

Bronze Body, Stainless Steel Ball and Stem





Type overview	
Туре	DN
B239VS	40

Technical data

Fluid	chilled or hot water, up to 60% glycol, steam
Fluid Temp Range (water)	-22280°F [-30138°C]
Body Pressure Rating	600 psig WOG psi
Close-off pressure Δps	600 psi
Flow characteristic	modified equal percentage
Max Differential Pressure (Steam)	35 psi
Flow Pattern	2-way
Leakage rate	ANSI Class VI

1.5" [40]

90° rotation

Cv	84
Maximum Inlet Pressure (Steam)	35 psi [241 kPa]
Maximum Velocity	15 FPS

Materials

Functional data

Valve size [mm]

Controllable flow range

Valve body	Bronze B584-C84400
Housing seal	PTFE
Spindle	316 stainless steel
Spindle seal	RPTFE
Seat	RPTFE
Lock nut	stainless steel
Pipe connection	NPT female ends
Retainer	B584-C84400 bronze
Ball	316 stainless steel
Non-Spring	GMB(X)
	PRB(X)

Suitable actuators

Non-Spring	GMB(X)	
	PRB(X)	
	GRCB(X)	
	GRB(X)	
Spring	AF	
Electrical fail-safe	PKRB(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

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.

This valve is designed with MFT functionally which facilitates the use of various control input.

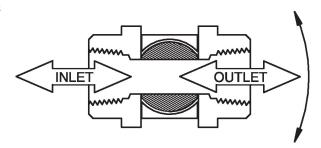
Up to 35 psi steam

1/2" - 2" 600 PSIG WOG, Cold Non-Shock Federal Specification: WW-V-35C, Type II

Composition: BZ

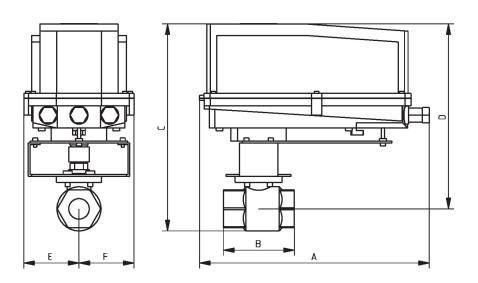
Style: 3

Flow/Mounting details



Dimensions

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B239VS+GRC..N4

<u>A</u>	В	С	D	E	F
11.7" [297.5]	4.4" [112]	9.7" [247]	7.7" [196]	2.3" [58]	2.3" [58]









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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	14 VA @ AC 24 V (class 2 power source), 17 VA @ AC 120 V, 36 VA @ AC 240 V		
	Electrical Connection	18 GA appliance cable, 3 ft [1 m], with 1/2" conduit connector		
	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	95°		
	Running Time (Motor)	75 s / 90°		
	Running time fail-safe	<20 s		
	Noise level, motor	50 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		
	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 Listed to UL 2043 - suitable for use in air plenums per Section 300.22(C) of the NEC and Section 602 of the IMC		
	Quality Standard	ISO 9001		
	Ambient temperature	-22122°F [-3050°C]		
	Storage temperature	-40176°F [-4080°C]		
	Ambient humidity	Max. 95% RH, non-condensing		
	Servicing	maintenance-free		
Materials	Housing material	Galvanized steel and plastic housing		

Footnotes

*Variable when configured with MFT options.

Electrical installation



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

Actuators with appliance cables are numbered.

 $\overline{\bigwedge}$ Provide overload protection and disconnect as required.



Actuators may also be powered by DC 24 V.

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

Parallel wiring required for piggy-back applications.

Wiring diagrams

On/Off 24 VAC Transformer Blk (1) Common Line Volts