

## 2-way, Characterized Control Valve, Stainless Steel Ball and Stem





5-year warranty



Type overview		

Туре	DN
B207	15

## **Technical data**

Functional data	Valve size [mm]	0.5" [15]
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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	
Leakage rate	0% for A – AB	
Pipe connection	Internal thread NPT (female)	
Servicing	maintenance-free	
Flow Pattern	2-way	
Controllable flow range	75°	
Cv	0.3	

## Materials

Valve body	Nickel-plated brass body
Stem	stainless steel
Stem seal	EPDM (lubricated)
Seat	PTFE
Characterized disc	TEFZEL®
O-ring	EPDM (lubricated)
Ball	stainless steel
Non Fail-Safe	TR
	LRB(X)
	I POR(X)

# Suitable actuators

	LRB(X)
	LRQB(X)
	NRB(X) N4
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**

**Dimensions** 

## **Application**

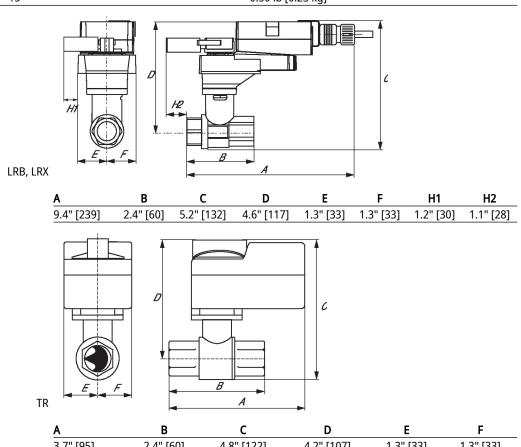
This valve is typically used in air handling units on heating or cooling coils, and fan coil unit heating or cooling coils. Some other common applications include Unit Ventilators, VAV box re-heat coils and bypass loops. This valve is suitable for use in a hydronic system with variable flow.

# Flow/Mounting details

BELIMO Α ΑB A → AB 100% A → AB 100%

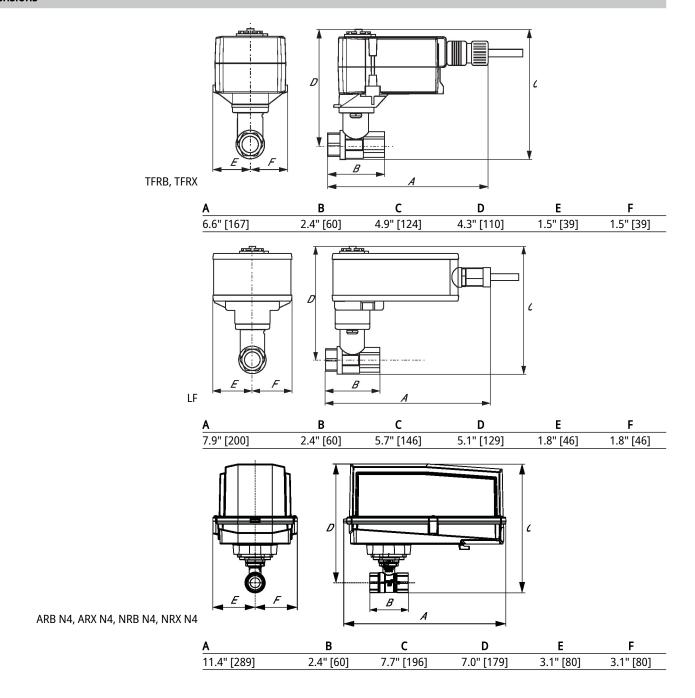
Two-way valves should be installed with the disc upstream.

#### DN Weight Type 0.50 lb [0.23 kg] B207 15





# **Dimensions**





Modulating, Non fail-safe, 24 V







# **Technical data**

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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	1.5 W
Power consumption in rest position	0.2 W
Transformer sizing	3 VA
Electrical Connection	Screw terminal (for 26 to 14 GA wire)
Overload Protection	electronic thoughout 090° rotation
Electrical Protection	actuators are double insulated

## **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 k $\Omega$ for 210 V (0.1 mA), 500 $\Omega$ for 420 mA
Position feedback U	210 V
Position feedback U note	Max. 1 mA
Direction of motion motor	selectable with switch 0/1
Manual override	external push button
Angle of rotation	90°
Angle of rotation note	adjustable with mechanical stop
Running Time (Motor)	90 s / 90°
Noise level, motor	35 dB(A)
Position indication	Mechanical, pluggable

# Safety data

Class 2 Supply
IP54
NEMA 2
UL Enclosure Type 2
cULus acc. to UL60730-1A/-2-14, CAN/CSA E60730-1:02, CE acc. to 2014/30/EU
ISO 9001
Suitable for use in air plenums per Section 300.22(C) of the NEC and Section 602 of the IMC
Max. 95% RH, non-condensing
-22122°F [-3050°C]
-40176°F [-4080°C]
maintenance-free



### **Technical data**

Weight	Weight	0.91 lb [0.41 kg]
Materials	Housing material	Galvanized steel and plastic housing

†Rated Impulse Voltage 800V, Type of Action 1, Control Pollution Degree 2.

#### **Accessories**

Electrical accessories	Description	Туре
	Battery backup system, for non-spring return models	NSV24 US
	Battery, 12 V, 1.2 Ah (two required)	NSV-BAT
	Auxiliary switch 1x SPDT add-on	S1A
	Auxiliary switch 2x SPDT add-on	S2A
	Feedback potentiometer 140 $\Omega$ add-on, grey	P140A GR
	Feedback potentiometer 1 k $\Omega$ add-on, grey	P1000A GR
	Feedback potentiometer 10 kΩ add-on, grey	P10000A GR
	Feedback potentiometer 2.8 kΩ add-on, grey	P2800A GR
	Feedback potentiometer 500 $\Omega$ add-on, grey	P500A GR
	Feedback potentiometer 5 k $\Omega$ add-on, grey	P5000A GR

## **Electrical installation**

## **INSTALLATION NOTES**

A Provide overload protection and disconnect as required.

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

Actuators may also be powered by DC 24 V.

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 are provided with a numbered screw terminal strip instead of a cable.

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

