

New!

HydroGuard® Series LM490



**Thermostatic Tempering Valves for
Hot Water Heaters & Multiple Lavatory Installations**

POWERS™

Water Tempering Innovation Since 1891

description

The HydroGuard® Series LM490 & LM490-10 high-capacity design makes them ideal for hot water heaters and multiple lavatory installations, providing flow rates as high as 23 gallons per minute. Compact design and brass construction simplify installation and maintenance while ensuring years of dependable service. Unique handle mechanism allows exact temperature selection to be “locked-in” for added protection. The Series LM490 and LM490-10 features Powers’ advanced paraffin-based actuation technology, integral checks and inlet screens to prevent cross-flow and contamination. The thermostatic element ensures optimal, consistent performance over a wide range of temperatures. The Series LM490 & LM490-10 are ASSE 1017 listed and CSA B125 certified.



features and benefits

Powers’ thermostatic valves provide safe, tempered water delivery to lavatory sinks, ensuring user safety and minimizing owner liability.

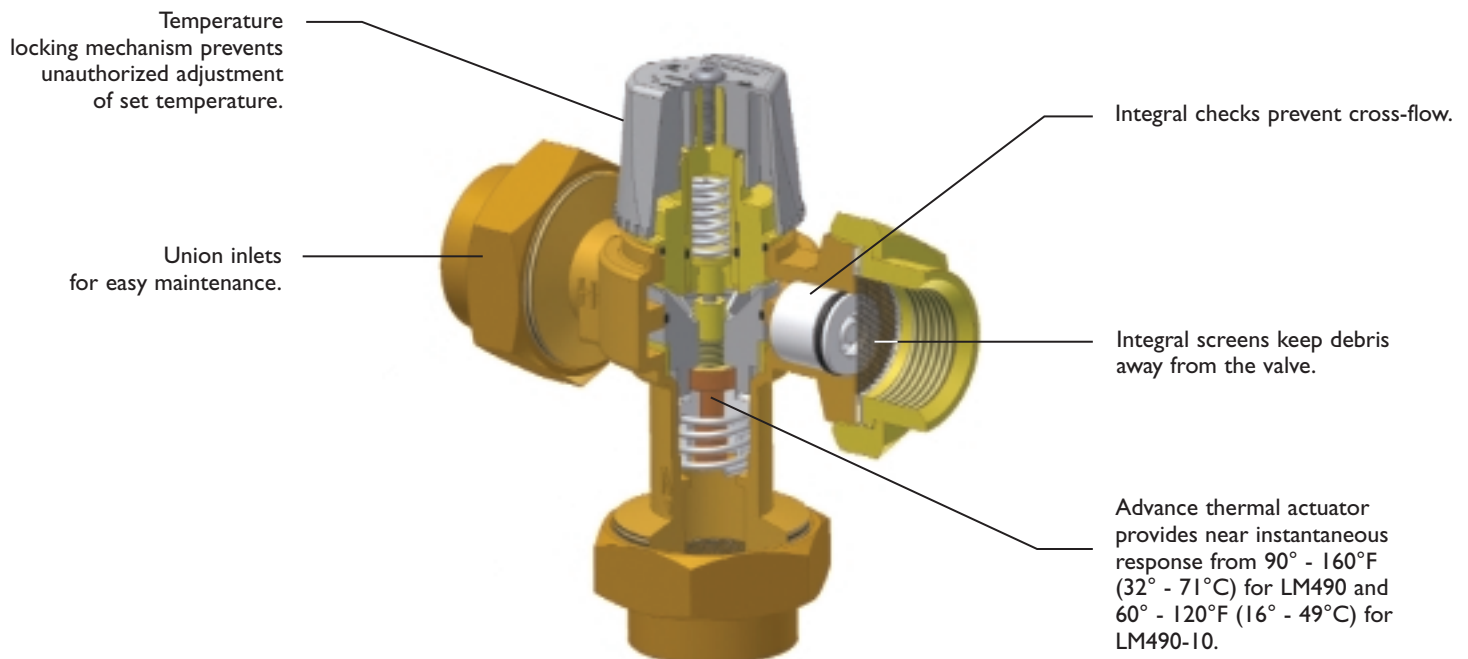
- Advanced thermal actuator improves performance at low flows
- Solid brass construction enhances durability
- Available in 1/2", 3/4" and 1" with NPT, Sweat, PEX and CPVC union connections
- Adjustable temperature selection with lockdown
- Union connections for easy maintenance
- Polysulfone plunger for extended life
- Integral checks and screens prevents cross-flow and contamination



The Series LM490 allows facilities to distribute water at higher temperatures, minimizing the potential occurrence of legionella and other known bacteria which can be present at temperatures below 131°F (55°C). Ideal for:

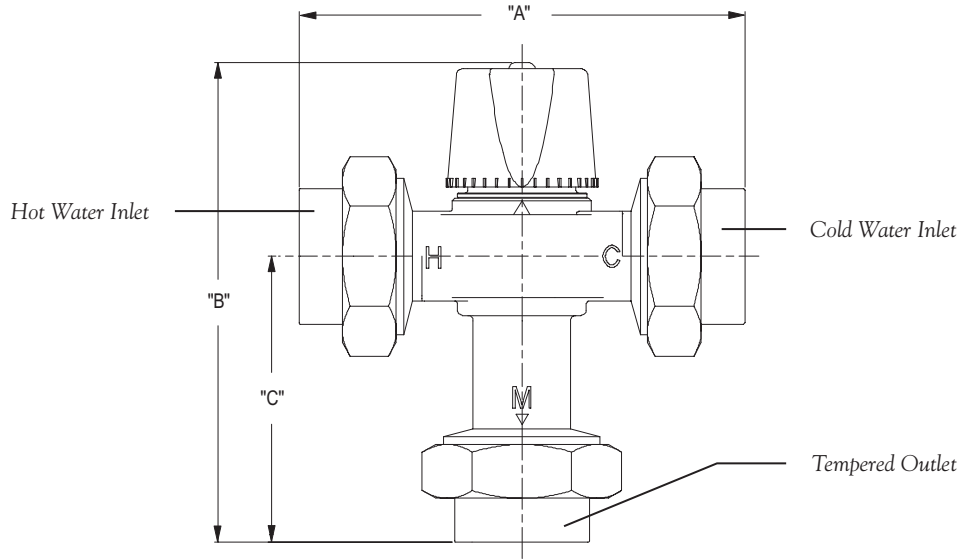
- schools
- public restrooms
- health clubs
- residential
- office buildings
- healthcare facilities
- hotels/motels
- anywhere multiple lavatory banks exist

an inside look at quality

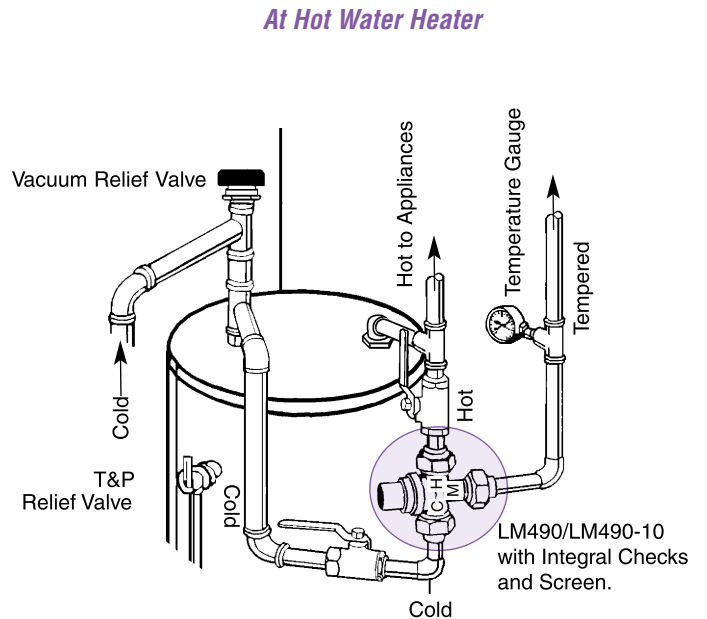
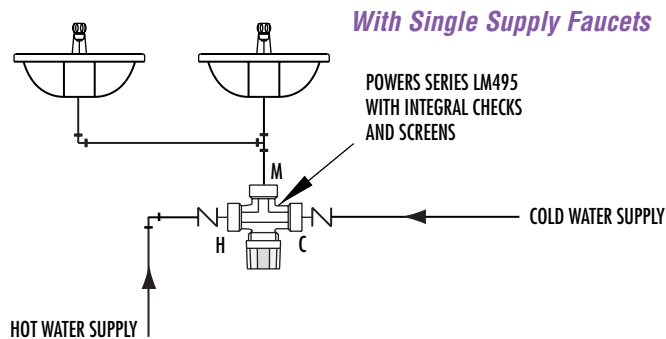
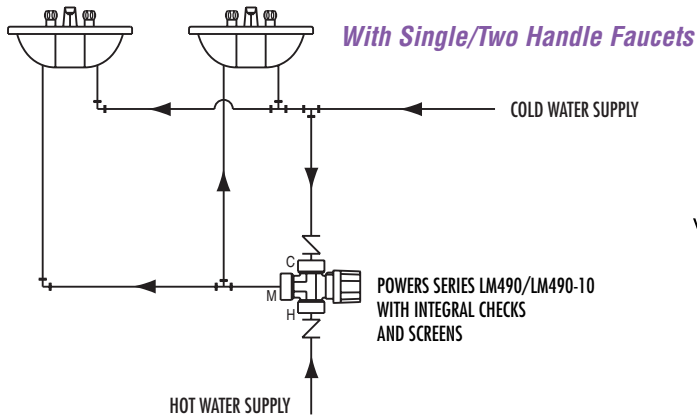


dimensions

Model	LM490-1 LM490-101	LM491-1 LM491-101	LM492-1 LM492-101	LM490-2 LM490-102	LM491-2 LM491-102	LM492-2 LM492-102	LM490-3 LM490-103	LM491-3 LM491-103	LM492-3 LM492-103	LM490-4 LM490-104	LM491-4 LM491-104	LM492-4 LM492-104
Connections	1/2" NPT Female	3/4" NPT Female	1" NPT Female	1/2" Sweat	3/4" Sweat	1" Sweat	1/2" CPVC	3/4" CPVC	1" CPVC	1/2" PEX	3/4" PEX	1" PEX
"A"	4.89 (124.2mm)	4.89 (124.2mm)	5.31 (134.9mm)	4.83 (122.7mm)	5.31 (134.9mm)	5.81 (147.6mm)	4.75 (120.7mm)	5.23 (132.8mm)	5.67 (144.0mm)	5.25 (133.4mm)	5.49 (139.5mm)	5.87 (149.1mm)
"B"	5.41 (137.4mm)	5.41 (137.4mm)	5.62 (142.7mm)	5.38 (136.7mm)	5.62 (142.7mm)	5.87 (149.1mm)	5.34 (135.6mm)	5.58 (141.7mm)	5.80 (147.3mm)	5.59 (142.0mm)	5.71 (145.0mm)	5.90 (149.9mm)
"C"	3.16 (80.2mm)	3.16 (80.2mm)	3.37 (85.6mm)	3.13 (79.5mm)	3.37 (85.6mm)	3.62 (91.9mm)	3.09 (78.5mm)	3.33 (84.6mm)	3.55 (90.2mm)	3.34 (84.8mm)	3.46 (87.9mm)	3.65 (92.7mm)



application diagrams



product specifications

Temperature Adjustment:

Series LM490

90° - 160° F (32° C to 71° C)

Series LM490-10

60° - 120° F (16° C to 49° C)

Union Connections:

Series LM490

Series LM490-10

Female NPT			Sweat			CPVC			PEX		
1/2"	3/4"	1"	1/2"	3/4"	1"	1/2"	3/4"	1"	1/2"	3/4"	1"
LM490-1	LM491-1	LM492-1	LM490-2	LM491-2	LM492-2	LM490-3	LM491-3	LM492-3	LM490-4	LM491-4	LM492-4
LM490-101	LM491-101	LM492-101	LM490-102	LM491-102	LM492-102	LM490-103	LM491-103	LM492-103	LM490-104	LM491-104	LM492-104

Capacity:

PRESSURE DROP ACROSS THE VALVE

(CV) 1 psi (7 kPa)	5 psi (34 kPa)	10 psi (69 kPa)	15 psi (103 kPa)	20 psi (138 kPa)	30 psi (207 kPa)	45 psi (310 kPa)	60 psi (414 kPa)
3.42	7.6 gpm (29.0 lpm)	11.0 gpm (42.0 lpm)	13.0 gpm (49.0 lpm)	15.0 gpm (57.0 lpm)	19.0 gpm (72.0 lpm)	23.0 gpm (87.0 lpm)	27.0 gpm (102.0 lpm)

Approach Temperature:

10° F (5.6° C) above set point

Max. Operating Pressure:

150 psi (1034 kPa)

Max. Hot Water Temperature:

200° F (93° C)

Minimum Flow:

0.5 gpm (1.90 lpm) when tested in accordance with ASSE 1017-2003

Check Valves:

Integral

Construction:

Cast Brass Body

Approval:

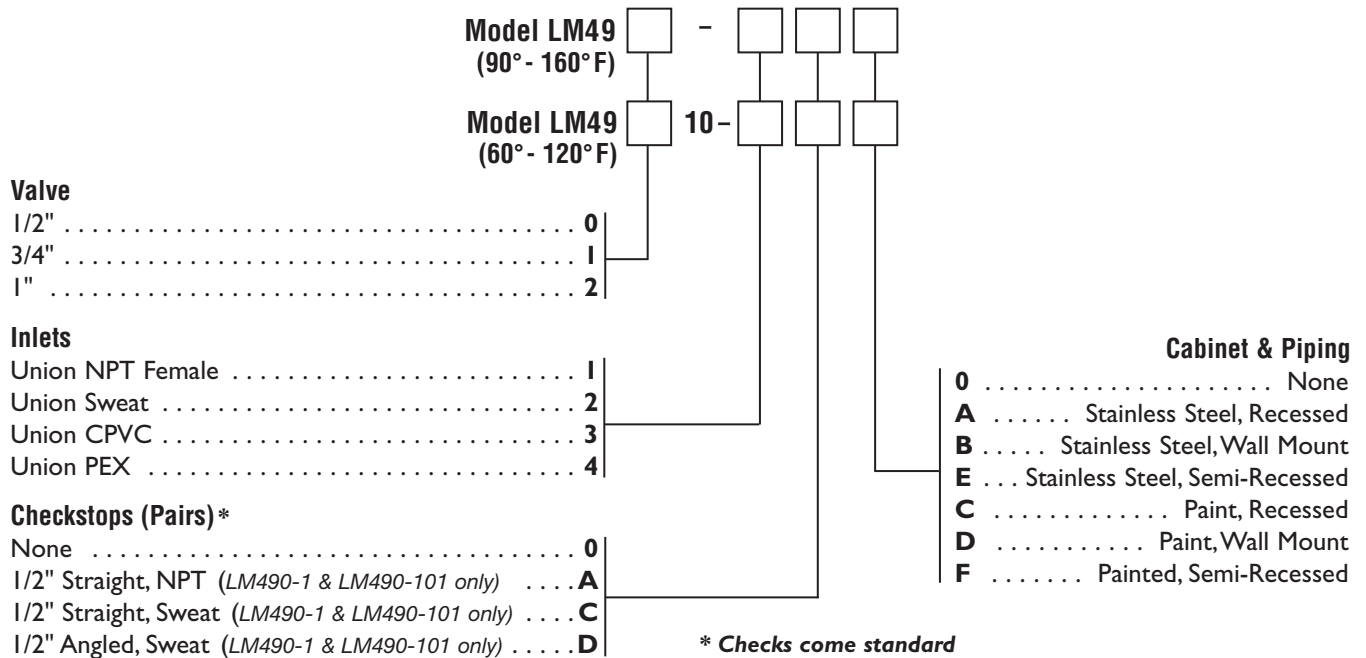
CSA B125 Certified

Listing:

ASSE 1017



how to order



typical specification

Thermostatic tempering valve shall be constructed of solid brass. The valve shall feature advanced paraffin-based actuation technology and union connections for ease of maintenance. All internal components shall be corrosion-resistant. Valve shall feature integral checks to prevent cross-flow and inlet screens to filter out debris. The valve shall be CSA B125 certified and ASSE 1017 listed.

Capacity of the valve shall be 23.0 gpm (87.0 lpm) at 45 psig differential. Valve shall perform to a minimum flow of 0.5 gpm to ASSE 1017-2003. Control temperature shall be adjustable between 90° - 160° F (32° - 71° C) for LM490 and 60° - 120° F (16° - 49° C) for LM490-10 Series. The valve shall feature a vandal-resistant lockable handle to prevent tampering. The valve shall be a Powers' HydroGuard Model LM490 (1/2"), LM491 (3/4"), LM492 (1"), LM490-10 (1/2"), LM491-10 (3/4") or LM492-10 (1"). Any alternate must have a written approval prior to bidding.

ENGINEERING APPROVAL

Project: _____

Contractor: _____

Architect/Engineer: _____

POWERS™

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