

# Model 804 Pre-piped Hi-Low Tempered Water Mixing System with Recirculation Eng. No. 86608

## CAPACITIES – MODEL 804

Pressure Drop PSI	5	10	20	30	45	60	80
Valve Number	Capacity						
<b>804-GPM</b>	52	72	100	124	150	174	193
<b>804-LPM</b>	197	273	379	469	568	659	731

1/2 gpm when properly installed in recirculated system.

Mixing valve shall be incorporated into a completely assembled and tested pre-piped manifold system which includes a recirculating pump, circuit setting balancing valve, aquastat, circulator switch box, thermometers, ball valves, mounting strut, and test connection.

804 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 provide three way protection against hot or cold supply line failure and thermostat failure.

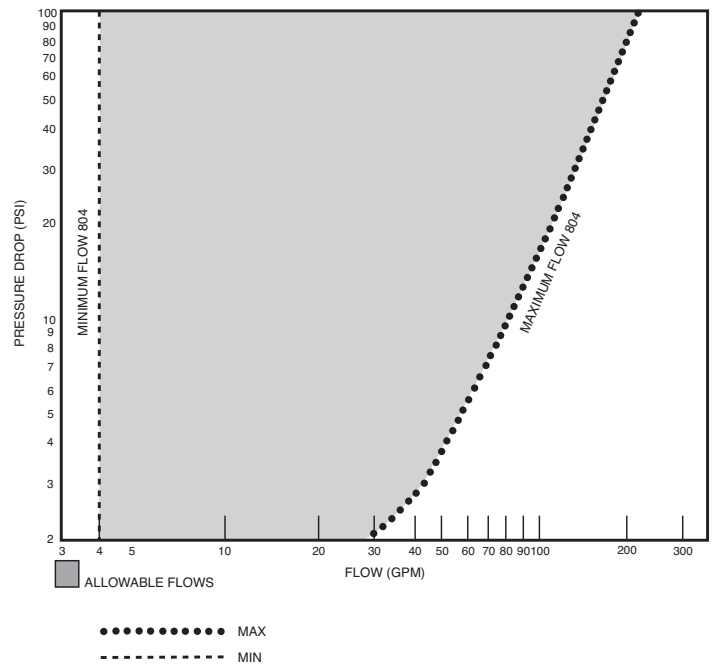
**FINISH:** Brass   
Rough Chrome   
Other

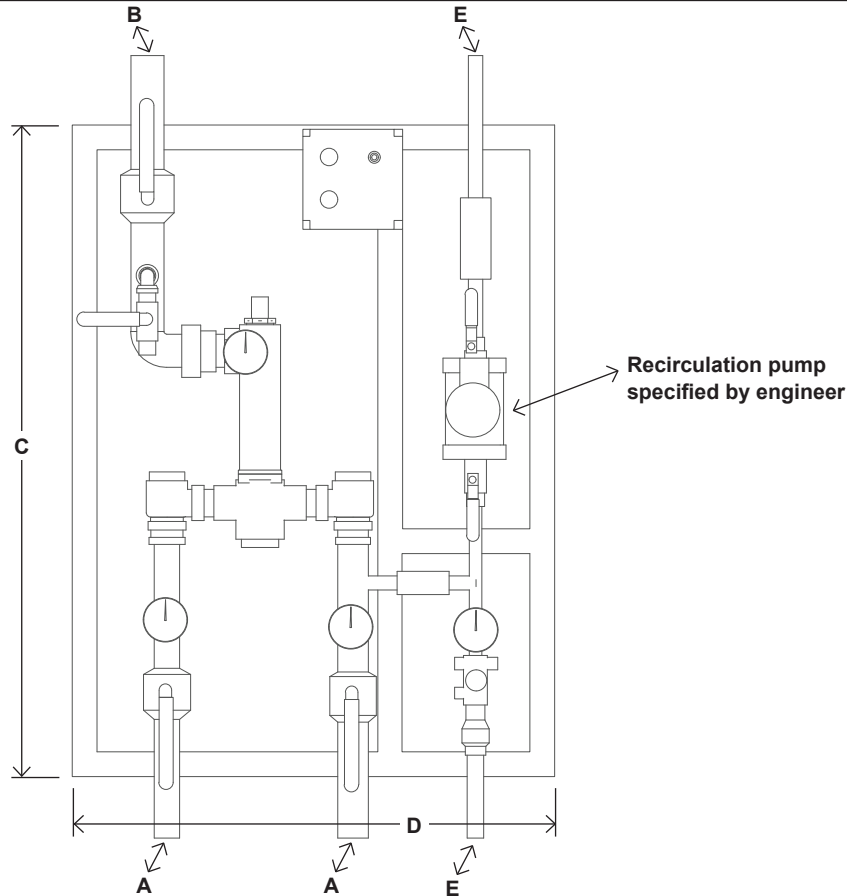
**TEMP. RANGE**      **SET POINT**

70° to 100°F      80°F   
90° to 120°F      110°F   
110° to 140°F      130°F   
Special \_\_\_\_\_

### PUMP OPTIONS

- Bell & Gossett PL 30B
- Bell & Gossett PL 36B
- Bell & Gossett PL 55B
- Taco 2400 Series \_\_\_\_\_ (Include ft/head and GPM)
- Grundfos UP26 Series \_\_\_\_\_ (Include ft/head and GPM)





**DIMENSIONS**

Valve Number	A	B	C	D	E
804	1-1/2" SWT	2" SWT	42"	34"	Specified by engineer

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.

**Model 804  
Eng. No. 86608**

**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.