

## *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 our enhanced CircuitSolver® options.

### CircuitSolver® Union (CSU)

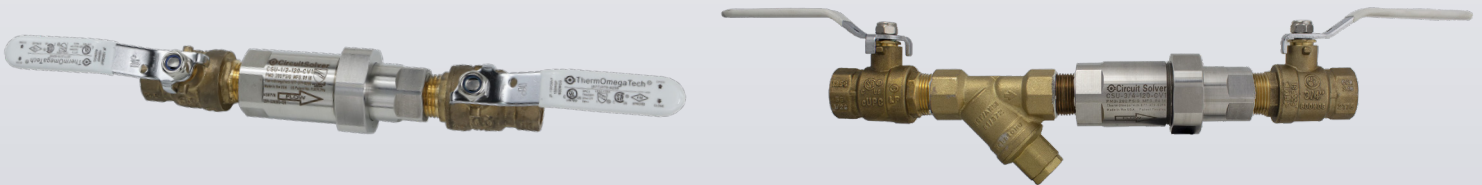
A union with optional check valve built into the body of the CircuitSolver® reduces the number of components to be installed and minimizes potential leak points.

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

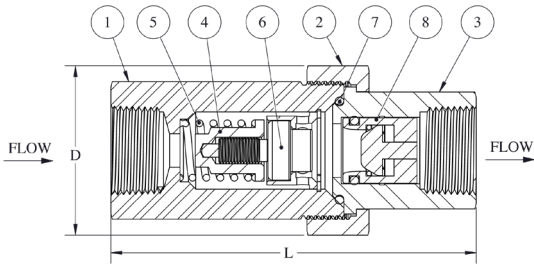


### CircuitSolver® Benefits

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

For more information and your local product representative, visit [CircuitSolver.com](http://CircuitSolver.com)

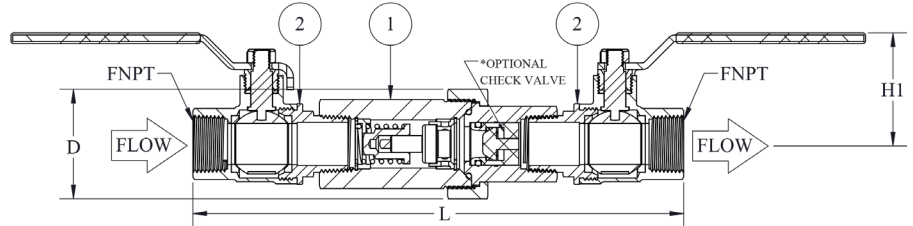
# CircuitSolver® Union (CSU)



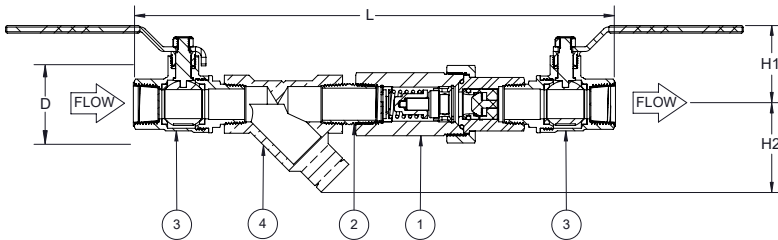
ITEM #	DESCRIPTION
1	BODY W/ UNION THREADS
2	UNION NUT
3	FEMALE THREADED INSERT
4	PLUG
5	OPERATING SPRING
6	ACTUATOR
7	O-RING
8	CHECK VALVE (Optional)

# 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, BRASS LEAD FREE
3	BALL VALVE Mx F, LEAD FREE
4	STRAINER, BRASS LEAD FREE

# Dimensions & Capacities

Model	SIZE (NPT)	Diameter (D)		Length (L)		Height (H1)		Height 2 (H2)		WEIGHT		C <sub>v</sub>		MAX. OPERATING PRESSURE		MAX. 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	N/A	N/A	N/A	N/A	1.2	0.5	1.3	0.2	200	14	250	121
CSU	3/4"	2.0	51	4.3	110	N/A	N/A	N/A	N/A	1.9	0.9	1.8	0.2				
CSU	1"	2.5	64	4.7	120	N/A	N/A	N/A	N/A	3.1	1.4	3.3	0.2				
CSUA	1/2"	1.8	46	7.7	196	1.8	46	N/A	N/A	2.1	1.0	1.3	0.2				
CSUA	3/4"	2.0	51	8.9	226	2.0	51	N/A	N/A	3.4	1.5	1.8	0.2				
CSUA	1"	2.5	64	10.5	267	2.3	59	N/A	N/A	5.4	2.5	3.3	0.2				
CSUAS	1/2"	1.8	46	10.8	275	1.8	46	2.5	64	2.9	1.3	1.3	0.2				
CSUAS	3/4"	2.0	51	12.8	326	2.0	51	3.3	84	4.7	2.1	1.8	0.2				
CSUAS	1"	2.5	64	14.4	366	2.3	59	3.8	97	7.0	3.2	3.3	0.2				

# 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)