

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





5-year warranty



Type overview	
Туре	DN
B215	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	10	
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)	
	LROB(X)	

## Suitable actuators

Materials

Non Fail-Safe	TR
	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**

#### 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

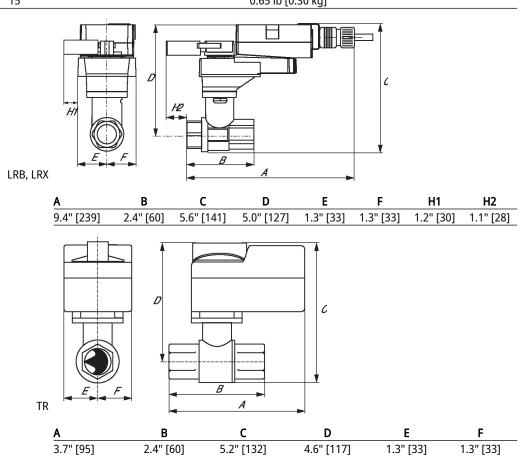
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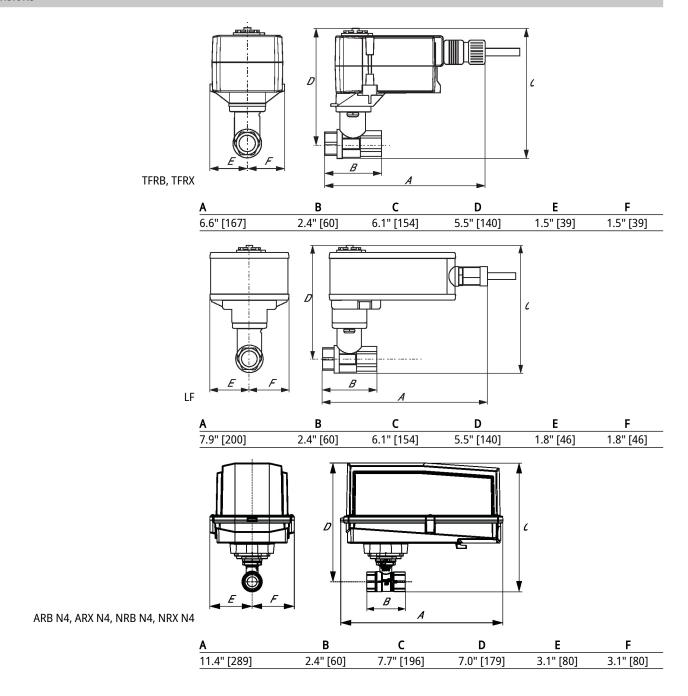
Two-way valves should be installed with the disc upstream.

# Type DN Weight B215 15 0.65 lb [0.30 kg]





#### **Dimensions**





#### On/Off, Floating point, Non fail-safe, 24 V







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	2.5 VA
Electrical Connection	18 GA plenum cable, 3 ft [1 m], with 1/2" NPT conduit connector
Overload Protection	electronic thoughout 090° rotation
Electrical Protection	actuators are double insulated
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)	40 s / 90°
Running time motor note	constant, independent of load
Noise level, motor	45 dB(A)
Position indication	Mechanical, pluggable
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 UL60730-1A/-2-14, CAN/CSA E60730-1:02
	CE acc. to 2014/30/EU and 2014/35/EU
	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]
Constitution	maintananca fran
Servicing	maintenance-free
	Nominal voltage range Power consumption in operation Power consumption in rest position Transformer sizing Electrical Connection  Overload Protection  Electrical Protection  Direction of motion motor Manual override Angle of rotation Angle of rotation note Running Time (Motor) Running time motor note Noise level, motor Position indication  Power source UL Degree of protection NEMA/UL Enclosure Agency Listing  Quality Standard UL 2043 Compliant  Ambient humidity Ambient temperature

Housing material

Materials

Galvanized steel and plastic housing



#### **Technical data**

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

#### **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 k $\Omega$ 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 kΩ add-on, grey	P5000A GR

#### **Electrical installation**

#### 🕻 INSTALLATION NOTES

(A) Actuators with appliance cables are numbered.

Provide overload protection and disconnect as required.

Actuators may also be powered by DC 24 V.

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.

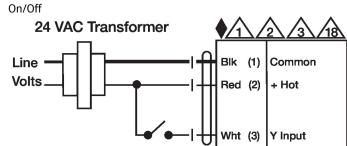
Actuators may be connected in parallel if not mechanically linked. Power consumption and input impedance must be observed.

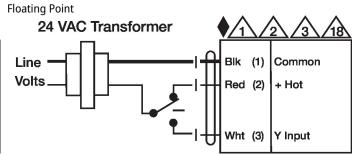
Meets cULus requirements without the need of an electrical ground connection.

#### 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







#### **Electrical installation**

#### Wiring diagrams

