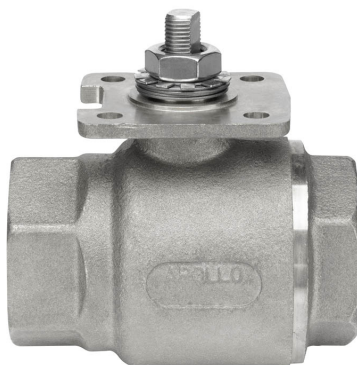


Ball Valve (VSS), 2", 2-way, Cv 108

- 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) | -22...298°F [-30...148°C] |
| | 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 |
| Suitable actuators | Ball | 316 stainless steel |
| | Non Fail-Safe | GMB(X) PRB(X) |
| | Spring | AF |
| | Electrical fail-safe | GKB(X) 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

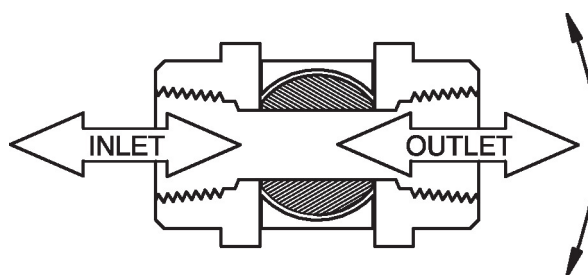
1/2" - 2000 PSIG WOG, Cold Non-Shock

Federal Specification: WW-V-35C, Type II

Composition: SS

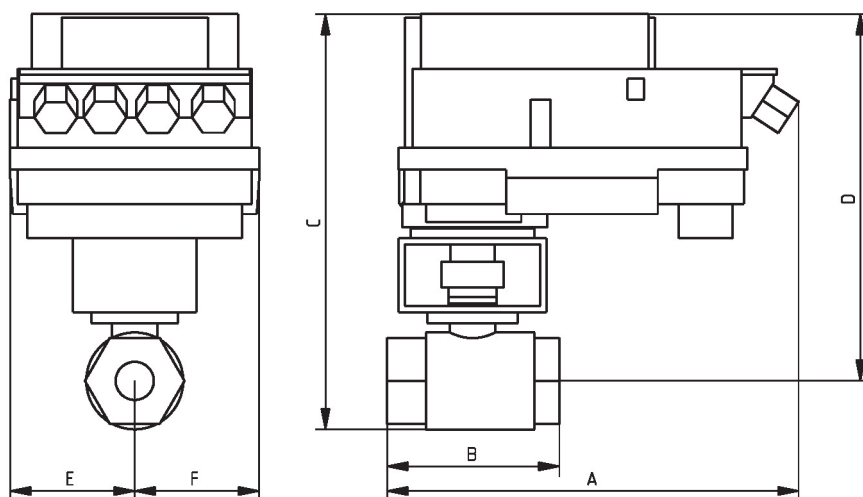
Style: 3

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...240 V



5-year warranty



Technical data

| | | |
|------------------------|-------------------------------------|---|
| Electrical data | Nominal voltage | AC 24...240 V / DC 24...125 V |
| | Nominal voltage frequency | 50/60 Hz |
| | Nominal voltage range | AC 19.2...264 V / DC 21.6...137.5 V |
| | Power consumption in operation | 7.5 W |
| | Power consumption in rest position | 3.5 W |
| | Transformer sizing | 36 VA |
| | Auxiliary switch | 2x SPDT, 1 mA...3 A (0.5 A inductive), DC 5 V...AC 250 V, 1x 10% / 1x 11...90% |
| | Switching capacity auxiliary switch | 1 mA...3 A (0.5 A inductive), DC 5 V...AC 250 V |
| | Electrical Connection | (2) 18 GA appliance cables, 3 ft [1 m], with 1/2" NPT conduit connectors |
| | Overload Protection | electronic throughout 0...95° rotation |
| Functional data | Position feedback U note | No Feedback |
| | 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) |
| Safety data | Position indication | Mechanical |
| | 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 |

Technical data

| | | |
|-----------|------------------|--------------------------------------|
| Weight | Weight | □ |
| Materials | Housing material | Galvanized steel and plastic housing |

Footnotes †Rated Impulse Voltage 4kV, Type of Action 1.AA.B, Control Pollution Degree 3.

Electrical installation

- ⚠ 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.
- (A)** Actuators with appliance cables are numbered.
- ◆** Meets cULus requirements without the need of an electrical ground connection.
- (UP)** Universal Power Supply (UP) models can be supplied with AC 24...240 V, or DC 24...125 V.
- ⚡** 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.
- 1** Provide overload protection and disconnect as required.
- 3** Actuators may also be powered by DC 24 V.
- 4** Two built-in auxiliary switches (2x SPDT), for end position indication, interlock control, fan startup, etc.
- 45** Actuators may be powered in parallel. Power consumption must be observed.
- 48** Parallel wiring required for piggy-back applications.

Wiring diagrams

On/Off

