

**For Non-Health Hazard Applications**

Job Name \_\_\_\_\_

Contractor \_\_\_\_\_

Job Location \_\_\_\_\_

Approval \_\_\_\_\_

Engineer \_\_\_\_\_

Contractor's P.O. No. \_\_\_\_\_

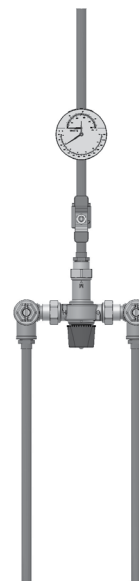
Approval \_\_\_\_\_

Representative \_\_\_\_\_

**LEAD FREE\***  
**HydroGuard® Master**  
**Tempering Valve Supply**  
**Fixture**  
**Series LM490 Bottom Inlets/Top Outlet**  
**— Exposed**

**Features**

- Paraffin-based advanced thermal actuation technology to sense and adjust outlet temperature
- Dirt and lime resistant poppet and seat design
- Virtual shutoff if supply pressure fails
- Factory tested valve and piping
- Triple-duty checkstops with filters, dial-thermometer, ball valve
- Rough bronze and chrome finishes



Advanced Thermal Actuation

**Specifications**

- Connections . . . . . ½" (15 mm) inlets and outlet
- Maximum Hot Water Supply Temperature . . . . . 200°F (93°C)
- Minimum Hot Water Supply Temperature . . . . . 5°F (3°C) above set point
- Minimum Flow\* . . . . . 0.5 gpm (1.9 lpm)
- Maximum Operating Pressure . . . . . 150 psi (1034 kPa)
- Temperature Adjustment Range . . . . . 90 – 160°F (32 – 71°C)
- Listing/Compliance (Valve Only) . . . . . ASSE 1017, IAPMO UPC and CSA B125

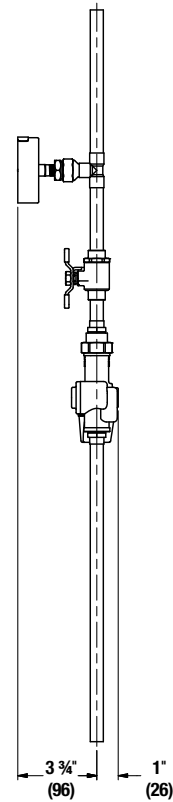
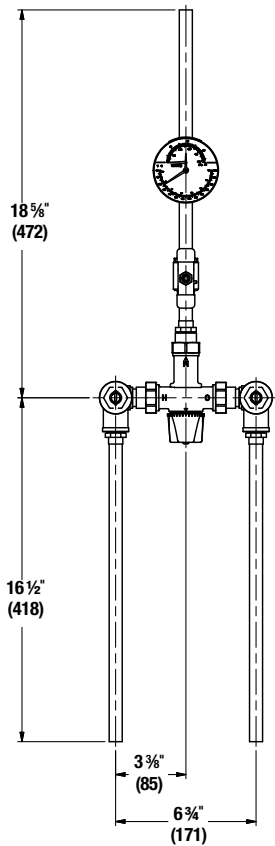
\* When tested in accordance with ASSE 1017

**Capacity**

Flow Capacity at 50-50 Mixed Ratio							
Valve	C <sub>v</sub>	Pressure Differential					
		5 psi (35 kPa)	10 psi (69 kPa)	20 psi (138 kPa)	30 psi (207 kPa)	45 psi (310 kPa)	60 psi (414 kPa)
LM490	3.42	7.6 gpm (29 lpm)	11.0 gpm (42 lpm)	15.0 gpm (57 lpm)	19.0 gpm (72 lpm)	23.0 gpm (87 lpm)	27.0 gpm (102 lpm)

Powers product specifications in U.S. customary units and metric are approximate and are provided for reference only. For precise measurements, please contact Powers Technical Service. Powers reserves the right to change or modify product design, construction, specifications, or materials without prior notice and without incurring any obligation to make such changes and modifications on Powers products previously or subsequently sold.

## Dimensions



Note:  
Dimensions are shown  $\pm 1/2''$   
Dimensions in parentheses  
are in mm

## Ordering Information

L M 4 9 0 E M S

### Valve Order Code

23 gpm (87 lpm) LM490

### Finish

Rough Bronze A  
Chrome Plated C

### Piping Inlets/Outlet

Bottom/Top E

### Cabinet Style

Exposed M

### Alarm System

None 0  
AquaSentry® 2 Alarm System 4

### Option

None 0  
Cold Water Bypass 2  
T/P Gauge on Inlets 4  
C/W Bypass & T/P Gauge on Inlets 6

### Temperature Range

Standard 90° – 160°F (32° – 71°C) S

## Typical Specification

Supply Fixture shall be factory assembled and tested and feature a HydroGuard® LM490 Series Master-Tempering Valve with advanced, paraffin-based actuation technology. Supply Fixture shall also include copper piping, ball valve(s) and temperature/pressure gauge for diagnostics. The tempering valve shall have union check stops, an outlet temperature range of 90 – 160°F (32 – 71°C) (with lockable means), and an approach temperature of 5°F (3°C). Valve shall be ASSE 1017, IAPMO UPC listed and CSA certified. Minimum flow to ASSE 1017 shall be 0.5 gpm (1.9 lpm).

Valve shall be a Powers model \_\_\_\_\_. All alternatives must have written approval prior to bidding.

# POWERS™

A WATTS Brand

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