BELIMO®

Stainless Steel Ball and Stem

5

5-year warranty

Type overview

Type	DN
B215HT186	15

Technical data

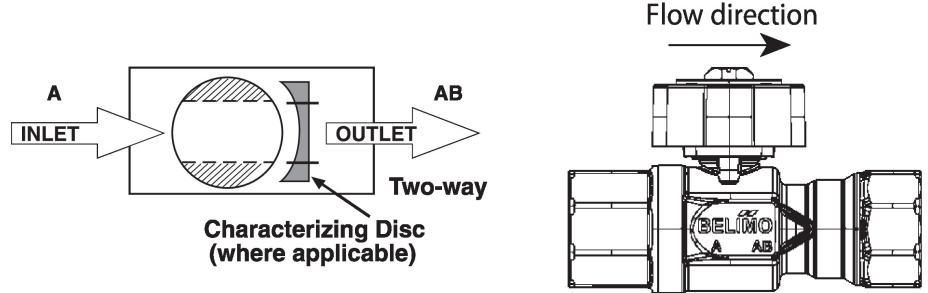|		
Functional data	Valve size [mm]	0.5" [15]
	Fluid	high temperature hot water/low pressure steam, up to 60% glycol
	Fluid Temp Range (water)	60...266°F [16...130°C]
	Fluid Temp Range (steam)	250°F [120°C]
	Body Pressure Rating	600 psi
	Close-off pressure Δps	200 psi
	Flow characteristic	A-port equal percentage
	Servicing	maintenance-free
	Max Differential Pressure (Steam)	15 psi
	Flow Pattern	2-way
	Leakage rate	0%
	Controllable flow range	75°
	Cv	1.86
	Maximum Inlet Pressure (Steam)	15 psi
Materials	Valve body	Nickel-plated brass (DZR) P-CuZn35Pb2
	Spindle	stainless steel
	Spindle seal	Vition O-ring
	Seat	ETFE
	Characterized disc	ETFE
	Pipe connection	NPT female ends
	O-ring	EPDM (lubricated)
	Ball	stainless steel
Suitable actuators	Non-Spring	TR
		LRB(X)
	Spring	TFRB(X)

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
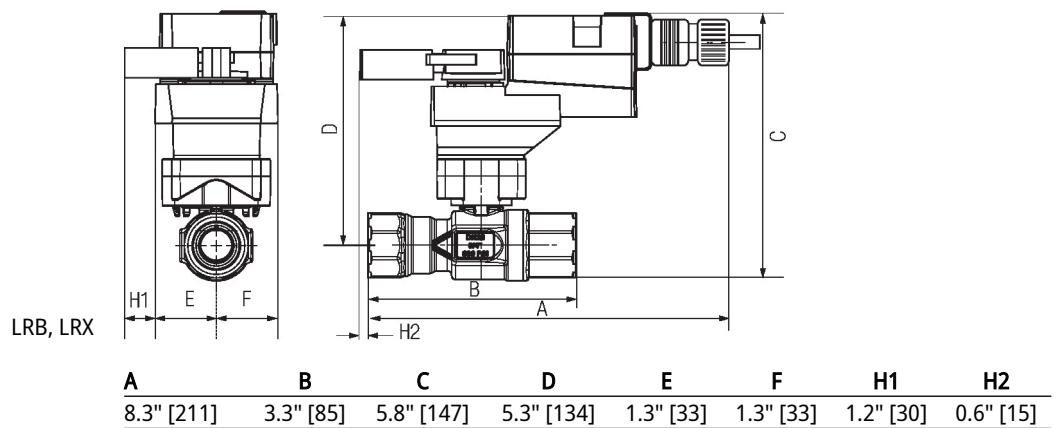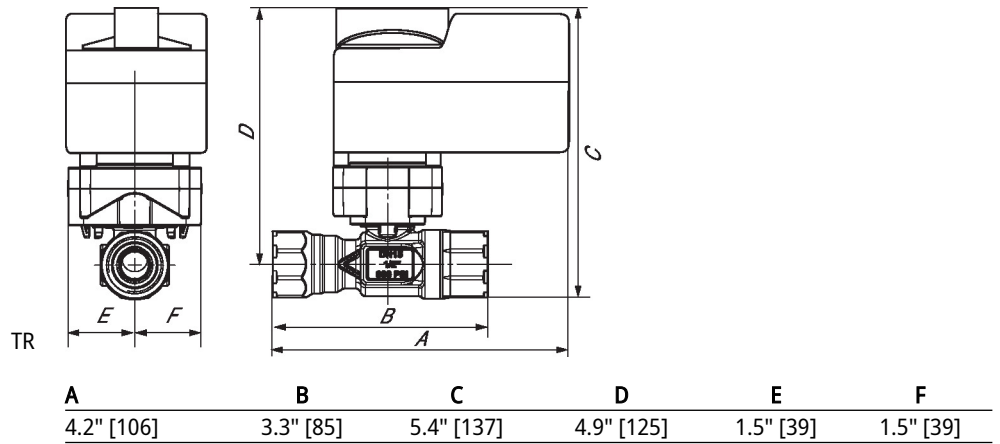
Product features

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.

This valve is designed to fit in compact areas where on/off, floating point and modulating control is required using 24 VAC.
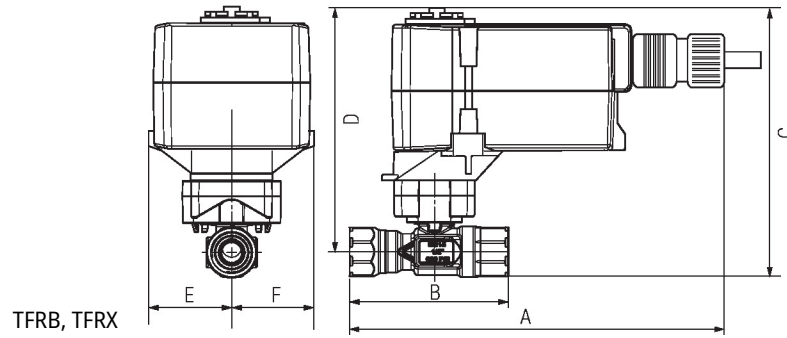
Flow/Mounting details

INLET — Characterizing Disc (where applicable) — OUTLET — Two-way

Flow direction

Dimensions

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TR

A	B	C	D	E	F
4.2" [106]	3.3" [85]	5.4" [137]	4.9" [125]	1.5" [39]	1.5" [39]

LRB, LRX

A	B	C	D	E	F	H1	H2
8.3" [211]	3.3" [85]	5.8" [147]	5.3" [134]	1.3" [33]	1.3" [33]	1.2" [30]	0.6" [15]

TFRB, TFRX

A	B	C	D	E	F
7.3" [185]	3.3" [85]	5.8" [147]	5.3" [134]	1.5" [39]	1.5" [39]

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5-year warranty

CE   LISTED 94 D5 TEMP. IND. & REG. EQUIP.   c(UL)us

Technical data

Electrical data	Nominal voltage	AC/DC 24 V
	Nominal voltage frequency	50/60 Hz
	Power consumption in operation	2.5 W
	Power consumption in rest position	1.3 W
	Power consumption for wire sizing	5 VA
	Transformer sizing	5 VA (class 2 power source)
	Electrical Connection	18 GA appliance cable, 3 ft [1 m], with 1/2" conduit connector
	Overload Protection	electronic throughout 0...95° rotation
Functional data	Position feedback U note	No Feedback
	Direction of motion motor	selectable by ccw/cw mounting
	Direction of motion fail-safe	reversible with cw/ccw mounting
	Angle of rotation	Max. 95°
	Running Time (Motor)	75 s
	Running time fail-safe	<75 s @ 20°C
	Noise level, motor	50 dB(A)
	Noise level, fail-safe	50 dB(A)
	Position indication	Mechanical
Safety data	Degree of protection IEC/EN	IP42
	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 Listed to UL 2043 - suitable for use in air plenums per Section 300.22(C) of the NEC and Section 602 of the IMC
	Quality Standard	ISO 9001
	Ambient temperature	-22...122°F [-30...50°C]
	Storage temperature	-40...176°F [-40...80°C]
	Ambient humidity	Max. 95% RH, non-condensing
	Servicing	maintenance-free
Materials	Housing material	UL94-5VA

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

Electrical installation

✂ **INSTALLATION NOTES**

Ⓐ Actuators with appliance cables are numbered.

⚠1 Provide overload protection and disconnect as required.

⚠️2 Actuators may be connected in parallel. Power consumption and input impedance must be observed.

⚠️3 Actuators may also be powered by DC 24 V.

◆ 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

On/Off

24 VAC Transformer

Line Volts

◆ (A) ⚠️1 ⚠️2 ⚠️3

Blk	(1)	Common
Red	(2)	+ Hot