# OptiPoint<sup>®</sup> Smart Valves

#### for Pressure Dependent Applications

### Automated Logic



Facility managers will benefit from more precise hot water flow in their zoning reheat systems using the new OptiPoint<sup>™</sup> smart valves. These valves feature communicating actuators that allow Automated Logic terminal unit controllers to manage reheat valve positions directly using serial commands. This communications technology offers more precise control than conventional zone valves, as the actuator is capable of modulating to any position as directed by the controller and provides exact position feedback for diagnostic purposes.

#### **Key Features and Benefits**

#### **Communicating Actuators**

Valves feature communicating actuators, eliminating the need to use physical I/O on the controller. Up to two valves can be connected to the Act Net bus on any Act Net-enabled controller. Each valve is preaddressed for quick commissioning.

#### Electronic Fail-safe

Actuators utilize super capacitors to drive actuator to fail state (open, closed or in place, based on part number), on loss of power.

#### **Exact Position Feedback**

Position feedback is communicated to the WebCTRL building automation system over the Act Net bus, helping to facilitate commissioning and ensure proper operation.

#### **Remote Accessibility**

Valves can be accessed remotely via the WebCTRL system, enabling comprehensive analysis and quick error detection with Fault Detection & Diagnostics (FDD).

#### **Ball Valve Technology**

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

#### **Snap Fit**

The valve bodies easily connect to the actuator, allowing operators and technicians to install valves quickly, easily, and without the use of tools. This helps simplify commissioning and helps reduce labor costs. In addition, it makes it easy to retrofit existing non-communicating valves.

#### Field Adjustable Max Cv/Flow

Valves can be easily adjusted either locally or remotely using the WebCTRL building automation system to ensure that necessary design requirements are met.

#### Stem Extension for Insulation

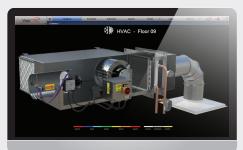
Unlike conventional zone valve actuators, which are normally covered by pipe insulation, the valve stem extension allows for easy actuator removal without damaging the surrounding insulation, helping simplify operation and maintenance activities.

#### Actuator with Patented Brushless DC Motor

The power consumption of the brushless DC motor is 2.5W (fail safe) and .6W (fail last position) when running and 0.5W (fail safe) and .4 (fail last position) when holding, helping to save energy and transformer power. This also helps eliminate failures due to stalled motors, helps prolongs actuator life, and also allows for more units to be powered by a single transformer.



The WebCTRL<sup>®</sup> system gives you the ability to understand your building operations and analyze the results. Integrate environmental, energy, security and safety systems into one powerful management tool that allows you to reduce energy consumption, increase occupant comfort, and achieve sustainable building operations.



#### AUTOMATED LOGIC

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1150 Roberts Boulevard, Kennesaw, Georgia 30144 770-429-3000 | www.automatedlogic.com Next level building automation engineered to help you make smart decisions.

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#### **Actuator Specifications**

Control type Act Net

Electrical connection

Power consumption

Power supply

Transformer sizing

**Valve Specifications** Service

Flow characteristic

Controllable flow range

Sizes

End fitting

Materials Body Ball Stem Seats O-rings

Media temp. range

Media temp. limit

Maximum allowable operating temperature

Body pressure rating

Close-off pressure Maximum differential

pressure ( $\Delta P$ )

Leakage

2.5 W running, .5 W holding (fail safe) .6 W running, .4 W holding (fail last position)
24 VAC/DC
8 VA
chilled or hot water, 60% glycol
equal percentage (2-way), linear (3-way)
75° (2-way), 90° (3-way)
1/2, 3/1
NPT female
forged brass chrome plated brass

Communication from any Act Net-enabled controller

3 ft. [1 m] cable

250°F [120°C]



#### Z3050Q-E+CQK-R-04-A 1/2" 1 4 Z3050Q-E+CQK-R-05-A 1/2" 1 5 720500-E+COK-R-04-A 1/2"

**Part Numbers & Default Characteristics** 

Fail Mode "Closed" Models

" 1.4	-
	5
" 2.7	4
" 2.7	5
" 5.9	4
" 5.9	5
" 4.6	4
" 4.6	5
" 9.8	4
" 9.8	5
	" 2.7   " 2.7   " 5.9   " 5.9   " 4.6   " 4.6

#### Fail Mode "Open" Models

Part #	Size	Flow Coef. Cv	Address
Z3050Q-E+CQKL-04-A	1/2"	1	4
Z3050Q-E+CQK-L-05-A	1/2"	1	5
Z2050Q-F+CQK-L-04-A	1/2"	1.4	4
Z2050Q-F+CQK-L-05-A	1/2"	1.4	5
Z3050Q-H+CQK-L-04-A	1/2"	2.7	4
Z3050Q-H+CQK-L-05-A	1/2"	2.7	5
Z2050Q-J+CQK-L-04-A	1/2"	5.9	4
Z2050Q-J+CQK-L-05-A	1/2"	5.9	5
Z3075Q-J+CQK-L-04-A	3/4"	4.6	4
Z3075Q-J+CQK-L-05-A	3/4"	4.6	5
Z2075Q-K+CQK-L-04-A	3/4"	9.8	4
Z2075Q-K+CQK-L-05-A	3/4"	9.8	5

Fail Mode "Last Position" Models					
Part #	Size	Flow Coef. Cv	Address		
Z3050Q-E+CQ-04-A	1/2"	1	4		
Z3050Q-E+CQ-05-A	1/2"	1	5		
Z2050Q-F+CQ-04-A	1/2"	1.4	4		
Z2050Q-F+CQ-05-A	1/2"	1.4	5		
Z3050Q-H+CQ-04-A	1/2"	2.7	4		
Z3050Q-H+CQ-05-A	1/2"	2.7	5		
Z2050Q-J+CQ-04-A	1/2"	5.9	4		
Z2050Q-J+CQ-05-A	1/2"	5.9	5		
Z3075Q-J+CQ-04-A	3/4"	4.6	4		
Z3075Q-J+CQ-05-A	3/4"	4.6	5		
Z2075Q-K+CQ-04-A	3/4"	9.8	4		
Z2075Q-K+CQ-05-A	3/4"	9.8	5		



Assembled in the United States



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Next level building automation engineered to help you make smart decisions.

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brass Teflon<sup>®</sup> PTFE EPDM (lubricated)

36°F to 212°F [2°C to 100°C]

212°F [100°C]

360 psi

75 psi

40 psi

0%