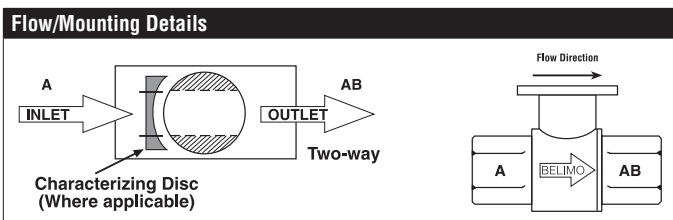


B250 Technical Data Sheet

Stainless Steel Ball and Stem



Technical Data	
Fluid	chilled, hot water, up to 60% glycol
Flow characteristic	equal percentage
Controllable flow range	75°
Valve Size [mm]	2" [50]
Pipe connection	NPT female ends
Housing	Nickel-plated brass body
Ball	stainless steel
Stem	stainless steel
Stem seal	EPDM (lubricated)
Seat	PTFE
O-ring	EPDM (lubricated)
Characterised disc	No Disc (full flow)
Body Pressure Rating	400 psi
Close-off pressure Δ ps	200 psi
Cv	57
Weight	2.87 lb [1.3 kg]
Fluid Temp Range (water)	0...250°F [-18...120°C]
Leakage rate	0% for A – AB
Maintenance	maintenance-free



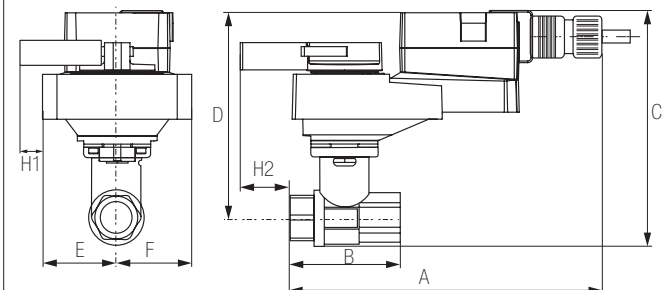
Application

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 a hydronic system with variable flow.

Suitable Actuators

	Non-Spring	Spring
B250	ARB(X)	AFRB(X)

Dimensions (Inches [mm])



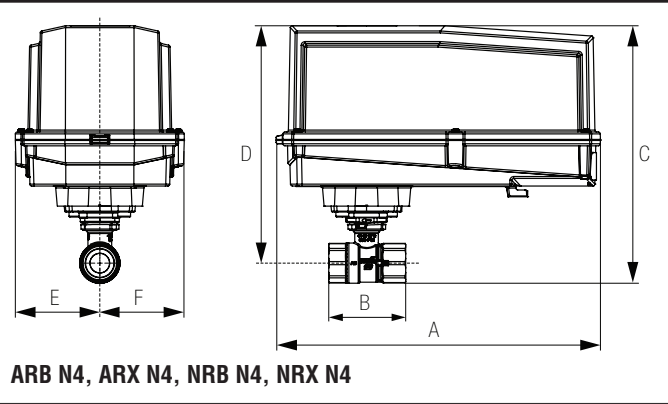
ARB, ARX

A	B	C	D	E	F	H1	H2
10.0"	4.2"	6.9"	5.5"	1.7"		1.2"	0.6"
[254]	[107]	[175]	[140]	[44]		[30]	[15]

Safety Notes

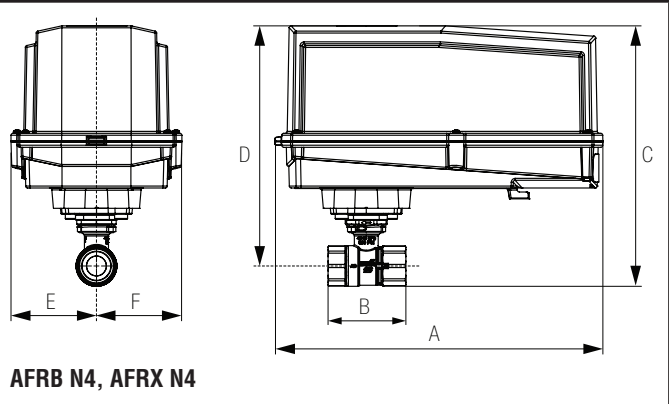
WARNING: For Belimo products sold in California: these products do or may contain chemicals which are known to the State of California to cause cancer and or birth defects or other reproductive harms. For more information see www.p65warnings.ca.gov.

Dimensions (Inches [mm])



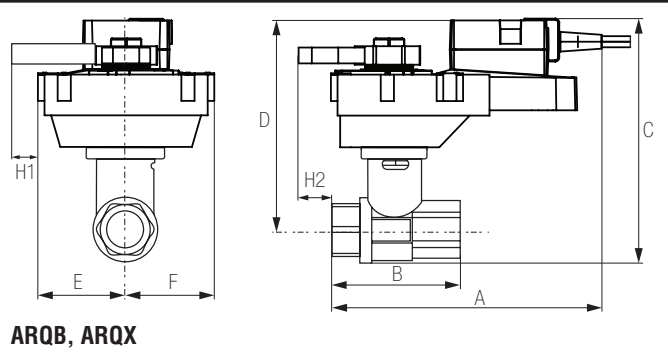
A	B	C	D	E	F
11.4" [289]	7267	9.8" [249]	7.6" [194]	3.1" [80]	

Dimensions (Inches [mm])



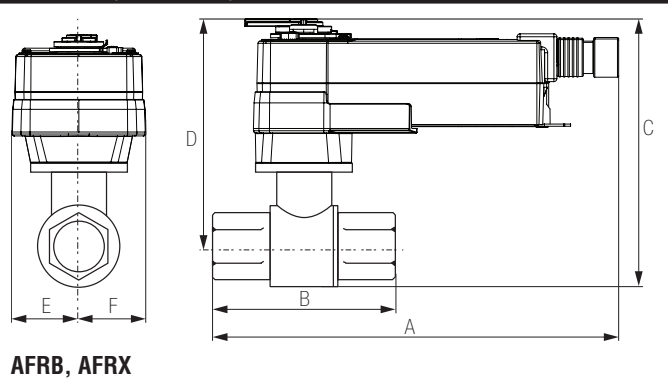
A	B	C	D	E	F
13.0" [330]	4.9" [125]	10.3" [262]	9.3" [235]	3.4" [86]	

Dimensions (Inches [mm])



A	B	C	D	E	F	H1	H2
9.9" [251]	4.2" [107]	7.5" [191]	6.1" [155]	2.3" [58]		0.8" [20]	0.6" [15]

Dimensions (Inches [mm])



A	B	C	D	E	F
10.8" [275]	4.2" [107]	9.5" [241]	8.1" [206]	2.0" [51]	

ARX120-SR Technical Data Sheet

Modulating, Non-Spring Return, AC 100...240 V, for DC 2...10 V or 4...20 mA



5-year warranty



Technical Data

Power Supply	100...240 VAC, -15% / +10%, 50/60 Hz
Power consumption in operation	4 W
Power consumption in rest position	1 W
Transformer sizing	7.5 VA (class 2 power source)
Electrical Connection	18 GA appliance cable, 3ft [1m] 10ft [3m] and 16ft [5m], with 1/2" conduit connector, degree of protection NEMA 2 / IP54
Overload Protection	electronic throughout 0...90° rotation
Operating Range	DC 2...10 V, 4...20 mA w/ ZG-R01 (500 Ω, 1/4 W resistor)
Input Impedance	100 kΩ for DC 2...10 V (0.1 mA), 500 Ω for 4...20 mA
Position Feedback	DC 2...10 V
Angle of rotation	90°
Direction of rotation motor	reversible with built-in switch
Position indication	Mechanically, pluggable
Manual override	external push button
Running Time (Motor)	default 90 s, variable 90 or 150 s
Ambient humidity	max. 95% r.H., non-condensing
Ambient temperature	-22...122°F [-30...50°C]
Storage temperature	-40...176°F [-40...80°C]
Degree of Protection	IP54, NEMA 2
Agency Listing	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	45 dB(A)
Maintenance	maintenance-free
Quality Standard	ISO 9001
Weight	2.2 lb [1.0 kg]

†Rated Impulse Voltage 4kV, Type of action 1, Control Pollution Degree 3.

Safety Notes

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Wiring Diagrams

✂️ INSTALLATION NOTES

- (A)** Actuators with appliance cables are numbered.
- 1** Provide overload protection and disconnect as required.
- 2** Actuators may be connected in parallel. Power consumption and input impedance must be observed.
- 5** Only connect common to negative (-) leg of control circuits.
- 7** A 500 Ω resistor (ZG-R01) converts the 4 to 20 mA control signal to 2 to 10 VDC.
- ◆** 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.

