



Balancing Your Domestic Hot Water System Has Never Been Easier

The CircuitSolver® thermostatic balancing device makes maintaining a balanced system as simple as installing a valve, and we've made that even easier with the enhanced CircuitSolver®.

CircuitSolver® Union (CSU)

A union with optional check valve built into the body of the CircuitSolver® reduces the number of components to be installed and minimizes potential leak points. The stainless steel union features an integrated o-ring for a hand-tightened, leak-free seal. Effortless installation and hands-off operation make it the best balancing valve for any application.



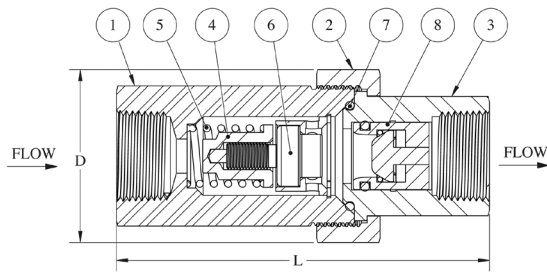
CircuitSolver® Union Assembly (CSUA)

We have gone one step further by adding isolation valves to either side of the CSU, making it the easiest and most efficient balancing valve to specify and install. Since it balances your system on its own, there are no additional labor costs. It arrives fully assembled and leak tested with all the components commonly specified with balancing valves. The M/F isolation valves mean fewer potential leak points and a compact profile. An integrated strainer is also available for water systems with particulate/dirt problems (Model CSUAS).



For more information and your local product representative, visit www.CircuitSolver.com

CircuitSolver® Union (CSU)



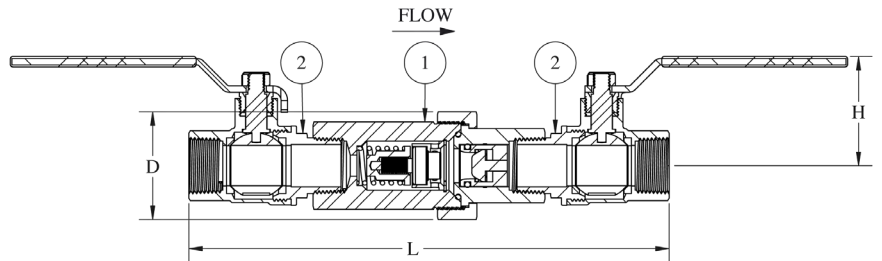
| ITEM # | DESCRIPTION |
|--------|------------------------|
| 1 | BODY W/ UNION THREADS |
| 2 | UNION NUT |
| 3 | FEMALE THREADED INSERT |
| 4 | PLUG |
| 5 | OPERATING SPRING |
| 6 | ACTUATOR |
| 7 | O-RING |
| 8 | CHECK VALVE (Optional) |

CircuitSolver® Benefits

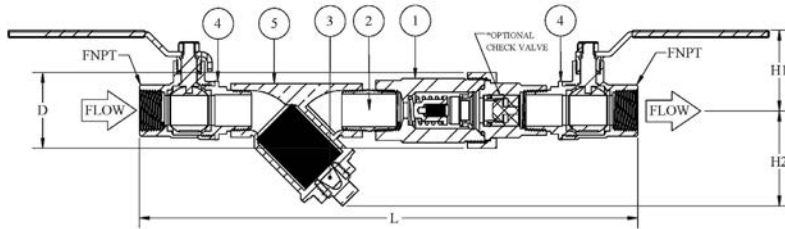
- Automatically and continuously adjusts to balance domestic hot water systems
- Eliminates balancing labor and callbacks
- Direct replacement for manual balancing valves
- Reliable, long lasting thermal actuator
- Compatible with all domestic recirculation systems
- All CircuitSolver® valves are NSF/ANSI 61 Certified

CSU Assembly (CSUA)

| ITEM # | DESCRIPTION |
|--------|---|
| 1 | CIRCUITSOLVER® THERMOSTATIC BALANCING VALVE WITH INTEGRATED UNION |
| 2 | BALL VALVE, Mx F, LEAD FREE |



CSU Assembly with Strainer (CSUAS)



| ITEM # | DESCRIPTION |
|--------|---|
| 1 | CIRCUITSOLVER® THERMOSTATIC BALANCING VALVE WITH INTEGRATED UNION |
| 2 | NIPPLE, LEAD FREE |
| 3 | PIPE PLUG, LEAD FREE |
| 4 | BALL VALVE Mx F, LEAD FREE |
| 5 | STRAINER, LEAD FREE |

Dimensions & Capacities

| Model | SIZE (NPT) | Diameter (D) | | Length (L) | | Height (H) | | Height 2 (H2) | | WEIGHT | | C _v | | MAXIMUM OPERATING PRESSURE | | MAXIMUM TEMPERATURE | |
|-------|------------|--------------|----|------------|-----|------------|----|---------------|----|--------|-----|----------------|--------|----------------------------|-----|---------------------|-----|
| | | IN. | MM | IN. | MM | IN. | MM | IN. | MM | LBS. | KG | OPEN | CLOSED | PSIG | BAR | °F | °C |
| CSU | 1/2" | 1.8 | 46 | 3.7 | 94 | | | | | 1.2 | 0.5 | 1.3 | 0.1 | 200 | 14 | 250 | 121 |
| CSU | 3/4" | 2.0 | 51 | 4.3 | 110 | | | | | 1.9 | 0.9 | 1.8 | 0.1 | | | | |
| CSU | 1" | 2.5 | 64 | 4.7 | 120 | | | | | 3.1 | 1.4 | 3.3 | 0.1 | | | | |
| CSUA | 1/2" | 1.8 | 46 | 7.7 | 196 | 1.8 | 46 | | | 2.5 | 1.1 | 1.3 | 0.1 | | | | |
| CSUA | 3/4" | 2.0 | 51 | 8.9 | 226 | 2.0 | 51 | | | 3.4 | 1.5 | 1.8 | 0.1 | | | | |
| CSUA | 1" | 2.5 | 64 | 10.5 | 267 | 2.3 | 59 | | | 5.4 | 2.5 | 3.3 | 0.1 | | | | |
| CSUAS | 1/2" | 1.8 | 46 | 10.7 | 272 | 1.8 | 46 | 2.5 | 64 | 3.3 | 1.5 | 1.3 | 0.1 | | | | |
| CSUAS | 3/4" | 2.0 | 51 | 13.2 | 335 | 2.0 | 51 | 3.0 | 76 | 5.3 | 2.4 | 1.8 | 0.1 | | | | |
| CSUAS | 1" | 2.5 | 64 | 15.5 | 394 | 2.3 | 59 | 3.2 | 82 | 8.4 | 3.8 | 3.3 | 0.1 | | | | |

Ordering Information

| | | | | | |
|-----------------|---------------------------------|------------------|----------------------------------|-------------------|-----------------------------------|
| CSU-1/2-XXX | 1/2" CSU WITHOUT CHECK VALVE | CSUA-1/2-XXX | 1/2" CSUA WITHOUT CHECK VALVE | CSUAS-1/2-XXX | 1/2" CSUAS WITHOUT CHECK VALVE |
| CSU-1/2-XXX-CV1 | 1/2" CSU WITH CHECK VALVE (CV1) | CSUA-1/2-XXX-CV1 | 1/2" CSUA WITH CHECK VALVE (CV1) | CSUAS-1/2-XXX-CV1 | 1/2" CSUAS WITH CHECK VALVE (CV1) |
| CSU-3/4-XXX | 3/4" CSU WITHOUT CHECK VALVE | CSUA-3/4-XXX | 3/4" CSUA WITHOUT CHECK VALVE | CSUAS-3/4-XXX | 3/4" CSUAS WITHOUT CHECK VALVE |
| CSU-3/4-XXX-CV1 | 3/4" CSU WITH CHECK VALVE (CV1) | CSUA-3/4-XXX-CV1 | 3/4" CSUA WITH CHECK VALVE (CV1) | CSUAS-3/4-XXX-CV1 | 3/4" CSUAS WITH CHECK VALVE (CV1) |
| CSU-1-XXX | 1" CSU WITHOUT CHECK VALVE | CSUA-1-XXX | 1" CSUA WITHOUT CHECK VALVE | CSUAS-1-XXX | 1" CSUAS WITHOUT CHECK VALVE |
| CSU-1-XXX-CV1 | 1" CSU WITH CHECK VALVE (CV1) | CSUA-1-XXX-CV1 | 1" CSUA WITH CHECK VALVE (CV1) | CSUAS-1-XXX-CV1 | 1" CSUAS WITH CHECK VALVE (CV1) |