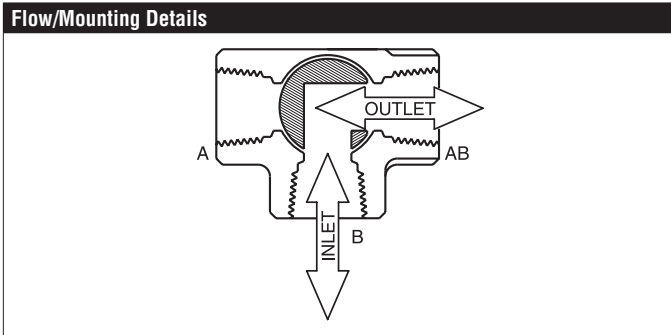


B320L Technical Data Sheet

Chrome Plated Brass Ball and Nickel Plated Brass Stem



Technical Data	
Fluid	chilled, hot water, up to 60% glycol
Flow characteristic	modified linear
Controllable flow range	75°
Valve Size [mm]	0.75" [20]
Pipe connection	NPT female ends
Housing	Nickel-plated brass body
Ball	chrome plated brass
Stem	nickel-plated brass
Seat	PTFE
Body Pressure Rating	600 psi
Close-off pressure Δ ps	200 psi
Cv	12.8
Weight	1.1 lb [0.50 kg]
Fluid Temp Range (water)	0...250°F [-18...120°C]
Leakage rate	ANSI Class VI
Servicing	maintenance-free



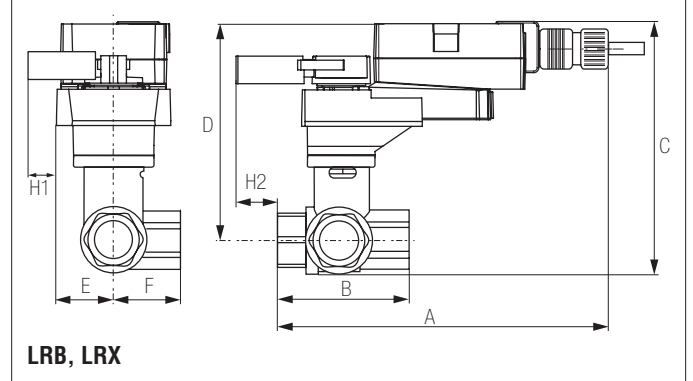
Application

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 or constant flow.

Suitable Actuators

	Non-Spring	Spring
B320L	LRB(X)	LF

Dimensions (Inches [mm])

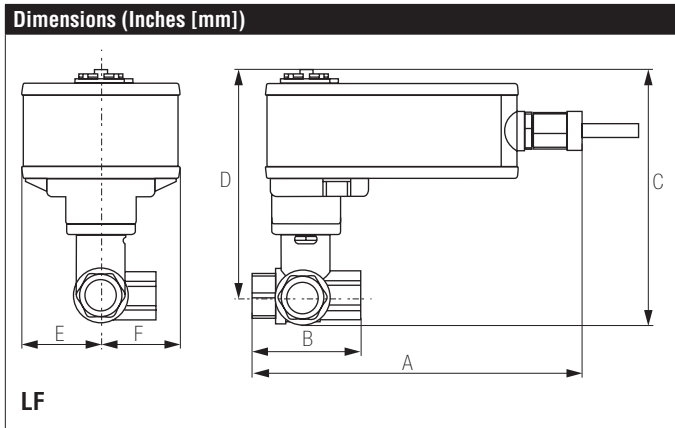


A	B	C	D	E	F	H1	H2
9.4"	2.7"	2.8"	5.1"	1.3"	1.6"	1.2"	1" [25]
[239]	[69]	[70]	[129]	[33]	[40]	[30]	

Safety Notes

WARNING: This product can expose you to lead which is known to the State of California to cause cancer and reproductive harm. For more information go to www.p65warnings.ca.gov

Date created, 10/14/2019 - Subject to change. © Belimo Aircontrols (USA), Inc.



A	B	C	D	E	F
8.6" [218]	2.7" [69]	6.3" [159]	5.6" [142]	1.8" [46]	1.9" [48]

LF24-3-S US, Valve Actuator Technical Data Sheet

Floating Point, Spring Return, 24 V



5-year warranty



Technical Data

Power Supply	24 VAC, ±20%, 50/60 Hz, 24 VDC, ±10%
Power consumption in operation	2.5 W
Power consumption in rest position	1 W
Transformer sizing	5 VA (class 2 power source)
Electrical Connection	(2) 18 GA appliance cables with 1/2" conduit connectors, 3 ft [1 m],
Overload Protection	electronic throughout 0...95° rotation
Input Impedance	1000 Ω (0.6 W)
Position Feedback	No Feedback
Angle of rotation	90°
Direction of rotation motor	reversible with built-in switch
Direction of motion fail-safe	reversible with cw/ccw mounting
Position indication	Mechanical
Running Time (Motor)	150 s constant, independent of load
Running time fail-safe	<25 s @ -4...122°F [-20...50°C], <60 s @ -22°F [-30°C]
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 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
Weight	3.1 lbs (1.40 kg.)
Auxiliary switch	1 x SPDT, 3 A resistive (0.5 A inductive) @ AC 250 V, adjustable 0...95°

†Rated Impulse Voltage 800V, Type of action 1.AA, Control Pollution Degree 3

Safety Notes

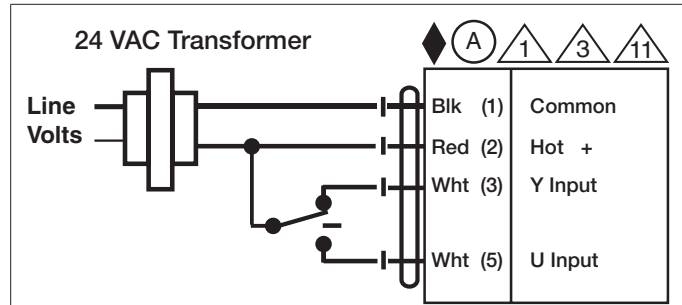
WARNING: For Belimo products sold in California: these products do or may contain chemicals which are known to the State of California to cause cancer and or birth defects or other reproductive harms. For more information see www.p65warnings.ca.gov.

Wiring Diagrams

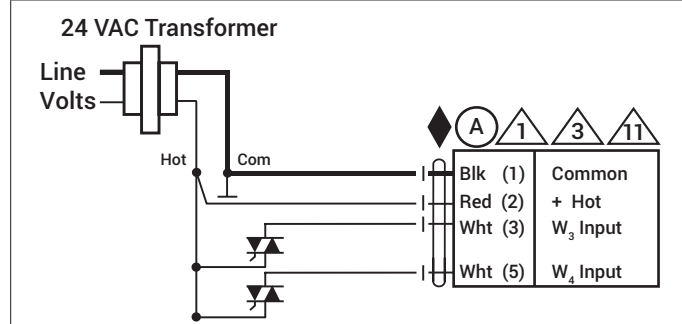
INSTALLATION NOTES

- Actuators with appliance cables are numbered.
- Provide overload protection and disconnect as required.
- Actuators may also be powered by 24 VDC.
- Actuators Hot wire must be connected to the control board common. Only connect common to neg. (-) leg of control circuits. Terminal models (-T) have no-feedback.
- Actuators may be connected in parallel if not mechanically linked. Power consumption and input impedance must be observed.
- One built-in auxiliary switch (1x SPDT), for end position indication, interlock control, fan startup, etc.
- Apply only AC line voltage or only UL-Class 2 voltage to the terminals of auxiliary switches. Mixed or combined operation of line voltage/safety extra low voltage is not allowed.
- Meets cULus requirements without the need of an electrical ground connection.

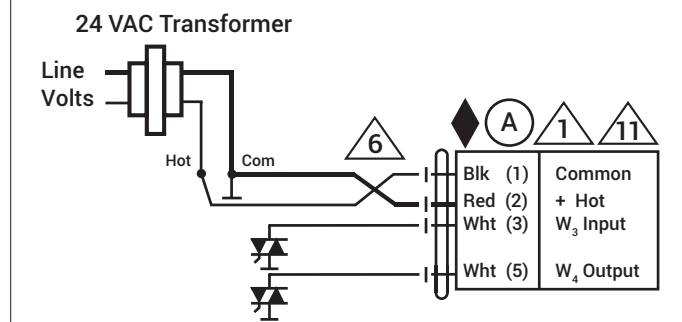
WARNING! LIVE ELECTRICAL COMPONENTS!
 During installation, testing, servicing and troubleshooting of this product, it may be necessary to work with live electrical components. Have a qualified licensed electrician or other individual who has been properly trained in handling live electrical components perform these tasks. Failure to follow all electrical safety precautions when exposed to live electrical components could result in death or serious injury.



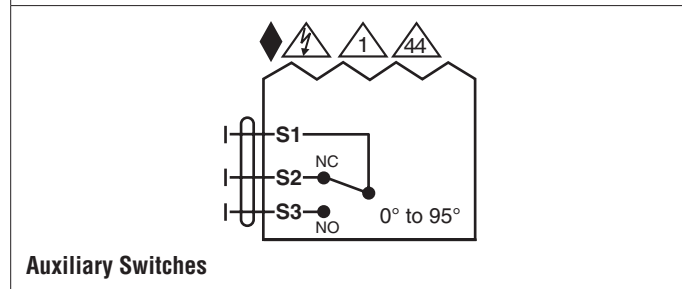
Floating Point



Floating Point - Triac Source



Floating Point - Triac Sink



Auxiliary Switches