

ANSI-Flanged Globe Valves

- chilled or hot water, up to 60% glycol, steam
- ANSI Class 250, up to 280 psi below 350°F
- 250
- Cast iron - ASTM A126 Class B



5-year warranty

Type overview

| Type | DN |
|-------------|-----|
| G6125CS-250 | 125 |

Technical data

| | | |
|--------------------|-----------------------------------|---|
| Functional data | Valve size [mm] | 5" [125] |
| | Fluid | chilled or hot water, up to 60% glycol, steam |
| | Fluid Temp Range (water) | 32...350°F [0...176°C] |
| | Fluid Temp Range (steam) | 32...338°F [0...170°C] |
| | Body Pressure Rating | ANSI Class 250, up to 280 psi below 350°F |
| | Flow characteristic | equal percentage |
| | Leakage rate | ANSI Class III |
| | Pipe connection | Flange for use with ASME/ANSI class 250 |
| | Servicing | repack/rebuild kits available |
| | Rangeability Sv | 100:1 |
| | Max Differential Pressure (Steam) | 50 psi [345 kPa] |
| | Flow Pattern | 2-way |
| | Controllable flow range | stem up - open A – AB |
| | Cv | 263 |
| | Maximum Inlet Pressure (Steam) | 100 psi [690 kPa] |
| Materials | Valve body | Cast iron - ASTM A126 Class B |
| | Valve plug | Stainless steel |
| | Stem | 316 stainless steel |
| | Stem seal | NLP EPDM (no lip packing) |
| | Seat | Stainless steel AISI 316 |
| Suitable actuators | Non Fail-Safe | EVB(X) |
| | Electrical fail-safe | AVKB(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
- The valve has been designed for use in stationary heating, ventilation and air-conditioning systems and must not be used outside the specified field of application, especially in aircraft or in any other airborne means of transport.
- Only authorized specialists may carry out installation. All applicable legal or institutional installation regulations must be complied with during installation.
- The valve does not contain any parts that can be replaced or repaired by the user.
- When determining the flow rate characteristic of controlled devices, the recognised directives must be observed.

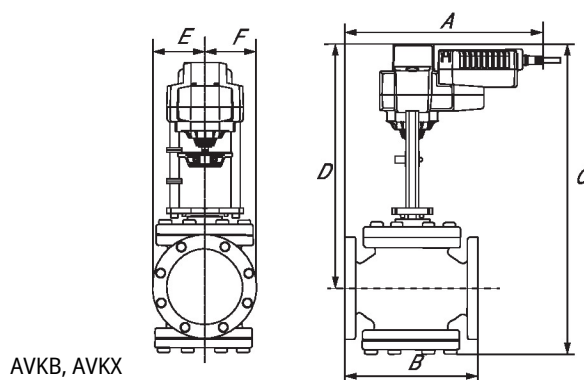
Dimensions

| Type | DN | Weight |
|-------------|-----|----------------|
| G6125CS-250 | 125 | 150 lb [67 kg] |



EVB, EVX, RVB, RVX

| A | B | C | D | E | F | Number of Bolt Holes |
|-------------|-------------|-------------|-------------|------------|------------|----------------------|
| 16.6" [422] | 15.5" [394] | 25.4" [646] | 17.5" [445] | 5.5" [140] | 5.5" [140] | 8 |



AVKB, AVKX

| A | B | D | E | F | Number of Bolt Holes |
|-------------|-------------|-------------|------------|------------|----------------------|
| 15.5" [394] | 16.6" [422] | 17.5" [445] | 5.5" [140] | 5.5" [140] | 8 |

Modulating, Non fail-safe, 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 | 1.5 W |
| | Transformer sizing | 7.5 VA |
| | Electrical Connection | 18 GA plenum cable, 1 m, with 1/2" NPT conduit connector, degree of protection NEMA 2 / IP54 |
| | Overload Protection | electronic throughout full stroke |
| | Electrical Protection | actuators are double insulated |
| Functional data | Actuating force motor | 2500 N [560 lbf] |
| | Operating range Y | 2...10 V |
| | Operating range Y note | 4...20 mA w/ ZG-R01 (500 Ω , 1/4 W resistor) |
| | Input impedance | 100 k Ω for 2...10 V (0.1 mA), 500 Ω for 4...20 mA |
| | Position feedback U | 2...10 V |
| | Position feedback U note | Max. 0.5 mA |
| | Direction of motion motor | selectable with switch 0/1 |
| | Manual override | 5 mm hex crank (3/16" Allen), supplied |
| | Stroke | 2" [50 mm] |
| | Running Time (Motor) | 90 s / |
| | Running time motor note | constant, independent of load |
| | Noise level, motor | 60 dB(A) |
| | Position indication | Mechanical, with pointer |
| 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 and 2014/35/EU |
| | Quality Standard | ISO 9001 |

Technical data

| | | |
|--------------------|---------------------|---|
| Safety data | 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 | Die cast aluminium and plastic casing |

Footnotes † Use flexible metal conduit. Push the listed conduit fitting device over the actuator's cable to butt against the enclosure. Screw in conduit connector. Jacket the actuators input wiring with listed flexible conduit. Properly terminate the conduit in a suitable junction box. Rated impulse Voltage 800V. Type of action 1. Control pollution degree 3.

Electrical installation

✂ INSTALLATION NOTES

- △ 3 Actuators may also be powered by DC 24 V.
- △ 7 A 500 Ω resistor (ZG-R01) converts the 4...20 mA control signal to 2...10 V.
- △ 18 Actuators with plenum cable do not have numbers; use color codes instead.
- ◆ 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.

Wiring diagrams

VDC / 4 to 20 mA

