

# Belimo ZoneTight™ Valves

## Efficient in Every Way



Compact  
Size

Low Power  
Consumption

Zero  
Leakage



EXPERIENCE  
EFFICIENCY

**BELIMO**

# Efficient in Every Way

Designed for maximum efficiency in tight spaces, Belimo's ZoneTight valve offering sets new design and performance standards for both pressure dependent and pressure independent zoning applications.



Actual Size  
QCV with Non-Spring Return Actuator

## ZoneTight Zone Valve (QCV)

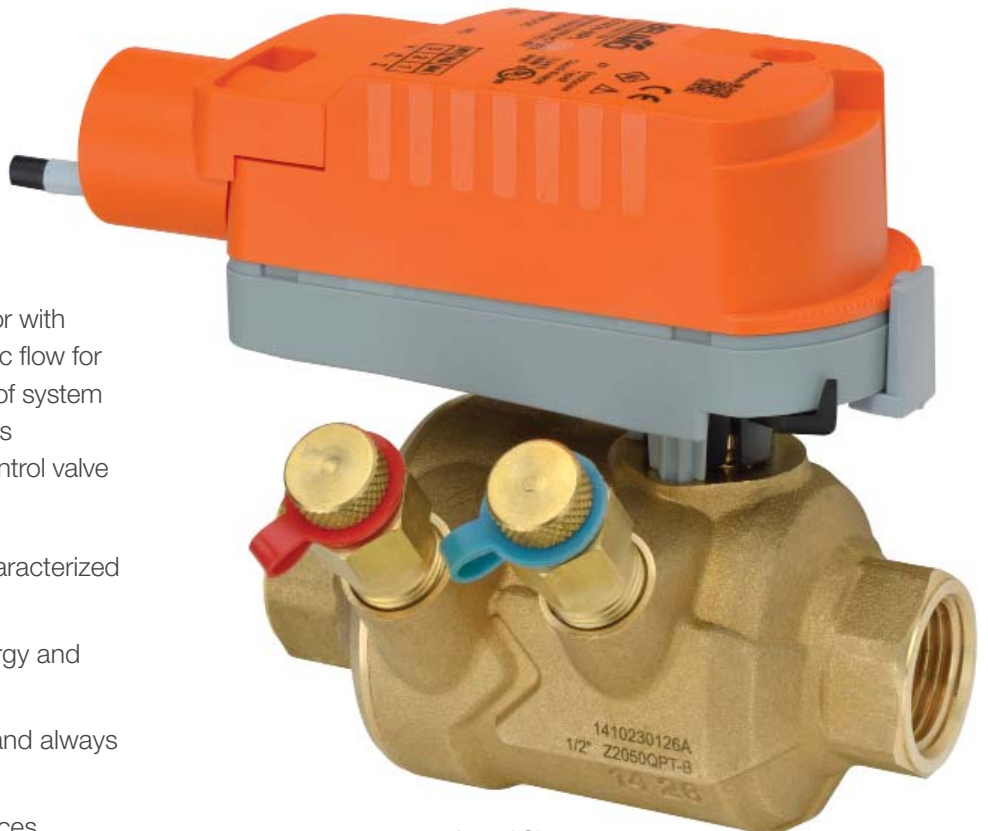
The ultra-compact QCV leads the way in Belimo's new generation of room and zone solutions. Equipped with a space-saving 2-way or 3-way ball valve and an electronic rotary actuator, the QCV has an installation height of just 4.33 inches (110 mm) and offers a number of benefits over conventional pressure dependent control valves, including:

- Belimo ball valve design with zero leakage eliminates energy loss.
- Self-cleaning ball valve technology provides superior clog resistance.
- Low power consumption up to 95% less than conventional zone valves.
- Field adjustable Cv value to meet your design requirements.

## ZoneTight Pressure Independent Zone Valve (PIQCV)

The PIQCV offers all the advantages of a Pressure Independent Characterized Control Valve (PICCV) but in an ultra compact configuration. The PIQCV combines a differential pressure regulator with a 2-way control valve to supply a specific flow for each degree of ball opening regardless of system pressure fluctuations. The valve performs the function of a balancing valve and control valve in one unit.

- Smallest pressure independent characterized ball valve in the market.
- Actuator runs at 0.3 W saving energy and transformer power.
- Flow is adjustable at the actuator and always perfectly balanced.
- Permits PIV installation in tight spaces.



Actual Size  
PIQCV with Electronic Fail-Safe Actuator

# More Than a Standard Zone Valve

## Ball Valve Technology

Unlike short stroke globe valves, the self-cleaning ball helps minimize energy losses caused by clogging (0% A – AB leakage) and eliminates overflow from pump pressure seat lift. In addition, high close-off capabilities ensure shut-off and allow for true equal percentage flow characteristics.



## Actuator with Patented Brushless DC Motor

The brushless DC motor's power consumption when running is a mere 0.3W (0.15W when holding) saving energy and transformer power. In addition to significantly reducing energy costs, this helps eliminate failures due to stalled motors and prolongs actuator life. It also allows for more units to be powered by a single transformer.

## Snap Fitting

The QCV and PIQCV easily connects to the actuator allowing operators and technicians to install valves quickly, easily, and without the use of tools. This helps simplify commissioning, reduces labor costs and help reduce inventory.



## Field Adjustable Max Cv/Flow

QCVs and PIQCVs can be quickly and easily field adjusted to ensure that necessary design requirements are met.





## Stem Extension for Insulation

Unlike conventional zone valve actuators, which are normally covered by pipe insulation, the stem extension on QCVs and PIQCVs allows for easy actuator removal without damaging the surrounding insulation, helping simplify operation and maintenance activities.

## Overall Benefits

- Increased reliability, even after powered-close during off periods.
- Ball valve technology avoids clogging.
- Patented brushless DC motor runs at only 0.3 W maximizing energy savings.
- Zero leakage means no energy losses.
- Ultra-compact design allows for installation in tight areas.
- Field set adjustment of Cv and maximum flow is fast.
- Snaps together quick and easy; no tools are required for assembly or flow adjustment.
- Comprehensive 5-year warranty.

# ZoneTight Series & Accessories

		Model #	C <sub>v</sub>	Inches	DN [mm]	Non-Spring	Electronic Fail-Safe
QCV		Z2050Q-J	5.9	½	15	CQ Series	CQK Series
		Z2075Q-K	9.8	¾	20		
		Z3050Q-E	1.0	½	15		
		Z3050Q-H	2.7	½	15		
		Z3075Q-J	4.6	¾	20		
PIQCV		Z2050QPT-B	0.9	½	15	CQ Series	CQK Series
		Z2050QPT-D	1.9	½	15		
		Z2050QPT-F	4.0	½	15		
		Model #	GPM	Inches	DN [mm]		



<b>Stem Extension (QCV/PIQCV)</b>	<b>Insulation Spacer</b> for cooling applications	<b>Error Proof Positioning</b>
<b>Manual Flow Setter (PIQCV)</b>	<b>Flow Limiter</b> for easy flow setting no tools are required	<b>Snap Interface</b>
<b>Flow Orifice Device</b>	<b>Manometer Readings = Flow</b>	<b>Stand Alone</b>
<b>Architectural Cover (2016)</b>	<b>Simple Design</b> covers complete actuator	<b>Snap Fitting</b> no tools required



Belimo Americas

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