





Type overview	
Туре	DN
G225B-L	25

### **Technical data**

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Valve size [mm]	1" [25]		
Fluid	chilled or hot water, up to 60% glycol, steam		
Fluid Temp Range (water)	20280°F [-7138°C]		
Body Pressure Rating	ANSI Class 250, up to 400 psi below 150°F		
Flow characteristic	modified equal percentage		
Servicing	repack kits available		
Rangeability Sv	100:1		
Max Differential Pressure (Steam)	20 psi [103 kPa]		
Flow Pattern	2-way		
Leakage rate	ANSI Class VI		
Controllable flow range	stem up - open A – AB		
Cv	14		
Maximum Inlet Pressure (Steam)	35 psi [241 kPa]		
Valve body	Bronze		
Valve plug	brass		
Spindle	stainless steel		
Spindle seal	EPDM O-ring		
Seat	Bronze		
Pipe connection	NPT female ends		
Non-Spring	LVB(X)		
Spring	LF		

## Safety notes



Electrical fail-safe

Suitable actuators

Materials

 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

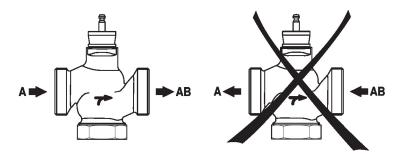
LVKB(X)

- The valve has been designed for use in stationary heating, ventilation and air-conditioning systems and must not be used outside the specified field of application, especially in aircraft or in any other airborne means of transport.
- Only authorized specialists may carry out installation. All applicable legal or institutional installation regulations must be complied during installation.
- The valve does not contain any parts that can be replaced or repaired by the user.
- When determining the flow rate characteristic of controlled devices, the recognised directives must be observed.



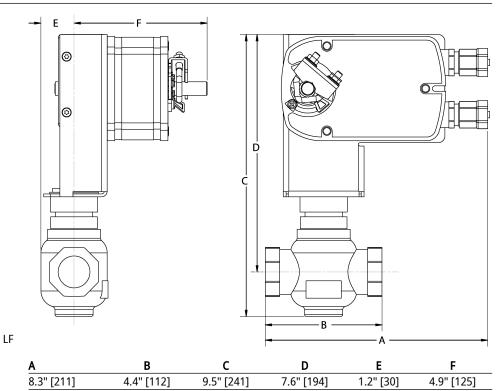
# **Installation notes**

**Flow direction** The direction of flow, specified by an arrow on the housing, is to be complied with, since otherwise the valve could become damaged.

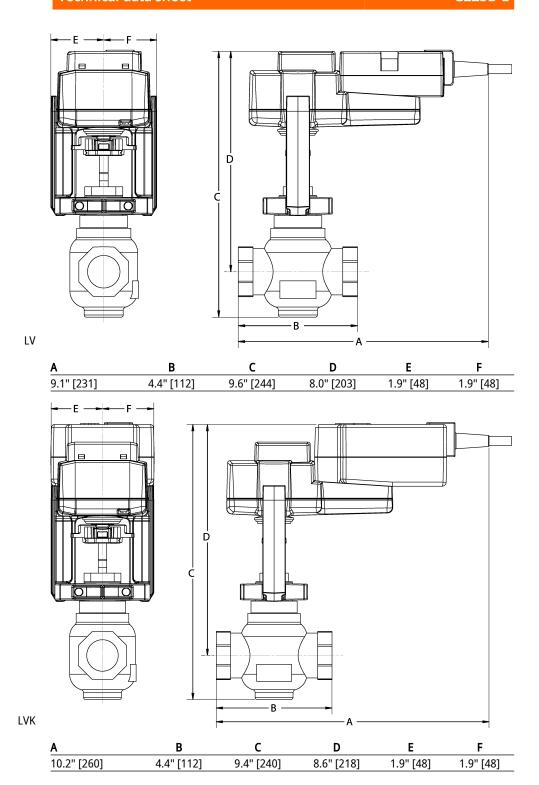


# **Dimensions**

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Modulating, Spring Return, AC 24 V for DC 2...10 V or 4...20 mA Control Signal

# Technical data sheet LF24-SR US



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Technical data		
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 plenum cable, 1 m, with 1/2" conduit connector
	Overload Protection	electronic throughout 095° rotation
Functional data	Operating range Y	210 V
	Operating range Y note	420 mA w/ ZG-R01 (500 Ω, 1/4 W resistor)
	Input Impedance	100 kΩ for 210 V (0.1 mA), 500 Ω for 420 mA
	Position feedback U	210 V
	Position feedback U note	Max. 0.7 mA
	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]
		maintenance-free
	Servicing	mannenance-nee
Weight	Weight	3.4 lb [1.5 kg]
Materials	Housing material	galvanized steel



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

### **Electrical installation**

## INSTALLATION NOTES

Actuators with appliance cables are numbered.

Provide overload protection and disconnect as required.

Actuators may also be powered by DC 24 V.

6 Only connect common to negative (-) leg of control circuits.

 $\Lambda$  A 500  $\Omega$  resistor (ZG-R01) converts the 4...20 mA control signal to 2...10 V.

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

