

B248, 2-Way, Characterized Control Valve

Stainless Steel Ball and Stem



Technical Data	
Service	chilled, hot water, up to 60% glycol
Flow Characteristic	equal percentage
Controllable Flow Range	75°
Size [mm]	2" [50]
End Fitting	NPT female ends
Body	forged brass, nickel plated
Ball	stainless steel
Stem	stainless steel
Stem Packing	EPDM (lubricated)
Seat	Teflon® PTFE
Seat O-ring	EPDM (lubricated)
Characterized Disc	TEFZEL®
Body Pressure Rating [psi]	400
Media Temperature Range (Water)	0°F to 250°F [-18°C to 120°C]
Max Differential Pressure (Water)	50 psi (345 kPa)
Close-Off Pressure	200 psi
Cv	29
Weight	2.9 lb [1.3 kg]
Leakage	0% for A to AB
Servicing	maintenance free



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.

Suitable Actuators

	Non-Spring	Spring
B248	ARB(X)	AFRB(X)

Dimensions (Inches [mm])



A	B	C	D	E	F	H1	H2
11"	4.21"	6.84"	5.51"	1.73"	[44]	1.18"	0.5"
[279]	[107]	[174]	[140]			[30]	[15]

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Dimensions (Inches [mm])



ARB N4, ARX N4, NRB N4, NRX N4

A	B	C	D	E	F
11.36" [289]	4.21" [107]	9.8" [249]	7.55" [192]	3.15" [80]	

Dimensions (Inches [mm])



AFRB N4, AFRX N4

A	B	C	D	E	F
12.98" [330]	4.93" [125]	10.29" [261]	9.24" [235]	3.39" [86]	

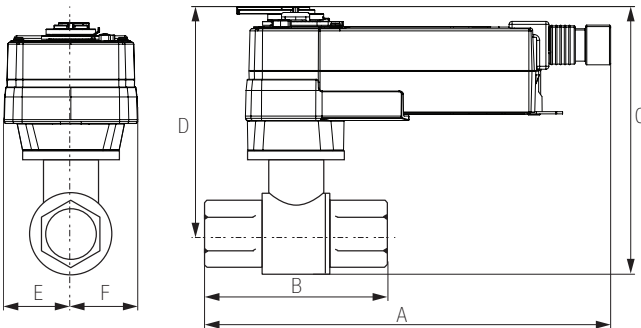
Dimensions (Inches [mm])



ARQB, ARQX

A	B	C	D	E	F	H1	H2
11" [279]	4.21" [107]	7.45" [190]	6.11" [155]	2.28" [58]		0.75" [20]	0.5" [15]

Dimensions (Inches [mm])



AFRB, AFRX

A	B	C	D	E	F
10.82" [275]	4.21" [107]	9.47" [241]	8.14" [207]	2.02" [51]	

ARX24-MFT95

Modulating, Non-Spring Return, 24 V, 0 to 135 Ω Input



Technical Data	
Power Supply	24 VAC, $\pm 20\%$, 50/60 Hz, 24 VDC, $\pm 10\%$
Power Consumption Running	3.5 W
Power Consumption Holding	1.3 W
Transformer Sizing	6 VA (class 2 power source)
Electrical Connection	18 GA plenum rated cable with 1/2" conduit connector protected NEMA 2 (IP54) 3ft [1m] 10ft [3m] and 16ft [5m]
Overload Protection	electronic throughout 0° to 90° rotation
Operating Range Y	0 to 135 Ω Honeywell Electronic Series 90, 0 to 135 Ω input
Input Impedance	100 k Ω
Feedback Output U	2 to 10 VDC, 0.5 mA max, VDC variable
Angle of Rotation	90°
Direction of Rotation (Motor)	reversible with built-in switch
Position Indication	integrated into handle
Manual Override	external push button
Running Time (Motor)	150 sec
Ambient Temperature Range	-22°F to 122°F [-30°C to 50°C]
Storage Temperature Range	-40°F to 176°F [-40°C to 80°C]
Housing	NEMA 2, IP54
Agency Listings†	cULus acc. to UL60730-1A/-2-14, CAN/CSA E60730-1:02, CE acc. to 2004/108/EC and 2006/95/EC
Noise Level (Motor)	<45 dB (A)
Servicing	maintenance free
Quality Standard	ISO 9001

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

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Modulating, Non-Spring Return, 24 V, 0 to 135 Ω Input



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Multiple Actuators with Minimum Position Potentiometer



Multiple Actuators Used with W973, W7100 and T775