variable flow. 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			
G35	0B-N	SVB(X)	AFB(X)	SVKB(X)			

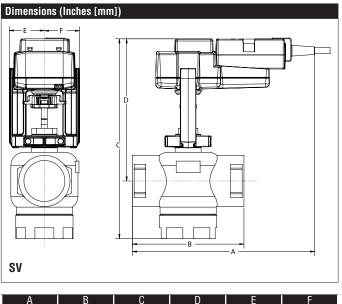


Piping

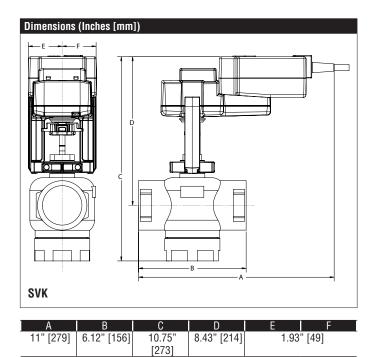
The valves should be mounted in a weather-protected area in a location that is within the ambient limits of the actuator. Allow sufficient room for valve with actuator and for service. The G2 and G3 preferred mounting position of the valve is with the valve stem vertical above the valve body, for maximum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







A	В	C	D	E	F
10.2" [259]	6.12" [156]	10.90" [277]	7.81" [198]	1.93	" [49]







Technical Data			
Power Supply	24 VAC ± 20%, 50/60 Hz, 24 VDC ± 10%		
Power Consumption Running	3 W		
Power Consumption Holding	2 W		
Transformer Sizing	7 VA (class 2 power source)		
Electrical Connection	3 ft, 18 GA plenum rated cable with 1/2"		
	conduit connector protected NEMA 2 (IP54)		
Overload Protection	electronic throughout full stroke		
Electrical Protection	actuators are double insulated		
Operating Range Y	2 to 10 VDC, 4 to 20 mA w/ ZG-R01 (500 Ω, 1/4 W resistor)		
Input Impedance	100 k Ω for 2 to 10 VDC (0.1 mA), 500 Ω for		
	4 to 20 mA		
Feedback Output U	2 to 10 VDC		
Stroke	0.6" [15 mm] LV, 3/4" [20 mm] SV		
Linear Force	337 lbf [1500 N force]		
Direction of Rotation (Motor)	reversible with switch		
Direction of Rotation (Fail-Safe)	reversible with switch		
Position Indication	stroke indicator on bracket		
Manual Override	4 mm hex crank (shipped w/actuator)		
Running Time (Motor)	90 sec, constant independent of load		
Running Time (Fail-Safe)	35 sec		
Bridge Time	2 sec delay before fail-safe activates		
Pre-charging Time	5 to 20 seconds		
Humidity	5 to 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	Aluminum die cast 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)	<45 dB (A)		
Noise Level (Fail-Safe)	<60 dB (A)		
Servicing	maintenance free		
Quality Standard	ISO 9001		
Weight	3.5 lb [1.6 kg]		

† Use flexible metal conduit. Push the listed conduit fitting device over the actuator's cable to butt against the enclosure. Screw in conduit connector. Jacket the actuators input wiring with listed flexible conduit. Properly terminate the conduit in a suitable junction box. Rated impulse Voltage 800V. Type of action 1. Control pollution degree 3.



Wiring Diagrams

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🔀 INSTALLATION NOTES

Actuators may also be powered by 24 VDC.

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

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

Actuators with plenum cable do not have numbers; use color codes instead.

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.

