

Technical data sheet



BERMOIS AB
48 4





Type overview

Туре	DN
B263	65

Technical data

Functional data	Valve size [mm]	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	
	Pipe connection type	Internal thread	
		NPT (female)	
	Servicing	maintenance-free	
	Flow Pattern	2-way	
	Leakage rate	0% for A – AB	
	Controllable flow range	75°	
	Cv	110	
Materials	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	
uitable actuators	Non-Spring	ARB(X)	
	Spring	AFRB(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

on 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 reheat coils and bypass loops. This valve is suitable for use in a hydronic system with variable flow.

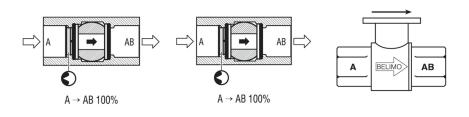


Technical data sheet

Flow/Mounting details

disc upstream.

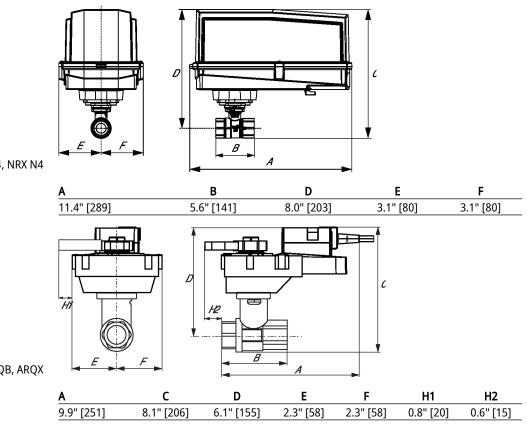
Two-way valves should be installed with the



Dimensions

Туре В263	DN 65			We 8.1 lb [ight 3.7 kg]		
	ARB, ARX					۷	
		A 11.0" [280] 5.6	B C		E 2.8" [71] 2.8	F H1 5" [71] 1.9" [48	H2 5] 0.8" [20]
	AFRB, AFRX					2	
		A 11.5" [293]	B 5.6" [141]	C 8.6" [219]	D 6.6" [168]	E 2.0" [51]	F 2.0" [51]
	AFRB N4, AFRX N4					د	
		A 13.0" [330]	B 5.6" [141]	C 10.3" [262]	D 9.3" [235]	E 3.4" [86]	F 3.4" [86]
		13.0" [330]	5.6" [141]	10.3" [262]	9.3" [235]	3.4" [86]	3.4" [86]





ARB N4, ARX N4, NRB N4, NRX N4

ARQB, ARQX



On/Off, Spring return, 24...240 V







Technical data

Electrical data	Nominal voltage	AC 24240 V / DC 24125 V
	Nominal voltage frequency	50/60 Hz
	Nominal voltage range	AC 19.2264 V / DC 21.6137.5 V
	Power consumption in operation	7 W
	Power consumption in rest position	3.5 W
	Transformer sizing	18 VA
	Auxiliary switch	2x SPDT, 1 mA3 A (0.5 A inductive), DC 5 VAC 250 V, 1x 10% / 1x 1190%
	Switching capacity auxiliary switch	1 mA3 A (0.5 A inductive), DC 5 VAC 250 V
	Electrical Connection	(2) 18 GA appliance cables, 3 ft [1 m], with 1/2" NPT conduit connectors
	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 / 90°
	Running time fail-safe	<20 s
	Noise level, motor	45 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	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
	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	5.7 lb [2.6 kg]



AFRBUP

Technical data Materials Housing material Galvanized steel and plastic housing Footnotes †Rated Impulse Voltage 800V, Type of action 1.AA, Control Pollution Degree 3 **Electrical installation** X INSTALLATION NOTES (A) Actuators with appliance cables are numbered. (UP) Universal Power Supply (UP) models can be supplied with AC 24...240 V, or DC 24...125 V. \bigwedge Provide overload protection and disconnect as required. A Two built-in auxiliary switches (2x SPDT), for end position indication, interlock control, fan startup, etc. A Actuators may be powered in parallel. Power consumption must be observed. A Parallel wiring required for piggy-back applications. 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. 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. Wiring diagrams On/Off **Auxiliary Switches** NC **S**3 10° -NO 24 to 240 VAC <u>S</u>4

Neutral

Load

Wht (1)

Blk (2)

Line Wht N

Volts Blk L

NC

-NO

10° to 90°