

Ball Valve (VSS), 2", 2-way, Cv 108

- NSF/ANSI 61 – Water Quality – C. Hot
- NSF/ANSI 372 - Lead Free



2-year warranty

Type overview

Type	DN
B249VSS	50

Technical data

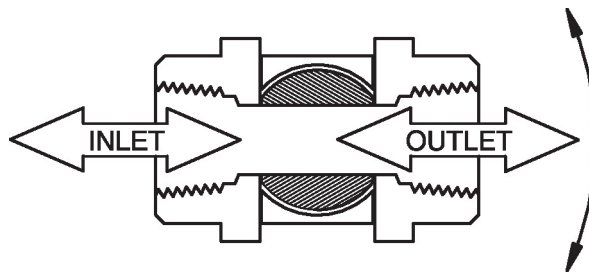
Functional data	Valve size [mm]	2" [50]	
	Fluid	chilled or hot water, up to 60% glycol, steam	
	Fluid Temp Range (water)	-30...148°C [-22...298°F]	
	Body Pressure Rating	1500 psig WOG	
	Close-off pressure Δps	1000 psi	
	Flow characteristic	modified equal percentage	
	Leakage rate	ANSI Class VI	
	Pipe connection	Internal thread NPT (female)	
	Max Differential Pressure (Steam)	50 psi	
	Flow Pattern	2-way	
	Controllable flow range	90° rotation, A – AB open ccw, B – AB open cw	
	Cv	108	
	Maximum Inlet Pressure (Steam)	50 psi	
	Maximum Velocity	15 FPS	
	Materials	Valve body	Stainless steel A351-CF8M 316
		Housing seal	PTFE
Stem		316 stainless steel	
Stem seal		RPTFE	
Seat		RPTFE	
Lock nut		stainless steel	
Ball		316 stainless steel	
Suitable actuators	Non Fail-Safe	GMB(X) PRB(X)	
	Spring	AF	
	Electrical fail-safe	PKRB(X)	

Note: NSF/ANSI/CAN 61 Section 8, Annex G, NSF/ANSI 372 - Drinking Water System Components - Lead Content. Suitable for Cold, Domestic Hot, and Commercial Hot applications.

Product features

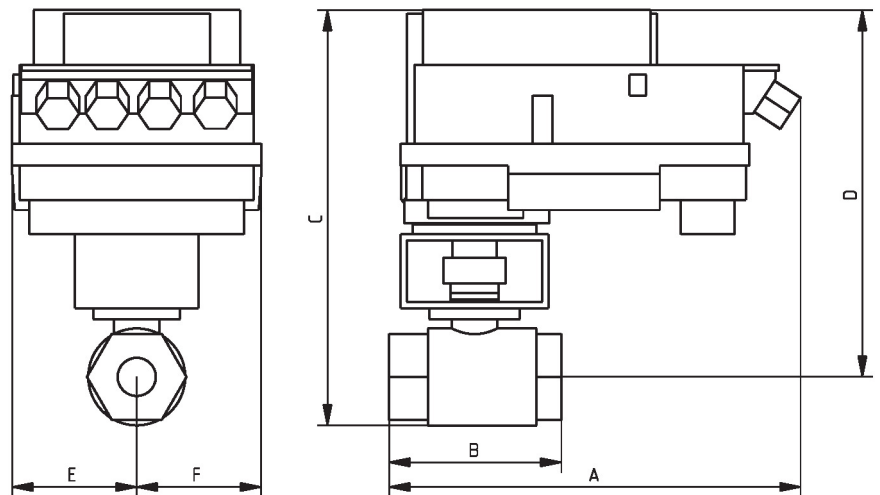
Application These threaded valves are designed to provide modulating or two position control of hot or chilled water and saturated steam systems under 50 psi.
 Typical applications include reheat coils, VAV terminal control, unit ventilators, and air handlers, especially in areas which have minimum profile requirements.
 Up to 50 psi steam
 1/2" - 2000 PSIG WOG, Cold Non-Shock
 Federal Specification: WW-V-35C, Type II
 Composition: SS
 Style: 3

Flow/Mounting details



Dimensions

Type	DN	Weight
B249VSS	50	6.2 lb [2.8 kg]



B249VSS+PKR..

A	B	C	D	E	F
12.8" [325]	5.5" [140]	13.3" [337]	11.7" [298]	4.0" [102]	4.0" [102]

On/Off, Spring return, 24 V



5-year warranty


Technical data

Electrical data	Nominal voltage	AC/DC 24 V
	Nominal voltage frequency	50/60 Hz
	Nominal voltage range	AC 19.2...28.8 V / DC 21.6...28.8 V
	Power consumption in operation	5 W
	Power consumption in rest position	2.5 W
	Transformer sizing	36 VA
	Electrical Connection	18 GA appliance cable, 3 ft [1 m], with 1/2" NPT conduit connector
	Overload Protection	electronic throughout 0...95° 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	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
	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	-22...122°F [-30...50°C]
	Storage temperature	-40...176°F [-40...80°C]
Servicing	maintenance-free	
Weight	Weight	□
Materials	Housing material	Galvanized steel and plastic housing

Technical data

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.
- ▲₁ Provide overload protection and disconnect as required.
- ▲₃ Actuators may also be powered by DC 24 V.
- ▲₄₅ Actuators may be powered in parallel. Power consumption must be observed.
- ▲₄₈ Parallel wiring required for piggy-back applications.

Wiring diagrams

On/Off

