

G6150C, 2-Way, Pressure Compensated Flanged Globe Valve



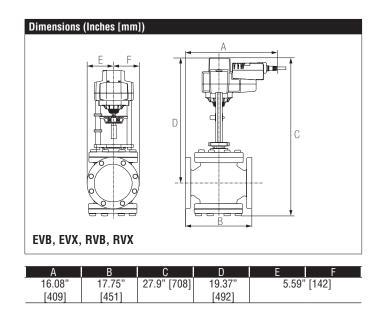
WARRANTY
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chilled or hot water, up to 60% glycol,
steam
equal percentage
stem up - open A to AB
6" [150]
125 lb flanged
cast iron - ASTM A126 Class B (ASME
B16.1)
stainless steel
NLP EPDM (no lip packing)
316 stainless steel
brass
ANSI 125
ANSI 125 (up to 175 psi below 150°F)
8
150 psi (1034 kPa) @ 250°F
35 psi (241 kPa)
32°F to 338°F [0°C to 138°C]
32°F to 280°F [0°C to 138°C]
15 psi (103 kPa)
25 psi (172 kPa)
98:1
344
195.1 lb [88.5 kg]
ANSI Class III
Repack/Rebuild kits available

Application

This valve is typically used in large air handling units on heating or cooling coils. This valve is suitable for use in a hydronic system with variable flow. Bronze or stainless steel trim valves can be used for steam applications, depending on actuator and close-off combination.

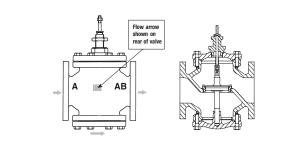
Suitable Actuators				
	Non-Spring	Spring	Electronic Fail-Safe	
G6150C	EVB(X)	2*AFB(X)	AVKB(X)	



Piping

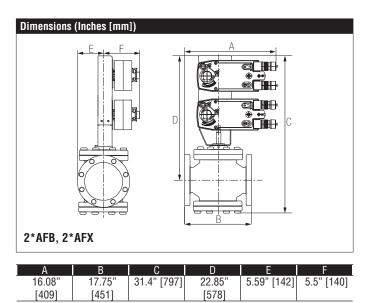
The valves should be mounted in a weather-protected area in a location that is within the ambient limits of the actuator. Allow sufficient room for valve with actuator and for service. The preferred mounting position of the valve is with the valve stem vertical above the valve body, for maximum life.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

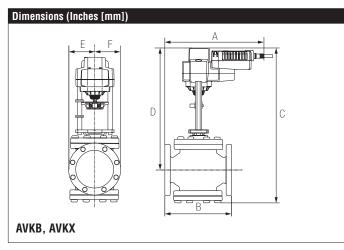
Flow Pattern





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А	В	С	D	E	F
16.08"	17.75"	27.9" [708]	19.37"	5.59"	[142]
[409]	[451]		[492]		



2*AFX24-MFT-S-X1

Modulating, Spring Return, 24 V, Multi-Function Technology®



Technical Data		
Power Supply	24 VAC±20%, 50/60Hz, 24 VDC+20%/-10%	
Power Consumption Running	7.5 W	
Power Consumption Holding	3 W	
Transformer Sizing	20 VA (class 2 power source)	
Electrical Connection	(2) 3 ft [1 m], 10 ft [3 m] or 16 ft [5 m] 18 GA appliance cables with or without 1/2" conduit connectors	
Overload Protection	electronic throughout 0° to 95° rotation	
Operating Range Y	on/off	
Input Impedance	100 k Ω for 2 to 10 VDC (0.1 mA), 500 Ω for 4 to 20 mA, 1500 Ω for PWM, floating point and 0n/Off	
Feedback Output U	2 to 10 VDC, 0.5 mA max, VDC variable	
Angle of Rotation	95° (adjustable with mechanical end stop, 35° to 95°)	
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)	150 sec (default), variable (70 to 220 sec)	
Running Time (Fail-Safe)	<20 sec	
Override Control	min. position = 0% , mid. Position = 50% , max. position = 100% (Default)	
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	
Noise Level (Motor)	<40 dB (A)	
Noise Level (Fail-Safe)	<62 dB (A)	
Servicing	maintenance free	
Quality Standard	ISO 9001	
Weight	9.3 lb [4.2 kg]	
Auxiliary Switch	2 x SPDT, 3A resistive (0.5A inductive) @ 250 VAC, one set at +10°, one adjustable 10° to 90°	

*Variable when configured with MFT options. †Rated Impulse Voltage 800V, Type of Action 1.AA.B, Control Pollution Degree 3.



Wiring Diagrams

Common

+ Hot

Y Input

Y Input

UOutput

46

Common

+ Hot

Y, Input

Y Input

U Output

Common

Y Input

Y Input

U Output

46 /47

Common

Y, Input Y, Input

U Output

+ Hot

+ Hot

/47

/47 46

A

Red (2)

Wht (3)

Pnk (4)

Org (5)

Blk (1)

Red (2)

Wht (3)

Pnk (4)

Org (5)

Blk (1)

Red (2)

Wht (3)

Pnk (4)

Org (5)

A

Blk (1)

Red (2)

Wht (3)

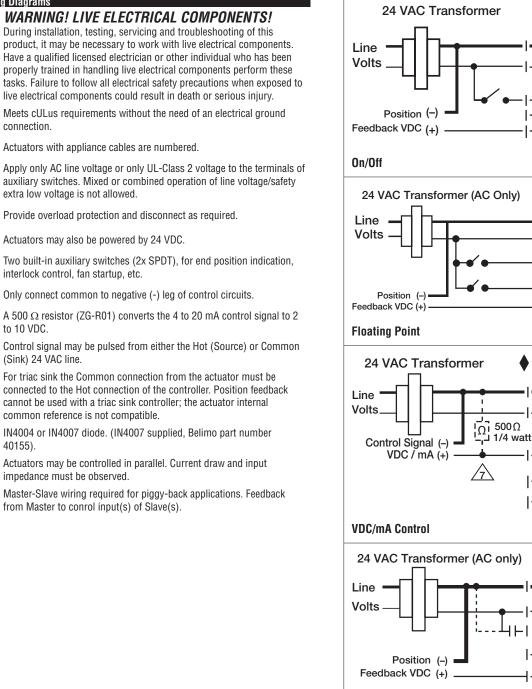
Pnk (4)

Org (5)

Ω

Blk (1)

Modulating, Spring Return, 24 V, Multi-Function Technology®



PWM Control

extra low voltage is not allowed.

Provide overload protection and disconnect as required.

Actuators may also be powered by 24 VDC.

Two built-in auxiliary switches (2x SPDT), for end position indication, interlock control, fan startup, etc.

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.

Control signal may be pulsed from either the Hot (Source) or Common (Sink) 24 VAC line.

- For triac sink the Common connection from the actuator must be connected to the Hot connection of the controller. Position feedback cannot be used with a triac sink controller; the actuator internal common reference is not compatible.

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40155). Actuators may be controlled in parallel. Current draw and input

impedance must be observed. Master-Slave wiring required for piggy-back applications. Feedback

from Master to conrol input(s) of Slave(s).

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