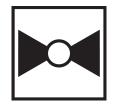


Bronze Body, Stainless Steel Ball and Stem





2-year warranty



## **Technical data**

| Fu | ını | ti | ٥n | ıal | Ιd | a | ta |
|----|-----|----|----|-----|----|---|----|
|    |     |    |    |     |    |   |    |

| Valve Size                        | 0.5" [15]                                     |  |
|-----------------------------------|---|--|
| Fluid                             | chilled or hot water, up to 60% glycol, steam |  |
| Fluid Temp Range (water)          | -22280°F [-30138°C]                           |  |
| Body Pressure Rating              | 600 psig WOG                                  |  |
| Close-off pressure ∆ps            | 600 psi                                       |  |
| Flow characteristic               | modified equal percentage                     |  |
| Max Differential Pressure (Steam) | 35 psi  |  |
| Flow Pattern                      | 2-way   |  |
| Leakage rate                      | ANSI Class VI                                 |  |
| Controllable flow range           | 90° rotation                                  |  |
| Cv                                | 1   |  |
| Maximum Inlet Pressure (Steam)    | 35 psi [241 kPa]                              |  |
| Body pressure rating note         | 600 psig WOG                                  |  |
| Maximum Velocity                  | 15 FPS  |  |
| Valve body                        | Bronze B584-C84400                            |  |
| Housing seal                      | PTFE  |  |
| Stem seal                         | RPTFE   |  |
| Seat                              | RPTFE   |  |
| Lock nut                          | stainless steel                               |  |
| Pipe connection                   | NPT female ends                               |  |
| Retainer                          | B16 Brass                                     |  |
| Ball                              | 316 stainless steel                           |  |
| Non-Spring                        | LMB(X)<br>GRCB(X)                             |  |
|                                   | GRB(X)  |  |

# Safety notes



**Suitable actuators** 

Materials

• 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 re-heat 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.

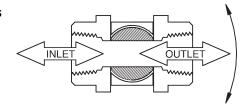
Up to 35 psi steam

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

Composition: BZ

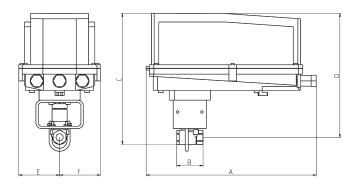
Style: 3

## Flow/Mounting details



### **Dimensions**

## **Dimensional drawings**



B2050VS..+GRC..N4

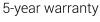
| A              | В            | С            | D            | E          | F          |
|----------------|--------------|--------------|--------------|------------|------------|
| 14.11" [358.5] | 2.17" [55.5] | 10.87" [276] | 10.28" [261] | 3.39" [86] | 3.39" [86] |



On/Off, Floating Point, Spring Return, 24 V









| IAChi | $\alpha \cdot c \cdot $ | 2+2     |
|-------|---|---------|
| Techi | ша  | <br>ลเล |
|       |   |         |

| Electrical data | Nominal voltage                    | AC/DC 24 V  |
|-----------------|------------------------------------|---|
|                 | Nominal voltage frequency          | 50/60 Hz  |
|                 | Power consumption in operation     | 1.5 W   |
|                 | Power consumption in rest position | 0.2 W   |
|                 | Transformer sizing                 | 2.5 VA (class 2 power source)   |
|                 | Electrical Connection              | 18 GA plenum cable with 1/2" conduit connector,<br>degree of protection NEMA 2 / IP54, 3 ft [1 m] 10 ft<br>[3 m] and 16ft [5 m]   |
|                 | Overload Protection                | electronic throughout 095° rotation   |
| Functional data | Direction of motion motor          | selectable with switch 0/1  |
|                 | Manual override                    | external push button  |
|                 | Angle of rotation                  | Max. 95°, adjustable with mechanical stop   |
|                 | Angle of rotation note             | adjustable with mechanical stop   |
|                 | Running Time (Motor)               | 90 s, constant, independent of load   |
|                 | Running time motor note            | constant, independent of load   |
|                 | Noise level, motor                 | 35 dB(A)  |
|                 | Position indication                | Mechanically, 3065 mm stroke  |
| Safety data     | Degree of protection IEC/EN        | IP54  |
|                 | Degree of protection NEMA/UL       | NEMA 2 UL Enclosure Type 2  |
|                 | Agency Listing                     | cULus acc. to UL60730-1A/-2-14, CAN/CSA E60730-1:02, CE acc. to 2014/30/EU and 2014/35/ EU; Listed to UL 2043 - suitable for use in air plenums per Section 300.22(c) of the NEC and Section 602.2 of the IMC |
|                 | Quality Standard                   | ISO 9001  |
|                 | Ambient temperature                | -22122°F [-3050°C]  |
|                 | Storage temperature                | -40176°F [-4080°C]  |
|                 | Ambient humidity                   | max. 95% r.H., non-condensing   |
|                 | Servicing                          | maintenance-free  |
| Weight          | Weight                             | 1.1 lb [0.50 kg]  |

# Safety notes



- PVC W'Shld for GV w/UGLK (AM)
- Classic GM to GMB(X) retrofit bracket.
- Battery Back Up System for SY(7~10)-110
- 120 to 24 VAC, 40 VA transformer.
- Cable for ZTH US to actuators w/o diagnostics socket.
- PC Tool computer programming interface, serial port.

## **Electrical installation**

### > INSTALLATION NOTES

(A) Actuators with appliance cables are numbered.

 $\sum$  Provide overload protection and disconnect as required.

Actuators may also be powered by 24 VDC.

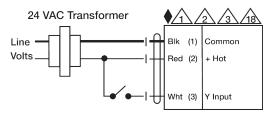
Actuators Hot wire must be connected to the control board common. Only connect common to neg. (-) leg of control circuits. Terminal models (-T) have no-feedback.

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.

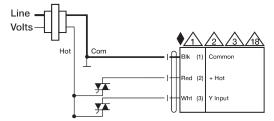
## Warning! Live Electrical Components!

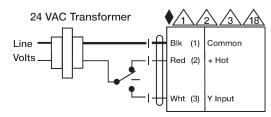
During installation, testing, servicing and troubleshooting of this product, it may be necessary to work with live electrical components. Have a qualified licensed electrician or other individual who has been properly trained in handling live electrical components perform these tasks. Failure to follow all electrical safety precautions when exposed to live electrical components could result in death or serious injury.



On/Off

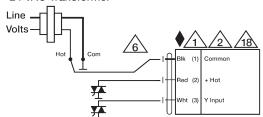
#### 24 VAC Transformer





Floating Point

#### 24 VAC Transformer



Floating Point - Triac Sink