

Bronze Body, Stainless Steel Ball and Stem





Type overview				
Туре			DN	
B2050VS-15			15	
Technical data				
	Functional data	Valve size [mm]	0.5" [15]	
		Fluid	chilled or hot water, up to 60% gly	col, steam
		Fluid Temp Range (water)	-22280°F [-30138°C]	
		Body Pressure Rating	600 psig WOG	
		Close-off pressure Δps	600 psi	
		Flow characteristic	modified equal percentage	
		Max Differential Pressure (Steam)	35 psi	
		Flow Pattern	2-way	
		Leakage rate	ANSI Class VI	

Controllable flow range

Maximum Inlet Pressure (Steam)

Cv

Spring

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Maximum Velocity	15 FPS	
Valve body	Bronze B584-C84400	
Housing seal	PTFE	
Stem	316 stainless steel	
Stem seal	RPTFE	
Seat	RPTFE	
Lock nut	stainless steel	
Pipe connection	NPT	
Retainer	B16 Brass	
Ball	316 stainless steel	
Non-Spring	LMB(X)	
	GRCB(X)	
	GRB(X)	

90° rotation

35 psi [241 kPa]

15

Safety notes



Suitable actuators

 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

LF



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 flow.

This valve is designed with MFT functionally which facilitates the use of various control input.

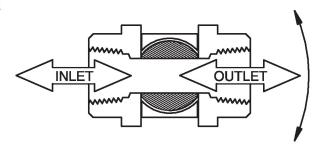
Up to 35 psi steam

1/2" - 2" 600 PSIG WOG, Cold Non-Shock Federal Specification: WW-V-35C, Type II

Composition: BZ

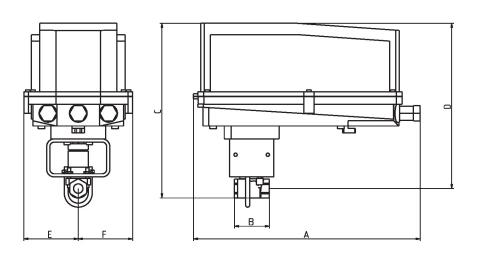
Style: 3

Flow/Mounting details



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Туре	DN	Weight
B2050VS-15	15	0.44 lb [0.20 kg]



B2050VS..+GRC..N4

Α	В	С	D	E	F
14.1" [358]	2.2" [56]	10.9" [277]	10.3" [261]	3.4" [86]	3.4" [86]



Technical data sheet LF24-S US



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	5 W
Power consumption in rest position	2.5 W
Transformer sizing	7 VA
Auxiliary switch	1 x SPDT, 3 A resistive (0.5 A inductive) @ AC 250 V, adjustable 095°
Switching capacity auxiliary switch	3 A resistive (0.5 A inductive) @ AC 250 V
Electrical Connection	(2) 18 GA appliance cables, 1 m, with 1/2" conduit connectors
Overload Protection	electronic throughout 095° rotation
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)	75 s / 90°
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
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	3.4 lb [1.6 kg]
	Nominal voltage frequency Nominal voltage range Power consumption in operation Power consumption in rest position Transformer sizing Auxiliary switch Switching capacity auxiliary switch Electrical Connection Overload Protection Direction of motion motor Direction of motion fail-safe Angle of rotation Running Time (Motor) Running time fail-safe Noise level, motor Noise level, fail-safe Position indication Power source UL Degree of protection IEC/EN Degree of protection NEMA/UL Enclosure Agency Listing Quality Standard UL 2043 Compliant Ambient humidity Ambient temperature Storage temperature Servicing

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



Electrical installation

X INSTALLATION NOTES

A Actuators with appliance cables are numbered.

 \sum Provide overload protection and disconnect as required.

Actuators may also be powered by DC 24 V.

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.

Wiring diagrams On/Off

