



Zone Sentry® Zone Valve

The Taco Zone Sentry® Zone Valve enhances the overall performance of any zone valve system. The unique patented technology in the Zone Sentry® utilizes a microcircuit based logic to control a gear driven electronic actuator which drives a ball valve based body design. All this adds up to a zone valve that leads the industry in energy efficiency, flow capacity (C_v), shutoff pressure rating, ease of installation, diagnostic capability and the number of valves (12) that can be use on a standard 40VA transformer.



Submittal Data Information Zone Sentry® Ball Valve Zone Valve

Submittal Data # 101-140
Supersedes: 10/01/10

Effective: 10/15/10

Product Specifications

| | |
|------------------------------|---|
| Max. Operating Pressure | 300 PSI (2100 kPa) |
| Max. Shutoff Pressure | 125 PSI (875 kPa) |
| Fluid Temperature Range | 20-240°F (7°-115°C) |
| Service | Water or Water/Glycol up to 50% Glycol Close Systems (Open System — Option Available) |
| Ball Rotation Speed | (90° turn), Approximately (after charge time) |
| Electrical Rating | 24 VAC, 60Hz 0.48 Amps |
| Power Consumption (Charging) | 11.4 W, 0.48 Amps |
| Power Consumption (Power On) | 1.44W, 0.06 Amps |
| Heat Anticipator Setting | 0.5 Amps |
| End Switch Rating | 1 Amp @ 24 VAC |

Materials of Construction, Actuator:

| | |
|-------|---|
| Body | High Performance Engineered Polymer |
| Gears | High Performance Internally Lubricated Engineered Polymer |

Materials of Construction, Valve:

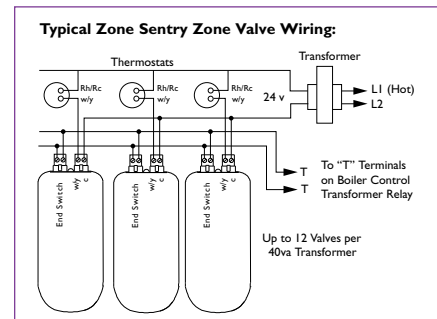
| | |
|------------|-----------------------|
| Body | Forged Brass |
| Stem | Brass |
| Press Ring | Brass |
| Ball | Brass (Chrome Plated) |
| Seat | Modified Teflon® |
| O-Rings | EPDM |

Application:

Taco Zone Sentry® Zone Valves provide on-off, normally open or normally closed control in both open and closed hot or chilled water hydronic systems. The valves can be used in a wide variety of heating and cooling applications, primarily designed for use with baseboard, fan coils, radiators, convectors, air handlers, heat pumps and radiant applications.

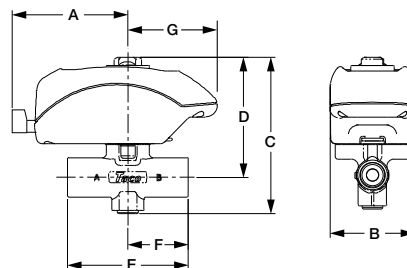
Ease of Installation / Operation:

The Taco Zone Sentry® is the most technologically advanced zone valve ever made. It's also simple to install and operate. The valve can be installed in any direction, in any orientation. We then went a step further, allowing the operator to be mounted to the valve body in either direction, great for those tight baseboard jobs. Snap-in quick connects on the back of the valve make for a simple, secure and fast wiring hook-up. A green LED light shows full functionality of the valve's operation and thermostat status. Under a no power situation the manual override button located on the top of the valve allows the ball to be rotated up to 90° and is also marked with a slot to indicate the position of the valve.



| Valve Size | Cv (Kv) / Ft. of Pipe Equiv.** | Close-Off Pressure (kPa) |
|------------|--------------------------------|--------------------------|
| 1/2" | 4.9 (4.3) / 9.5 | 0-125 psi (0-862 kPa) |
| 3/4" | 10.3 (8.9) / 8.4 | 0-125 psi (0-862 kPa) |
| 1" | 8.9 (7.7) / 47.4 | 0-125 psi (0-862 kPa) |

**At 4' per second (Maximum recommended residential flow rate).



Zone Sentry® Dimensions: (FOR REFERENCE PURPOSES)

| Valve Size | A | | B | | C | | D | | E (Sweat) | | E (Threaded) | | F | | G | | Weight (Valve + Actuator) | |
|------------|-----|------|--------|------|--------|-------|-------|------|-----------|------|--------------|-------|--------|------|--------|------|---------------------------|-------|
| | in. | mm | in. | mm | in. | mm | in. | mm | in. | mm | in. | mm | in. | mm | in. | mm | Lbs. | Kg |
| 1/2" | 3" | 76.2 | 2.375" | 60.3 | 4.125" | 104.7 | 2.06" | 52.3 | 3.125" | 79.3 | 4.750" | 120.6 | 1.562" | 39.7 | 2.312" | 58.7 | 0.85 | 0.385 |
| 3/4" | 3" | 76.2 | 2.375" | 60.3 | 4.125" | 104.7 | 2.12" | 53.8 | 3.125" | 79.3 | 3.312" | 84.1 | 1.562" | 39.7 | 2.312" | 58.7 | 0.90 | 0.408 |
| 1" | 3" | 76.2 | 2.375" | 60.3 | 4.125" | 104.7 | 2.12" | 53.8 | 3.875" | 98.4 | 3.875" | 98.4 | 1.875" | 47.6 | 2.312" | 58.7 | 1.10 | 0.498 |

