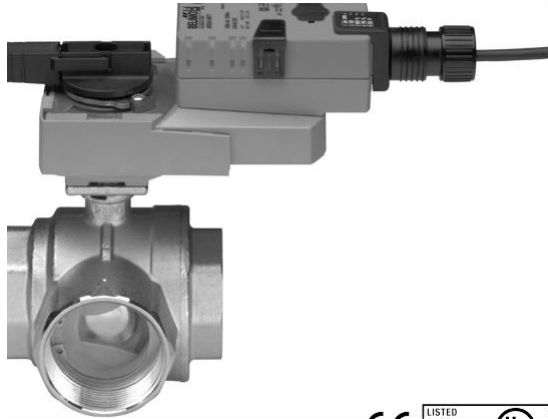


AR...24-3 Actuators, On/Off, Floating Point



Models

ARB24-3	
ARB24-3-S	w/built-in Aux. Switch
ARX24-3	Flexible
ARX24-3-S	Flexible w/built-in Aux. Switch
ARB24-3-5-14	
ARX24-3-5-14	

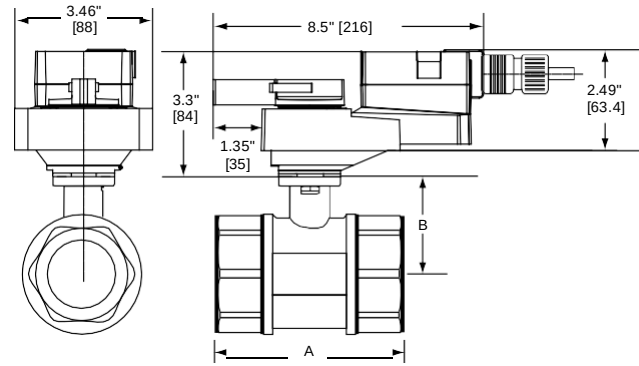
Technical Data	
Control	on/off, floating point
Power supply	24 VAC $\pm$ 20% 50/60 Hz 24 VDC $\pm$ 10%
Power consumption	running 2.5 W holding 0.2 W
Transformer sizing	5.5 VA (class 2 power source)
Electrical connection	1/2" conduit connector 18 GA plenum rated cable 3 ft. [1m] ARX24-3... 3 ft. [1m] 10 ft. [3m] 16 ft. [5m]
Overload protection	electronic throughout 0° to 95° rotation
Input impedance	600 Ω
Angle of rotation	90°, adjustable with mechanical stop
Direction of rotation	reversible with protected switch
Position indication	handle
Manual override	external push button
Running time	ARB24-3... 90 seconds ARX24-3... 300, 150, 90 seconds, constant independent of load
Humidity	5 to 95% RH non-condensing (EN 60730-1)
Ambient temperature	-22°F to 122°F [-30°C to 50°C]
Storage temperature	-40°F to 176°F [-40°C to 80°C]
Housing	NEMA 2/IP54
Housing material	UL94-5VA
Agency listings†	cULus according to UL 60730-1A/-2-14, CAN/CSA E60730-1:02, CE according to 2004/108/EC and 2006/95/EC for line voltage and/or -S versions
Noise level	<45 dB(A)
Quality standard	ISO 9001

AR...24-3-S

Auxiliary switch (-S models)	1xSPDT, 3A(0.5A) @ 250VAC, UL Listed, adjustable 0 to 90°
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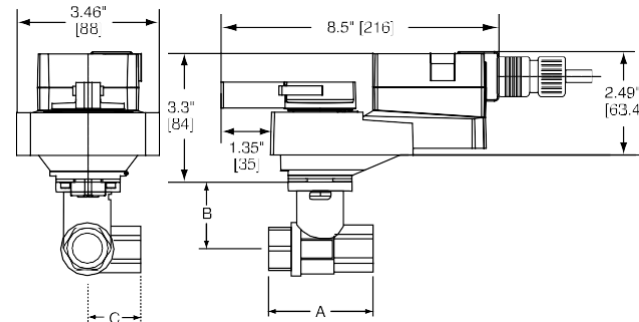
† Rated impulse voltage 800V, Control pollution degree 3, Type of action (1.B for -S models)

Dimensions with 2-Way Valve



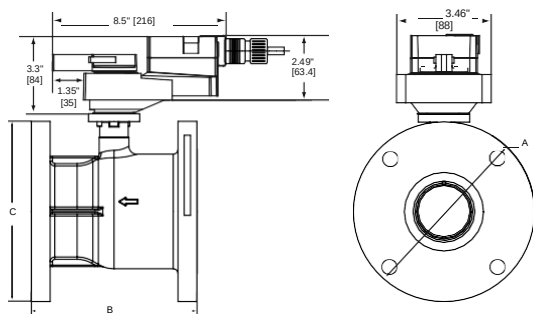
Valve Nominal Size		Dimensions (Inches [mm])		
Valve Body	Inches DN [mm]	A	B	C
B231-B232	1 1/4" 32	3.72" [94.6]	1.98" [50.4]	
B238-B240	1 1/2" 40	3.88" [98.5]	1.98" [50.4]	
B248-B250	2" 50	4.21" [107.0]	2.21" [56.2]	
B251-B254	2" 50	4.93" [125.2]	2.68" [68.0]	
B261-B265	2 1/2" 65	5.55" [140.9]	2.68" [68.0]	
B277-B280	3" 80	5.82" [147.9]	2.68" [68.0]	

Dimensions with 3-Way Valve



Valve Nominal Size		Dimensions (Inches [mm])		
Valve Body	Inches DN [mm]	A	B	C
B329-B331	1 1/4" 32	3.96" [100.6]	2.21" [56.2]	2.14" [54.3]
B338-B341	1 1/2" 40	4.39" [111.6]	2.45" [62.2]	2.33" [59.1]
B347-B352	2" 50	4.90" [124.5]	2.68" [68.0]	2.60" [66.0]

Dimensions



Valve Body	Nominal Pipe Size	Top Flange Design	Flange Diameter	Face-to-Face Length	Height
			A		C
B6250	2½" [65]		7.50" [190.5]	5.50" [139.7]	8.10" [205.4]
B6300	3" [80]	F05	8.00" [203.2]	6.60" [167.6]	8.40" [213.1]
B6400	4" [100]		9.00" [228.6]	8.30" [210.8]	9.30" [235.9]

Wiring Diagrams

INSTALLATION NOTES

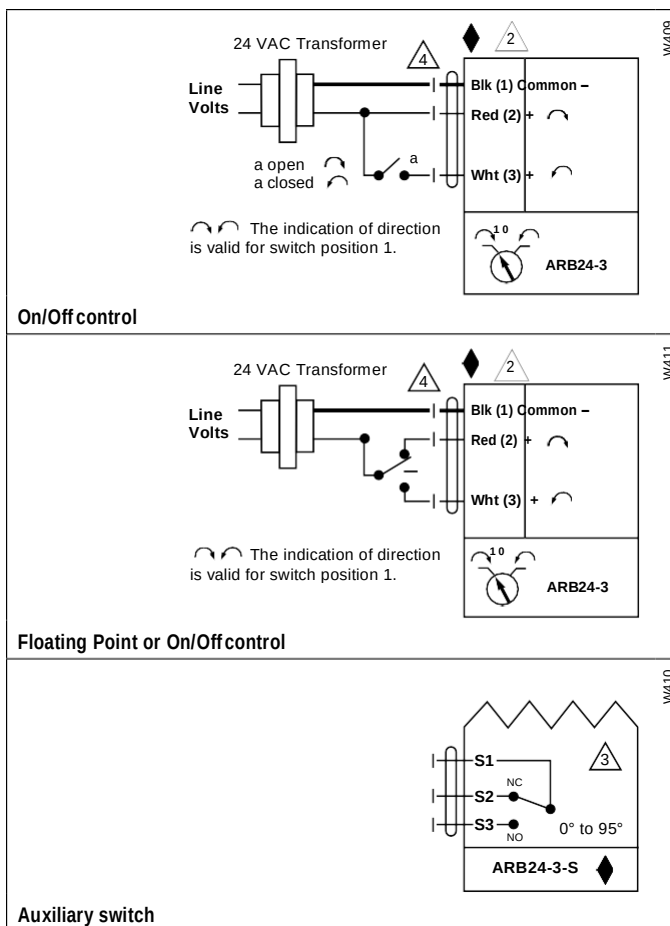
- 2 **CAUTION Equipment damage!**
Actuators may be connected in parallel.
Power consumption and input impedance must be observed.
- 3 For end position indication, interlock control, etc.,
ARB24-3-S incorporates one built-in auxiliary switches:
1xSPDT, 3A (0.5A) @250 VAC, UL listed, adjustable 0° to 95°.
- 4 Actuators may also be powered by 24 VDC.

APPLICATION NOTES

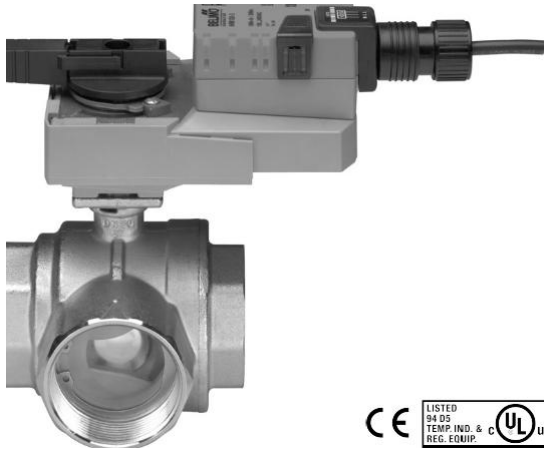
- ◆ Meets cULus or UL and CSA requirements without the need of an electrical ground connection.

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.



AR...24-SR Actuators, Proportional



Models

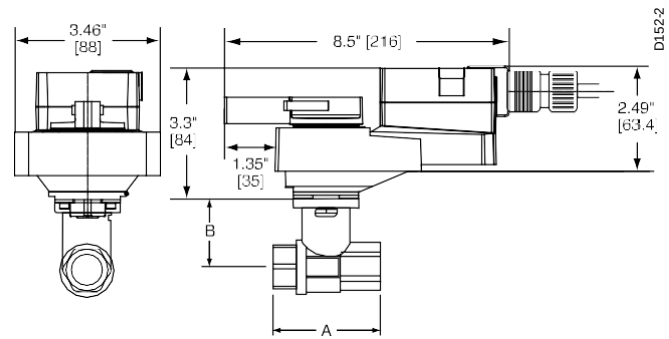
ARB24-SR
ARX24-SR Flexible Version

Technical Data

Power supply	24 VAC $\pm$ 20% 50/60 Hz 24 VDC $\pm$ 10%
Power consumption	running 2.5 W holding 0.4 W
Transformer sizing	5 VA (class 2 power source)
Electrical connection	½" conduit connector 18 GA plenum rated cable 3 ft [1m], 10 ft [3m], 16 ft [5m]
Overload protection	electronic throughout 0° to 95° rotation
Operating range Y	2 to 10 VDC, 4 to 20 mA
Feedback output U	1 to 10 VDC, max 0.5 mA
Input impedance	100 k (0.1 mA), 500 Ω
Angle of rotation	90°, adjustable with mechanical stop
Torque	180 in-lb [20 Nm]
Direction of rotation	reversible with protected switch
Position indication	handle
Manual override	external push button
Running time	ARB24-SR... 90 seconds ARX24-SR... 300, 150, 90 seconds, constant independent of load
Humidity	5 to 95% RH non-condensing (EN 60730-1)
Ambient temperature	-22°F to +122°F [-30°C to +50°C]
Storage temperature	-40°F to +176°F [-40°C to +80°C]
Housing	NEMA 2/IP54
Housing material	UL94-5VA
Agency listings†	cULus according to UL 60730-1A/-2-14, CAN/CSA E60730-1:02, CE according to 2004/108/EC and 2006/95/EC for line voltage and/or -S versions
Noise level	<45 dB(A)
Quality standard	ISO 9001

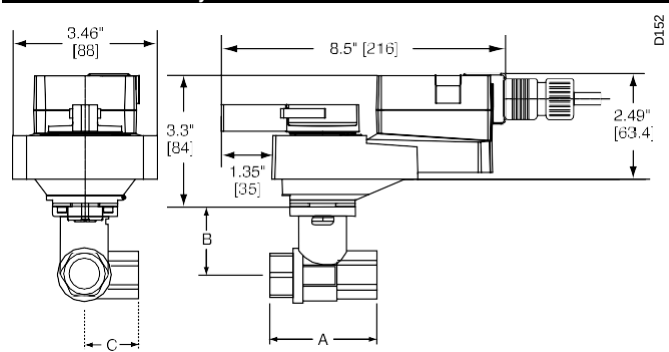
† Rated impulse voltage 800V, Control pollution degree 3, Type of action
(1.B for -S models)

Dimensions with 2-Way Valve



Valve Body	Valve Nominal Size		Dimensions (Inches [mm])	
	Inches	DN [mm]	A	
B231-B232	1¼"	32	3.72" [94.6]	2.04" [51.9]
B238-B240	1½"	40	3.88" [98.5]	2.04" [51.9]
B248-B250	2"	50	4.21" [107.0]	2.27" [57.7]

Dimensions with 3-Way Valve



Valve Body	Valve Nominal Size		Dimensions (Inches [mm])		
	Inches	DN [mm]	A	B	C
B329-B331	1¼"	32	3.96" [100.6]	2.27" [57.7]	2.14" [54.3]
B338-B341	1½"	40	4.39" [111.6]	2.51" [63.7]	2.40" [61.1]
B347-B352	2"	50	4.90" [124.5]	2.73" [69.5]	2.74" [69.7]

O50905 - 05/12 - Subject to change. © Belimo Aircontrols (USA), Inc.

Wiring Diagrams

INSTALLATION NOTES

CAUTION Equipment damage!
Actuators may be connected in parallel.
Power consumption and input impedance must be observed.

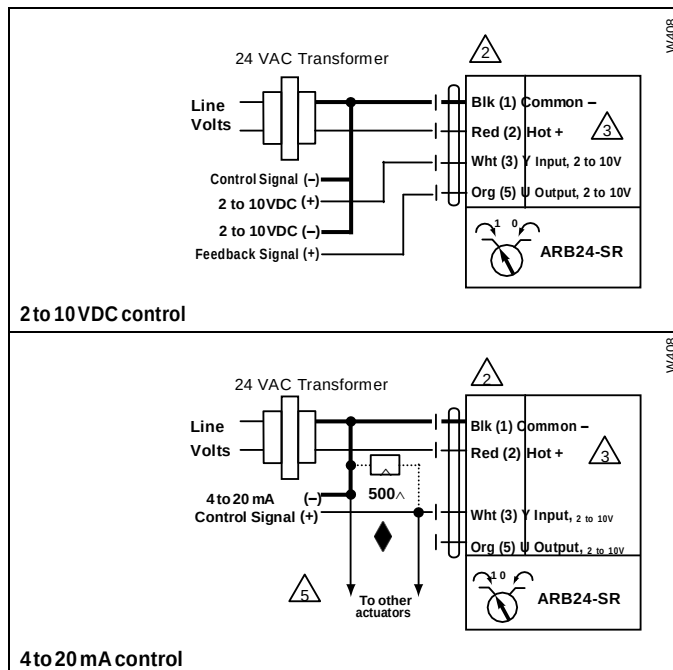
Actuators may also be powered by 24 VDC.

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

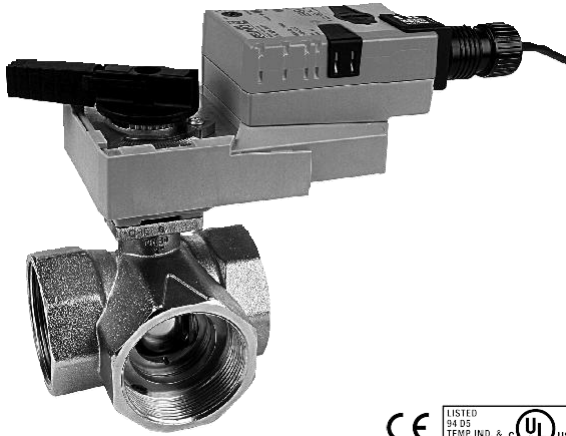
APPLICATION NOTES

The ZG-R01 500 Ω resistor converts the 4 to 20 mA control signal to 2 to 10 VDC, up to 2 actuators may be connected in parallel.

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.



AR...120-3 Actuators, On/Off, Floating Point



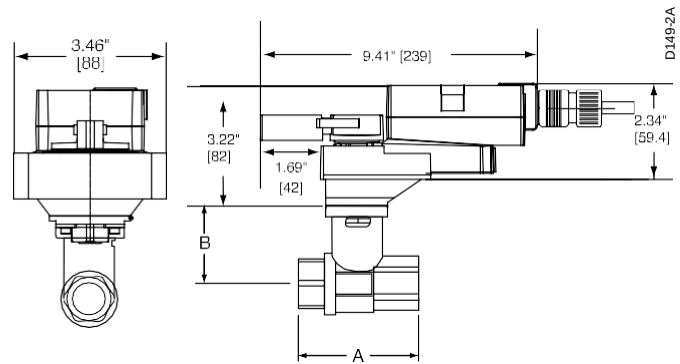
Models

ARB120-3
ARX120-3 Flexible Version

Technical Data	
Control	on/off, floating point
Power supply	100 to 240 VAC, 50/60 Hz (nominal) 85 to 265 VAC, 50/60 Hz (tolerance)
Power consumption	running 3 W
	holding 0.6 W
Transformer sizing	7 VA (class 2 power source)
Electrical connection	1/2" conduit connector
	18 GA appliance rated cable
	ARB120-3 3 ft [1m] ARX120-3 3 ft [1m], 10 ft [3m], 16 ft [5m]
Overload protection	electronic throughout 0° to 95° rotation
Input impedance	600 Ω
Angle of rotation	90°, adjustable with mechanical stop
Direction of rotation	reversible with protected $\swarrow/\searrow$ switch
Position indication	handle
Manual override	external push button
Running time	90 seconds
	ARB120-3 300, 150, 90 seconds, ARX120-3 constant independent of load
Humidity	5 to 95% RH non-condensing (EN 60730-1)
Ambient temperature	-22°F to 122°F [-30°C to 50°C]
Storage temperature	-40°F to 176°F [-40°C to 80°C]
Housing	NEMA 2/IP54
Housing material	UL94-5VA
Agency listings†	cULus according to UL 60730-1A/-2-14, CAN/CSA E60730-1:02, CE according to 2004/108/EC and 2006/95/EC for line voltage and/or -S versions
Noise level	<45 dB(A)
Servicing	maintenance free
Quality standard	ISO 9001

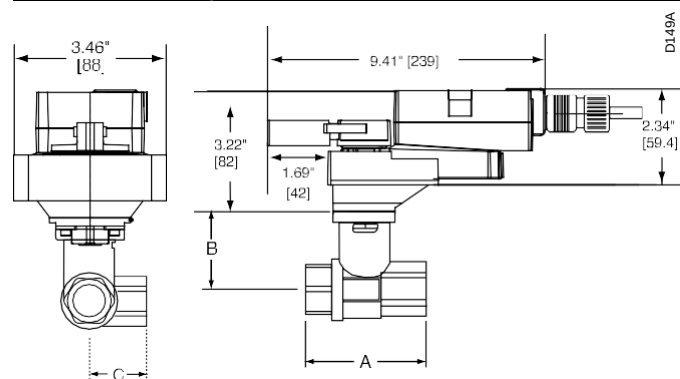
† Rated impulse voltage 4kV, Control pollution degree 3, Type of action

Dimensions with 2-Way Valve



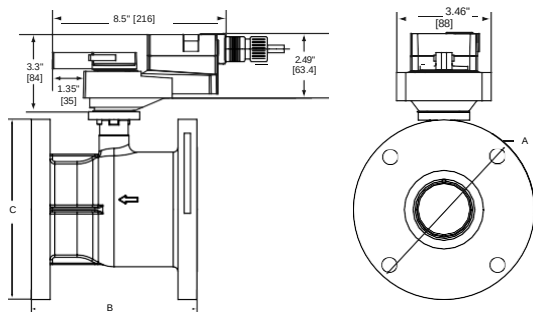
Valve Body	Valve Nominal Size		Dimensions (Inches [mm])	
	Inches	DN [mm]	A	
B231-B232	1 1/4"	32	3.72" [94.6]	2.04" [51.9]
B238-B240	1 1/2"	40	3.88" [98.5]	2.04" [51.9]
B248-B250	2"	50	4.21" [107.0]	2.27" [57.7]
B251-B254	2"	50	4.93" [125.2]	2.73" [69.5]
B261-B265	2 1/2"	65	5.55" [140.9]	2.73" [69.5]
B277-B280	3"	80	5.82" [147.9]	2.73" [69.5]

Dimensions with 3-Way Valve



Valve Body	Valve Nominal Size		Dimensions (Inches [mm])		
	Inches	DN [mm]	A		C
B329-B331	1 1/4"	32	3.96" [100.6]	2.27" [57.7]	2.14" [54.3]
B338-B341	1 1/2"	40	4.39" [111.6]	2.51" [63.7]	2.40" [61.1]
B347-B352	2"	50	4.90" [124.5]	2.73" [69.5]	2.74" [69.7]

Dimensions



Valve Body	Nominal Pipe Size	Top Flange Design	Flange Diameter	Face-to-Face Length	Height
			A		C
B6250	2½" [65]		7.50" [190.5]	5.50" [139.7]	8.10" [205.4]
B6300	3" [80]	F05	8.00" [203.2]	6.60" [167.6]	8.40" [213.1]
B6400	4" [100]		9.00" [228.6]	8.30" [210.8]	9.30" [235.9]

Wiring Diagrams

INSTALLATION NOTES

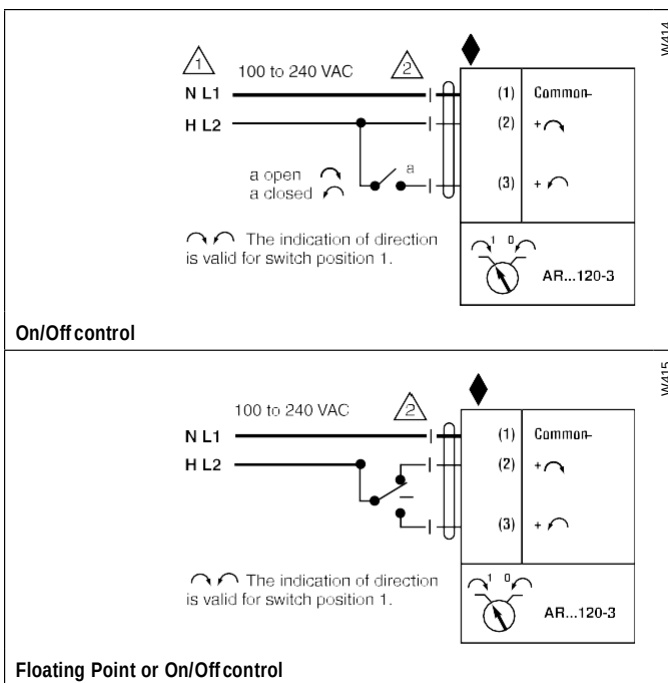
Provide overload protection and disconnect as required.

CAUTION Equipment damage!
Actuators may be connected in parallel.
Power consumption and input impedance must be observed.

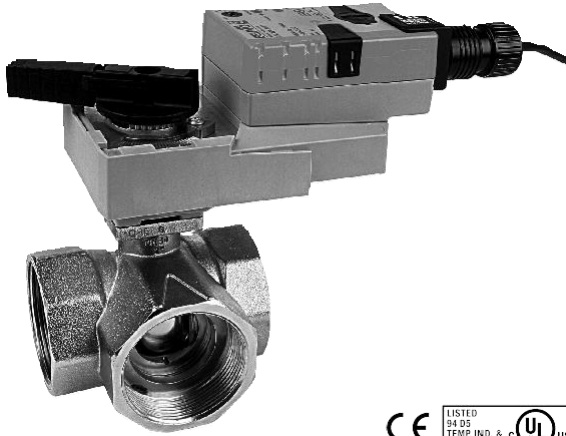
APPLICATION NOTES

Meets cULus or UL and CSA requirements without the need of an electrical ground connection.

WARNING Live Electrical Components!
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AR...120-SR Actuators



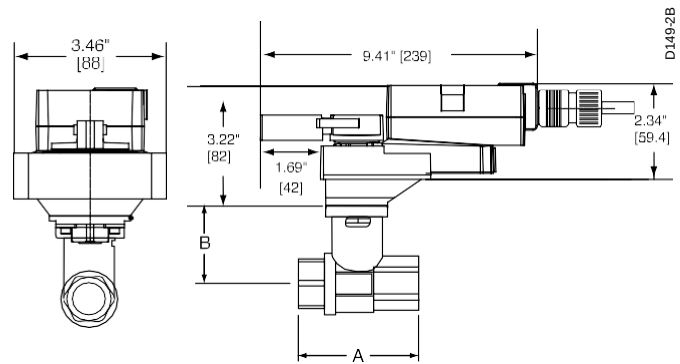
Models

ARB120-SR
ARX120-SR Flexible Version

Technical Data	
Control	on/off, floating point
Power supply	100 to 240 VAC, 50/60 Hz (nominal) 85 to 265 VAC, 50/60 Hz (tolerance)
Power consumption	running 3 W
	holding 0.6 W
Transformer sizing	7.5 VA (class 2 power source)
Electrical connection	1/2" conduit connector
	18 GA plenum rated cable
ARB120-SR	3 ft [1m]
ARX120-SR	3 ft [1m], 10 ft [3m], 16 ft [5m]
Overload protection	electronic throughout 0° to 95° rotation
Feedback output U	1 to 10 VDC, max 0.5 mA
Input impedance	600 Ω
Angle of rotation	90°, adjustable with mechanical stop
Direction of rotation	reversible with protected switch
Position indication	handle
Manual override	external push button
Running time	90 seconds
	ARB120-SR
ARX120-SR	300, 150, 90 seconds, constant independent of load
Humidity	5 to 95% RH non-condensing (EN 60730-1)
Ambient temperature	-22°F to 122°F [-30°C to 50°C]
Storage temperature	-40°F to 176°F [-40°C to 80°C]
Housing	NEMA 2/IP54
Housing material	UL94-5VA
Agency listings†	cULus according to UL 60730-1A/-2-14, CAN/CSA E60730-1:02, CE according to 2004/108/EC and 2006/95/EC for line voltage and/or -S versions
Noise level	<45 dB(A)
Servicing	maintenance free
Quality standard	ISO 9001

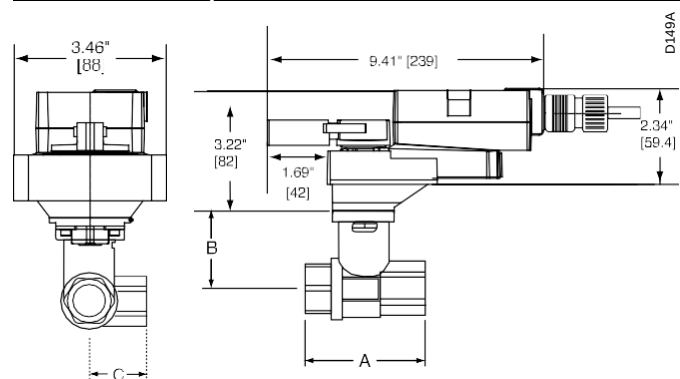
† Rated impulse voltage 4kV, Control pollution degree 3, Type of action

Dimensions with 2-Way Valve



Valve Body	Valve Nominal Size		Dimensions (Inches [mm])	
	Inches	DN [mm]	A	
B231-B232	1 1/4"	32	3.72" [94.6]	2.04" [51.9]
B238-B240	1 1/2"	40	3.88" [98.5]	2.04" [51.9]
B248-B250	2"	50	4.21" [107.0]	2.27" [57.7]

Dimensions with 3-Way Valve



Valve Body	Valve Nominal Size		Dimensions (Inches [mm])		
	Inches	DN [mm]	A	B	C
B329-B331	1 1/4"	32	3.96" [100.6]	2.27" [57.7]	2.14" [54.3]
B338-B341	1 1/2"	40	4.39" [111.6]	2.51" [63.7]	2.40" [61.1]
B347-B352	2"	50	4.90" [124.5]	2.73" [69.5]	2.74" [69.7]

Wiring Diagrams

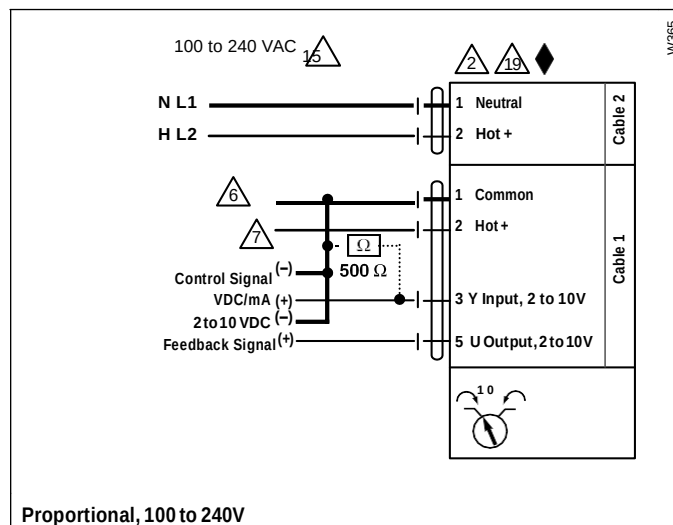
✂ INSTALLATION NOTES

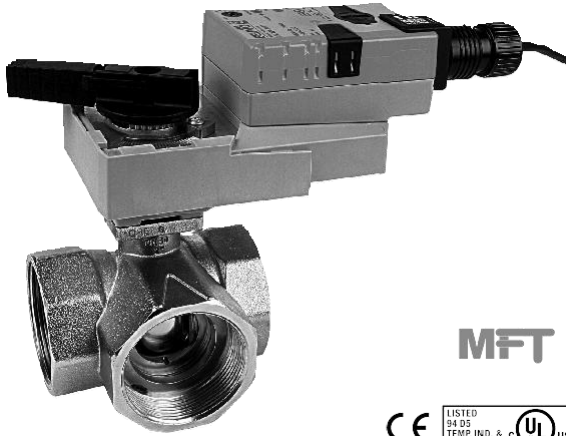
- ⚠ **CAUTION Equipment damage!**
Actuators may be connected in parallel.
Power consumption and input impedance must be observed.
- △6 Only connect common to neg. (-) leg of control circuits.
- △ A 500 Ω resistor converts the 4 to 20 mA control signal to 2 to 10 VDC.
- △5 ARB(X) can be supplied with both 120 VAC and 230 VAC.
- △9 All 120 VAC and 230 VAC actuators use appliance rated cables.

📋 APPLICATION NOTES

- ◆ Meets cULus or UL and CSA requirements without the need of an electrical ground connection.

⚠ **WARNING LIVE Electrical Components!**
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MFT



Models

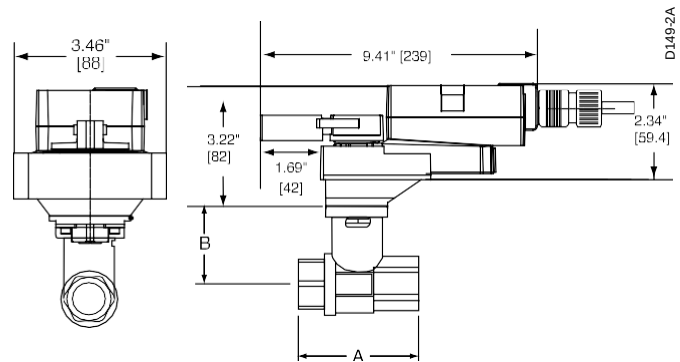
ARX24-MFT
ARX24-MFT-5-14

Technical Data

Power supply	24 VAC $\pm$ 20% 50/60 Hz 24 VDC $\pm$ 10%
Power consumption	running 4 W holding 1.25 W
Transformer sizing	6 VA (class 2 power source)
Electrical connection	1/2" conduit connector 18 GA plenum rated cable 3 ft. [1m], 10 ft. [3m], 16 ft. [5m]
ARX24-MFT	
Overload protection	electronic throughout 0° to 95° rotation
Operating range Y	2 to 10 VDC, 4 to 20 mA (default) variable (VDC, PWM, floating point, on/off)
Feedback output U	2 to 10 VDC, 0.5 mA max VDC variable
Input impedance	100 k $\wedge$ (0.1 mA), 500 $\wedge$ 1500 $\wedge$ (PWM, floating point, on/off)
Angle of rotation	95° electronically variable
Direction of rotation	reversible with protected switch
Position indication	handle
Manual override	external push button
Running time	
ARB24-MFT	150 seconds
ARX24-MFT	variable (90 to 350 seconds)
Humidity	5 to 95% RH non-condensing (EN 60730-1)
Ambient temperature	-22°F to 122°F [-30°C to 50°C]
Storage temperature	-40°F to 176°F [-40°C to 80°C]
Housing	NEMA 2/IP54
Housing material	UL94-5VA
Agency listings†	cULus according to UL 60730-1A/-2-14, CAN/CSA E60730-1:02, CE according to 2004/108/EC and 2006/95/EC for line voltage and/or -S versions
Noise level	<45 dB(A)
Quality standard	ISO 9001

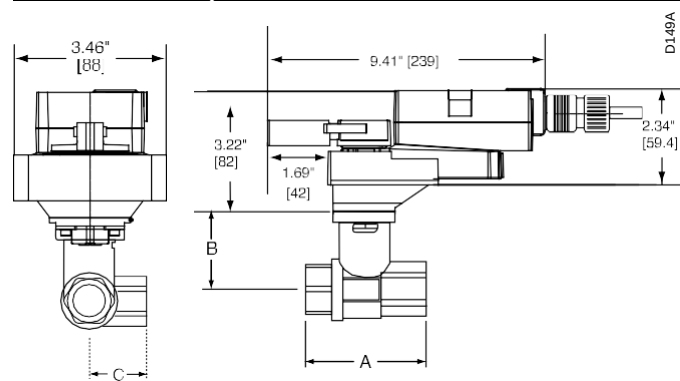
† Rated impulse voltage 4kV, Control pollution degree 3, Type of action

Dimensions with 2-Way Valve



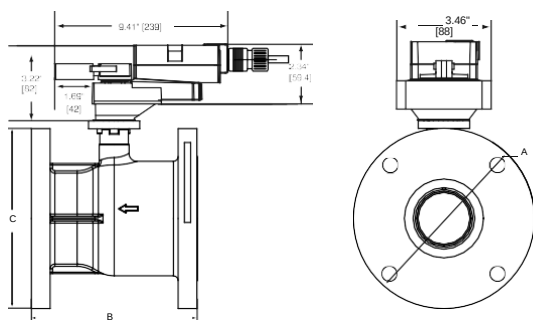
Valve Body	Valve Nominal Size		Dimensions (Inches [mm])	
	Inches	DN [mm]	A	
B231-B232	1 1/4"	32	3.72" [94.6]	1.98" [50.4]
B238-B240	1 1/2"	40	3.88" [98.5]	1.98" [50.4]
B248-B250	2"	50	4.21" [107.0]	2.21" [56.2]
B251-B254	2"	50	4.93" [125.2]	2.68" [68.0]
B261-B265	2 1/2"	65	5.55" [140.9]	2.68" [68.0]
B277-B280	3"	80	5.82" [147.9]	2.68" [68.0]

Dimensions with 3-Way Valve



Valve Body	Valve Nominal Size		Dimensions (Inches [mm])		
	Inches	DN [mm]	A		C
B329-B331	1 1/4"	32	3.96" [100.6]	2.21" [56.2]	2.14" [54.3]
B338-B341	1 1/2"	40	4.39" [111.6]	2.45" [62.2]	2.33" [59.1]
B347-B352	2"	50	4.90" [124.5]	2.68" [68.0]	2.60" [66.0]

Dimensions



AR_MFT_LG00V

Valve Body	Nominal Pipe Size	Top Flange Design	Flange Diameter	Face-to-Face Length	Height
			A		C
B6250	2½" [65]	F05	7.50" [190.5]	5.50" [139.7]	8.10" [205.4]
B6300	3" [80]		8.00" [203.2]	6.60" [167.6]	8.40" [213.1]
B6400	4" [100]		9.00" [228.6]	8.30" [210.8]	9.30" [235.9]

Wiring Diagrams

INSTALLATION NOTES

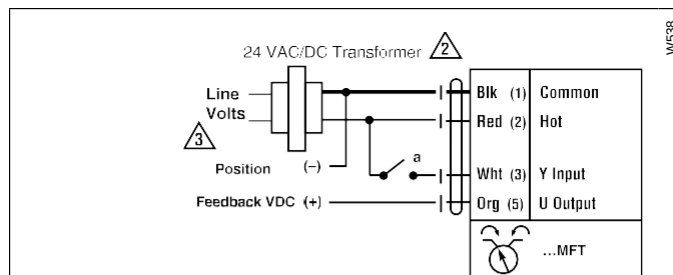
- 2 CAUTION Equipment damage!**
Actuators may be connected in parallel.
Power consumption and input impedance must be observed.
- 3** Actuators may also be powered by 24 VDC.
- 4** Position feedback cannot be used with Triac sink controller.
The actuator internal common reference is not compatible.
- 6** Control signal may be pulsed from either the Hot (source) or the Common (sink) 24 VAC line.
- 8** Contact closures A & B also can be triacs.
- 8** A & B should both be closed for triac source and open for triac sink.
- 9** For triac sink the common connection from the actuator must be connected to the hot connection.

APPLICATION NOTES

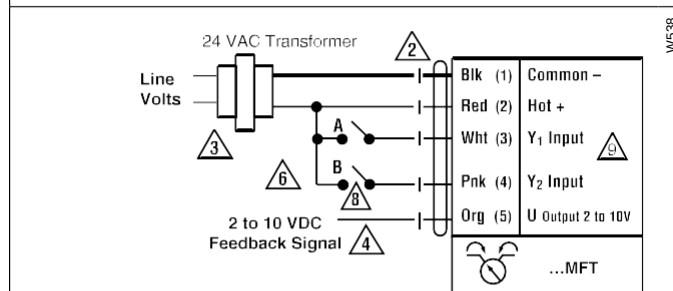
- ◆** The ZG-R01 500 Ω resistor converts the 4 to 20 mA control signal to 2 to 10 VDC, up to 2 actuators may be connected in parallel.

WARNING LIVE Electrical Components!

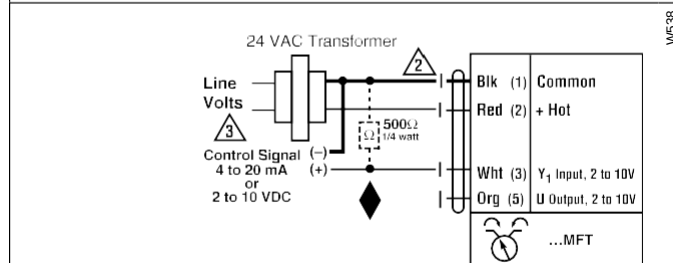
⚠ During installation, testing, servicing and troubleshooting of this product, it may be necessary to work with live electrical components. Have a qualified licensed electrician or other individual who has been properly trained in handling live electrical components perform these tasks. Failure to follow all electrical safety precautions when exposed to live electrical components could result in death or serious injury.



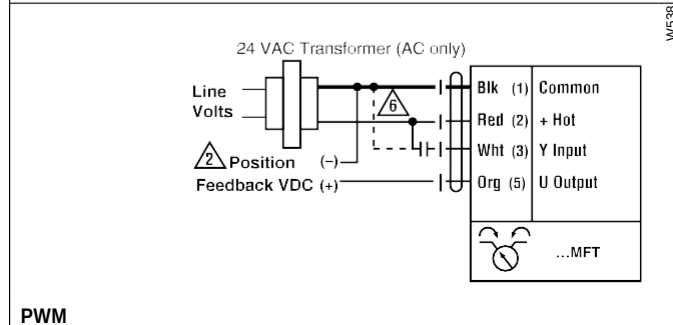
On/Off control



Floating Point

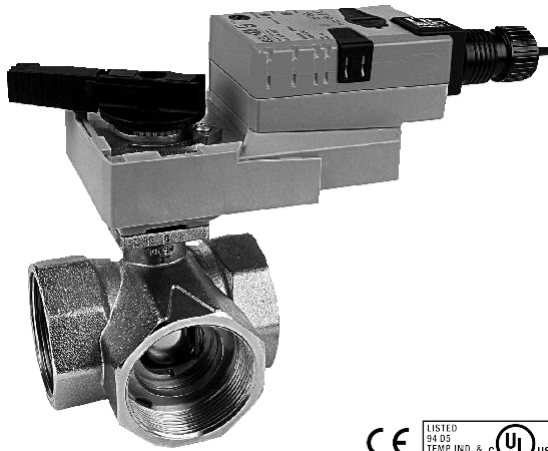


VDC/4-20 mA



PWM

ARX24-PC Actuators, Phasecut



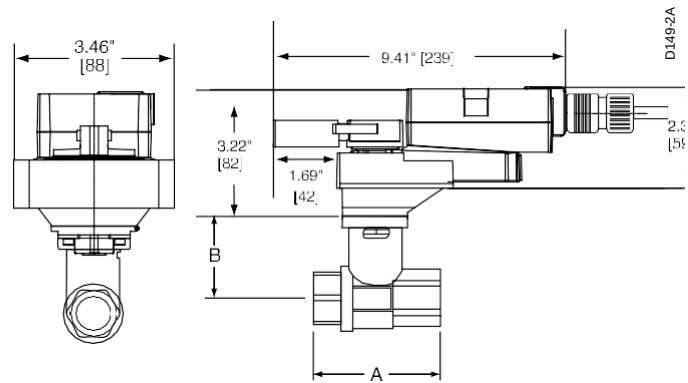
Models

ARX24-PC

Technical Data	
Power supply	24 VAC $\pm$ 20% 50/60 Hz 24 VDC $\pm$ 10%
Power consumption	running 4 W holding 1.25 W
Transformer sizing	5.5 VA (Class 2 power source)
Electrical connection	1/2" conduit connector 18 GA plenum rated cable 3 ft. [1m], 10 ft. [3m], 16 ft. [5m]
Overload protection	electronic throughout 0 to 95° rotation
Operating range Y	0 to 20V phasecut
Feedback output U	2 to 10 VDC, 0.5mA max VDC variable
Input impedance	8 k (50 mW)
Angle of rotation	90°, adjustable with mechanical stop electronically variable
Direction of rotation	reversible with switch
Position indication	handle
Manual override	external push button
Running time	150 seconds (default)
Humidity	5 to 95% RH non-condensing (EN 60730-1)
Ambient temperature	-22°F to 122°F [-30°C to 50°C]
Storage temperature	-40°F to 176°F [-40°C to 80°C]
Housing	NEMA 2/IP54
Housing material	UL94-5VA
Agency listings†	cULus according to UL 60730-1A/-2-14, CAN/CSA E60730-1:02, CE according to 2004/108/EC and 2006/95/EC for line voltage and/or -S versions
Noise level	<45 dB(A)
Quality standard	ISO 9001

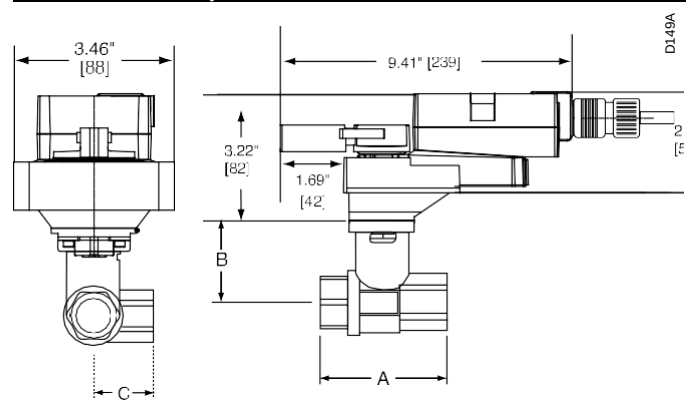
†Rated Impulse Voltage 800V, Type of action 1, Control Pollution Degree 3.

Dimensions with 2-Way Valve



Valve Nominal Size		Dimensions (Inches [mm])	
Valve Body	nches DN [mm]	A	
B231-B232	1 1/4" 32	3.72" [94.6]	2.04" [51.9]
B238-B240	1 1/2" 40	3.88" [98.5]	2.04" [51.9]
B248-B250	2" 50	4.21" [107.0]	2.27" [57.7]
B251-B254	2" 50	4.93" [125.2]	2.73" [69.5]
B261-B265	2 1/2" 65	5.55" [140.9]	2.73" [69.5]
B277-B280	3" 80	5.82" [147.9]	2.73" [69.5]

Dimensions with 3-Way Valve



Valve Nominal Size		Dimensions (Inches [mm])		
Valve Body	nches DN [mm]	A		C
B329-B331	1 1/4" 32	3.96" [100.6]	2.27" [57.7]	2.14" [54.3]
B338-B341	1 1/2" 40	4.39" [111.6]	2.51" [63.7]	2.40" [61.1]
B347-B352	2" 50	4.90" [124.5]	2.73" [69.5]	2.74" [69.7]

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Wiring Diagrams

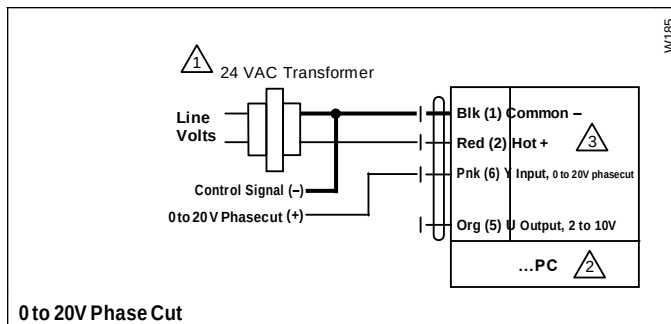
✂️ INSTALLATION NOTES

△ Provide overload protection and disconnect as required.

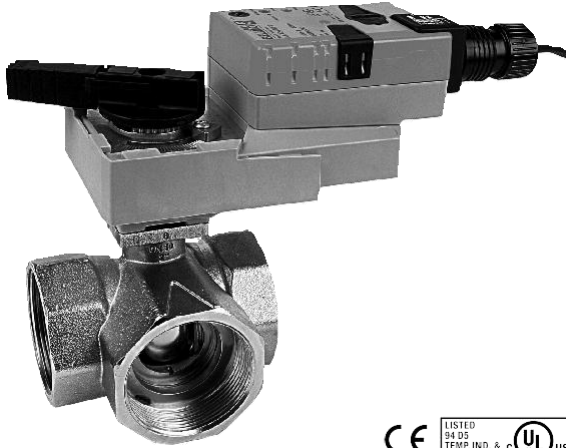
△ **CAUTION Equipment damage!**
Actuators may be connected in parallel.
Power consumption and input impedance must be observed.

△ 3 Actuators may also be powered by 24 VDC.

⚠️ **WARNING LIVE Electrical Components!**
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ARX24-MFT95 Actuators, 0 to 135



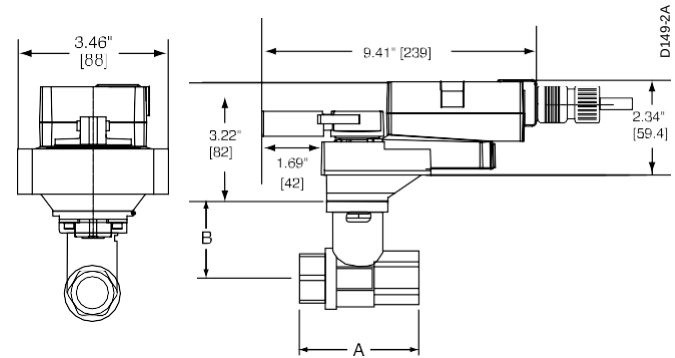
Models

ARX24-MFT95

Technical Data	
Power supply	24 VAC $\pm$ 20% 50/60 Hz 24 VDC $\pm$ 10%
Power consumption	running 4 W holding 1.25 W
Transformer sizing	6 VA (Class 2 power source)
Electrical connection	1/2" conduit connector 18 GA plenum rated cable 3 ft [1m], 10 ft [3m], 16 ft [5m]
Overload protection	electronic throughout 0 to 95° rotation
Operating range WRB	0 to 135 Honeywell Electronic Series 90, 0 to 135 input
Feedback output U	2 to 10 VDC, 0.5mA max
Input impedance	100 k (0.1 mW)
Angle of rotation	90°, adjustable with mechanical stop electronically variable
Direction of rotation	reversible with switch
Position indication	handle
Manual override	external push button
Running time	150 seconds (default) variable (90 to 350 seconds)
Humidity	5 to 95% RH non-condensing (EN 60730-1)
Ambient temperature	-22°F to 122°F [-30°C to 50°C]
Storage temperature	-40°F to 176°F [-40°C to 80°C]
Housing	NEMA 2/IP54
Housing material	UL94-5VA
Agency listings†	cULus according to UL 60730-1A/-2-14, CAN/CSA E60730-1:02, CE according to 2004/108/EC and 2006/95/EC for line voltage and/or -S versions
Noise level	<45 dB(A)
Quality standard	ISO 9001

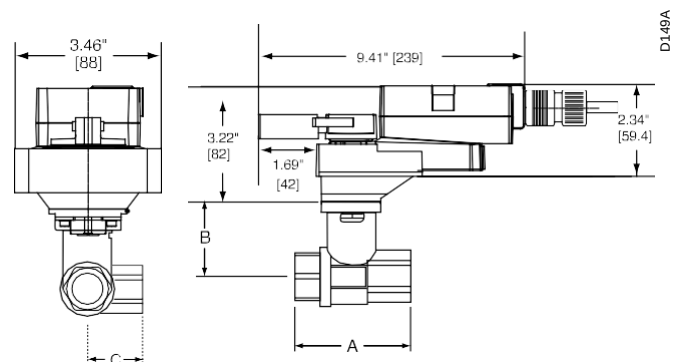
†Rated Impulse Voltage 800V, Type of action 1.AA, Control Pollution Degree 3.

Dimensions with 2-Way Valve



Valve Nominal Size		Dimensions (Inches [mm])	
Valve Body	nches DN [mm]	A	
B231-B232	1 1/4" 32	3.72" [94.6]	2.04" [51.9]
B238-B240	1 1/2" 40	3.88" [98.5]	2.04" [51.9]
B248-B250	2" 50	4.21" [107.0]	2.27" [57.7]
B251-B254	2" 50	4.93" [125.2]	2.73" [69.5]
B261-B265	2 1/2" 65	5.55" [140.9]	2.73" [69.5]
B277-B280	3" 80	5.82" [147.9]	2.73" [69.5]

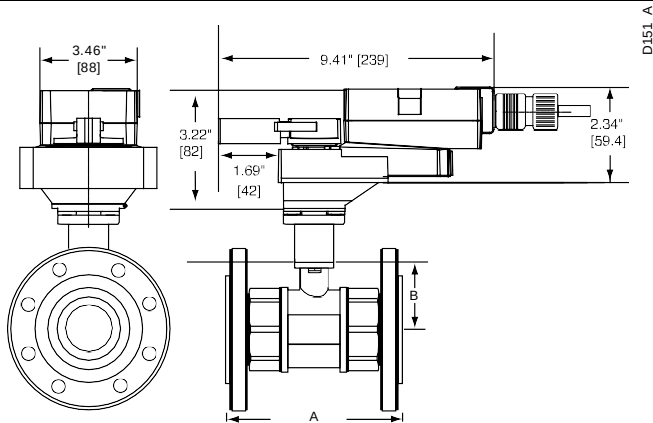
Dimensions with 3-Way Valve



Valve Nominal Size		Dimensions (Inches [mm])		
Valve Body	nches DN [mm]	A		C
B329-B331	1 1/4" 32	3.96" [100.6]	2.27" [57.7]	2.14" [54.3]
B338-B341	1 1/2" 40	4.39" [111.6]	2.51" [63.7]	2.40" [61.1]
B347-B352	2" 50	4.90" [124.5]	2.73" [69.5]	2.74" [69.7]

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Dimensions with 2-Way Flanged Valve



Valve Nominal Size			Dimensions (Inches [mm])		
Valve Body	nches	DN [mm]	A	CCV-EXT	
B661-B665	2½"	65	7.54" [192]	3.50" [89]	2.00" [50]
B677-B680	3"	80	7.93" [202]	3.75" [96]	2.00" [50]

Wiring Diagrams

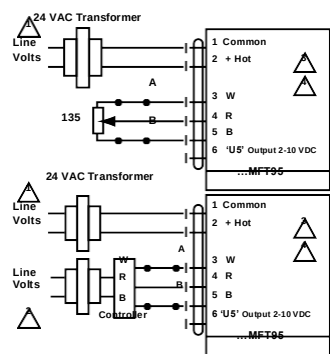
INSTALLATION NOTES

- 1 Provide overload protection and disconnect as required.
- CAUTION *Equipment damage!*
Actuators and controller must have separate transformers.
- 3 Consult controller instruction data for more detailed installation information.
- 4 Resistor value depends on the type of controller and the number of actuators. No resistor is used for one actuator. Honeywell resistor kits may also be used.
- To reverse control rotation, use the reversing switch.

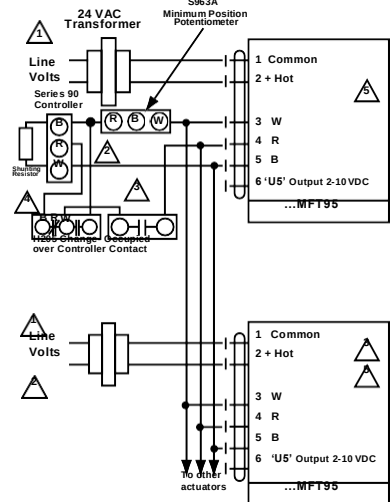
WARNING Live Electrical Components!
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Switch A	Switch B	Damper Position
		Damper Open
		Damper Closed

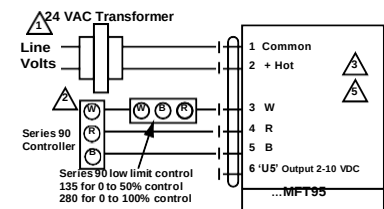
The direction of rotation switch is set so that the fail safe position and the position of the damper is closed with no signal at wire R.



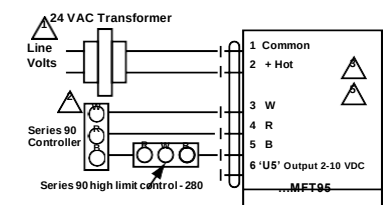
Override



Wiring multiple actuators to a Series 90 controller using a minimum position potentiometer.



Low Limit Control



High Limit Control