

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





5-year warranty



Type overview	
Туре	DN
B208	15

# Technical data Functional data Valve size [mm] 0.5" [15]

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	0.46
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)
	LRQB(X)
	NRB(X) N4
Spring	TFRB(X)
	LF

# Safety notes



Materials

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



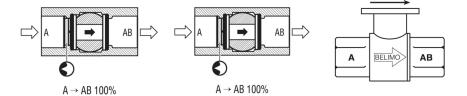
# **Product features**

**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.

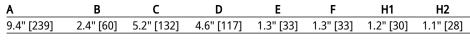
# Flow/Mounting details

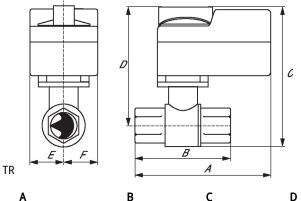


Two-way valves should be installed with the disc upstream.

Туре	DN	Weight
B208	15	0.50 lb [0.23 kg]



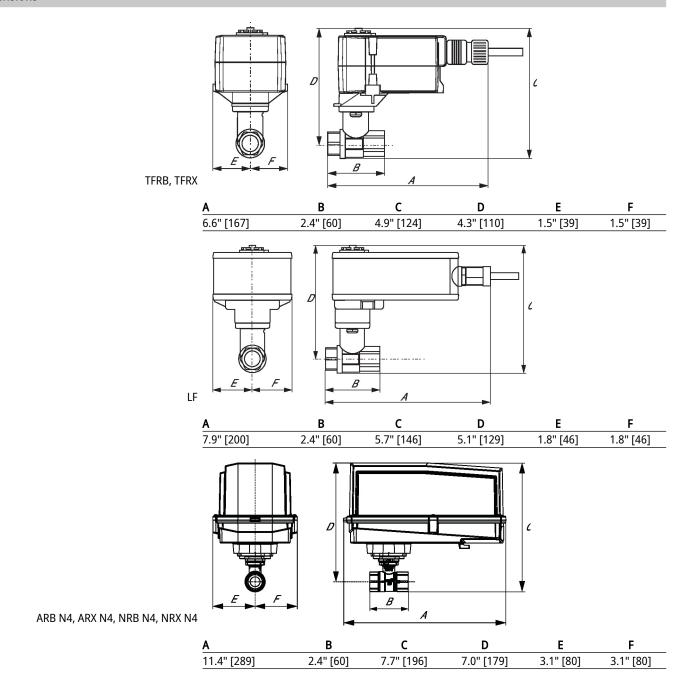




A	В	C	ט	E .	- F
3.7" [95]	2.4" [60]	4.8" [122]	4.2" [107]	1.3" [33]	1.3" [33]



# **Dimensions**





Modulating, Non fail-safe, 24 V







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	0.5 W
	Transformer sizing	1 VA
	Electrical Connection	18 GA plenum cable, 16 ft [5 m]
	Overload Protection	electronic throughout full 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 k $\Omega$ for 210 V (0.1 mA), 500 $\Omega$ for 420 mA
	Direction of motion motor	selectable with switch
	Manual override	push down handle
	Angle of rotation	90°
	Running Time (Motor)	90 s / 90°
	Noise level, motor	35 dB(A)
	Position indication	integrated into handle
Safety data	Power source UL	Class 2 Supply
	Degree of protection IEC/EN	IP40
	Degree of protection NEMA/UL	NEMA 1
	Enclosure	UL Enclosure Type 1
	Agency Listing	cULus acc. to UL60730-1A/-2-14, CAN/CSA E60730-1:02
	0 15 5 1 1	CE acc. to 2014/30/EU and 2014/35/EU
	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	0



#### **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	

### **Electrical installation**

# **X** INSTALLATION NOTES

Trovide 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

