



5-year warranty

Type overview

| | |
|--------|----|
| Type | DN |
| G665CS | 65 |

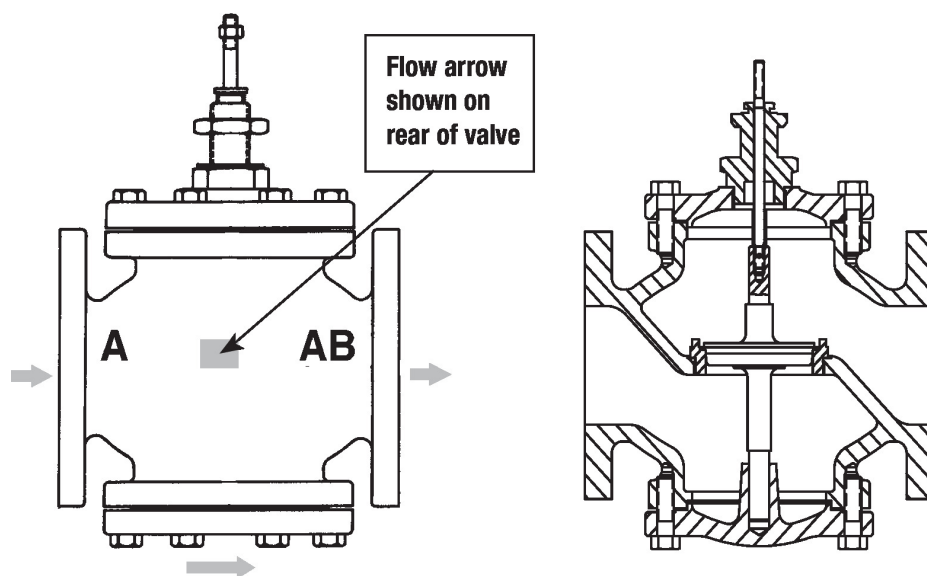
Technical data

| | | |
|--------------------|-----------------------------------|---|
| Functional data | Valve size [mm] | 2.5" [65] |
| | 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 125, up to 175 psi below 150°F |
| | Flow characteristic | equal percentage |
| | Servicing | repack/rebuild kits available |
| | Rangeability Sv | 85:1 |
| | Max Differential Pressure (Steam) | 50 psi [345 kPa] |
| | Flow Pattern | 2-way |
| | Leakage rate | ANSI Class III |
| | Controllable flow range | stem up - open A – AB |
| | Cv | 65 |
| | Maximum Inlet Pressure (Steam) | 100 psi [690 kPa] |
| Materials | Valve body | Cast iron - ASTM A126 Class B |
| | Valve plug | Stainless steel |
| | Spindle | 316 stainless steel |
| | Spindle seal | NLP EPDM (no lip packing) |
| | Seat | Stainless steel AISI 316 |
| | Pipe connection | 125 lb flanged |
| Suitable actuators | Non-Spring | EVB(X) |
| | Spring | AF |
| | 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 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.

Product features
Flow/Mounting details

Dimensions

| Type | DN | Weight |
|--------|----|------------------|
| G665CS | 65 | 57.32 lb [26 kg] |

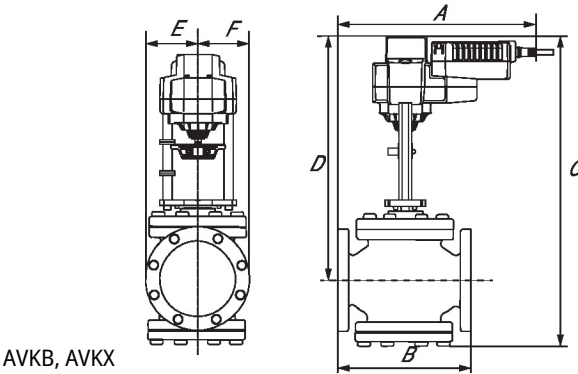
The image contains two technical drawings of a valve assembly. The left drawing is a front view showing a vertical valve body with a flange at the bottom and a handle assembly at the top. Dimension lines indicate: 'E' for the width of the handle assembly, 'F' for the width of the valve body, and 'D' for the height of the valve body. The right drawing is a side view showing the valve body and handle assembly from the side. Dimension lines indicate: 'A' for the width of the handle assembly, 'B' for the width of the valve body, 'C' for the height of the handle assembly, 'D' for the height of the valve body, and 'L' for the total height of the assembly.

EVB, EVX, RVB, RVX

| A | B | C | D | E | F | Number of Bolt Holes |
|-------------|------------|-------------|-------------|-----------|-----------|----------------------|
| 11.7" [298] | 9.0" [229] | 23.0" [584] | 18.3" [464] | 3.6" [92] | 3.6" [92] | 4 |

AFB, AFX

| A | B | C | D | E | F | Number of Bolt Holes |
|-------------|------------|-------------|-------------|-----------|------------|----------------------|
| 11.7" [298] | 9.0" [229] | 21.7" [550] | 16.9" [428] | 3.6" [92] | 5.3" [135] | 4 |



| A | B | C | D | E | F | Number of Bolt Holes |
|-------------|------------|-------------|-------------|-----------|-----------|----------------------|
| 11.7" [298] | 9.0" [229] | 23.0" [584] | 18.3" [464] | 3.6" [92] | 3.6" [92] | 4 |



5-year warranty



Technical data


| | | |
|------------------------|-------------------------------------|--|
| Electrical data | Nominal voltage | AC 24...240 V / DC 24...125 V |
| | Nominal voltage frequency | 50/60 Hz |
| | Power consumption in operation | 7 W |
| | Power consumption in rest position | 3.5 W |
| | Power consumption for wire sizing | 18 VA |
| | Transformer sizing | 7 VA @ AC 24 V (class 2 power source), 8.5 VA @ AC 120 V, 18 VA @ AC 240 V |
| | Auxiliary switch | 2 x SPDT, 3 A resistive (0.5 A inductive) @ AC 250 V, one set at 10°, one adjustable 10...90° |
| | Switching capacity auxiliary switch | 3 A resistive (0.5 A inductive) @ AC 250 V |
| | Electrical Connection | (2) 18 GA appliance cables with 1/2" conduit connectors, 3 ft [1 m], |
| | 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 |
| | 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; 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 | -22...122°F [-30...50°C] |
| | Storage temperature | -40...176°F [-40...80°C] |
| | Ambient humidity | Max. 95% RH, non-condensing |
| | Servicing | maintenance-free |
| | Weight | |
| | Weight | 4.6 lb [2.1 kg] |
| Materials | Housing material | |
| | 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.


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


 Actuators with appliance cables are numbered.


 Universal Power Supply (UP) models can be supplied with 24 VAC up to 240 VAC, or 24 VDC up to 125 VDC.


 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.

 Provide overload protection and disconnect as required.

 Actuators may also be powered by DC 24 V.

 Two built-in auxiliary switches (2x SPDT), for end position indication, interlock control, fan startup, etc.

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

 Parallel wiring required for piggy-back applications.

Wiring diagrams

On/Off

