





5-year warranty



Type overview	
Туре	DN
B325	25

Technical data

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Valve size [mm]	1" [25]
Fluid	chilled or hot water, up to 60% glycol
Fluid Temp Range (water)	0250°F [-18120°C]
Body Pressure Rating	600 psi
Close-off pressure Δps	200 psi
Flow	A-port: as stated in chart B-port: 70% of A – AB Cv
Flow characteristic	A-port equal percentage, B-port modified for constant common port flow
Servicing	maintenance-free
Flow Pattern	3-way Mixing/Diverting
Leakage rate	0% for A – AB, <2.0% for B – AB
Controllable flow range	75°
Cv	30
No Characterized Disc	TRUE

Materials

Valve body	Nickel-plated brass body
Stem	stainless steel
Stem seal	EPDM (lubricated)
Seat	PTFE
Characterized disc	TEFZEL®
Pipe connection	NPT
O-ring	EPDM (lubricated)
Ball	stainless steel
Non-Spring	LRB(X) NRB(X) N4

Suitable actuators

Non-Spring	LRB(X) NRB(X) N4
Spring	LF

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

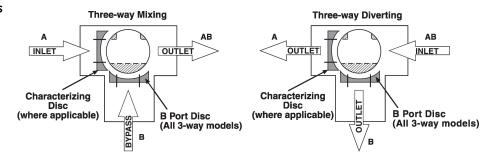


Product features

Application

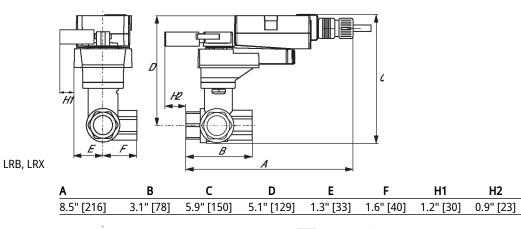
This valve is typically used in air handling units on heating or cooling coils, and fan coil unit heating or cooling coils. Some other common applications include Unit Ventilators, VAV box reheat coils and bypass loops. This valve is suitable for use in a hydronic system with variable or constant flow.

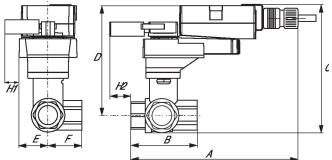
Flow/Mounting details



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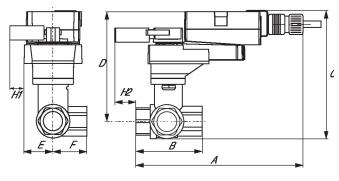
Туре	DN	Weight
B325	25	1.32 lb [0.60 kg]





LRB, LRX

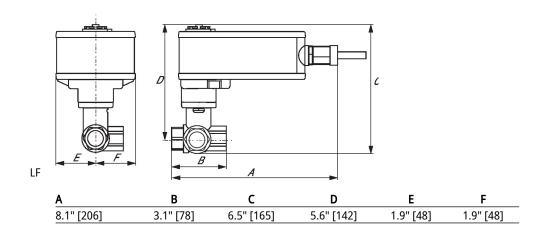
Α	В	C	D	E	F	H1	H2
9.4" [239]	3.1" [78]	7.2" [184]	6.3" [161]	1.3" [33]	1.3" [33]	1.2" [30]	0.9" [23]



LRQB, LRQX

Α	В	C	D	E	F	H1	H2
8.9" [226]	3.1" [78]	6.7" [169]	5.6" [142]	1.6" [40]	1.6" [40]	1.2" [30]	1" [25]







Technical data

Technical data sheet LF24-3 US



Electrical data	Nominal voltage	AC/DC 24 V	
	Nominal voltage frequency	50/60 Hz	
	Nominal voltage range	AC 19.228.8 V / DC 21.628.8 V	
	Power consumption in operation	2.5 W	
	Power consumption in rest position	1 W	
	Transformer sizing	5 VA	
	Electrical Connection	18 GA appliance cable, 1 m, with 1/2" conduit connector	
	Overload Protection	electronic throughout 095° rotation	
Functional data	Position feedback U note	No Feedback	
	Direction of motion motor	selectable with switch 0/1	
	Direction of motion fail-safe	reversible with cw/ccw mounting	
	Angle of rotation	90°	
	Running Time (Motor)	150 s / 90°	
	Running time motor note	constant, independent of load	
	Running time fail-safe	<25 s @ -4122°F [-2050°C], <60 s @ -22°F [-30°C]	
	Noise level, motor	50 dB(A)	
	Noise level, fail-safe	62 dB(A)	
	Position indication	Mechanical	
Safety data	Power source UL	Class 2 Supply	
	Degree of protection IEC/EN	IP54	
	Degree of protection NEMA/UL	NEMA 2	
	Enclosure	UL Enclosure Type 2	
	Agency Listing	cULus acc. To UL 873 and CAN/CSA C22.2 No. 24-93	
	Quality Standard	ISO 9001	
	UL 2043 Compliant	Suitable for use in air plenums per Section 300.22(C) of the NEC and Section 602 of the IMC	
	Ambient humidity	Max. 95% RH, non-condensing	
	Ambient temperature	-22122°F [-3050°C]	
	Storage temperature	-40176°F [-4080°C]	
	Servicing	maintenance-free	
Weight	Weight	3.3 lb [1.5 kg]	

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



Electrical installation

INSTALLATION NOTES

(A) Actuators with appliance cables are numbered.

Provide overload protection and disconnect as required.

Actuators may also be powered by DC 24 V.

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.

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.

Wiring diagrams

Floating Point

24 VAC Transformer

Line Volts

Blk (1) Common + Hot Wht (3) W₃ Input

Wht (5)

W, Input

Floating Point - Triac Source

24 VAC Transformer

Line
Volts

Hot

Com

Blk (1)
Red (2)
Wht (3)
Wht (5)
W₄ Input

Floating Point - Triac Sink

