Date created, 10/27/2017 - Subject to change. Belimo Aircontrols (USA), Inc.

B223, **2-Way**, **Characterized Control Valve** Stainless Steel Ball and Stem

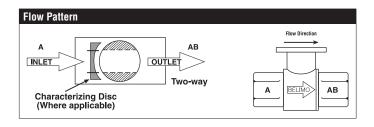






WARRANTY

Technical Data	
Service	chilled, hot water, up to 60% glycol
Flow Characteristic	equal percentage
Controllable Flow Range	75°
Size [mm]	1" [25]
End Fitting	NPT female ends
Body	forged brass, nickel plated
Ball	stainless steel
Stem	stainless steel
Stem Packing	EPDM (lubricated)
Seat	Teflon® PTFE
Seat O-ring	EPDM (lubricated)
Characterized Disc	TEFZEL®
Body Pressure Rating [psi]	600
Media Temperature Range	0°F to 250°F [-18°C to 120°C]
(Water)	
Max Differential Pressure (Water)	50 psi (345 kPa)
Close-Off Pressure	200 psi
Cv	10
Weight	1.1 lb [0.5 kg]
Leakage	0% for A to AB
Servicing	maintenance free

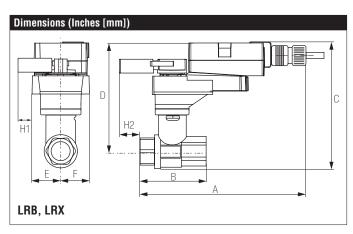


Application

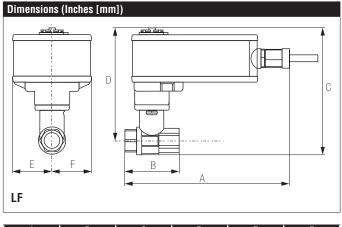
This valve is typically used in air handling units on heating or cooling coils, and fan coil unit heating or cooling coils. Some other common applications include Unit Ventilators, VAV box re-heat coils and bypass loops. This valve is suitable for use in a hydronic system with variable flow.

Suitable Actuators

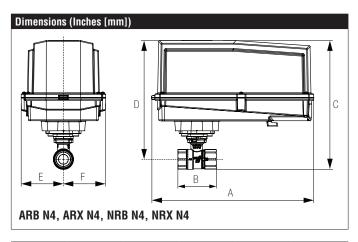
	Non-Spring	Spring	
B223	LR, NR	LF	



А	В	C	D	Е	F	H1	H2
9.4"	3.07"	7.25"	6.31"	1.3"	[33]	1.18"	0.9" [23]
[239]	[78]	[184]	[160]			[30]	



А	В	С	D	Е	F
8.12" [206]	3.07" [78]	6.5" [165]	5.57" [141]	1.82	" [46]



Α	В	С	D	Е	F
11.36"	3.07" [78]	7.85" [199]	7.15" [181]	3.15	" [80]
[289]					

LRQX24-1 On/Off, Non-Spring Return, 24 V





24 VAC, ±20%, 50/60 Hz, 24 VDC, ±10%		
13 W		
1.5 W		
23 VA (class 2 power source) (I max		
20A@5ms)		
18 GA plenum rated cable with 1/2" conduit		
connector protected NEMA 2 (IP54) 3ft [1m]		
10ft [3m] and 16ft [5m]		
electronic thoughout 0° to 90° rotation		
actuators are double insulated		
on/off		
1000 Ω		
90°		
reversible with built-in switch		
integrated into handle		
external push button		
-22°F to 122°F [-30°C to 50°C]		
-40°F to 176°F [-40°C to 80°C]		
NEMA 2, IP42, UL Enclosure Type 2		
cULus acc. to UL60730-1A/-2-14, CAN/CSA		
E60730-1:02, CE acc. to 2004/108/EC		
max. 52 dB (A)		
maintenance free		
ISO 9001		







Wiring Diagrams



X INSTALLATION NOTES



Provide overload protection and disconnect as required.



Actuators may be connected in parallel. Power consumption and input impedance must be observed.



Actuators may also be powered by 24 VDC.



Actuators with plenum cable do not have numbers; use color codes instead.



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.

