

B6250S-110, 2-Way, Characterized Control Valve

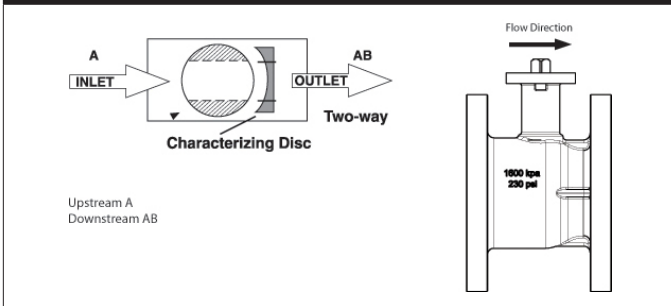
Stainless Steel Ball and Stem



Technical Data

Service	chilled, hot water, up to 60% glycol
Flow Characteristic	equal percentage
Controllable Flow Range	75°
Size [mm]	2.5" [65]
End Fitting	pattern to mate with ANSI 125 flange
Body	cast iron - GG25
Ball	stainless steel
Stem	stainless steel
Stem Packing	EPDM (lubricated)
Seat	Teflon® PTFE
Seat O-ring	EPDM (lubricated)
Characterized Disc	stainless steel
Body Pressure Rating [psi]	ANSI 125, standard class B
Number of Bolt Holes	4
Media Temperature Range (Water)	0°F to 250°F [-18°C to 120°C]
Max Differential Pressure (Water)	50 psi (345 kPa)
Close-Off Pressure	100 psi
Cv	110
Weight	25.1 lb [11.4 kg]
Leakage	0% for A to AB
Servicing	maintenance free

Flow Pattern



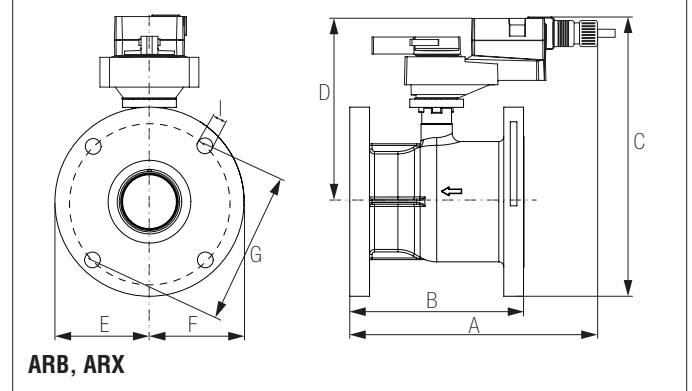
Application

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 or constant flow.

Suitable Actuators

	Non-Spring	Spring
B6250S-110	ARB(X)	AFRB(X)

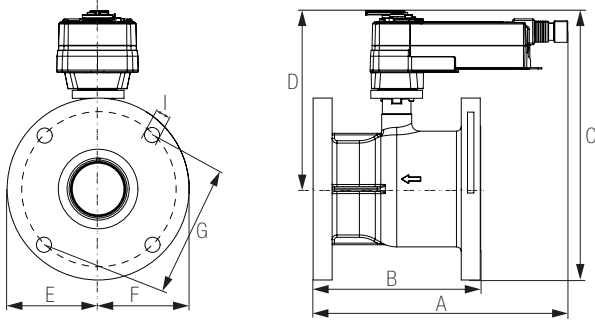
Dimensions (Inches [mm])



A	B	C	D	E	F	G	I
8.37" [212]	5.37" [137]	11.59" [294]	7.79" [198]	3.64" [92]		5.5" [140]	0.75" [19]

Date created, 09/01/2016 - Subject to change. © Belimo Aircontrols (USA), Inc.

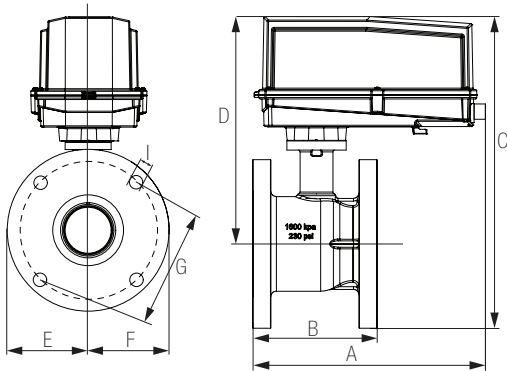
Dimensions (Inches [mm])



AFRB, AFRX

A	B	C	D	E	F	G	I
8.37"	5.37"	12.21"	9.37"	3.64" [92]		5.5"	0.75"
[212]	[137]	[310]	[238]			[140]	[19]

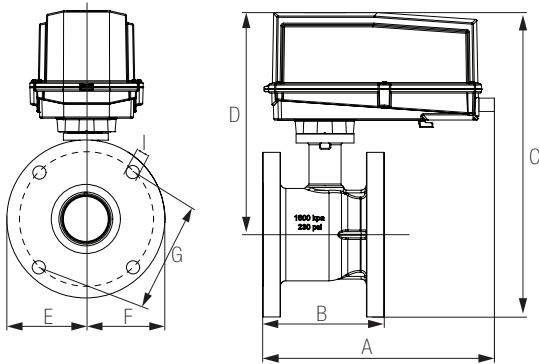
Dimensions (Inches [mm])



ARX

A	B	C	D	E	F	G	I
12.98"	5.37"	15.00"	7.79"	3.64" [92]		5.5"	0.75"
[330]	[137]	[381]	[198]			[140]	[19]

Dimensions (Inches [mm])



AFRX

A	B	C	D	E	F	G	I
14.50"	5.37"	16.61"	11.94"	3.64" [92]		5.5"	0.75"
[368.3]	[137]	[421.9]	[302.23]			[140]	[19]

AFRX24

On/Off, Spring Return Fail-Safe, 24 VAC



Technical Data	
Power Supply	24 VAC ± 20%, 50/60 Hz, 24 VDC ± 10%
Power Consumption Running	5 W
Power Consumption Holding	2.5 W
Transformer Sizing	7.5 VA (class 2 power source)
Electrical Connection	3ft [1m], 18 GA appliance cable with 1/2" conduit connector
Overload Protection	electronic throughout 0° to 95° rotation
Operating Range Y	on/off
Angle of Rotation	90°
Direction of Rotation (Motor)	reversible with CW/CCW mounting
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)	<75 sec
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
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)	<45 dB (A)
Noise Level (Fail-Safe)	<62 dB (A)
Servicing	maintenance free
Quality Standard	ISO 9001

†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.
- Actuators may be powered in parallel. Power consumption must be observed.
- Parallel wiring required for piggy-back applications.

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.

