## G240, 2-Way, Globe Valve, Bronze Trim

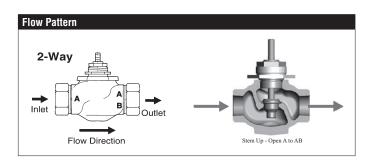






]	VEAR
	WARRANT

Technical data	
Service	chilled or hot water, up to 60% glycol,
	steam
Flow Characteristic	equal percentage
Controllable Flow Range	stem up - open A to AB
Size [mm]	1.5" [40]
End Fitting	NPT female ends
Body	bronze
Stem	stainless steel
Stem Packing	spring loaded Teflon V-ring
Seat	bronze
Plug	brass
Disc	composition (EPDM)
Body Pressure Rating [psi]	ANSI 250
ANSI Class	ANSI 250 ( up to 400 psi below 150°F)
Max Inlet Pressure (Steam)	35 psi (241 kPa)
Media Temperature Range	20°F to 280°F [-7°C to 138°C]
(Water)	
Media Temperature Range	32°F to 280°F [0°C to 138°C]
(Steam)	00: (400 l-D-)
Maximum differential pressure	20 psi (103 kPa)
(steam) Max Differential Pressure (Water)	35 psi (241 kPa)
	ANSI Class IV
Leakage	
Rangeability	75:1
Cv	28
Weight	5.7 lb [2.6 kg]
Servicing	Repack/Rebuild kits available

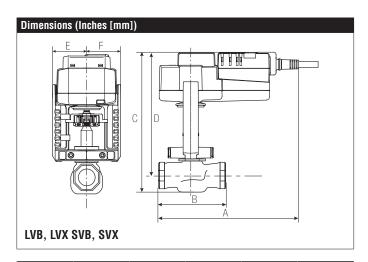


#### **Application**

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 variable flow. Bronze and stainless steel trim valves can be used for steam applications, depending on actuator and close-off combinations.

**Suitable Actuators** 

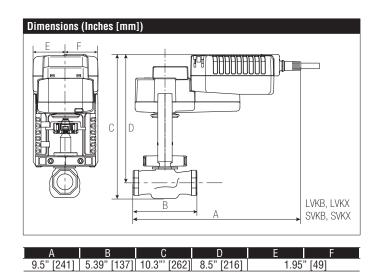
	Non-Spring	Spring	Electronic Fail-Safe
G240	SVB(X)	AFB(X)	SVKB(X)

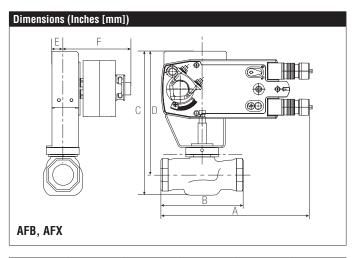


A	В	C	D	E F
9" [229]	5.39" [137]	10" [252]	8.5" [216]	1.95" [49]

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(S) and G3(D) 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. Do not reverse flow direction.

# G240, 2-Way, Globe Valve, Bronze Trim





Α	В	С	D	E	F
10.5" [267]	5.39" [137]	10.24"	8.7" [221]	1.5" [38]	5" [127]
		[260]			

## AFX24-MFT-X1

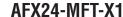
## Modulating, Spring Return, 24 V, Multi-Function Technology®





Power Supply 24 VAC±20%, 50/60Hz, 24 VDC+20%/-10% Power Consumption Running 7.5 W Power Consumption Holding 3 W Transformer Sizing 10 VA (class 2 power source) Electrical Connection 18 GA applicance rated cable with 1/2" conduit connector protected NEMA 2 (IP54) 3 ft [1m] 10 ft [3m] and 16 ft [5m] Overload Protection electronic throughout 0° to 95° rotation Operating Range 2 to 10 VDC, 4 to 20 mA (default), variable (VDC, PWM, floating point, on/off) Position Feedback 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 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 <40 dB (A) Noise Level (Fail-Safe) <62 dB (A) Servicing maintenance free Quality Standard ISO 9001 Weight		
Power Consumption Running Power Consumption Holding Transformer Sizing 10 VA (class 2 power source)  Electrical Connection 18 GA applicance rated cable with 1/2" conduit connector protected NEMA 2 (IP54) 3 ft [1m] 10 ft [3m] and 16 ft [5m]  Overload Protection electronic throughout 0° to 95° rotation Operating Range 2 to 10 VDC, 4 to 20 mA (default), variable (VDC, PWM, floating point, on/off)  Position Feedback 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 Running Time (Motor) 5 mm hex crank (3/16" Allen), supplied Running Time (Fail-Safe)  Verride 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 MEMA 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  Verein Application  Verein Application  Running Time (Fail-Safe) Verein Application  Running Material Agency Listings† cULus acc. to UL60730-1A/-2-14, CAN/CSA E60730-1:02, CE acc. to 2004/108/EC  Sound power level  Verein Application  Running Maintenance free  Quality Standard  Round Verein Application  Running Maintenance free  Running Maintenance free  Running Maintenance free	Technical Data	
Power Consumption Holding Transformer Sizing 10 VA (class 2 power source)  Electrical Connection 18 GA applicance rated cable with 1/2" conduit connector protected NEMA 2 (IP54) 3 ft [1m] 10 ft [3m] and 16 ft [5m]  Overload Protection electronic throughout 0° to 95° rotation  Operating Range 2 to 10 VDC, 4 to 20 mA (default), variable (VDC, PWM, floating point, on/off)  Position Feedback 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 S mm hex crank (3/16" Allen), supplied  Running Time (Motor) 150 sec (default), variable (70 to 220 sec)  Running Time (Fail-Safe)  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 Material  Agency Listings† cULus acc. to UL60730-1A/-2-14, CAN/CSA E60730-1:02, CE acc. to 2004/108/EC  Sound power level  Value Control Roise Level (Fail-Safe) Value Coloud/108/EC  Sound power level  Value Roise Agency Listings Maintenance free  Quality Standard  ISO 9001	117	, ,
Transformer Sizing 10 VA (class 2 power source)  Electrical Connection 18 GA applicance rated cable with 1/2" conduit connector protected NEMA 2 (IP54) 3 ft [1m] 10 ft [3m] and 16 ft [5m]  Overload Protection electronic throughout 0° to 95° rotation  Operating Range 2 to 10 VDC, 4 to 20 mA (default), variable (VDC, PWM, floating point, on/off)  Position Feedback 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 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 <40 dB (A)  Noise Level (Fail-Safe) <62 dB (A)  Servicing maintenance free  Quality Standard ISO 9001	Power Consumption Running	7.5 W
Electrical Connection  18 GA applicance rated cable with 1/2" conduit connector protected NEMA 2 (IP54) 3 ft [1m] 10 ft [3m] and 16 ft [5m]  Overload Protection  electronic throughout 0° to 95° rotation  Operating Range  2 to 10 VDC, 4 to 20 mA (default), variable (VDC, PWM, floating point, on/off)  Position Feedback  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)  Direction of Rotation (Fail-Safe)  Position Indication  wisual indicator, 0° to 95° (0° is full spring return position)  Manual Override  Running Time (Motor)  150 sec (default), variable (70 to 220 sec)  Running Time (Fail-Safe)  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  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  40 dB (A)  Noise Level (Fail-Safe)  Gel 20 dB (A)  Servicing  maintenance free  Quality Standard  ISO 9001	1 0	3 W
conduit connector protected NEMA 2 (IP54) 3 ft [1m] 10 ft [3m] and 16 ft [5m]  Overload Protection electronic throughout 0° to 95° rotation  Operating Range 2 to 10 VDC, 4 to 20 mA (default), variable (VDC, PWM, floating point, on/off)  Position Feedback 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  Sound power level <40 dB (A)  Noise Level (Fail-Safe) <62 dB (A)  Servicing maintenance free  Quality Standard ISO 9001	Transformer Sizing	10 VA (class 2 power source)
Operating Range  2 to 10 VDC, 4 to 20 mA (default), variable (VDC, PWM, floating point, on/off)  Position Feedback  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)  Direction of Rotation (Fail-Safe)  Position Indication  Manual Override  Running Time (Motor)  Running Time (Fail-Safe)  Override Control  Humidity  Humidity  Ambient Temperature Range  Position Paid Range  Agency Listings†  CULus acc. to UL60730-1A/-2-14, CAN/CSA E60730-1:02, CE acc. to 2004/108/EC  Sound power level  Quality Standard  Position Feedback  2 to 10 VDC, 20 mA (default), variable (VDC, PWM, floating point, on/off)  2 to 10 VDC, 0.5 mA max, VDC variable  2 to 10 VDC, 0.5 mA max, VDC variable  2 to 10 VDC, 0.5 mA max, VDC variable  2 to 10 VDC, 0.5 mA max, VDC variable  2 to 10 VDC, 0.5 mA max, VDC variable  2 to 10 VDC, 0.5 mA max, VDC variable  2 to 10 VDC, 0.5 mA max, VDC variable  2 to 10 VDC, 0.5 mA max, VDC variable  2 to 10 VDC, 0.5 mA max, VDC variable  4 to 10 VDC, 0.5 mA max, VDC variable  2 to 10 VDC, 0.5 mA max, VDC variable  4 to 10 VDC, 0.5 mA max, VDC variable  2 to 10 VDC, 0.5 mA max, VDC variable  2 to 10 VDC, 0.5 mA max, VDC variable  4 to 10 VDC, 0.5 mA max, VDC variable  2 to 10 VDC, 0.5 mA max, VDC variable  2 to 10 VDC, 0.5 mA max, VDC variable  4 (default), variable (WCCW mounting  2 to 10 VDC, 0.5 mA max, VDC variable  4 (default), variable (WCCW mounting  2 to 10 VDC, 0.5 mA max, VDC variable  2 to 10 VDC, 0.5 mA max, VDC variable  2 to 10 VDC, 0.5 mA max, VDC variable  2 to 10 VDC, 0.5 mA max, VDC variable  2 to 10 VDC, 0.5 mA max, VDC variable  2 to 10 VDC, 0.5 mA max, VDC variable  4 (default), variable (WCW variable  4 (default), variable (WCW variable  4 (default), v	Electrical Connection	conduit connector protected NEMA 2 (IP54) 3 ft [1m] 10 ft [3m] and 16 ft [5m]
(VDC, PWM, floating point, on/off)  Position Feedback 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  Sound power level <40 dB (A)  Noise Level (Fail-Safe) <62 dB (A)  Servicing maintenance free  Quality Standard ISO 9001	Overload Protection	electronic throughout 0° to 95° rotation
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  Sound power level <40 dB (A)  Noise Level (Fail-Safe) <62 dB (A)  Servicing maintenance free  Quality Standard ISO 9001		(VDC, PWM, floating point, on/off)
Direction of Rotation (Motor)  Direction of Rotation (Fail-Safe)  Position Indication  Manual Override  Running Time (Motor)  Position Equipment (Fail-Safe)  Override Control  Humidity  Ambient Temperature Range  For Temperature Range  Housing Material  Agency Listings†  Culus acc. to UL60730-114.  Direction of Rotation (Motor)  reversible with CW/CCW mounting  reversible with Dwilt CW/CCW mounting  reversible with CW/CCW mounting  reversible with CW/CCW mounting  reversible with CW/CCW mounting  visual indicator, 0° to 95° (0° is full spring  reversible with CW/CCW mounting  reversible with CW/CCW and Sull spring  reversible with CW/CCW to 95° (0° is full spring  return position  150 sec (default), variable (70 to 220 sec)  Running Time (Fail Sple)  420 sec  Override Control  min. position = 0% , mid. Position = 50% ,  max. position = 10% (pf ault)  reversible with CW/CX  Allen), variable (70 to 220 sec)  Running Time (Fail Sple)  420 sec  Override Control  min. position = 0% , mid. Position = 50% ,  max. position = 10% (pf ault)  reversible with CW/CX  Allen), variable (70 to 220 sec)  reversible with CW/CX  Allen), variable (70 to 220 sec)  reversible with CW/CX  Allen), variable (70 to 220 sec)  reversible var	Position Feedback	
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  Sound power level <40 dB (A)  Noise Level (Fail-Safe) <62 dB (A)  Servicing maintenance free  Quality Standard ISO 9001	Ü	
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  Sound power level <40 dB (A)  Noise Level (Fail-Safe) <62 dB (A)  Servicing maintenance free  Quality Standard ISO 9001	Direction of Rotation (Motor)	reversible with built-in switch
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  Sound power level <40 dB (A)  Noise Level (Fail-Safe) <62 dB (A)  Servicing maintenance free  Quality Standard ISO 9001	Direction of Rotation (Fail-Safe)	reversible with CW/CCW mounting
Manual Override Running Time (Motor)  Running Time (Fail-Safe)  Override Control  Humidity  Ambient Temperature Range  Storage Temperature Range  Housing Material  Agency Listings†  Could Default  Sound power level  Anoise Level (Fail-Safe)  5 mm hex crank (3/16" Allen), supplied  150 sec (default), variable (70 to 220 sec)  min. position = 0%, mid. Position = 50%, max. position = 100% (Default)  max. 95% RH non-condensing  -22°F to 122°F [-30°C to 50°C]  Storage Temperature Range  -40°F to 176°F [-40°C to 80°C]  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  40 dB (A)  Noise Level (Fail-Safe)  Servicing  maintenance free  Quality Standard	Position Indication	
Running Time (Motor)  Running Time (Fail-Safe)  Override Control  min. position = 0%, mid. Position = 50%, max. position = 100% (Default)  Humidity  Ambient Temperature Range  Storage Temperature Range  Housing  Housing  Agency Listings†  Culus acc. to UL60730-1A/-2-14, CAN/CSA E60730-1:02, CE acc. to 2004/108/EC  Sound power level  Quality Standard  150 sec (default), variable (70 to 220 sec)  Agency Agency Listings†  Culus acc. to 100% (Default)  max. 95% RH non-condensing  Agency C to 50°C]  For 122°F [-30°C to 50°C]  For 122°F [-40°C to 80°C]  NEMA 2, IP54, UL enclosure type 2  Culus acc. to UL60730-1A/-2-14, CAN/CSA E60730-1:02, CE acc. to 2004/108/EC  Sound power level  Agency Listings†  Servicing  Maintenance free  Quality Standard	Manual Override	
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  Sound power level  <40 dB (A)  Noise Level (Fail-Safe)  Servicing  maintenance free  Quality Standard  ISO 9001	Running Time (Motor)	
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  Sound power level <40 dB (A)  Noise Level (Fail-Safe) <62 dB (A)  Servicing maintenance free  Quality Standard ISO 9001	Running Time (Fail-Safe)	<20 sec
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 <40 dB (A)  Noise Level (Fail-Safe) <62 dB (A)  Servicing maintenance free  Quality Standard ISO 9001	Override Control	The state of the s
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 <40 dB (A)  Noise Level (Fail-Safe) <62 dB (A)  Servicing maintenance free  Quality Standard ISO 9001	Humidity	max. 95% RH non-condensing
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 <40 dB (A)  Noise Level (Fail-Safe) <62 dB (A)  Servicing maintenance free  Quality Standard ISO 9001	Ambient Temperature Range	
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 <40 dB (A)  Noise Level (Fail-Safe) <62 dB (A)  Servicing maintenance free  Quality Standard ISO 9001	Storage Temperature Range	
Agency Listings† cULus acc. to UL60730-1A/-2-14, CAN/CSA E60730-1:02, CE acc. to 2004/108/EC  Sound power level <40 dB (A)  Noise Level (Fail-Safe) <62 dB (A)  Servicing maintenance free  Quality Standard ISO 9001	Housing	NEMA 2, IP54, UL enclosure type 2
E60730-1:02, CE acc. to 2004/108/EC  Sound power level <40 dB (A)  Noise Level (Fail-Safe) <62 dB (A)  Servicing maintenance free  Quality Standard ISO 9001	Housing Material	zinc coated metal and plastic casing
Noise Level (Fail-Safe) <62 dB (A)  Servicing maintenance free  Quality Standard ISO 9001	Agency Listings†	
Servicing maintenance free Quality Standard ISO 9001	Sound power level	<40 dB (A)
Quality Standard ISO 9001	Noise Level (Fail-Safe)	<62 dB (A)
	Servicing	maintenance free
Weight 4.6 lb [2.1 kg]	Quality Standard	ISO 9001
	Weight	4.6 lb [2.1 kg]

<sup>\*</sup>Variable when configured with MFT options. †Rated Impulse Voltage 800V, Type of action 1.AA, Control Pollution Degree 3



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



#### Wiring Diagrams



### 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.



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



Actuators with appliance cables are numbered.



Provide overload protection and disconnect as required.

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



Actuators may also be powered by 24 VDC.



A 500  $\Omega$  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.



IN4004 or IN4007 diode. (IN4007 supplied, Belimo part number 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).

