

Technical data sheet

B215HT073

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





Type overview

Туре	DN
B215HT073	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)	60266°F [16130°C]
	Fluid Temp Range (steam)	250°F [120°C]
	Body Pressure Rating	600 psi
	Close-off pressure ∆ps	200 psi
	Flow characteristic	equal percentage
	Pipe connection	Internal thread
		NPT (female)
	Servicing	maintenance-free
	Max Differential Pressure (Steam)	15 psi
	Flow Pattern	2-way
	Leakage rate	0%
	Controllable flow range	75°
	Cv	0.73
	Maximum Inlet Pressure (Steam)	15 psi
Materials	Valve body	Nickel-plated brass (DZR) P-CuZn35Pb2
	Stem	stainless steel
	Stem seal	Vition O-ring
	Seat	ETFE
	Characterized disc	ETFE
	O-ring	EPDM (lubricated)
	Ball	stainless steel
Suitable actuators	Non Fail-Safe	TR
		LRB(X)
	Spring	TFRB(X)

Safety notes



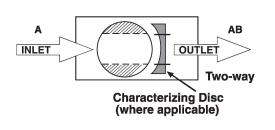
• WARNING: This product can expose you to lead which is known to the State of California to cause cancer and reproductive harm. For more information go to www.p65warnings.ca.gov

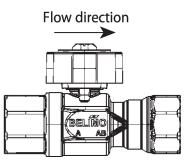


Product features

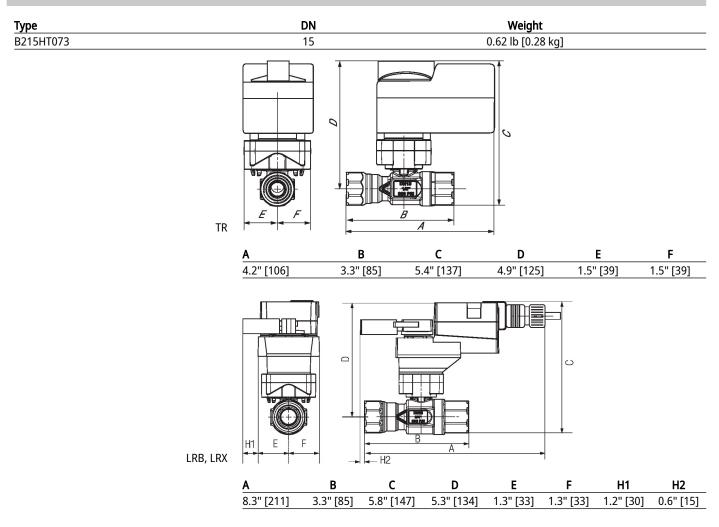
ApplicationThis valve is typically used in air handling units on heating or cooling coils, and fan coil unit
heating or cooling coils. Some other common applications include unit ventilators, VAV box re-
heat coils and bypass loops. This valve is suitable for use in a hydronic system with variable flow.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



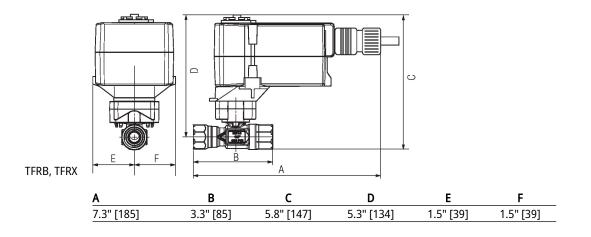


Dimensions











TFRB24-SR





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	2.5 W
	Power consumption in rest position	1 W
	Transformer sizing	4 VA
	Electrical Connection	18 GA plenum cable, 1 m, with 1/2" NPT conduit connector
	Overload Protection	electronic throughout 095° 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 Ω for 210 V (0.1 mA), 500 Ω for 420 mA
	Position feedback U	210 V
	Position feedback U note	Max. 0.5 mA
	Direction of motion motor	selectable with switch 0/1
	Direction of motion fail-safe	reversible with cw/ccw mounting
	Angle of rotation	Max. 95°
	Running Time (Motor)	95 s
	Running time fail-safe	<25 s @ 20°C
	Noise level, motor	35 dB(A)
	Noise level, fail-safe	62 dB(A)
	Position indication	Mechanical
Safety data	Power source UL	Class 2 Supply
	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 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	1.5 lb [0.69 kg]
Materials	Housing material	UL94-5VA





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

Electrical installation

K INSTALLATION NOTES

 \bigwedge 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 DC 24 V.

S Only connect common to negative (-) leg of control circuits.

A 500 Ω resistor (ZG-R01) converts the 4...20 mA control signal to 2...10 V.

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

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

Marning! 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

2...10 V / 4...20 mA Control

