OPTIPOINT™ SMART VALVES

PRESSURE INDEPENDENT APPLICATIONS

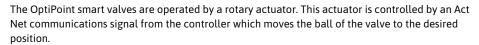






VALVES FOR THE WEBCTRL® BUILDING AUTOMATION SYSTEM

The OptiPoint™ smart valves are designed for maximum efficiency in tight spaces. They combine 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. As such, the valves perform the function of a balancing valve and control valve in one unit.





KEY FEATURES AND BENEFITS

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- Communicating actuators eliminate 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 pre-addressed
 for quick commissioning
- Valves are accessed remotely via the WebCTRL system enabling comprehensive analysis and quick error detection with Fault Detection & Diagnostics (FDD)
- Actuators utilize super capacitors to drive actuator to fail state (open or closed, based on part number) on loss of power
- Position feedback is communicated to the WebCTRL system over the Act Net bus helping to facilitate commissioning and ensure proper operation
- Self-cleaning ball helps minimize energy losses caused by clogging and eliminates overflow from pump pressure seat lift. High close-off capabilities ensure shut-off (0% A – AB leakage) and allow for true equal percentage flow characteristics

- Power consumption of the brushless DC motor is 2.5W (fail safe) and .6W (fail last position) when running and .5W (fail safe) and .4W (fail last position) when holding, helping to save energy and transformer power. This also helps eliminate failures due to stalled motors, prolongs actuator life, and allows for more units to be powered by a single transformer
- The valve bodies easily connect to the actuator, allowing operators and technicians to install valves quickly, easily, and without the use of tools to simplify commissioning and help reduce labor costs
- Easily adjust valves either locally or remotely using the WebCTRL system to ensure necessary design requirements are met
- The valve stem extension allows for easy actuator removal without damaging the surrounding insulation, helping simplify operation and maintenance activities





The WebCTRL building automation 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 helps you reduce energy consumption, increase occupant comfort, and achieve sustainable building operations.

SPECIFICATIONS





Actuator			
Control Type	Communication from any Act Net-enabled controller		
Electrical Connection	3 ft. (1 meter) cable		
Power Consumption	2.5 W running / 0.5 W holding (fail safe) .6 W running / .4 W holding (fail last position)		
Power Supply	24 Vac / Vdc		
Transformer Sizing	5 VA		
Valve			
Service	Chilled or hot water, 60% glycol		
Flow Characteristic	Equal percentage		
Sizes	Sizes: ½", ¾"		
Controllable Flow	75°		
End Fitting	NPT female		
Materials	Body: forged brass Ball: stainless steel Stem/Extension/Seals: stainless steel, blow-out proof design Seats/Seals: Teflon® PTFE O-rings: (2) EPDM O-rings		
Media Temp Range	36 to 212°F (2 to 100°C)		
Media Temp Limit	250°F (120°C)		
Max Allowable Operating Temp	212°F (100°C)		
Body Pressure Rating	Body: 360 psi		
Close-off Pressure Maximum Differential	200 psi		
Pressure (△P)	5 - 50 psi		
Leakage	0%		

Part Numbers & Default Characteristics							
Fail Mode "Closed" Models							
Part #	Size	Flow Rate GPM	Address				
Z2050QPT-B+CQK-R-04-A	1/2"	0.9	4				
Z2050QPT-B+CQK-R-05-A	1/2"	0.9	5				
Z2050QPT-D+CQK-R-04-A	1/2"	2.0	4				
Z2050QPT-D+CQK-R-05-A	1/2"	2.0	5				
Z2050QPT-F+CQK-R-04-A	1/2"	4.3	4				
Z2050QPT-F+CQK-R-05-A	1/2"	4.3	5				
Z2075QPT-G+CQK-R-04-A	3/4"	9.0	4				
Z2075QPT-G+CQK-R-05-A	3/4"	9.0	5				

Fail Mode "Open" Models						
Part #	Size	Flow Rate GPM	Address			
Z2050QPT-B+CQK-L-04-A	1/2"	0.9	4			
Z2050QPT-B+CQK-L-05-A	1/2"	0.9	5			
Z2050QPT-D+CQK-L-04-A	1/2"	2.0	4			
Z2050QPT-D+ CQK-L-05-A	1/2"	2.0	5			
Z2050QPT-F+CQK-L-04-A	1/2"	4.3	4			
Z2050QPT-F+CQK-L-05-A	1/2"	4.3	5			
Z2075QPT-G+CQK-L-04-A	3/4"	9.0	4			

Fail Mode "Last Position" Models					
Part #	Size	Flow Rate GPM	Address		
Z2050QPT-B+CQ-04-A	1/2"	0.9	4		
Z2050QPT-B+CQ-05-A	1/2"	0.9	5		
Z2050QPT-D+CQ-04-A	1/2"	2.0	4		
Z2050QPT-D+ CQ-05-A	1/2"	2.0	5		
Z2050QPT-F+CQ-04-A	1/2"	4.3	4		
Z2050QPT-F+CQ-05-A	1/2"	4.3	5		
Z2075QPT-G+CQ-04-A	3/4"	9.0	4		
Z2075QPT-G+CQ-05-A	3/4"	9.0	5		



