

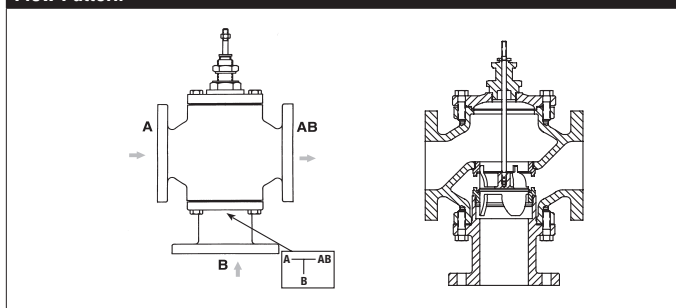
## G7100, 3-Way, Mixing Flanged Globe Valve



### Technical data

Service	chilled, hot water, up to 60% glycol
Flow Characteristic	linear
Controllable Flow Range	stem up - open B to AB
Size [mm]	4" [100]
End Fitting	125 lb. flanged
Body	Cast Iron - ASTM A126 Class B
Stem	stainless steel
Stem Packing	NLP EPDM (no lip packing)
Seat	316 stainless steel
Plug	bronze
Body Pressure Rating [psi]	ANSI 125
ANSI Class	ANSI 125 ( up to 175 psi below 150°F)
Number of Bolt Holes	8
Max Inlet Pressure (Water)	150 psi (1034 kPa) @ 250°F
Media Temperature Range (Water)	32°F to 350°F [0°C to 176°C]
Max Differential Pressure (Water)	25 psi (172 kPa)
Leakage	ANSI Class III
Rangeability	50:1
Cv	190
Weight	136.9 lb [62.1 kg]
Servicing	Repack/Rebuild kits available

### Flow Pattern



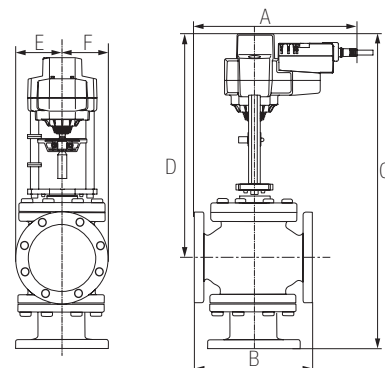
### Application

This valve is typically used in large Air Handling Units (AHU) on heating or cooling coils. This valve is suitable for use in a hydronic system with variable flow.

### Suitable Actuators

	Non-Spring	Spring	Electronic Fail-Safe
G7100	EVb(X), RVb(X)	2*AFB(X)	2*GKB(X)

### Dimensions (Inches [mm])



### EVb, EVX RVb, RVX

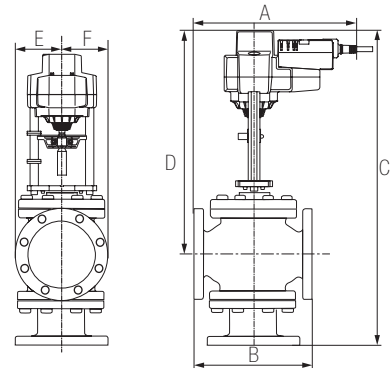
A	B	C	D	E	F
13.7" [348]	13" [330]	29.69" [754]	19.75" [502]	4.5" [114]	

### 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 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 valve stem vertical above the valve or up to 45 degrees in relation to the horizontal 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.

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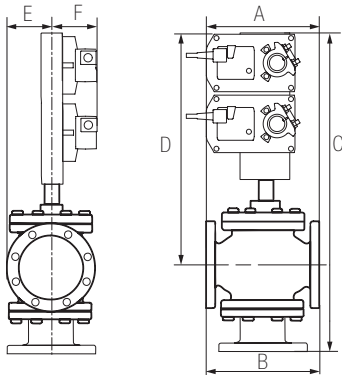
**Dimensions (Inches [mm])**



**EVB, EVX RVB, RVX**

A	B	C	D	E	F
13.7" [348]	13" [330]	29.69" [754]	19.75" [502]	4.5" [114]	

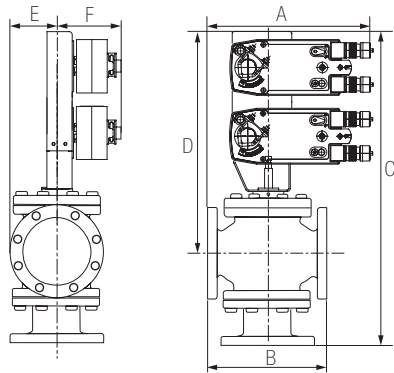
**Dimensions (Inches [mm])**



**2\*GMB, 2\*GMX 2\*GKB, 2\*GKX**

A	B	C	D	E	F
13.7" [348]	13" [330]	33.25" [844]	23.4" [594]	4.5" [114]	5.25" [135]

**Dimensions (Inches [mm])**



**2\*AFB, 2\*AFX**

A	B	C	D	E	F
13.7" [348]	13" [330]	33.25" [844]	23.4" [594]	4.5" [114]	5.25" [135]

## 2\* AFBUP-S-X1

On/Off, Spring Return, 24 to 240 VAC



### Technical Data

Power Supply	24...240 VAC +10% / -20%, 50/60 Hz, 24...125 VDC ±10%
Power Consumption Running	7.5 W
Power Consumption Holding	3.5 W
Transformer Sizing	14 VA @ 24VAC (class 2 power source), 17 VA @ 120 VAC, 36 VA @ 240 VAC
Electrical Connection	(2) 3 ft [1 m], 18 GA appliance cables with 1/2" conduit connectors
Overload Protection	electronic throughout 0° to 95° rotation
Operating Range	on/off
Position Feedback	No Feedback
Angle of Rotation	95° (adjustable with mechanical end stop, 35° to 95°)
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
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
Sound power level	6201
Noise Level (Fail-Safe)	<62 dB (A)
Servicing	maintenance free
Quality Standard	ISO 9001
Weight	9.7 lb [4.4 kg]
Auxiliary Switch	2 x SPDT, 3A resistive (0.5A inductive) @ 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

- A** Actuators with appliance cables are numbered.
- Meets cULus requirements without the need of an electrical ground connection.**
- UP** Universal Power Supply (UP) models can be supplied with 24 VAC up to 240 VAC, or 24 VDC up to 125 VDC.
- ⚡** 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.
- 1** Provide overload protection and disconnect as required.
- 3** Actuators may also be powered by 24 VDC.
- 4** Two built-in auxiliary switches (2x SPDT), for end position indication, interlock control, fan startup, etc.
- 45** Actuators may be powered in parallel. Power consumption must be observed.
- 48** Parallel wiring required for piggy-back applications.

