Embrace the Technology®

CircuitSolver®

A ThermOmegaTech® brand

INSTALLATION INSTRUCTIONS
BALANCING VALVES
CS & CSU

1) We recommend that you use a shut off valve before and after the **CircuitSolver®**. A union should be used after the CS-type **CircuitSolver®**. See schematic diagram below.

2) Install the valve in the proper flow direction as indicated by the arrow on the valve body. This is especially critical for valves equipped with an integrated check valve. The valve may be installed in either a horizontal orientation or in a vertical orientation with flow directed upward.

3a) Use suitable pipe thread sealant rated for domestic water applications on all male pipe threads except on the stainless steel CSU-type **CircuitSolver® Union** threads (this connection has an integrated o-ring that fully seals when hand tightened); if using PTFE sealant tape, make sure not to apply tape to the first thread to avoid cutting the PTFE tape and causing potential obstructions to flow.

3b) **How to apply PTFE Tape:**

1. Clean the male and female threads of any oil or dirt.
2. Apply tape to the male threaded end in a clockwise direction starting one thread back from the end. Hold on to one end of the tape, and wrap the threads three to six times, keeping it tight.
3. Once the threads are completely wrapped, grab the tape with your thumb and index finger and snap it off.

NOTE: Upon tightening the assembly, verify that the shutoff valves are oriented so that their handles are accessible and can be operated fully without obstruction. If a reorientation after final installation is needed, loosen the Union Nut to rotate the section so as to not disturb the tightened components and possibly cause a leaky connection.

Scan to watch a quick tutorial video on proper reorientation instructions.

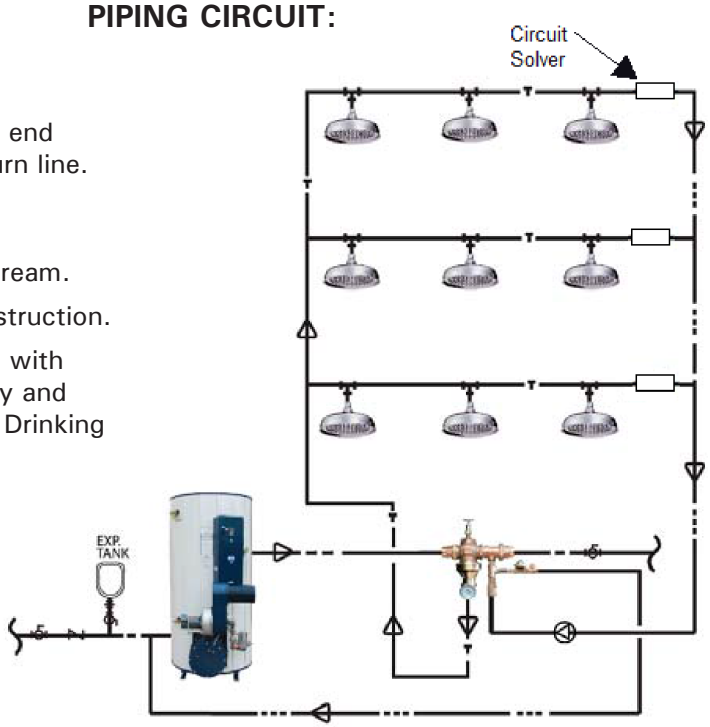
4) **CircuitSolver®** valves are designed to be installed at the end of each domestic hot water supply just prior to the return line. See diagram to the right.

5) For water systems with particulate/dirt problems, consider using a strainer if one is not already used upstream.

*Strainer must be maintained in order to avoid flow obstruction.

6) The CircuitSolver® valve is designed for use exclusively with fluids that are compliant with U.S. EPA National Primary and Secondary Drinking Water Regulations or the Canadian Drinking Water Quality Guidelines.

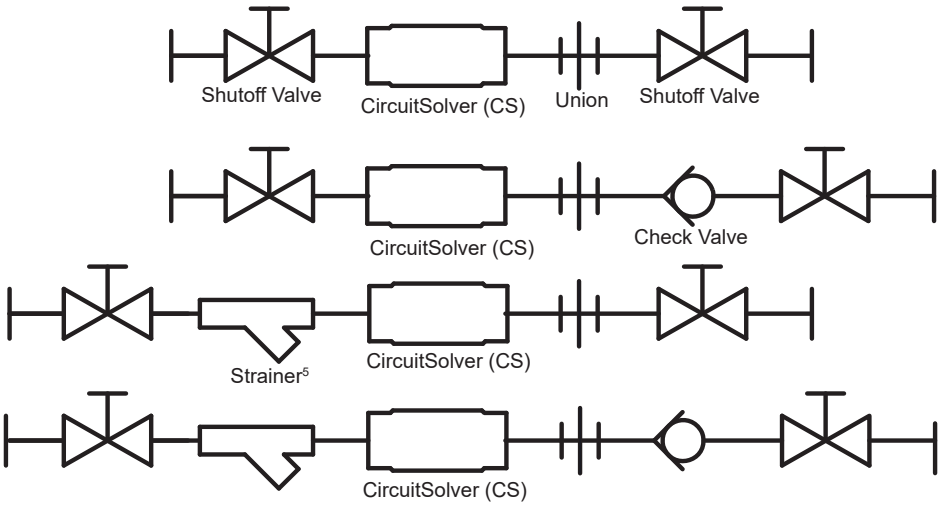
MULTI-BRANCH PARALLEL PIPING CIRCUIT:



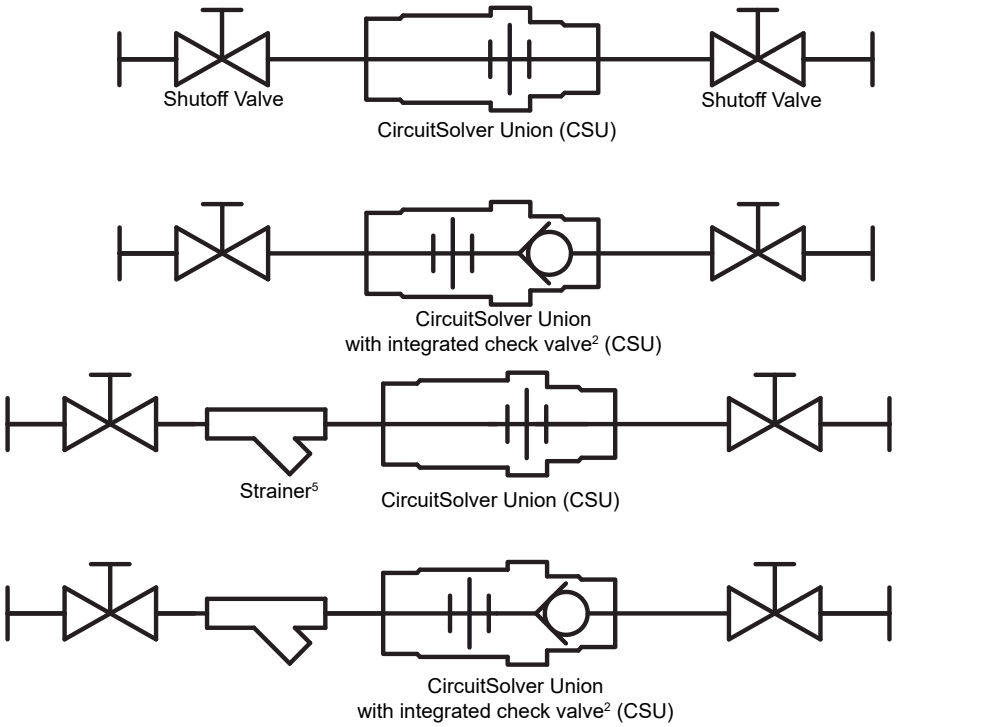
Buy American to Build America®

SCHEMATIC DIAGRAMS

CircuitSolver® (CS)



CircuitSolver® Union (CSU)



Proper Use: Use ThermOmegaTech® products only as specified to ensure performance, safety, and regulatory compliance.
No Modifications: Do not modify ThermOmegaTech® products, as changes may void warranties and violate regulations (e.g., RoHS, REACH).
Proper Disposal: Dispose of end-of-life products per local hazardous substance regulations; contact ThermOmegaTech® or recycling facilities for guidance.

⚠ WARNING: This product can expose you to chemicals, for example lead, nickel, acrylonitrile, which are known to the State of CA to cause cancer, birth defects, or reproductive harm. For more information, go to www.P65Warnings.ca.gov

Warranty information disclosed at www.thermomegatech.com/terms-conditions/

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