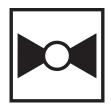






5-year warranty



Technical data

Functional data

Valve Size	2.5" [65]	
Fluid	chilled or hot water, up to 60% glycol	
Fluid Temp Range (water)	0212°F [-18100°C]	
Body Pressure Rating	400 psi	
Close-off pressure Δps	100 psi	
Flow characteristic	equal percentage	
Servicing	maintenance-free	
Flow Pattern	2-way	
Leakage rate	0% for A – AB	
Controllable flow range	75°	
Cv	210	
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)	
Coat	DTEF	

Materials

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

Safety notes



Suitable actuators

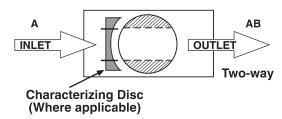
 WARNING: This product can expose you to lead which is known to the State of California to cause cancer and reproductive harm. For more information go to www.p65warnings.ca.gov

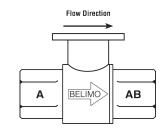
Product features

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.

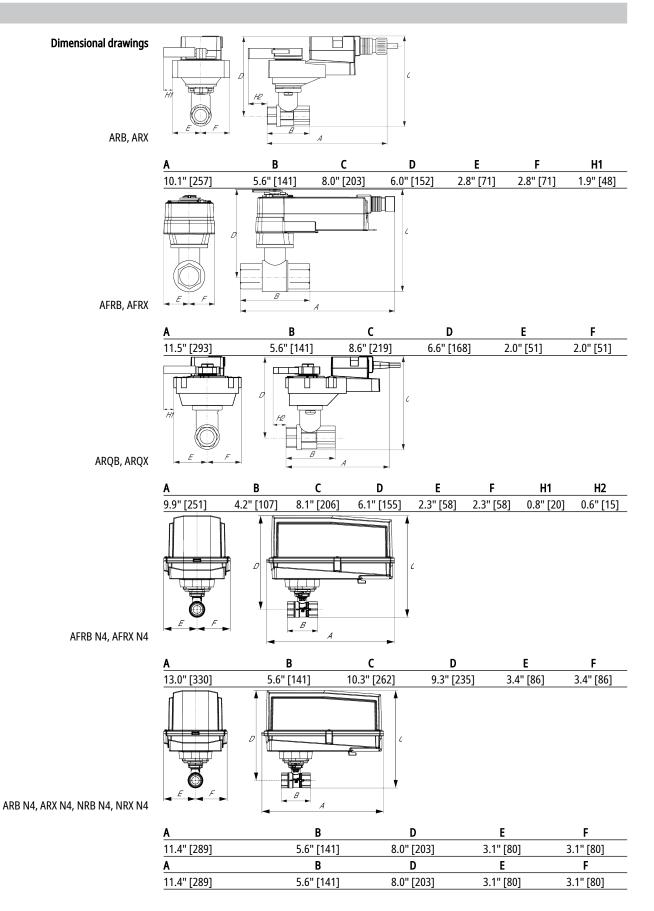
Flow/Mounting details







Dimensions





Technical data		
Electrical data	Nominal voltage	AC/DC 24 V
	Nominal voltage frequency	50/60 Hz
	Power consumption in operation	5 W
	Power consumption in rest position	2.5 W
	Transformer sizing	7.5 VA (class 2 power source)
	Auxiliary switch	2 x SPDT, 3 A resistive (0.5 A inductive) @ AC 250 V, one set at 10°, one adjustable 1090°
	Switching capacity auxiliary switch	3 A resistive (0.5 A inductive) @ AC 250 V
	Electrical Connection	(2) 18 GA appliance cables with 1/2" conduit connectors, 3 ft [1 m],
	Overload Protection	electronic throughout 095° rotation
Functional data	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	5.7 lb [2.6 kg]

Electrical installation



INSTALLATION NOTES

A Actuators with appliance cables are numbered.
Provide overload protection and disconnect as required.



Technical data sheet AFRB24-S

4 Two built-in auxiliary switches (2x SPDT), for end position indication, interlock control, fan startup, etc. Actuators may be powered in parallel. Power consumption must be observed.

As Parallel wiring required for piggy-back applications.

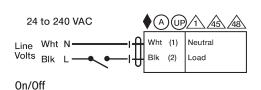
Apply only AC line voltage or only UL-Class 2 voltage to the terminals of auxiliary switches. Mixed or combined operation of line voltage/safety extra low voltage is not allowed.

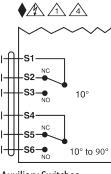


Meets cULus requirements without the need of an electrical ground connection.

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.





Auxiliary Switches