Embrace the Technology®

CircuitSolver®

A ThermOmegaTech® brand

INSTALLATION INSTRUCTIONS
BALANCING VALVE ASSEMBLIES
CSUA, CSUAS, CSUAPT & CSUASPT

1) 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.

2a) Use suitable pipe thread sealant rated for domestic water applications on all male pipe threads; 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.

2b) **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 **CircuitSolver®** 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.

3) **CircuitSolver®** Union Assemblies 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.

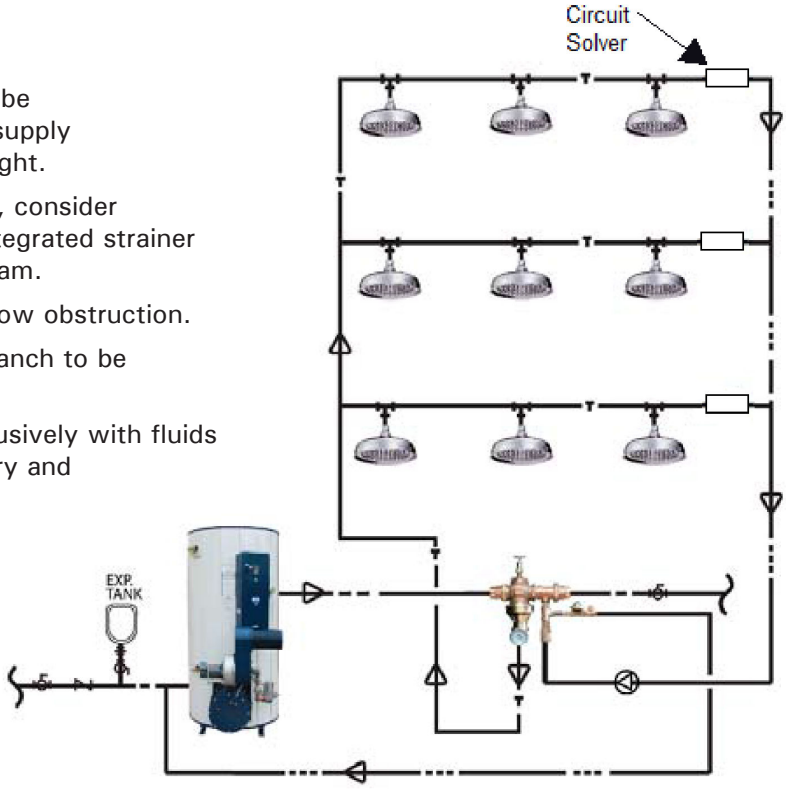
4) For water systems with particulate/dirt problems, consider using the CircuitSolver® Union Assembly with integrated strainer (Model CSUAS) if one is not already used upstream.

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

5) A convenient drain port allows for the system branch to be flushed without disconnecting plumbing lines.

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:



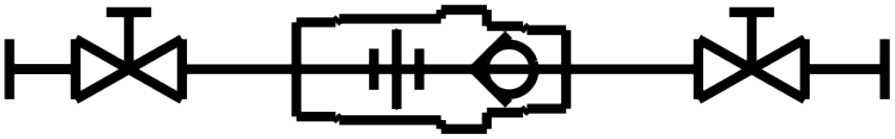
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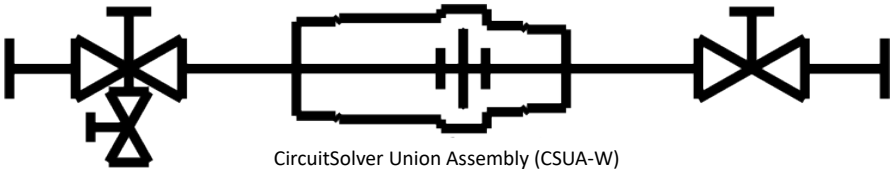
SCHEMATIC DIAGRAMS



CircuitSolver Union Assembly (CSUA)

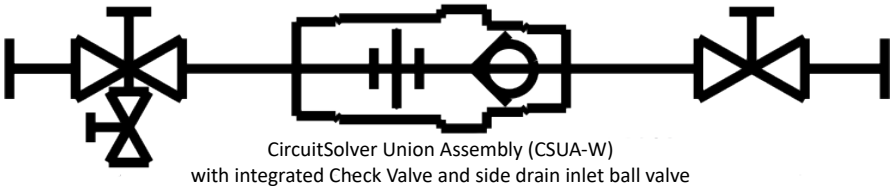


CircuitSolver Union Assembly (CSUA)
with integrated Check Valve

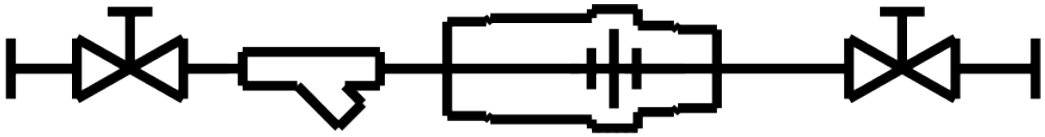


Shutoff Valve w/
Side Drain

CircuitSolver Union Assembly (CSUA-W)
with side drain ball valve

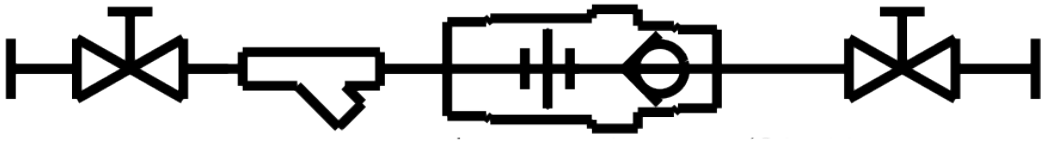


CircuitSolver Union Assembly (CSUA-W)
with integrated Check Valve and side drain inlet ball valve



Strainer[4]

CircuitSolver Union Assembly
with integrated Strainer (CSUAS)



CircuitSolver Union Assembly (CSUAS)
with integrated Check Valve and Strainer

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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