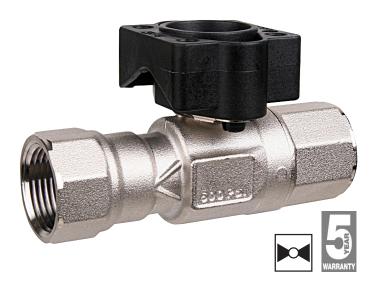
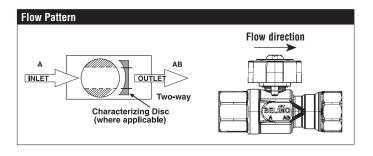
B220HT731, 3/4", High Temperature CCV Stainless Steel Ball and Stem





Technical Data	
Service	high temperature hot water/low pressure
001 V100	steam, up to 60% glycol
Flow Characteristic	A-port equal percentage
Controllable Flow Range	75°
Size [mm]	0.75" [20]
End Fitting	NPT female ends
Body	nickel plated brass (DZR) P-CuZn35Pb2
Ball	stainless steel
Stem	stainless steel
Stem Packing	Vition O-ring
Seat	ETFE
Seat O-ring	EPDM (lubricated)
Characterized Disc	ETFE
Body Pressure Rating [psi]	600
Max Inlet Pressure (Steam)	15 psi
Media Temperature Range (Water)	60°F to 266°F [16°C to 130°C]
Media Temperature Range (Steam)	250°F [120°C]
Maximum Differential Pressure (Steam)	15 psi
Max Differential Pressure (Water)	60 psi partially open ball, 116 psi full open
Close-Off Pressure	200 psi
Cv	7.31
Weight	0.9 lb [0.4 kg]
Leakage	0%
Servicing	maintenance free



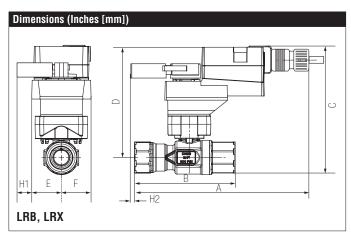
Application

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.

This valve is designed to fit in compact areas where on/off, floating point and modulating control is required using 24 VAC.

Suitable Actuators

	Non-Spring	Spring		
B220HT731	LR	LF		



Α	В	С	D	E	F	H1	H2
8.32"	3.96"	6.15"	5.59"	1.3"	[33]	1.18"	0.5" [15]
[211]	[101]	[156]	[142]			[30]	

Ì	Α	В	С	D	Е	F
	8.7" [221]	3.96" [101]	6.74" [171]	6.07" [154]	1.89	" [48]

LF120 US, Valve Actuator On/Off, Spring Return Fail-Safe, 120 VAC







Technical Data		
Power Supply	120 VAC ± 10%, 50/60 Hz	
Power Consumption Running	5.5 W	
Power Consumption Holding	3.5 W	
Transformer Sizing	7.5 VA	
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 built-in switch	
Direction of Rotation (Fail-Safe)	reversible with CW/CCW mounting	
Position Indication	visual indicator, 0° to 95° (0° is full spring	
	return position)	
Running Time (Motor)	<40 to 75 sec	
Running Time (Fail-Safe)	<25 sec @ -4°F to 122°F [-20°C to 50°C], < 60 sec @ -22°F [-30°C]	
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	
Agency Listings†	cULus acc. To UL 873 and CAN/CSA C22.2	
	No. 24-93	
Noise Level (Motor)	<50 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



LF120 US, Valve Actuator On/Off, Spring Return Fail-Safe, 120 VAC

Wiring Diagrams



💢 INSTALLATION NOTES



Actuators with appliance cables are numbered.



Provide overload protection and disconnect as required.



Actuators may be connected in parallel if not mechanically linked. Power consumption and input impedance must be observed.



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.

