

**SPECIFICATIONS** CircuitSolver®

Thermostatic Balance Valve

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SECTION 22 11 19

Domestic Water Piping Specialties

**PART 1 GENERAL**

**1.01 SECTION INCLUDES**

# Unit shall be a CircuitSolver® Thermostatic Balance Valve Models CS, CSU, CSUA, CSUAS, or CSUSF as manufactured by ThermOmegaTech.

# Furnish Thermostatic Balance Valve with capabilities as indicated in the plans.

**1.02 RELATED SECTIONS**

1. Section 22 11 00 – Facility Water Distribution
2. Section 22 11 16 – Domestic Water Piping

**1.03 REFERENCES**

1. ANSI - American National Standards Institute
2. ISO - International Standards Organization
3. NSF – National Science Foundation

**1.04 SUBMITTALS**

1. CS, CSU, CSUA, CSUAS, & CSUSF submittals
2. Technical Brochure
3. Dimensional prints
4. Sales Brochure

**1.05 QUALITY ASSURANCE**

1. The valve manufacturer shall be fully certified by the International Standards Organization per ISO 9001:2015.
2. The valve shall be NSF61 certified.
3. The valve shall carry a 3 year warranty.

**1.06 MAINTENANCE MATERIAL SUBMITTALS**

1. Installation & maintenance instruction manual

**PART 2 PRODUCTS**

**2.01 MANUFACTURERS**

# Subject to compliance with these specifications, the following manufacturers shall be acceptable:

1. Thermostatic Balance Valve
2. ThermOmegaTech Inc. CircuitSolver® Models CS, CSU, CSUA, CSUAS, CSUSF as well as associated accessories such as Model CSA and CSUASF and models with optional thermometer, PEX ends or ProPress ends.
	1. Pre-approved equal.

**2.02 COMPONENTS**

1. Thermostatic Balance Valve
2. The valve shall be certified lead free according to NSF/ANSI 61 standards.
3. The valve body shall be constructed out of stainless steel.
4. The valve shall be rated for 200 PSIG working pressure and 250°F max. temperature.
5. The valve shall have a fixed, non-adjustable (tamper proof) temperature setpoint; temperature setpoints range from 80°F (27°C) to 170°F (27°C) in 5°F (2.8°C) increments.
6. The valve shall have a temperature accuracy of ±3.0°F (±1.7°C).
7. The valve shall have a wax thermostatic element.
8. The valve shall come in 6 sizes: 1/2”; 3/4”; 1”; 1 1/4”; 1 1/2”; 2”.

**2.02 ACCESSORIES**

1. Thermostatic Balance Valve Accessories
2. Model CS and CSU with optional thermometer, PEX ends or ProPress ends.
3. Model CSU, CSUA, CSUAS, CSUSF with integrated check valve.
4. Model CSUA and CSUAS with shutoff valves and optional thermometer, PEX ends or ProPress ends.

**PART 3 EXECUTION**

* 1. **INSTALLATION**
1. Install Thermostatic Balance Valve in accordance with manufacturer’s instructions.
2. Unit shall be a ThermOmegaTech CircuitSolver® thermostatic balancing valve Models CS, CSU, CSUA, CSUAS, CSUSF and associated assemblies CSA and CSUASF manufactured by ThermOmegaTech®, Warminster, PA.

###### END OF SECTION