



| Type overview | |
|---------------|----|
| Туре | DN |
| B207 | 15 |

Technical data

| _ | | | |
|------|-------|------|------|
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| Valve size [mm] | 0.5" [15] | |
|--------------------------|--|--|
| 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 characteristic | equal percentage | |
| Servicing | maintenance-free | |
| Flow Pattern | 2-way | |
| Leakage rate | 0% for A – AB | |
| Controllable flow range | 75° | |
| Cv | 0.3 | |
| | | |

Materials

| Nickel-plated brass body | |
|--------------------------|--|
| stainless steel | |
| EPDM (lubricated) | |
| PTFE | |
| TEFZEL® | |
| NPT | |
| EPDM (lubricated) | |
| stainless steel | |
| TR LRB(X) | |
| | |

Suitable actuators

| , in S | LRB(X) NR |
|--------|--------------|
| Spring | TFRB(X) |
| | 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 flow.



Flow/Mounting details

A AB 100%

A AB 100%

Two-way valves should be installed with the disc upstream.

| • | disc upstream. | $A \rightarrow AB 100\%$ | $A \rightarrow AB 100\%$ | |
|---------------------|-----------------|---|--|--|
| Dimensions | | | | |
| Type B207 | DN 15 | | Weight 0.44 lb [0.20 kg] | |
| | LRB, LRX | HI F F | | C |
| | <u>,</u> | A B 9.4" [239] 2.4" [60] 5.2" | C D E [132] 4.6" [117] 1.3" [33] | F H1 H2 1] 1.3" [33] 1.2" [30] 1.1" [28] |
| | TR | | | |
| | | A B 3.7" [95] 2.4" [60] | C D 4.8" [122] 4.2" [10 | E F 7] 1.3" [33] 1.3" [33] |
| | TFRB, TFRX | | | <i>c</i> |

В

2.4" [60]

6.6" [167]

C

4.9" [124]

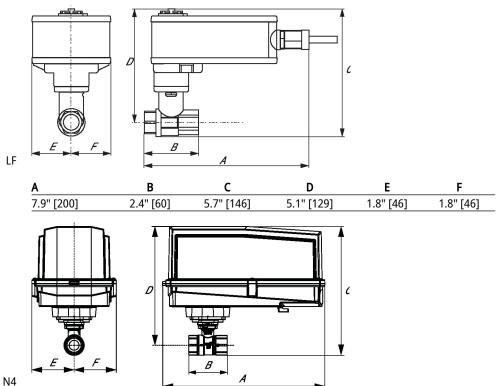
D

4.3" [110]

E

1.5" [39]





ARB N4, ARX N4, NRB N4, NRX N4

| Α | В | C | D | E | F |
|-------------|-----------|------------|------------|-----------|-----------|
| 11.4" [289] | 2.4" [60] | 7.7" [196] | 7.0" [179] | 3.1" [80] | 3.1" [80] |



Technical data sheet LF24-S US



| Electrical data | Nominal voltage | AC/DC 24 V |
|-----------------|--|---|
| Electrical data | Nominal voltage frequency | 50/60 Hz |
| | | AC 19.228.8 V / DC 21.628.8 V |
| | Nominal voltage range 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 |
| Functional data | 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 |
| 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 | 3.4 lb [1.6 kg] |
| | | |

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.

Auxiliary Switches

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

