

**ZoneTight™, 3-way, Internal thread**

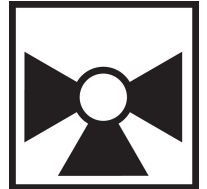
- For closed chilled and hot water systems
- For switching functions and 2-point controls on the water side of air-handling units and heating systems
- Snap-assembly of the actuator



Picture may differ from product



5-year warranty


**Type overview**

<b>Type</b>	<b>DN</b>
Z3100Q-J	25

**Technical data**

<b>Functional data</b>	Valve size [mm]	1" [25]
	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 Δps	40 psi
	Differential pressure Δpmax	40psi
	Flow characteristic	linear
	Leakage rate	0%
	Pipe connection	Internal thread NPT (female)
	Installation orientation	upright to horizontal (in relation to the spindle)
	Servicing	maintenance-free
	Flow Pattern	3-way Diverting
	Cv	4.4
	<b>Materials</b>	Valve body
Stem		brass
Stem seal		EPDM O-ring
Seat		PTFE, O-Ring EPDM
O-ring		EPDM (lubricated)
Ball		chrome plated brass
<b>Suitable actuators</b>	Non Fail-Safe	CQB(X)
	Electronic fail-safe	CQKB(X)

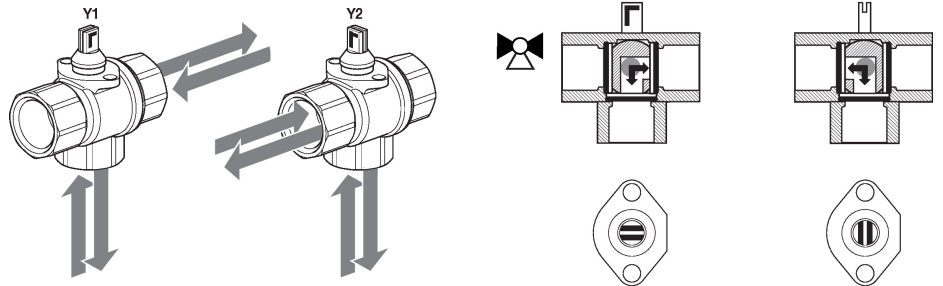
**Safety notes**


- **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](http://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



**Operating mode** The change-over zone valve is adjusted by a rotary actuator. The rotary actuator is controlled by an on/off signal.

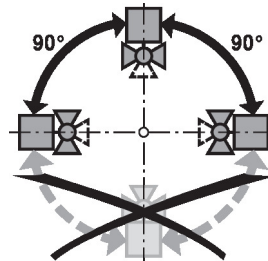
**Simple direct mounting** Tool-free snap assembly.

The actuator can be plugged on the valve by hand (Caution! Just vertical movements). Pins must match the holes on the flange.

The mounting orientation in relation to the valve can be selected in 180° increments. (Possible two times)

## Installation notes

**Permissible installation orientation** The ball valve can be installed upright to horizontal. The ball valve may not be installed in a hanging position, i.e. with the stem pointing downwards.



**Water quality requirements** Belimo valves are regulating devices. For the valves to function correctly in the long term, they must be kept free from particle debris (e.g. welding beads during installation work). The installation of a suitable strainer is recommended.

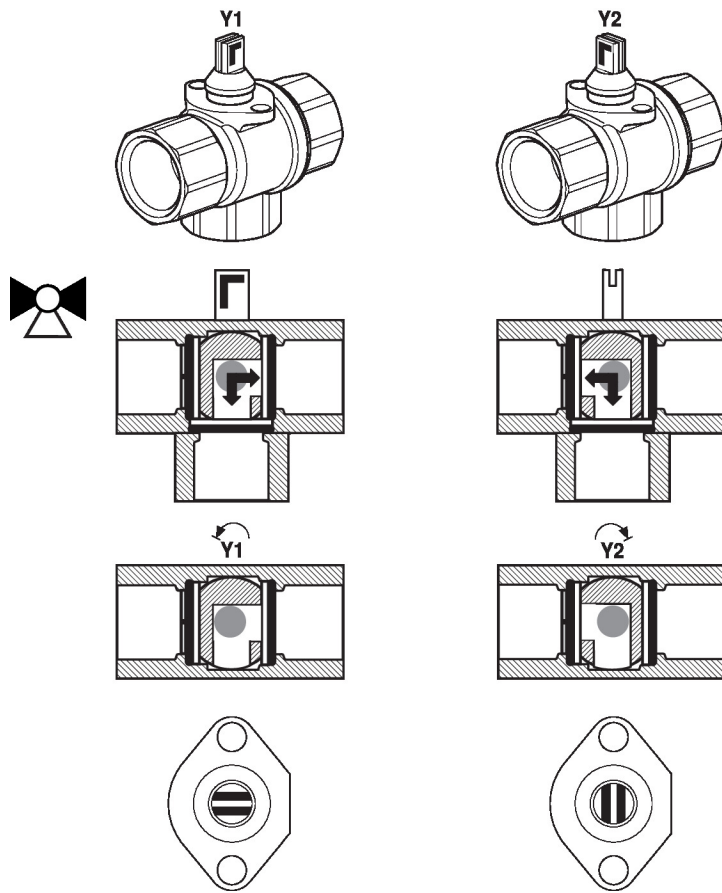
**Servicing** Ball valves and rotary actuators are maintenance-free.

Before any service work on the control element is carried out, it is essential to isolate the rotary actuator from the power supply (by unplugging the electrical cable if necessary). Any pumps in the part of the piping system concerned must also be switched off and the appropriate slide valves closed (allow all components to cool down first if necessary and always reduce the system pressure to ambient pressure level).

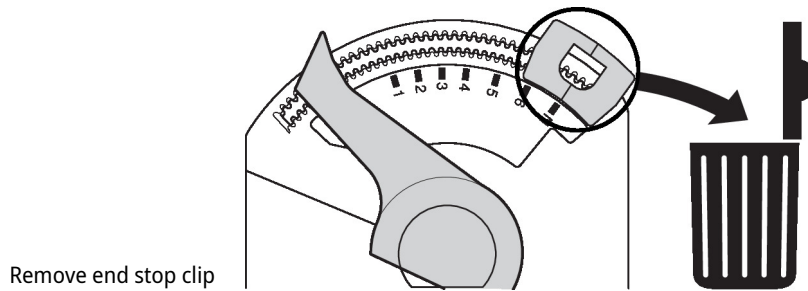
The system must not be returned to service until the ball valve and the rotary actuator have been correctly reassembled in accordance with the instructions and the pipeline has been refilled by professionally trained personnel.

Installation notes

**Flow direction** Direction of flow in both directions possible.



**Flow setting** At the actuator the end stop clip has to be removed in order to get the angle of rotation of 90°, which is needed for the change-over functionality.

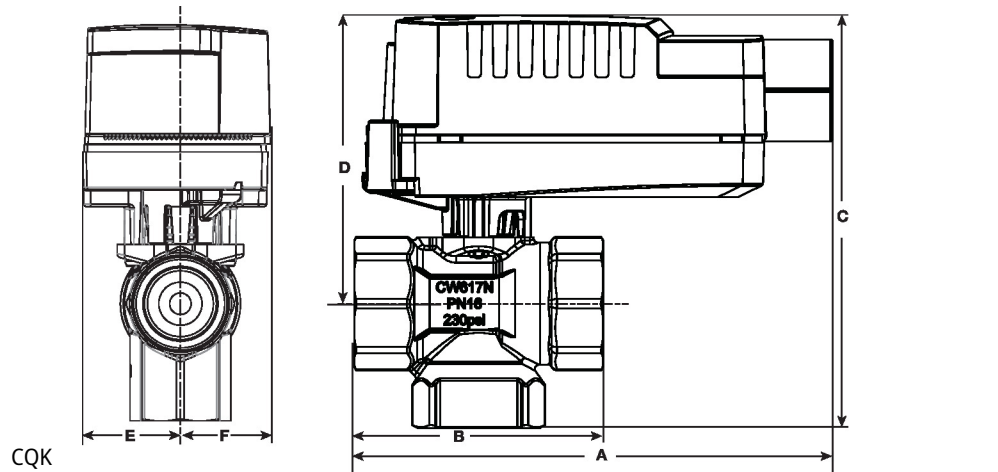


Remove end stop clip

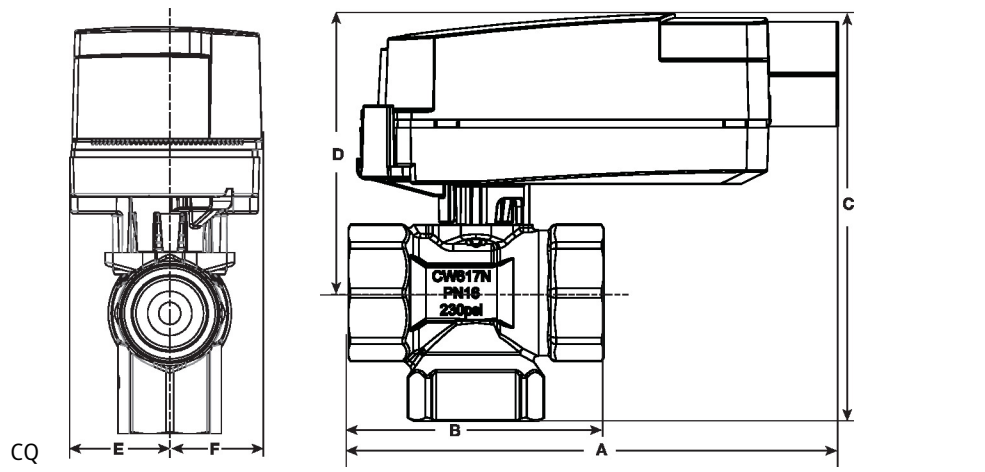
Dimensions

Type	DN	Weight
Z3100Q-J	25	0.88 lb [0.37 kg]

Dimensions



A	B	C	D	E	F
4.6" [118]	2.8" [70]	5.1" [129]	2.8" [70]	1.2" [30]	1.2" [31]



A	B	C	D	E	F
4.6" [118]	2.8" [70]	4.9" [124]	2.6" [65]	1.2" [30]	1.2" [31]