





5-year warranty



Technical data

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Valve Size	1.25" [32]	
Fluid	chilled or hot water, up to 60% glycol	
Fluid Temp Range (water)	0250°F [-18120°C]	
Body Pressure Rating	400 psi	
Close-off pressure Δps	200 psi	
Flow characteristic	equal percentage	
Servicing	maintenance-free	
Flow Pattern	2-way	
Leakage rate	0% for A – AB	
Controllable flow range	75°	
Cv	25	
Body pressure rating note	400 psi	
Cv Flow Rating	A-port: as stated in chart B-port: 70% of A – AB Cv	
Valve body	Nickel-plated brass body	
Stem seal	EPDM (lubricated)	

Materials

Valve body	Nickel-plated brass body	
Stem seal	EPDM (lubricated)	
Seat	PTFE	
Pipe connection	NPT female ends	
O-ring	EPDM (lubricated)	
Ball	stainless steel	
Non-Spring	ARB(X)	
	NROR(X)	

Suitable actuators

Safety notes



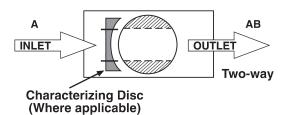
WARNING: This product can expose you to lead which is known to the State of California to cause cancer and reproductive harm. For more information go to www.p65warnings.ca.gov

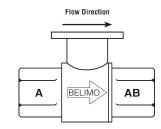
Product features

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.

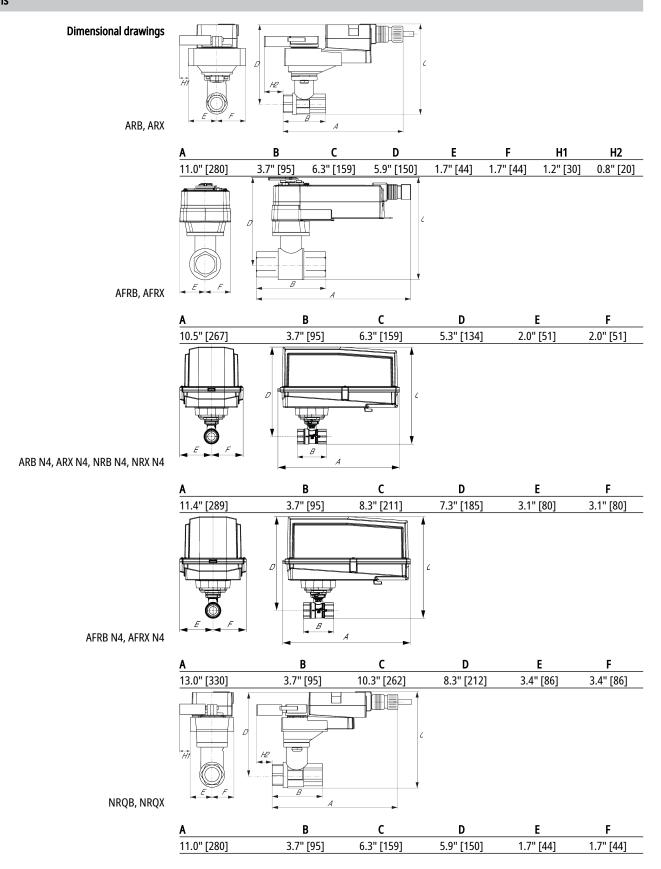
Flow/Mounting details







Dimensions





Technical data		
Electrical data	Nominal voltage	AC 24240 V / DC 24125 V
	Nominal voltage frequency	50/60 Hz
	Power consumption in operation	7 W
	Power consumption in rest position	3.5 W
	Transformer sizing	7 VA @ AC 24 V (class 2 power source), 8.5 VA @ AC 120 V, 18 VA @ AC 240 V
	Electrical Connection	18 GA appliance cable, 3 ft [1 m], with 1/2" conduiction
Functional data	Overload Protection	electronic throughout 095° rotation
	Direction of motion motor	selectable by ccw/cw mounting
	Direction of motion fail-safe	reversible with cw/ccw mounting
	Manual override	5 mm hex crank (3/16" Allen), supplied
	Angle of rotation	90°
	Running Time (Motor)	75 s
	Running time fail-safe	<20 s
	Noise level, motor	45 dB(A)
	Noise level, fail-safe	62 dB(A)
	Position indication	Mechanical
Safety data	Degree of protection IEC/EN	IP54
	Degree of protection NEMA/UL	NEMA 2 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; Listed to UL 2043 - suitable for use in air plenums per Section 300.22(c) of the NEC and Section 602.2 of the IMC
	Quality Standard	ISO 9001
	Ambient temperature	-22122°F [-3050°C]
	Storage temperature	-40176°F [-4080°C]
	Ambient humidity	max. 95% r.H., non-condensing
	Servicing	maintenance-free
Weight	Weight	4.1 lb [1.9 kg]

Electrical installation



Actuators with appliance cables are numbered.

UP Universal Power Supply (UP) models can be supplied with 24 VAC up to 240 VAC, or 24 VDC up to 125 VDC. Provide overload protection and disconnect as required.

45 Actuators may be powered in parallel. Power consumption must be observed.



Technical data sheet **AFRBUP**

Parallel wiring required for piggy-back applications.

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.

