B213 Technical Data Sheet

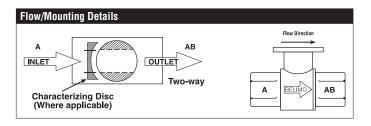
Stainless Steel Ball and Stem







| Technical Data | | | |
|--------------------------|--------------------------------------|--|--|
| Fluid | chilled, hot water, up to 60% glycol | | |
| Flow characteristic | equal percentage | | |
| Controllable flow range | 75° | | |
| Valve Size [mm] | 0.5" [15] | | |
| Pipe connection | NPT female ends | | |
| Housing | Nickel-plated brass body | | |
| Ball | stainless steel | | |
| Stem | stainless steel | | |
| Stem seal | EPDM (lubricated) | | |
| Seat | PTFE | | |
| 0-ring | EPDM (lubricated) | | |
| Characterised disc | TEFZEL® | | |
| Body Pressure Rating | 600 psi | | |
| Close-off pressure ∆ps | 200 psi | | |
| Cv | 4.7 | | |
| Weight | 0.66 lb [0.30 kg] | | |
| Fluid Temp Range (water) | 0250°F [-18120°C] | | |
| Leakage rate | 0% for A – AB | | |
| Maintenance | maintenance-free | | |

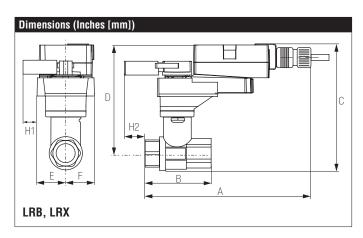


Application

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 flow.

Suitable Actuators

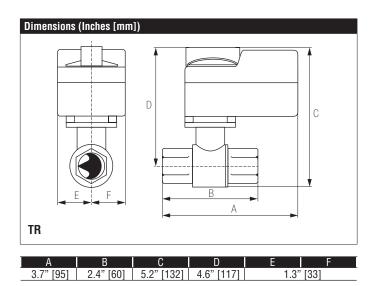
| | Non-Spring | Spring |
|------|----------------|-------------|
| B213 | TR, LRB(X), NR | TFRB(X), LF |

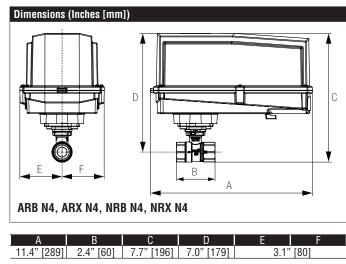


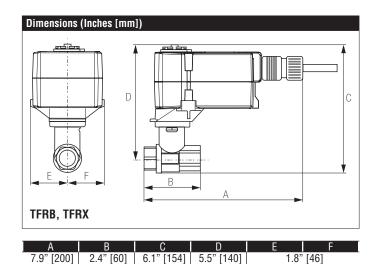
| Α | В | С | D | E | F | H1 | H2 |
|-------|------|-------|-------|------|------|------|-----------|
| 9.4" | 2.4" | 5.6" | 5.0" | 1.3" | [33] | 1.2" | 1.1" [28] |
| [239] | [60] | [141] | [127] | | | [30] | |

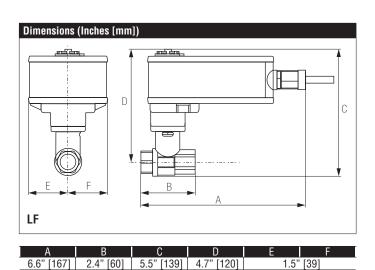
Safety Notes

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.









LRB24-3 Technical Data Sheet

On/Off, Floating Point, Non-Spring Return, 24 V









| | REG. EQUIR. | | | | |
|------------------------------------|--|--|--|--|--|
| Technical Data | | | | | |
| Power Supply | 24 VAC, ±20%, 50/60 Hz, 24 VDC, ±10% | | | | |
| Power consumption in operation | 1.5 W | | | | |
| Power consumption in rest position | 0.2 W | | | | |
| Transformer sizing | 2.5 VA (class 2 power source) | | | | |
| Electrical Connection | 18 GA plenum cable, 3 ft [1 m], with 1/2" conduit connector | | | | |
| Overload Protection | electronic thoughout 090° rotation | | | | |
| Input Impedance | 600 Ω | | | | |
| Angle of rotation | 90° | | | | |
| Direction of rotation motor | reversible with built-in switch | | | | |
| Position indication | Mechanically, pluggable | | | | |
| Manual override | external push button | | | | |
| Running Time (Motor) | 90 s | | | | |
| Ambient humidity | max. 95% r.H., non-condensing | | | | |
| Ambient temperature | -22122°F [-3050°C] | | | | |
| Storage temperature | -40176°F [-4080°C] | | | | |
| Degree of Protection | IP54, NEMA 2, UL Enclosure Type 2 | | | | |
| Agency Listing | cULus acc. to UL60730-1A/-2-14, CAN/CSA E60730-1:02, CE acc. to 2004/108/EC | | | | |
| Noise level, motor | 35 dB(A) | | | | |
| Maintenance | maintenance-free | | | | |
| Quality Standard | ISO 9001 | | | | |
| Weight | 1.1 lb [0.50 kg] | | | | |

[†]Rated Impulse Voltage 800V, Type action 1.B, Control Pollution Degree 3.

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Wiring Diagrams



> INSTALLATION NOTES



Provide overload protection and disconnect as required.



Actuators may be connected in parallel. Power consumption and input impedance must be observed.



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 with plenum cable do not have numbers; use color codes instead. 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.

