

# Model 805 Recirculation Piping with ARV Eng. No. 86673

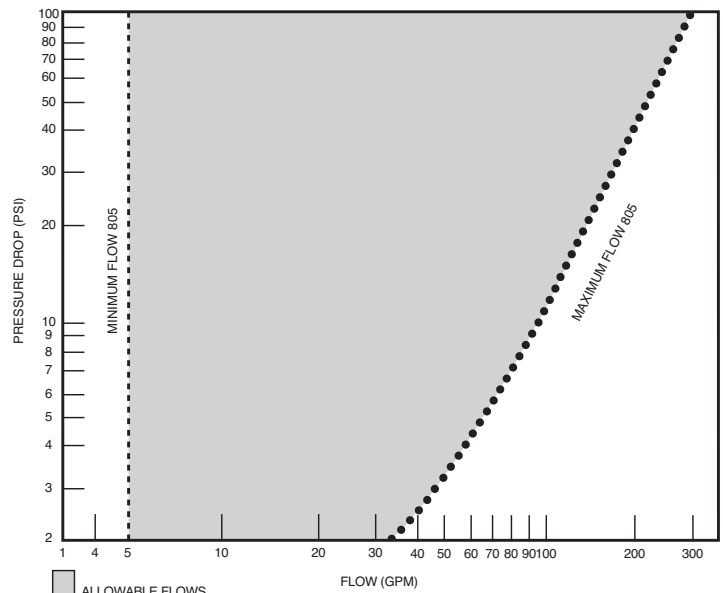
## CAPACITIES – MODEL 805

Pressure Drop PSI	5	10	20	30	45	60	80
Valve Number	Capacity						
<b>805-GPM</b>	64	96	133	165	200	230	265
<b>805-LPM</b>	242	363	503	624	757	870	1003

1/2 gpm when properly installed in recirculated system.

805 Master water mixing valve shall be of the thermostatic type with liquid-filled thermal motor. It shall have lead free brass body construction with replaceable corrosion-resistant components. Valve construction shall employ a sliding piston control mechanism. Sliding piston and liner shall be of stainless steel material. Valve shall come equipped with union end stop and check inlets with removable stainless steel strainers. Valve shall control temperature from a low flow of 5 GPM up to a maximum flow rate for a given pressure differential.

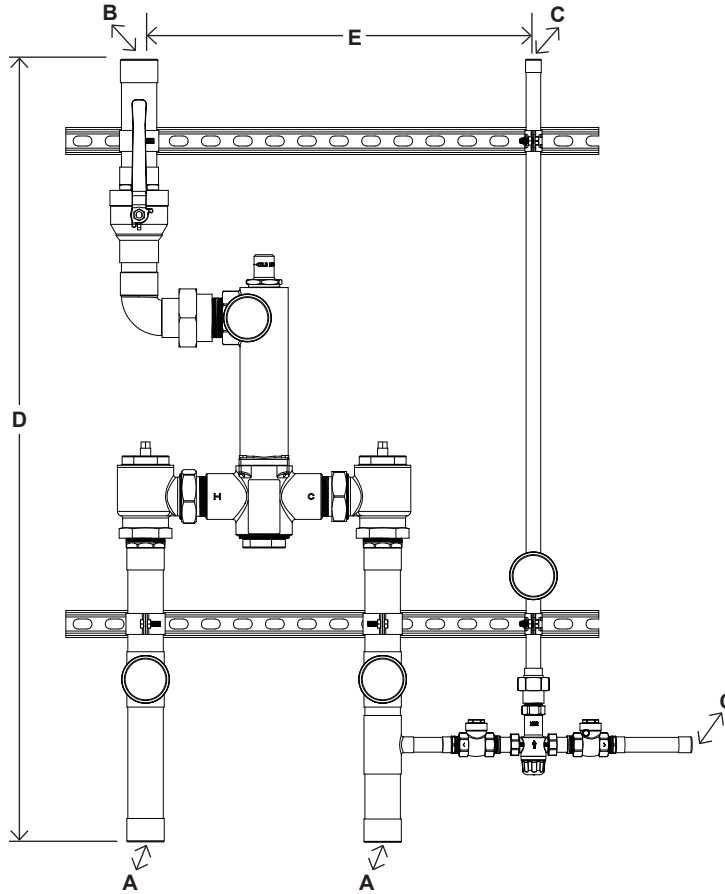
Valve shall provide protection against hot or cold supply line failure and thermostat failure. System shall include return piping for recirculation connection and an automatic return valve (ARV) for thermostatic balancing of the system.



- FINISH:** Brass   
 Rough Chrome   
 Other

- | TEMP. RANGE   | SET POINT |                          |
|---------------|-----------|--------------------------|
| 70° to 100°F  | 80°F      | <input type="checkbox"/> |
| 90° to 120°F  | 110°F     | <input type="checkbox"/> |
| 110° to 140°F | 130°F     | <input type="checkbox"/> |
| Special _____ | _____     | <input type="checkbox"/> |

- Optional Test Connection**   
 Including garden hose connection, shut-off and thermometer.
- Brass   
 Rough Chrome



**DIMENSIONS**

Valve Number	A	SWT	B	SWT	C	SWT	D	E
805		2"	2"		3/4"		43"	24"

Dimensions are for reference purposes only. For rough-in dimensions please refer to Lawler's Revit/BIM models found at [temperedwater.com](http://temperedwater.com).

All connections are sweat connections.

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Eng. No. 86673**

**Setting The Mixing Valve To The System**

1. After installations be sure to flush the system thoroughly.
2. Make sure the hot water supply is heated to normal design temperature.
3. Close and tag all fixtures to ensure they are not used during this procedure.
4. Turn off the recirculating pump.
5. Create a draw on the system greater than the minimum flow rating of the mixing valve. All open fixtures must be tagged to ensure they are not tampered with or used during this procedure.
6. Allow water to flow through the mixing valve until the water temperature is stable. If necessary, readjust the mixing valve in accordance with the TEMPERATURE ADJUSTMENT section of the installation manual.
7. Once the temperature is set, start the recirculating pump and allow the system to reach set temperature.
8. Measure the water temperature at the return pump and adjust the aquastat to shut off the pump should the return water exceed the set point by 2 degrees F. Set the low limit switch to restart the return pump when return water drops 5 degrees F below the set temperature.
9. Set the balancing valve in the full open position.
10. Shut off all fixtures and ensure there is no draw on the system. The cold inlet to the mixing valve should be warm.
11. Allow the system to run in this condition for at least 30 minutes.
12. In some cases, an increase in water temperature may occur during a no draw period. If this occurs, slowly close the balancing valve until the water temperature is back to the original set temperature.