



5-year warranty


Type overview

| | |
|-------------|-----------|
| Type | DN |
| Z3100QS-J | 25 |

Technical data

| | | |
|---------------------------|---------------------------------|--|
| Functional data | Valve Size | 1" [25] |
| | Noise level, Motor | dB(A) |
| | Fluid | chilled or hot water, up to 60% glycol |
| | Fluid Temp Range (water) | 36...212°F [2...100°C] |
| | Body Pressure Rating | 360 psi |
| | Close-off pressure Δp_s | 40 psi |
| | Flow characteristic | linear |
| | Servicing | maintenance-free |
| | Flow Pattern | 3-way Diverting |
| | Leakage rate | 0% |
| | Controllable flow range | 75° |
| | Cv | 4.4 |
| Materials | Valve body | forged brass |
| | Spindle | brass |
| | Seat | PTFE |
| | Pipe connection | sweat |
| | O-ring | EPDM (lubricated) |
| | Ball | chrome plated brass |
| Suitable actuators | Non-Spring | CQB |
| | Electrical fail-safe | CQKB(X) |

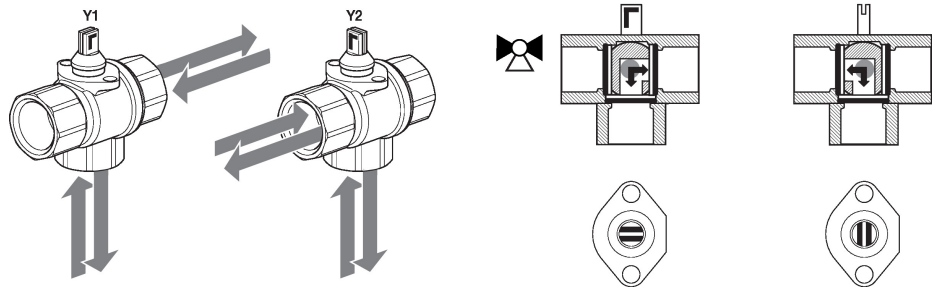
Safety notes


- **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
- If temperature exceeds 212°F operating range due to a boiler control failure the valve will safely contain the hot water but manufacturers product warranty becomes invalid. Valve and actuator replacement is at the expense of others.

Product features

Application The QCV zone valves are suited for large commercial buildings where higher close-off and the ability to change flow is desired. Common applications include unit ventilators, fan coil units, VAV reheat coils, fin tube casing, radiant panels and duct coils. The valve fits in space restricted areas and can be assembled without the use of tools.

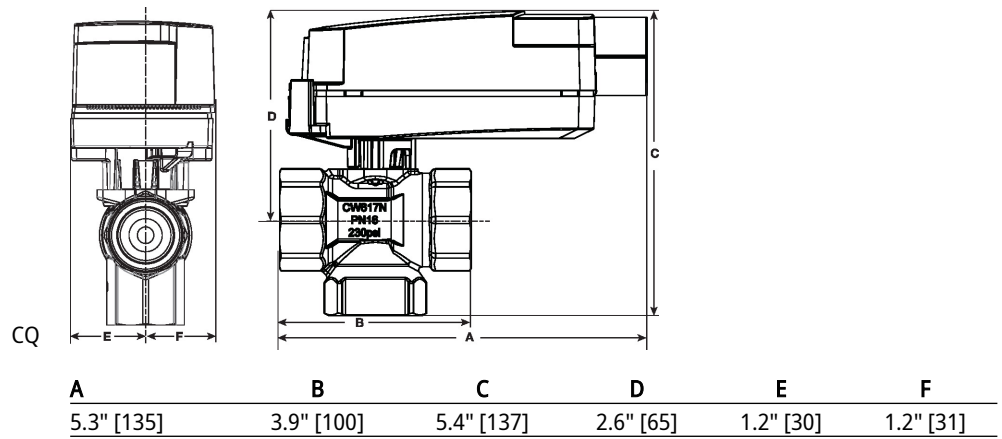
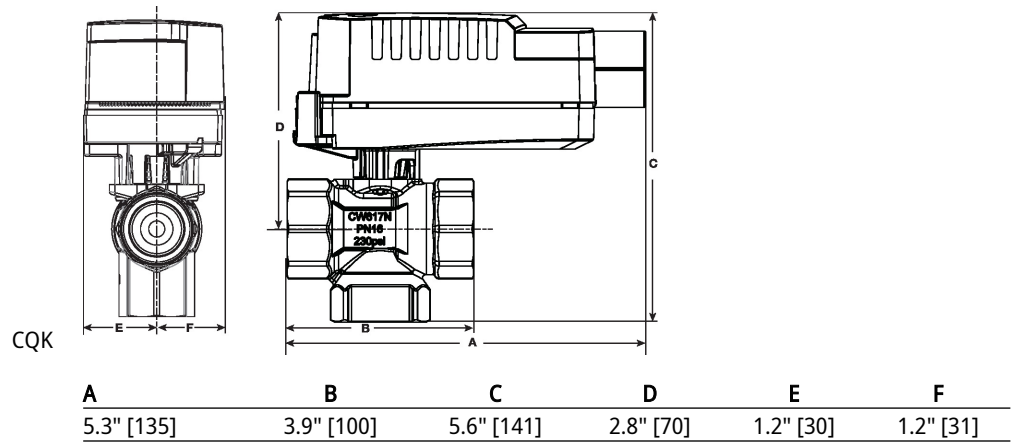
Flow/Mounting details



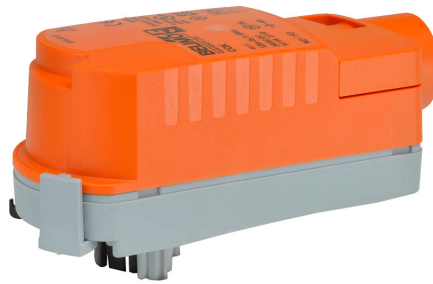
Dimensions

Type
Z3100QS-J

DN
25



- Nominal voltage AC/DC 24 V
- Control On/Off
- Position feedback



5-year warranty



Technical data

| | | |
|------------------------|--|--|
| Electrical data | Nominal voltage | AC/DC 24 V |
| | Nominal voltage frequency | 50/60 Hz |
| | Power consumption in operation | 2.5 W |
| | Power consumption in rest position | 0.5 W |
| | Power consumption for wire sizing | 5 VA |
| | Transformer sizing | 5 VA (class 2 power source) |
| | Auxiliary switch | 1 x SPST, 1 A resistive @ DC 30 V |
| | Switching capacity auxiliary switch | 1 A resistive @ DC 30 V |
| | Electrical Connection | 18 GA plenum cable, 3 ft [1 m], with 1/2" conduit connector |
| Overload Protection | electronic throughout 0...90° rotation | |
| Functional data | Bridging time (PF) | 2 s |
| | Pre-charging time | 5...20 s |
| | Angle of rotation | 90° |
| | Angle of rotation note | adjustable with mechanical stop |
| | Running Time (Motor) | 75 s / 90° |
| | Running time fail-safe | <60 s |
| | Noise level, motor | 35 dB(A) |
| | Noise level, fail-safe | 35 dB(A) |
| Position indication | pointer | |
| Safety data | Degree of protection IEC/EN | IP40 |
| | 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 | 1.7...40°C |
| | Storage temperature | -40...176°F [-40...80°C] |
| | Ambient humidity | Max. 95% RH, non-condensing |
| | Servicing | maintenance-free |
| | Materials | Housing material |

Product features

Application Electrical fail-safe On/Off ZoneTight actuator.
 Valve selection should be done in accordance with the flow parameters and system specifications. The actuator is mounted directly to the valve without the need for tools or additional linkage.
 The actuator operates in response to AC/DC 24 V.
 Angle of rotation is adjustable with the integrated mechanical stop.

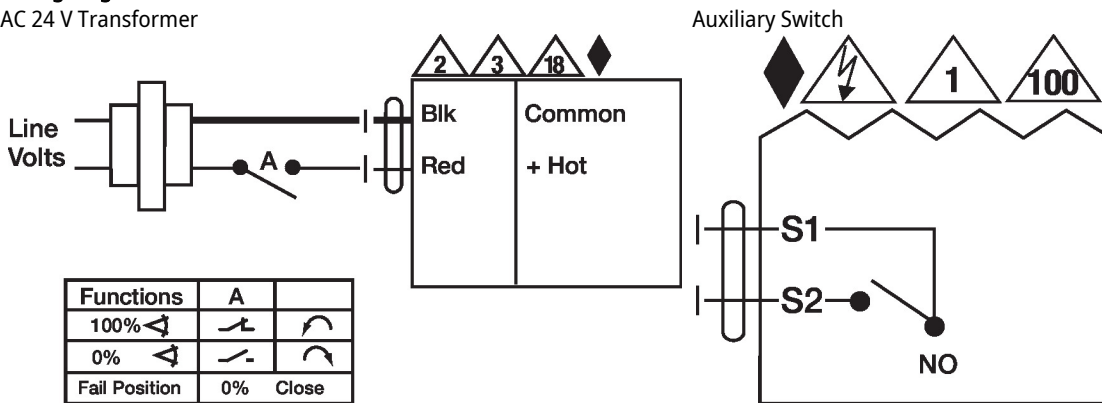
Electrical installation

INSTALLATION NOTES

- Actuators with appliance cables are numbered.
- Provide overload protection and disconnect as required.
- Actuators may be connected in parallel. Power consumption and input impedance must be observed.
- Actuators may also be powered by DC 24 V.
- Actuators with plenum cable do not have numbers; use color codes instead.
- One built-in auxiliary switch, 1x SPST 1A @ 30 VDC (resistive load), for end position indication, interlock control, fan startup, etc.
- Meets cULus requirements without the need of an electrical ground connection.
- 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.
- 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

AC 24 V Transformer



Dimensions