

B6300S-110, 2-Way, Characterized Control Valve

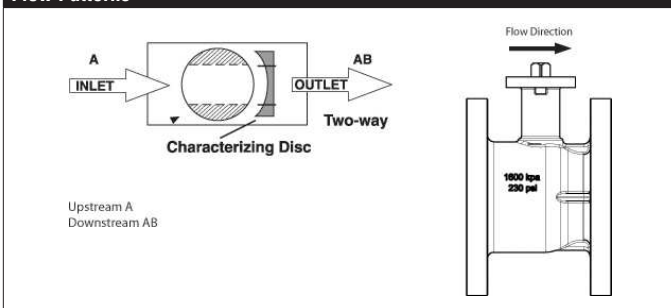
Stainless Steel Ball and Stem



Technical Data

Service	chilled , hot water, up to 60% glycol
Flow characteristic	equal percentage
Controllable Flow Range	75°
Size [mm]	3" [80]
End Fitting	pattern to mate with ANSI 125 flange
Body	cast iron - GG25
Ball	stainless steel
Stem	stainless steel
Seat	Teflon® PTFE
Characterized Disc	stainless steel
O-ring	EPDM (lubricated)
Body Pressure Rating [psi]	ANSI 125, standard class B
Number of 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
Leakage	0% for A to AB
Cv	110

Flow Patterns



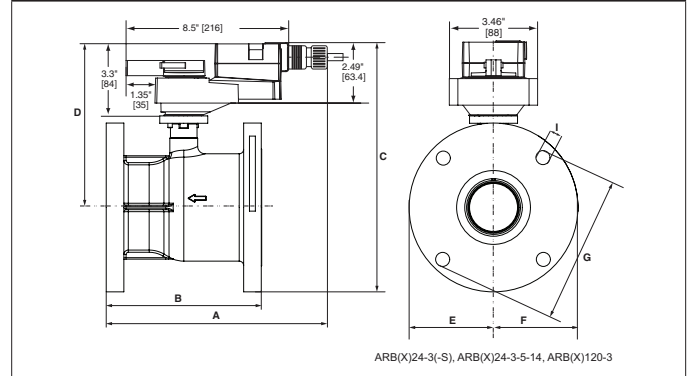
Application

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

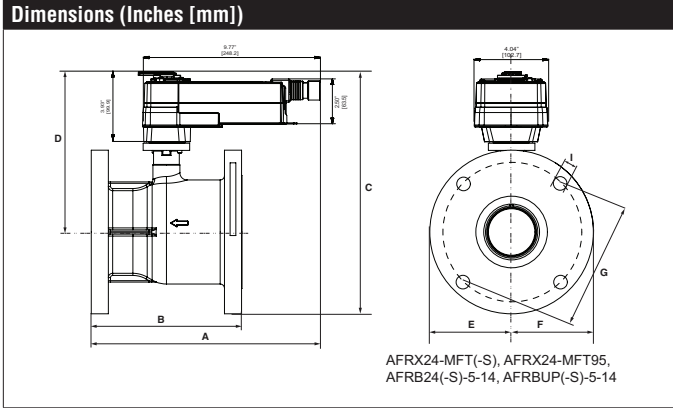
	Non-Spring	Spring
B6300S-110	ARB(X)	AFRB(X)

Dimensions (Inches [mm])

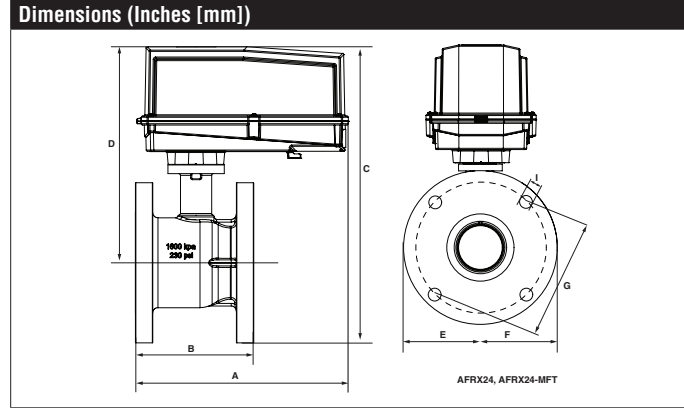


A	B	C	D	E	F	G	I
9.61" [244]	6.61" [168]	12.01" [309]	7.79" [198]	3.94" [100]	6" [152]	6" [152]	0.75" [19]

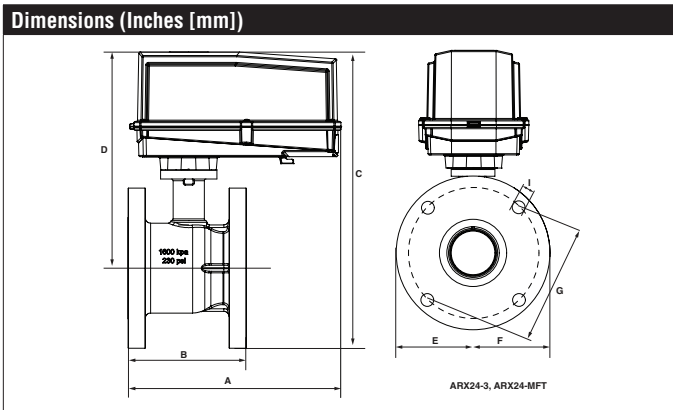
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A	B	C	D	E	F	G	I
9.61" [244]	6.61" [168]	12.79" [325]	9.37" [238]	3.94" [100]	6" [152]	6" [152]	0.75" [19]



A	B	C	D	E	F	G	I
16" [406]	6.61" [168]	16.61" [421.9]	11.94" [302.23]	3.94" [100]	6" [152]	6" [152]	0.75" [19]



A	B	C	D	E	F	G	I
13.25" [337]	6.61" [168]	15.00" [381]	10.47" [266]	3.94" [100]	6" [152]	6" [152]	0.75" [19]

AFRX24 N4

NEMA 4, On/Off, Spring Return, 24 V



Technical Data

Power Supply	24 VAC ± 20%, 50/60 Hz, 24 VDC + 20% / -10%
Power Consumption Running	5 W
Power Consumption Holding	2.5 W
Transformer Sizing	7.5 VA (class 2 power source)
Shaft Diameter	1/2" to 1.05" round, centers on 3/4" with insert, 1.05" without insert
Electrical Connection	3 ft., 18 GA appliance cable, 1/2" conduit connector
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 CW/CCW mounting
Direction of Rotation (Fail-Safe)	reversible with CW/CCW mounting
Position Indication	dial
Manual Override	5 mm hex crank (3/16" Allen), supplied
Running Time (Motor)	75 seconds
Running Time (Fail-Safe)	< 20 seconds
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 4, IP66, UL enclosure type 4
Housing Material	polycarbonate
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

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Wiring Diagrams

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

Ⓐ 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.

⚠ **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.

