



CircuitSolver®

A ThermOmegaTech® product



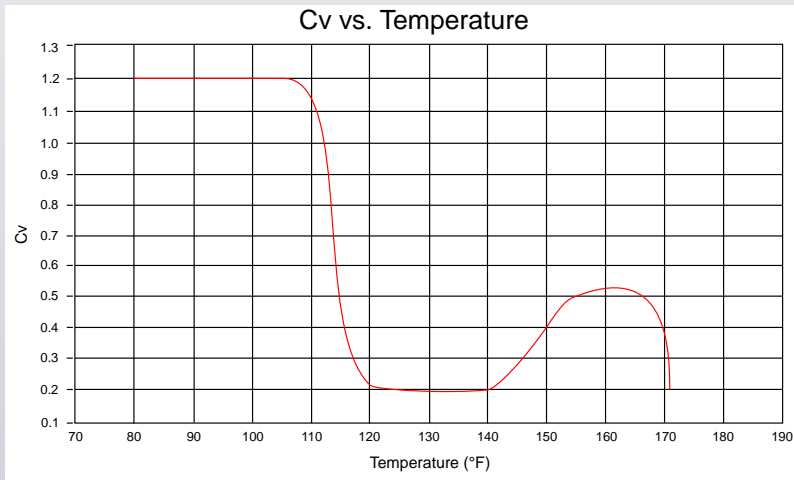
CircuitSolver® Sanitary Flush thermostatic balancing valve for domestic hot water systems.

CircuitSolver® is a thermostatic self-actuating balancing valve that continuously adjusts the flow through each branch of a domestic hot water recirculation system to maintain the specified temperature at the ends of the branches.

The **CircuitSolver® Sanitary Flush (CSUSF)** valve allows for higher water temperatures to flow through the system during a disinfection process to protect against Legionella growth.

This valve uses two thermal actuators to control the flow of water through a branch. When the water temperature in the line reaches the set point of the low temperature actuator, the CircuitSolver® closes to keep the hot water at the fixtures. This forces the additional water on to the other branches maintaining a constantly balanced system.

During the super heat disinfection process, the low temperature actuator will begin to reopen, allowing the high temperature water to flow through the branch again. When the water temperature reaches the set point of the second (high temperature) actuator, the CircuitSolver® closes to keep the high temperature water at the fixtures. See the Cv Chart below.



The **CircuitSolver® Sanitary Flush** valve is tamper-proof and operates at the ideal line temperature for standard balancing while also allowing higher water temperatures during disinfection processes. It is the ideal solution for a maintenance free high temperature flush.

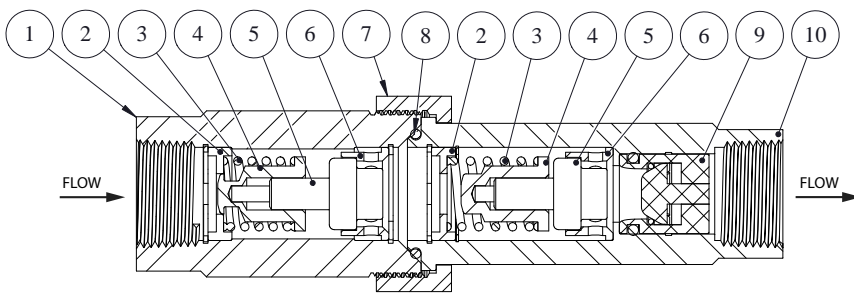
For more information and your local product representative, visit www.CircuitSolver.com

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 actuators
- Allows for super heat disinfection flushing of the system to protect against Legionella growth
- Long service life and 3 year warranty
- NSF/ANSI 61 certified

Design Features

- Never fully closes, small bypass of flow
- Two high thrust actuators keep orifices free of debris
- Low-temperature actuator maintains standard balancing temperature
- High-temperature actuator allows for higher temperatures during a disinfection process
- Lead free for use in potable water systems
- All stainless steel, corrosion resistant construction



ITEM #	DESCRIPTION	MATERIAL
1	Valve Body w/ Union Threads	303 SS
2	Insert - CircuitSolver®	303 SS
3	Spring	302 SS
4	Plug	303 SS
5	Thermal Actuator	303 SS
6	Carrier	303 SS
7	Union Nut	303 SS
8	O-ring	BUNA-N
9	Check Valve (optional)	GLASS FILLED NORYL
10	Insert - Female Threaded	303 SS

Dimensions & Capacities

Model Number	SIZE (NPT)	Diameter (D)		Length (L)		WEIGHT		MAXIMUM OPERATING PRESSURE		MAXIMUM TEMPERATURE	
		IN.	MM	IN.	MM	LBS.	KG	PSIG	BAR	°F	°C
CSUSF-1/2-XXX ² /170 ³	1/2"	2.0	51	6.3	160	2.5	1.1	200	14	250	121
CSUSF-1/2-XXX ² /170 ³ -CV1											
CSUSF-3/4-XXX ² /170 ³	3/4"	2.0	51	6.3	160	2.5	1.1				
CSUSF-3/4-XXX ² /170 ³ -CV1											
CSUSF-1-XXX ² /170 ³	1"	2.4	60	6.7	169	4.0	1.8				
CSUSF-1-XXX ² /170 ³ -CV1											

Model Selection

XXX refers to the desired closing temperature for standard balancing. For example, if you want 120°F desired return temperature during standard balancing and a 170°F maximum temperature flowing through the system fixtures installed on a 3/4" line, the model number would be CSUSF-3/4-120/170. To add optional check valve insert -CV1 directly after the temperature designation in the model number.

Notes:

1. The CircuitSolver® valve is fully open approximately 10°F below the closing temperature.
2. Typical closing temperatures of the low temperature actuator include: 100°F, 105°F, 110°F, 115°F, 120°F, 125°F, 130°F, and 140°F.
3. Standard temperature for the high temperature actuator is 170°F.
4. Warranty information disclosed at www.thermomegatech.com/terms-conditions/