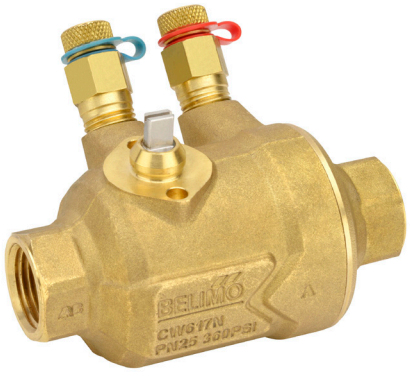
Z2050QPT-D Technical Data Sheet



5-year warranty

Technical Data

Fluid	chilled or hot water, up to 60% glycol
Flow characteristic	equal percentage
Controllable flow range	75°
Valve Size [mm]	0.5" [15]
Pipe connection	NPT female ends
Housing	forged brass
Ball	stainless steel
Stem	stainless steel
Seat	PTFE
O-ring	EPDM
Characterized disc	incorporated into the ball
Diaphragm	EPDM
Body Pressure Rating	360 psi
Maximum Allowable Operating Temperature	212°F [100°C] *
Close-off pressure Δps	200 psi
Valve Accuracy	±5%
Weight	1.76 lb [0.80 kg]
GPM	2
Fluid Temp Range (water)	36...212°F [2...100°C]
Leakage rate	0%
Servicing	maintenance-free

* 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.

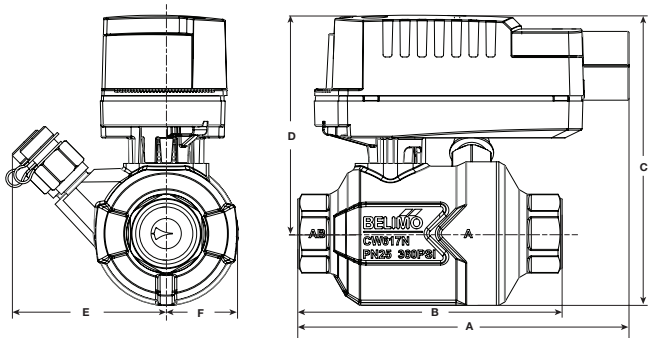
Application

The PIQCV zone valves with its pressure independent technology are suited for large commercial buildings where higher close-off and dynamic balancing is required. 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.

Suitable Actuators

	Non-Spring	Electronic fail-safe
Z2050QPT-D	CQB	CQKB(X)

Dimensions (Inches [mm])



CQK

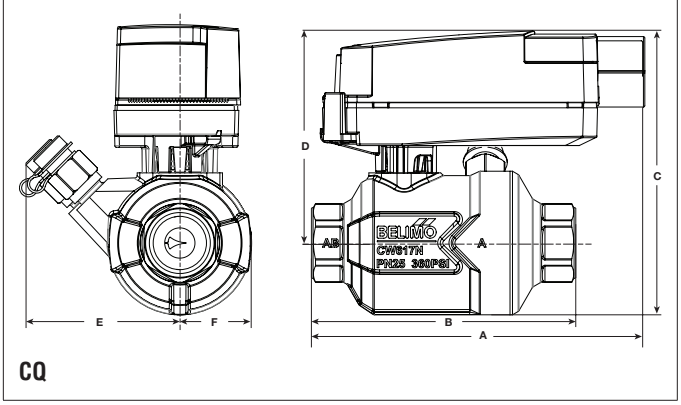
A	B	C	D	E	F
4.9" [125]	3.8" [97]	4.8" [122]	3.5" [89]	2.4" [62]	1.3" [33]

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

Z2050QPT-D Technical Data Sheet

Dimensions (Inches [mm])



CQ

A	B	C	D	E	F
4.9” [125]	3.8” [97]	4.5” [114]	3.4” [87]	2.4” [62]	1.3” [33]

CQKB24-RR Technical Data Sheet
On/Off, Electronic-Fail-safe, 24 V

5-year warranty

Application
Electronic 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.

Technical Data	
Power Supply	24 VAC, ±20%, 50/60 Hz, 24 VDC, ±10%
Power consumption in operation	2.5 W
Power consumption in rest position	0.5 W
Transformer sizing	5 VA (class 2 power source)
Electrical Connection	18 GA plenum cable, 3 ft [1 m], with 1/2" conduit connector
Overload Protection	electronic thoughout 0...90° rotation
Angle of rotation	90°, adjustable with mechanical stop
Position indication	pointer
Running Time (Motor)	75 s
Running time fail-safe	<60 s
Bridging time	2 s delay before fail-safe activates
Pre-charging time	5...20 s
Ambient humidity	max. 95% r.H., non-condensing
Ambient temperature	35...104°F [1.7...40°C]
Storage temperature	-40...176°F [-40...80°C]
Degree of Protection	IP40, NEMA 2
Housing material	UL94-5VA
Agency Listing	cULus acc. to UL60730-1A/-2-14, CAN/CSA E60730-1:02, CE acc. to 2014/30/EU and 2014/35/EU
Noise level, motor	35 dB(A)
Noise level, fail-safe	35 dB(A)
Servicing	maintenance-free
Quality Standard	ISO 9001
Weight	0.55 lb [0.20 kg]

† 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.

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

Wiring Diagrams

INSTALLATION NOTES

(A) Actuators with appliance cables are numbered.

2 Actuators may be connected in parallel. Power consumption and input impedance must be observed.

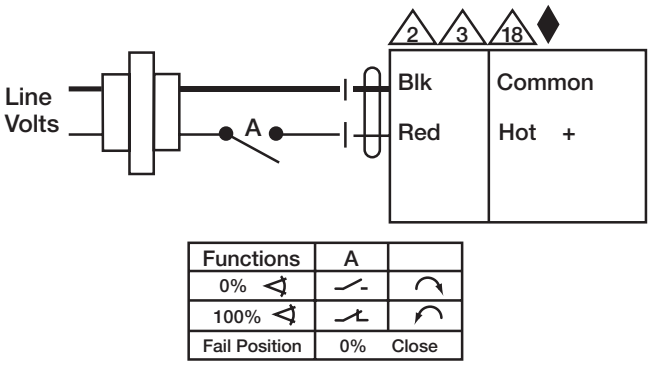
3 Actuators may also be powered by 24 VDC.

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.



Functions	A	
0%		
100%		
Fail Position	0%	Close

24 VAC Transformer