

HYDROGUARD® Series LFLM490 Thermostatic Tempering Valves for Hot Water Distribution

Product Specification

LEAD FREE*

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" (15, 20, 25mm) with NPT, Sweat, PEX, Quick-Connect, and CPVC union connections



Advanced Thermal Activation

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: 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 (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

UNION CONNECTIONS														
Female NPT			Sweat			CPVC			PEX			Quick-Connect		
1/2" (15)	3/4" (20)	1" (25)	1/2" (15)	3/4" (20)	1" (25)	1/2" (15)	3/4" (20)	1" (25)	1/2" (15)	3/4" (20)	1" (25)	1/2" (15)	3/4" (20)	1" (25)
LFLM490-1	LFLM491-1	LFLM492-1	LFLM490-2	LFLM491-2	LFLM492-2	LFLM490-3	LFLM491-3	LFLM492-3	LFLM490-4	LFLM491-4	LFLM492-4	LFLM490-5	LFLM491-5	LFLM492-5
LFLM490-101	LFLM491-101	LFLM492-101	LFLM490-102	LFLM491-102	LFLM492-102	LFLM490-103	LFLM491-103	LFLM492-103	LFLM490-104	LFLM491-104	LFLM492-104	LFLM490-105	LFLM491-105	LFLM492-105

Capacity ■

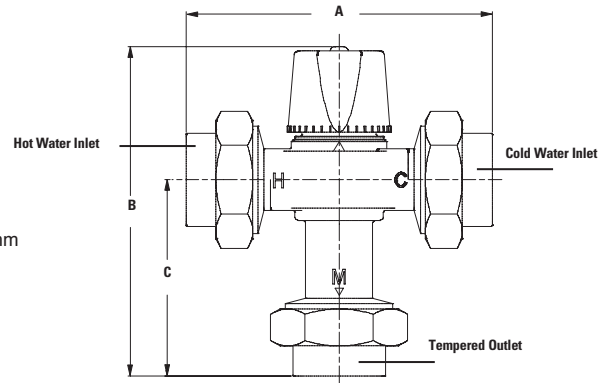
PRESSURE DROP ACROSS THE VALVE							
(C _v) 1 psi (7 kPa)	5psi (34 kPa)	10psi (69 kPa)	15psi (103 kPa)	20psi (138 kPa)	30psi (207 kPa)	45psi (310 kPa)	60psi (414 kPa)
3.42	7.6 gpm (29 lpm)	11.0 gpm (42 lpm)	13.0 gpm (49 lpm)	15.0 gpm (57 lpm)	19.0 gpm (72 lpm)	23.0 gpm (87 lpm)	27.0 gpm (102 lpm)

* The wetted surface of this product contacted by consumable water contains less than one quarter of one percent (0.25%) of lead by weight.

Dimensions ■

Model	LFLM490-1 LFLM490-101	LFLM491-1 LFLM491-101	LFLM492-1 LFLM492-101	LFLM490-2 LFLM490-102	LFLM491-2 LFLM491-102	LFLM492-2 LFLM492-102	LFLM490-3 LFLM490-103	LFLM491-3 LFLM491-103	LFLM492-3 LFLM492-103	LFLM490-4 LFLM490-104	LFLM491-4 LFLM491-104	LFLM492-4 LFLM492-104
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"	4-7/8 (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 LFLM490-105	LFLM491-5 LFLM491-105	LFLM492-5 LFLM492-105
Connections	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 ±1/4"
Dimensions in brackets are in mm

Ordering Information ■

Model LFLM49 (90° - 160°F) (32°C - 71°C)
Model LFLM49 (60° - 120°F) (16°C - 49°C)

Valve

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

Inlets

Union NPT Female 1
Union Sweat 2
Union CPVC 3
Union PEX 4
Quick-Connect 5

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.

ENGINEERING APPROVAL

Project: _____
Contractor: _____
Architect/Engineer: _____

POWERS™

A Watts Water Technologies Company



ISO 9001-2000
CERTIFIED

USA: Phone: 1.800.669.5430 • Fax 1.847.229.0526 • www.powerscontrols.com
Canada: Phone: 1.888.208.8927 • Fax 1.888.479.2887 • www.powerscontrols.ca