

Product Specification

Job Name _____

Contractor _____

Job Location _____

Approval _____

Engineer _____

Contractor's P.O. No. _____

Approval _____

Representative _____

LEAD FREE*

HYDROGUARD®

Series LFLM495

Thermostatic Mixing Valves for Lavatory Installations

Features

- Temperature control to ASSE 1017, 1069 and 1070 down to 0.5 gpm
- Advanced thermal actuator improves performance at low flow
- Lead Free* cast copper silicon alloy body construction for durability and to comply with Lead Free* requirements
- Adjustable temperature selection with lock down
- Union connections for easy maintenance
- Integral checks and screen prevents cross-flow and contamination
- Available union connection models include threaded, sweat, CPVC, PEX, PEX F1960 cold expansion fittings (CEF), Quick-Connect, or w/press

Specifications

Temperature Adjustment: 80° - 120°F (27°C to 49°C)

Approach Temperature: 5°F (3°C) above set point

Max. Operating Pressure: 125 psi (861 kPa)

Max. Hot Water Temperature: 200°F (93°C)

Max. Pressure Differential between

Hot & Cold Water Supplies: 25%

Minimum Flow: 0.5 gpm (2 lpm) when tested in accordance with ASSE 1017

Check Valves: Integral

Construction: Lead Free* Cast copper silicon alloy body

Standards: ASSE 1017, ASSE 1069, ASSE 1070 Certified
IAPMO cUPC Certified and approved to CSA B125.3 and CSA B125.70, NSF/ANSI/CAN 61 & NSF/ANSI/CAN 372 Certified

Viega Pro-Press™ connections are optional factory installed fitting on each end of the approved/certified assembly

Capacity

Pressure Drop Across The Valve							
(C _v) 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)
1.79	4.0 gpm (15.0 lpm)	5.7 gpm (22.0 lpm)	7.0 gpm (26.0 lpm)	8.0 gpm (30.0 lpm)	9.8 gpm (37.0 lpm)	12.0 gpm (45.0 lpm)	13.9 gpm (53.0 lpm)

*The wetted surface of this product contacted by consumable water contains less than 0.25% of lead by weight.

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.



LFLM495-1

LFLM496-6



UNION CONNECTIONS	SIZE	MODEL
Female NPT	1/2"	LFLM495-1
	3/4"	LFLM496-1
	1"	LFLM497-1
Sweat	1/2"	LFLM495-2
	3/4"	LFLM496-2
	1"	LFLM497-2
CPVC	1/2"	LFLM495-3
	3/4"	LFLM496-3
	1"	LFLM497-3
PEX (For PEX B)	1/2"	LFLM495-4
	3/4"	LFLM496-4
	1"	LFLM497-4
Quick-Connect	1/2"	LFLM495-5
	3/4"	LFLM496-5
	1"	LFLM497-5
CEF PEX (For PEX A)	1/2"	LFLM495-6
	3/4"	LFLM496-6
w/Press	1/2"	LFLM495-1 w/press
	3/4"	LFLM496-1 w/press
	1"	LFLM497-1 w/press

⚠ WARNING

When used in an ASSE 1017 application at the hot water source, the Powers Thermostatic Mixing Valve Series LFLM495 cannot be used by itself to control final temperature at fixtures where ASSE Standard 1016 or ASSE Standard 1070 listed devices are required. Such use may result in severe bodily injury (i.e. scalding or chilling) and/or death. ASSE Standard 1016, ASSE 1069 or ASSE Standard 1070 listed devices, such as Powers Series LFe480 or LFLM495, should be used at point-of-use to prevent possible injury. Consult all product manuals, and instruction guides before installing any referenced product.

Recirculation systems should recirculate water at temperatures over 140°F to reduce the risk of bacterial growth in the piping. This valve should not be used at the hot water source in recirculation systems.

NOTICE

The information contained herein is not intended to replace the full product installation and safety information available or the experience of a trained product installer. You are required to thoroughly read all installation instructions and product safety information before beginning the installation of this product.

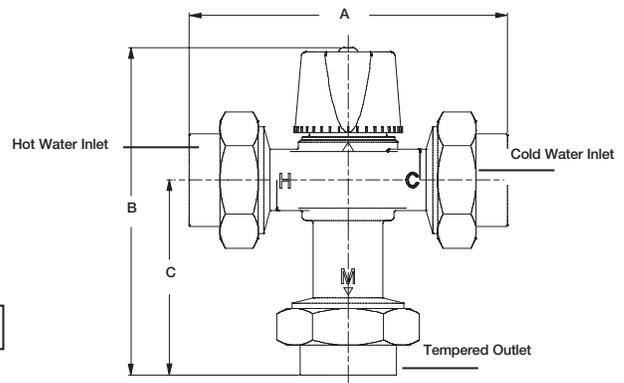
POWERS™
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Dimensions

MODEL CONNECTIONS	LFLM495-1 1/2" NPT FEMALE	LFLM496-1 3/4" NPT FEMALE	LFLM497-1 1" NPT FEMALE	LFLM495-2 1/2" SWEAT	LFLM496-2 3/4" SWEAT	LFLM497-2 1" SWEAT	LFLM495-3 1/2" CPVC	LFLM496-3 3/4" CPVC	LFLM497-3 1" CPVC	LFLM495-4 1/2" PEX	LFLM496-4 3/4" PEX	LFLM497-4 1" PEX
"A"	4-7/8 (124mm)	4-7/8 (124mm)	5-5/16 (135mm)	4-13/16 (123mm)	5-5/16 (135mm)	5-13/16 (148mm)	4-3/4 (121mm)	5-1/4 (133mm)	5-11/16 (144mm)	5-1/4 (133mm)	5-1/2 (140mm)	5-7/8 (149mm)
"B"	5-7/16 (137mm)	5-7/16 (137mm)	5-5/8 (143mm)	5-3/8 (137mm)	5-5/8 (143mm)	5-7/8 (149mm)	5-5/16 (136mm)	5-9/16 (142mm)	5-13/16 (147mm)	5-9/16 (142mm)	5-11/16 (145mm)	5-7/8 (150mm)
"C"	3-3/16 (80mm)	3-3/16 (80mm)	3-3/8 (86mm)	3-1/8 (80mm)	3-3/8 (86mm)	3-5/8 (92mm)	3-1/16 (79mm)	3-5/16 (85mm)	3-9/16 (90mm)	3-5/16 (85mm)	3-7/16 (88mm)	3-5/8 (93mm)

MODEL CONNECTIONS	LFLM495-5 1/2" QUICK-CONNECT	LFLM496-5 3/4" QUICK-CONNECT	LFLM497-5 1" QUICK-CONNECT	LFLM495-6 1/2" CEF PEX	LFLM496-6 3/4" CEF PEX
"A"	6-5/8 (168mm)	6-15/16 (177mm)	7-1/8 (181mm)	5-1/2 (140mm)	6-1/16 (155mm)
"B"	6-1/4 (159mm)	6-7/16 (163mm)	6-1/2 (165mm)	5-11/16 (144mm)	5-15/16 (151mm)
"C"	4 (102mm)	4-3/16 (106mm)	4-1/4 (108mm)	3-7/16 (87mm)	3-11/16 (94mm)

Note:
Dimensions are shown $\pm 1/4"$
Dimensions in brackets are in mm
Consult factory for dimensions w/press



Ordering Information

Model LFLM49
(80° - 120°F)
(27° - 49°C)

Valve

1/2"	5
3/4"	6
1"	7

Inlets

Union NPT Female	1
Union Sweat	2
Union CPVC	3
Union PEX	4
Union Quick-Connect	5
Union PEX F1960 (CEF)	6
w/press	1-w/press

Typical Specification

Thermostatic tempering valve shall be constructed using Lead Free* cast copper silicon alloy material which shall comply with state codes and standards, where applicable requiring reduced lead content. 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 ASSE 1017, ASSE 1069, and ASSE 1070 certified, IAPMO cUPC certified and approved to CSA B125.3 and CSA B125.70. Capacity of the valve shall be 12.0 gpm (45.0 lpm) at 45psi (310 kPa) differential. Valve shall perform to a minimum flow of 0.5 gpm (2 lpm) to ASSE 1070. Control temperature shall be adjustable between 80°F - 120°F (27 - 49°C). The valve shall feature a vandal-resistant lockable handle to prevent tampering. The valve shall be a Powers' HydroGuard® Model LFLM495 (1/2"), LFLM496 (3/4"), LFLM497 (1"). Any alternate must have a written approval prior to bidding.

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⚠ WARNING

When used in an ASSE 1017 application at the hot water source, the Watts Thermostatic Mixing Valve Series LFMMV cannot be used by itself to control final temperature at fixtures where ASSE Standard 1016 or ASSE Standard 1070 listed devices are required. Such use may result in severe bodily injury (i.e. scalding or chilling) and/or death. ASSE Standard 1016, ASSE 1069 or ASSE Standard 1070 listed devices, such as Watts Series LFUSG, LFL111 or LFMMV, should be used at point-of-use to prevent possible injury. Consult all product manuals, and instruction guides before installing any referenced product.

Recirculation systems should recirculate water at temperatures over 140°F to reduce the risk of bacterial growth in the piping. This valve should not be used at the hot water source in recirculation systems.

⚠ WARNING

Water temperatures in excess 110°F (43°C) are dangerous and may cause scalding, severe injury or death! This valve can be adjusted to deliver water at temperatures exceeding 110°F (43°C). Consequently, when used in an ASSE 1016, ASSE 1069 or ASSE 1070 application, the installer must check the mixed water outlet temperature at the point of use and adjust the Watts Thermostatic Mixing Valve Series LFMMV to ensure delivery of water at a safe temperature not exceeding 110°F (43°C). Mechanical valves are not fail-safe. Due to the effects of various water conditions, periodic verification of outlet water temperature is required.

⚠ WARNING

Valve should be installed and adjusted by a licensed contractor in accordance with local codes and ordinances. Valves to be installed in an accessible and visible location (non-destructive and observable) where it is accessible for cleaning, service or adjustment. Inspect device annually, including plumbing connections. PEX B (1806) connections for use with Watts WP14C, copper PEX crimp rings.