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B253, **2-Way**, **Characterized Control Valve** Stainless Steel Ball and Stem

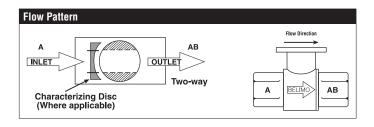






WARRANT

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	stainless steel
Body Pressure Rating [psi]	400
Media Temperature Range	0°F to 250°F [-18°C to 120°C]
(Water)	
Max Differential Pressure (Water)	50 psi (345 kPa)
Close-Off Pressure	200 psi
Cv	120
Weight	5.3 lb [2.4 kg]
Leakage	0% for A to AB
Servicing	maintenance free

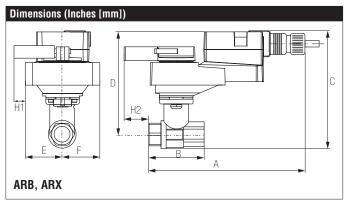


Application

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

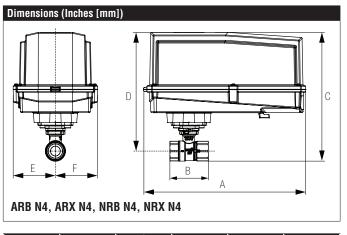
	Non-Spring	Spring
B253	ARB(X)	AFRB(X)



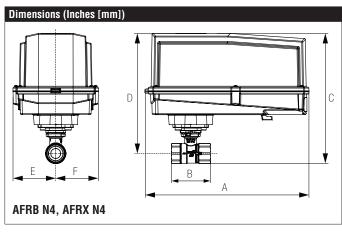
А	В	С	D	Е	F	H1
11.25"	4.93"	7.68"	5.98"	1.73	" [44]	1.18" [30]
[286]	[125]	[195]	[152]			

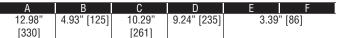
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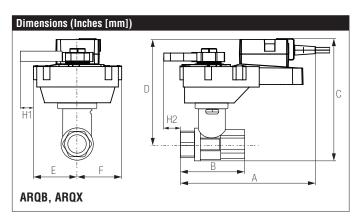




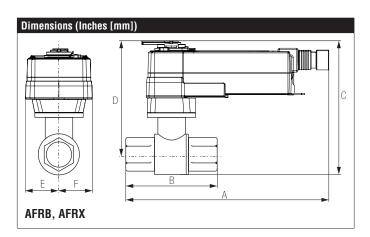
Α	В	C	D	Е	F
11.36"	4.21" [107]	9.8" [249]	7.55" [192]	3.15	" [80]
[289]					







Α	В	С	D	E	F	H1	H2
9.9"	4.21"	7.45"	6.11"	2.28	" [58]	0.75"	0.5" [15]
[251]	[107]	[190]	[155]			[20]	



Α	В	C	D	Е	F
11.27"	4.93" [125]	10.56"	8.86" [225]	2.02	" [51]
[286]		[268]			

Modulating, Non-Spring Return, 24 V, 0 to 20 V Phasecut





ned-Edoji.
24 VAC, ±20%, 50/60 Hz, 24 VDC, ±10%
3.5 W
1.3 W
5.5 VA (class 2 power source)
cable with conduit connector
electronic thoughout 0° to 90° rotation
0 TO 20 V phasecut control is only for the
positive part of the sine wave (max. of 10 volts)
8000 Ω (50mW)
2 to 10 VDC
90°
reversible with built-in switch
integrated into handle
external push button
90 sec
5 to 95% RH non condensing (EN 60730-1)
-22°F to 122°F [-30°C to 50°C]
-40°F to 176°F [-40°C to 80°C]
NEMA 2, IP54
UL94-5VA
cULus acc. to UL60730-1A/-2-14, CAN/CSA
E60730-1:02, CE acc. to 2004/108/EC and
2006/95/EC
max. 45 dB (A)
maintenance free
ISO 9001
2.2 lb [1 kg]

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Modulating, Non-Spring Return, 24 V, 0 to 20 V Phasecut

Wiring Diagrams



X INSTALLATION NOTES



Provide overload protection and disconnect as required.



Actuators may also be powered by 24 VDC.



Only connect common to negative (-) leg of control circuits. Actuators may be connected in parallel if not mechanically linked. Power



consumption and input impedance must be observed.



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.

