B2100VB-024, 1", V Ball Control Valve Hardened Chrome Plated Carbon Steel Body, Stainless Steel Ball and Stem

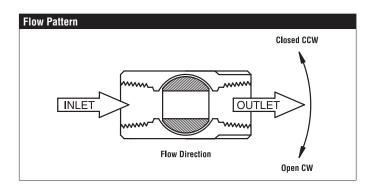








Technical Data	
Service	chilled or hot water, up to 60% glycol,
	steam
Flow Characteristic	equal percentage
Controllable Flow Range	75°
Size [mm]	1" [25]
End Fitting	NPT female ends (1"to 2"); ISO flange
	(3"to 6")
Body	WCC Grade Carbon steel
Ball	stainless steel
Stem	stainless steel
Stem Packing	spring loaded Teflon® V-ring
Ball Seat	Teflon®
Packing	spring loaded Teflon® V-ring
Body Pressure Rating [psi]	ASME/ANSI Class 300
Max Inlet Pressure (Steam)	200 psi
Media Temperature Range	-22°F to 380°F [-30°C to 193°C]
(Water)	
Media Temperature Range	-22°F to 380°F [-30°C to 193°C]
(Steam) Maximum Differential Pressure	100 psi
(Steam)	100 psi
Max Differential Pressure (Water)	150 psi
Maximum Differential Pressure	100 psi
Steam (Rotary Actuator)	·
Close-Off Pressure	150 psi
Close-Off Pressure (Steam)	200 psi
Rangeability	300:1
Cv	24
Weight	9 lb [4.1 kg]
Leakage	ANSI Class IV



Product Features

Fast quarter turn open or closed operation, Stainless steel ball and stem, Positive shut-off, Two piece body construction

Application

Water-side control of air handling apparatus in ventilation and air-conditioning

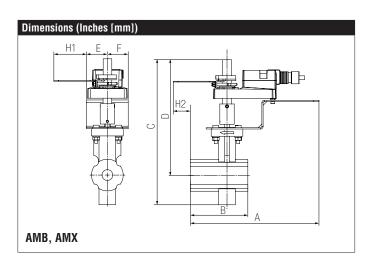
Water/Steam control in heating system.

300:1 rangeability.

The dimensions and drilling of end flanges conform to the American cast iron flange standard, Class 150 (ANSI B16.1).

Suitable Actuators

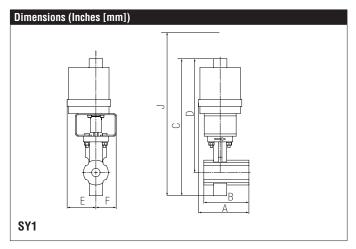
	Non-Spring	Spring				
B2100VB-024	SY1, SY2, AMB(X)	NFB(X)				



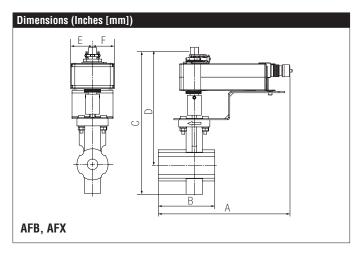
Α	В	C	D	E	F	H1	H2
11.8"	5" [127]	12.6"	10.07"	1.81	" [46]	1.18"	0.5" [15]
[300]		[320]	[256]			[30]	



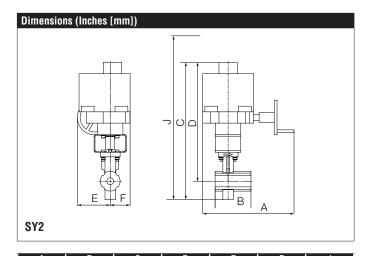
B2100VB-024, 1", V Ball Control Valve Hardened Chrome Plated Carbon Steel Body, Stainless Steel Ball and Stem



А	В	С	D	E	F	J
5.58"	5" [127]	14.94"	12.64"	2.4"	[61]	20.44"
[142]		[380]	[321]			[519]



Α	В	С	D	Е	F
11.74"	5" [127]	12.6" [320]	10.07"	1.95	" [49]
[298]			[256]		



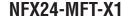
А	В	C	ט ו	Ė	F	J
12.6"	5" [127]	19.17"	16.57"	4.48"	3.56" [90]	27.67"
[320]		[487]	[421]	[114]		[703]

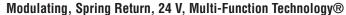




Power Supply 24 VAC±20%, 50/60Hz, 24 VDC±20%/-10% Power Consumption Running 6.5 W Power Consumption Holding 3 W Transformer Sizing 9 VA (class 2 power source) Shaft Diameter 1/2" to 1.05" oround, centers on 1/2" and 3/4" with insert, 1.05" without insert Electrical Connection 18 GA applicance rated cable 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 Y 2 to 10 VDC, 4 to 20 mA w/ ZG-R01 (500 Ω, 1/4 W resistor), variable (VDC, PWM, floating point, on/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°) Torque 90 in-lbs [10 Nm] minimum 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) 90 sec, constant independent of load Running Time (Fail-Safe) <20 sec @ -4°F to 122°F [-30°C] Ov	Technical Data	
Power Consumption Holding 3 W Transformer Sizing 9 VA (class 2 power source) Shaft Diameter 1/2" to 1.05" round, centers on 1/2" and 3/4" with insert, 1.05" without insert 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 Y 2 to 10 VDC, 4 to 20 mA w/ ZG-R01 (500 Ω, 1/4 W resistor), variable (VDC, PWM, floating point, on/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°) Torque 90 in-lbs [10 Nm] minimum Direction of Rotation (Motor) reversible with built-in switch Direction of Rotation (Fail-Safe) visual indicator, 0° to 95° (0° is full spring return position) Manual Override 5 mm hex crank (3/16" Allen), supplied Running Time (Motor) 90 sec, constant independent of load Running Time (Fail-Safe) <20 sec @ -4°F to 122°F [-20°C to 50°C], <60 sec @ -22°F [-30°C]		24 VAC±20%, 50/60Hz, 24 VDC+20%/-10%
Power Consumption Holding 3 W Transformer Sizing 9 VA (class 2 power source) Shaft Diameter 1/2" to 1.05" round, centers on 1/2" and 3/4" with insert, 1.05" without insert 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 Y 2 to 10 VDC, 4 to 20 mA w/ ZG-R01 (500 Ω, 1/4 W resistor), variable (VDC, PWM, floating point, on/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°) Torque 90 in-lbs [10 Nm] minimum Direction of Rotation (Motor) reversible with built-in switch Direction of Rotation (Fail-Safe) visual indicator, 0° to 95° (0° is full spring return position) Manual Override 5 mm hex crank (3/16" Allen), supplied Running Time (Motor) 90 sec, constant independent of load Running Time (Fail-Safe) <20 sec @ -4°F to 122°F [-20°C to 50°C], <60 sec @ -22°F [-30°C]	Power Consumption Running	6.5 W
Shaft Diameter 1/2" to 1.05" round, centers on 1/2" and 3/4" with insert, 1.05" without insert 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 Operating Range Y 2 to 10 VDC, 4 to 20 mA w/ ZG-R01 (500 Ω, 1/4 W resistor), variable (VDC, PWM, floating point, on/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°) Torque 90 in-lbs [10 Nm] minimum 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) Running Time (Fail-Safe) 5 mm hex crank (3/16" Allen), supplied Running Time (Fail-Safe) <20 sec @ -4°F to 122°F [-20°C to 50°C], <60 sec @ -22°F [-30°C] Override Control min. position = 0%, mid. Position = 50%, max. position = 100% (Default) Humidity Ambient Temperature Range 40°F to 176°F [-40°C to 80°C] Housing NEMA 2, IP54, UL enclosure type 2 Housing Material Agency Listings† cultus acc. to UL60730-1A/-2-14, CAN/CSA E60730-1:02, CE acc. to 2004/108/EC and 2006/95/EC Noise Level (Motor) <80 dB (A) Noise Level (Fail-Safe) <80 dB (A) Noise Level (Fail-Safe) <80 dB (A) Servicing maintenance free Quality Standard 150 9001		3 W
Shaft Diameter	Transformer Sizing	9 VA (class 2 power source)
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 Y 2 to 10 VDC, 4 to 20 mA w/ ZG-R01 (500 Ω, 1/4 W resistor), variable (VDC, PWM, floating point, on/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°) Torque 90 in-lbs [10 Nm] minimum 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) 90 sec, constant independent of load Running Time (Fail-Safe) <20 sec @ -4°F to 122°F [-30°C]	Shaft Diameter	1/2" to 1.05" round, centers on 1/2" and 3/4"
Operating Range Y2 to 10 VDC, 4 to 20 mA w/ ZG-R01 (500 Ω, 1/4 W resistor), variable (VDC, PWM, floating point, on/off)Feedback Output U2 to 10 VDC, 0.5 mA max, VDC variableAngle of Rotation95° (adjustable with mechanical end stop, 35° to 95°)Torque90 in-lbs [10 Nm] minimumDirection of Rotation (Motor)reversible with built-in switchDirection of Rotation (Fail-Safe)reversible with CW/CCW mountingPosition Indicationvisual indicator, 0° to 95° (0° is full spring return position)Manual Override5 mm hex crank (3/16" Allen), suppliedRunning Time (Motor)90 sec, constant independent of loadRunning Time (Fail-Safe)<20 sec @ -4°F to 122°F [-20°C to 50°C], <60 sec @ -22°F [-30°C]	Electrical Connection	conduit connector protected NEMA 2 (IP54) 3 ft [1m] 10 ft [3m] and 16 ft [5m]
1/4 W resistor), variable (VDC, PWM, floating point, on/off)	Overload Protection	
Angle of Rotation 95° (adjustable with mechanical end stop, 35° to 95°) Torque 90 in-lbs [10 Nm] minimum Direction of Rotation (Motor) Position Indication Manual Override Running Time (Motor) Override Control Humidity Ambient Temperature Range Ambient Temperature Range Housing Material Agency Listings† CULus acc. to UL60730-14, 2-14, CAN/CSA E60730-1:02, CE acc. to 2004/108/EC and 2006/95/EC Noise Level (Motor) Assign Agency Listings P5° (adjustable with mechanical end stop, 35° to 95°) Overrible Numlimum Position (Motor) Position (Fail-Safe) Position (Fail-Safe) Position (Fail-Safe) Position (Fail-Safe) Position (Fail-Safe) Position (Fail-Safe) Position (Position) P	Operating Range Y	1/4 W resistor), variable (VDC, PWM, floating point, on/off)
Torque 90 in-lbs [10 Nm] minimum 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) 90 sec, constant independent of load Running Time (Fail-Safe) <20 sec @ -4°F to 122°F [-20°C to 50°C], <60 sec @ -22°F [-30°C] 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 and 2006/95/EC Noise Level (Motor) <50 dB (A) Noise Level (Fail-Safe) <62 dB (A) Servicing maintenance free Quality Standard ISO 9001	Feedback Output U	2 to 10 VDC, 0.5 mA max, VDC variable
Direction of Rotation (Motor) Direction of Rotation (Fail-Safe) Position Indication Manual Override Running Time (Motor) Override Control Humidity Ambient Temperature Range Formage Temperature Range Agency Listings† CULus acc. to UL60730-14, CAN/CSA E60730-1102, CE acc. to 2004/108/EC and 2006/95/EC Noise Level (Motor) Position Indication reversible with Duilt-in switch reversible with Duilt-in switch reversible with built-in switch reversible with Duilt-in switch reversible with built-in switch reversible with built-in switch reversible with Duilt-in switch reversible with CW/CCW mounting visual indicator, 0° to 95° (0° is full spring return position 90 sec, constant independent of load 80 sec @ -4°F to 122°F [-20°C to 50°C], < 60 sec @ -22°F [-20°C to 50°C], < 60 sec @ -22°F [-30°C] min. position = 0%, mid. Position = 50%, max. position = 100% (Default) 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) Noise Level (Fail-Safe) Sec de dB (A) Running Time (Wotor) Rancing Temperature Range visual indicator, 0° to 95° (0° is full spring return position. Formal Position Position Position visual indicator, 0° to 95° (0° is full spring return position. Sec well spring return position. Sec well spring return position. Sec well spring return position. Sec well spring return position. Sec well spring return position. Sec well spring return position. Sec well spring return position. Sec well spring return position. Sec well spring reture position. Sec well spring return position. Sec well spring	Angle of Rotation	35° to 95°)
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) 90 sec, constant independent of load Running Time (Fail-Safe) <20 sec @ -4°F to 122°F [-20°C to 50°C], <60 sec @ -22°F [-30°C] 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 and 2006/95/EC Noise Level (Motor) <50 dB (A) Noise Level (Fail-Safe) <62 dB (A) Servicing maintenance free Quality Standard ISO 9001	Torque	90 in-lbs [10 Nm] minimum
Position Indication visual indicator, 0° to 95° (0° is full spring return position) Manual Override Running Time (Motor) Running Time (Fail-Safe) Override Control Humidity Ambient Temperature Range Housing MEMA 2, IP54, UL enclosure type 2 Housing Material Agency Listings† CULus acc. to UL60730-1AV-2-14, CAN/CSA E60730-1:02, CE acc. to 2004/108/EC and 2006/95/EC Noise Level (Motor) New York 1 indicator, 0° to 95° (0° is full spring return position) Full spring spring full spring return position) Storage Temperature Range Visual indicator, 0° to 95° (0° is full spring return position) Smm hex crank (3/16" Allen), supplied Allen), supplied Som hex crank (3/16" Allen), supplied Ned 20 sec @ -4°F to 122°F [-20°C to 50°C], < 60 sec @ -42°F [-20°C to 50°C], < 60 sec @ -42°F to 122°F [-30°C to 50°C] Thumidity Max. 95% RH non-condensing -22°F to 122°F [-30°C to 50°C] Thumidity NEMA 2, IP54, UL enclosure type 2 Housing Material Zinc coated metal and plastic casing Agency Listings† CULus acc. to UL60730-1AV-2-14, CAN/CSA E60730-1:02, CE acc. to 2004/108/EC and 2006/95/EC Noise Level (Motor) Noise Level (Fail-Safe) Som definition position Visual indicator, 0° to 95° (10 study), supplied Allen), supplied Agency Listing position Visual indicator, 0° to 95° (10 study), supplied Agency Listing position Visual indicator, 0° to 95° (10 study), supplied Agency Listing position Visual indicator, 0° to 95° (10 study), supplied Agency Listing position Visual indicator, 0° to 95° (10 study), supplied Agency Listing position Visual indicator, 0° to 90° (10 study), supplied Allen position Agency Listing position Visual indicator, 0° Allen position Agency Listing position Visual indicator, 0° Apricus position Agency Listing position Visual indicator, 10 supplied Agency Listing position	Direction of Rotation (Motor)	reversible with built-in switch
return position) Manual Override 5 mm hex crank (3/16" Allen), supplied Running Time (Motor) 90 sec, constant independent of load Running Time (Fail-Safe) <20 sec @ -4°F to 122°F [-20°C to 50°C], <60 sec @ -22°F [-30°C] 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 and 2006/95/EC Noise Level (Motor) <50 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
Running Time (Motor) Running Time (Fail-Safe) Running Time (Fail-Safe) Solution = 0% - 4°F to 122°F [-20°C to 50°C], < 60 sec @ -22°F [-30°C] 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 and 2006/95/EC Noise Level (Motor) Noise Level (Fail-Safe) Servicing maintenance free Quality Standard	Position Indication	
Running Time (Fail-Safe) -20 sec @ -4°F to 122°F [-20°C to 50°C], < 60 sec @ -22°F [-30°C] Override Control min. position = 0%, mid. Position = 50%, max. position = 100% (Default) Humidity 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) Noise Level (Fail-Safe) Servicing maintenance free Quality Standard	Manual Override	5 mm hex crank (3/16" Allen), supplied
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 Housing NEMA 2, IP54, UL enclosure type 2 Housing Material 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) Noise Level (Fail-Safe) Servicing Quality Standard Min. position = 50%, max. Posi	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 and 2006/95/EC Noise Level (Motor) <50 dB (A) Noise Level (Fail-Safe) <62 dB (A) Servicing maintenance free Quality Standard ISO 9001	Running Time (Fail-Safe)	60 sec @ -22°F [-30°C]
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	Override Control	
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	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 and 2006/95/EC Noise Level (Motor) <50 dB (A) Noise Level (Fail-Safe) <62 dB (A) Servicing maintenance free Quality Standard ISO 9001		
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	Storage Temperature Range	
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)	Housing	NEMA 2, IP54, UL enclosure type 2
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	Housing Material	zinc coated metal and plastic casing
Noise Level (Fail-Safe) <62 dB (A) Servicing maintenance free Quality Standard ISO 9001		E60730-1:02, CE acc. to 2004/108/EC and 2006/95/EC
Servicing maintenance free Quality Standard ISO 9001		
Quality Standard ISO 9001		<62 dB (A)
=		maintenance free
Weight 4.4 lb [2 kg]	Quality Standard	1 1 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2
יו ד.ד ווו נע גען נער נער ווידי ווע נער גען	Weight	4.4 lb [2 kg]

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







Wiring Diagrams



🔀 INSTALLATION NOTES



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 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.



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



IN4004 or IN4007 diode. (IN4007 supplied. Belimo part number 40155).



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.

