### For Non-Health Hazard Applications

Job Name	Contractor
Job Location	Approval
Engineer	Contractor's P.O. No.
Approval	Representative

# LEAD FREE\*

## HydroGuard® XP Master Tempering Valves Supply Fixture Series LFMM430 Bottom Inlets/Top Outlet – Exposed

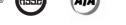
#### Features

- Features Lead Free\* construction to comply with Lead Free\* installation requirements.
- 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
- Vandal-resistant locking mechanism to secure temperature setting
- Factory tested valve and piping
- · Rotatable union triple-duty checkstops with filters, dial-thermometer, ball valve
- Rough bronze and chrome finishes

#### **Specifications**

Connections	See chart on reverse	
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	125 psi (861 kPa)	
Temperature Adjustment Range****	Standard 90 – 160°F (32 – 71°C)	
	Low 60 – 90°F (16 – 32°C)	
Hot Water Inlet Temperature Range	120 – 180°F (49 – 82°C)	
Cold Water Inlet Temperature Range	40 – 80°F (4 – 27°C)	
Listing/Compliance–Valve Only	ASSE 1017, CSA B125	





Advanced Thermal Activation

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

- \*\* With equal pressure
- \*\*\* Minimum flow when the valve is installed at or near hot water source w/ recirculated tempered water with a properly sized continuously operating recirculating pump
- \*\*\*\* Note: Low limit cannot be less than the cold water temperature. For best operation, hot water should be at least 5°F (3°C) above desired set point.

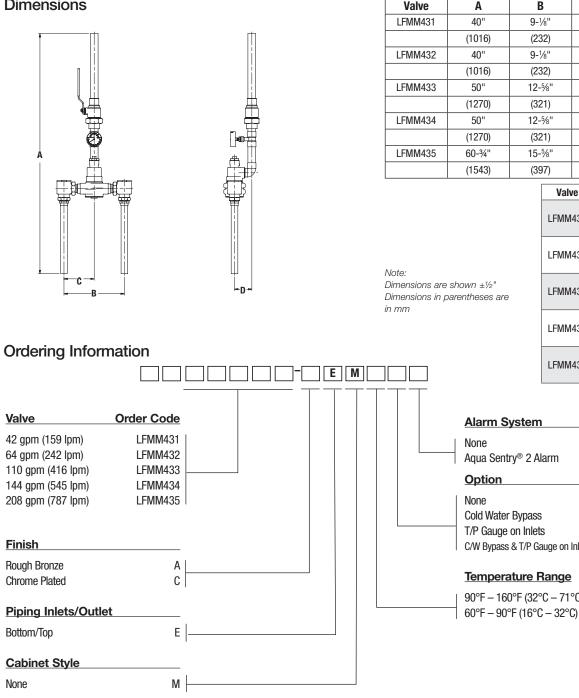
#### Capacity

Flow Capacity at 50-50 Mixed Ratio								
		Pressure Drop Across Valve						
Model	Min. Flow	Cv	5 psi	10 psi	20 psi	30 psi	45 psi	60 psi
	to ASSE 1017		(34 kPa)	(69 kPa)	(138 kPa)	(207 kPa)	(310 kPa)	(414 kPa)
LFMM431	3 gpm	6.32	14 gpm	20 gpm	28 gpm	35 gpm	42 gpm	49 gpm
	11 lpm		53 lpm	76 lpm	106 lpm	132 lpm	159 lpm	185 lpm
LFMM432	4 gpm	9.49	21 gpm	30 gpm	42 gpm	52 gpm	64 gpm	74 gpm
	15 lpm		80 lpm	114 lpm	159 lpm	197 lpm	242 lpm	280 lpm
LFMM433	5 gpm	16.44	37 gpm	52 gpm	74 gpm	90 gpm	110 gpm	127 gpm
	19 lpm		140 lpm	197 lpm	280 lpm	341 lpm	416 lpm	481 lpm
LFMM434	7 gpm	21.50	48 gpm	68 gpm	96 gpm	118 gpm	144 gpm	167 gpm
	26 lpm		182 lpm	257 lpm	363 lpm	447 lpm	545 lpm	632 lpm
LFMM435	10 gpm	31.00	69 gpm	98 gpm	139 gpm	170 gpm	208 gpm	240 gpm
	38 lpm		261 lpm	371 lpm	526 lpm	644 lpm	787 lpm	908 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**



Alarm System	Order Code
None	0
Aqua Sentry <sup>®</sup> 2 Alarm	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	
90°F – 160°F (32°C – 71°C)	S
60°F – 90°F (16°C – 32°C)	W

C

4-1/2'

(114)

4-1/2"

(114)

6-1/4"

(159)

6-1/4"

(159)

7-1/8"

(200)

Inlets

3⁄4"

(20)

3⁄4"

(20)

1-1/4"

(32)

1-1/4"

(32)

2"

(50)

D

2-5%

(67)

2-3⁄4"

(70)

3-3/8"

(86)

3-5/8"

(92)

4-1⁄4"

(108) Outlet

3⁄4"

(20)

1"

(25)

1-1/4"

(32)

1-1/2'

(40)

2"

(50)

В

9-1/8'

(232)

9-1/8"

(232)

12-%"

(321)

12-%"

(321)

15-%"

(397)

Valve

LFMM431

LFMM432

LFMM433

LFMM434

LFMM435

#### **Recirculation Piping Diagram**

Please see Piping Diagram Section of this catalog.

#### Typical Specification — Supply Fixtures

Supply Fixture shall be factory assembled and tested and feature a HydroGuard® XP LFMM430 series master-tempering valve with advanced, paraffin-based actuation technology. The valves shall be constructed using Lead Free\* brass. Lead Free\* brass valves shall comply with state codes and standards, where applicable, requiring reduced lead content. Supply fixture shall also include copper piping, ball valve(s) and temperature/pressure gauge for diagnostics. The tempering valve shall have union checkstops, an outlet temperature range of 90 - 160°F (32° - 71°C) (with lockable means), a single seat design for positive shutoff and an approach temperature of 5°F (3°C). Valve shall be ASSE 1017 listed and CSA certified. Minimum flows to ASSE 1017 shall be LFMM431 (3.0 gpm, 11 lpm), LFMM432 (4.0 gpm, 15 lpm), LFMM433 (5.0 gpm, 19 lpm), LFMM434 (7.0 gpm, 26 lpm), LFMM435 (10.0 gpm, 38 lpm).

Valve shall be a Powers Model . All alternatives must have written approval prior to bidding.



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