

Product Specification

Job Name _____
 Job Location _____
 Engineer _____
 Approval _____

Contractor _____
 Approval _____
 Contractor's P.O. No. _____
 Representative _____

LEAD FREE*

HYDROGUARD®

Series LFLM490

Thermostatic Tempering Valves for Hot Water Distribution

Features

- Lead Free* Brass body construction for durability and to comply with Lead Free* installation requirements
- Advanced thermal actuator improves performance at low flow
- Adjustable temperature selection with lock down
- Union connections for easy maintenance
- Integral checks and screen prevents cross-flow and contamination
- Available in 1/2", 3/4", 1" with NPT, Sweat, PEX, Quick-Connect, CPVC union connections and w/press**



Specifications

Temperature Adjustment:

Series LFLM490 90°- 160°F (32°C to 71°C)
Series LFLM490-10 60°- 120°F (16°C to 49°C)

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

Max. Operating Pressure: 125psi (861 kPa)

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

Max. Pressure Differential between Hot & Cold Water Supplies: 25%

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

Check Valves: Integral

Construction: Lead Free* Brass body

Approval: CSA B125 Certified

Listing: ASSE 1017, IAPMO UPC, & NSF372

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

Capacity

PRESSURE DROP ACROSS THE VALVE							
(Cv) 1psi (7 kPa)	5psi (34 kPa)	10psi (69 kPa)	15psi (103 kPa)	20psi (138 kPa)	30psi (207 kPa)	45psi (310 kPa)	60psi (414 kPa)
3.42	7.6 gpm (29 lpm)	11.0 gpm (42 lpm)	13.0 gpm (49 lpm)	15.0 gpm (57 lpm)	19.0 gpm (72 lpm)	23.0 gpm (87 lpm)	27.0 gpm (102 lpm)

UNION CONNECTIONS			
Female NPT	1/2"	LFLM490-1	LFLM490-101
	3/4"	LFLM491-1	LFLM491-101
	1"	LFLM492-1	LFLM492-101
Sweat	1/2"	LFLM490-2	LFLM490-102
	3/4"	LFLM491-2	LFLM491-102
	1"	LFLM492-2	LFLM492-102
CPVC	1/2"	LFLM490-3	LFLM490-103
	3/4"	LFLM491-3	LFLM491-103
	1"	LFLM492-3	LFLM492-103
PEX	1/2"	LFLM490-4	LFLM490-104
	3/4"	LFLM491-4	LFLM491-104
	1"	LFLM492-4	LFLM492-104
Quick-Connect	1/2"	LFLM490-5	LFLM490-105
	3/4"	LFLM491-5	LFLM491-105
	1"	LFLM492-5	LFLM492-105
w/Press	1/2"	LFLM490-1 w/press	N/A
	3/4"	LFLM491-1 w/press	N/A
	1"	LFLM492-1 w/press	N/A

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.

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

** Available with LFLM490 series only

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.

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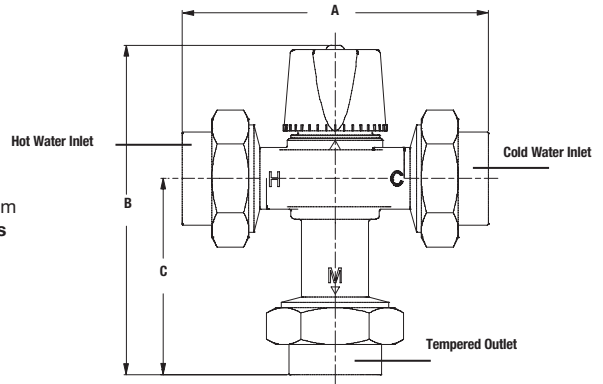
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Dimensions

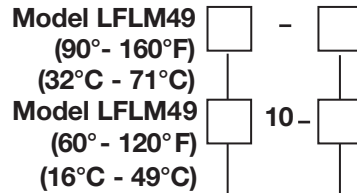
MODEL	LFLM490-1	LFLM491-1	LFLM492-1	LFLM490-2	LFLM491-2	LFLM492-2	LFLM490-3	LFLM491-3	LFLM492-3	LFLM490-4	LFLM491-4	LFLM492-4
CONNECTIONS	LFLM490-101	LFLM491-101	LFLM492-101	LFLM490-102	LFLM491-102	LFLM492-102	LFLM490-103	LFLM491-103	LFLM492-103	LFLM490-104	LFLM491-104	LFLM492-104
	1/2" NPT FEMALE	3/4" 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"	4-7/8 (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	LFLM490-5	LFLM491-5	LFLM492-5
CONNECTIONS	LFLM490-105	LFLM491-105	LFLM492-105
	1/2" QUICK-CONNECT	3/4" QUICK-CONNECT	1" QUICK-CONNECT
"A"	6-5/8 (168mm)	6-15/16 (177mm)	7-1/8 (181mm)
"B"	6-1/4 (159mm)	6-7/16 (163mm)	6-1/2 (165mm)
"C"	4 (102mm)	4-3/16 (106mm)	4-1/4 (108mm)

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



Ordering Information



Valve

1/2"0
3/4"1
1"2

Inlets

Union NPT Female1
Union Sweat2
Union CPVC3
Union PEX4
Quick-Connect5
w/press1-w/press

Typical Specification

Thermostatic tempering valve shall be constructed using Lead Free* brass 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 CSA B125 certified and ASSE 1017 and IAPMO UPC listed. Capacity of the valve shall be 23.0 gpm (87.0 lpm) at 45psi (310 kPa) differential. Valve shall

perform to a minimum flow of 0.5 gpm (2 lpm) to ASSE 1017-2003. Control temperature shall be adjustable between 90 - 160°F (32 - 71°C) for LFLM490 and 60 - 120°F (16 - 49°C) for LFLM490-10 Series. The valve shall feature a vandal-resistant lockable handle to prevent tampering. The valve shall be a Powers HydroGuard Model LFLM490 (1/2", 15mm), LFLM491 (3/4", 20mm), LFLM492 (1", 25mm), LFLM490-10 (1/2", 15mm), LFLM491-10 (3/4", 20mm) or LFLM492-10 (1", 25mm). Any alternate must have a written approval prior to bidding.

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