# For Non-Health Hazard Applications

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

# LEAD FREE\*

# HydroGuard<sup>®</sup> XP Master Tempering Valves Supply Fixture

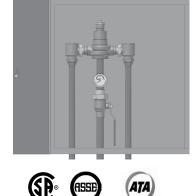
Series LFMM430 Bottom Inlets/Bottom Outlet – Semi-Recessed Cabinet

#### 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
- Stainless steel or white painted cabinets
- 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.

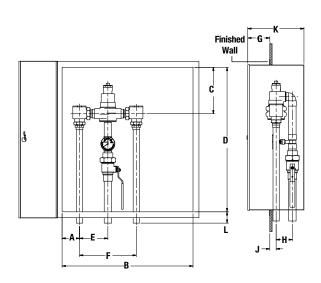
#### Capacity

Flow Capacity at 50-50 Mixed Ratio										
		Pressure Drop Across Valve								
Model	Min. Flow to ASSE 1017	Cv	5 psi (34 kPa)	10 psi (69 kPa)	20 psi (69 kPa)	30 psi (207 kPa)	45 psi (310 kPa)	60 psi (414 kPa)		
LFMM431	3 gpm 11 lpm	6.32	14 gpm 53 lpm	20 gpm 76 lpm	28 gpm 106 lpm	35 gpm 132 lpm	42 gpm 159 lpm	49 gpm 185 lpm		
LFMM432	4 gpm	9.49	21 gpm	30 gpm	42 gpm	52 gpm	64 gpm	74 gpm		
	15 lpm 5 gpm	10.44	80 lpm 37 gpm	114 lpm 52 gpm	159 lpm 74 gpm	197 lpm 90 gpm	242 lpm 110 gpm	280 lpm 127 gpm		
LFMM433	19 lpm	16.44	140 lpm	197 lpm	280 lpm	341 lpm	416 lpm	481 lpm		
LFMM434	7 gpm 26 lpm	21.50	48 gpm 182 lpm	68 gpm 257 lpm	96 gpm 363 lpm	118 gpm 447 lpm	144 gpm 545 lpm	167 gpm 632 lpm		
LFMM435	10 gpm 38 lpm	31.00	69 gpm 261 lpm	98 gpm 371 lpm	139 gpm 526 lpm	170 gpm 644 lpm	208 gpm 787 lpm	240 gpm 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

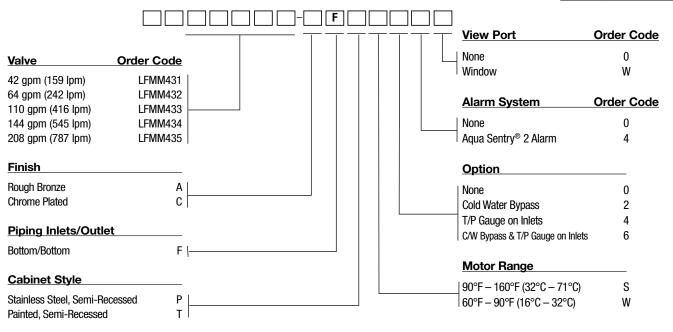


Valve	Α	В	C	D	E	F	G	Н	J	K	L
LFMM431	3-1⁄2"	20"	9-1⁄4"	24"	4-5⁄8"	9-1⁄4"	3-1⁄2"	2-5⁄8"	1-1⁄8"	9"	2"
	(89)	(508)	(235)	(610)	(117)	(235)	(89)	(67)	(29)	(229)	(50)
LFMM432	3-1⁄2"	20"	9-1⁄4"	24"	4-5⁄8"	9-1⁄4"	3-1⁄2"	2-¾"	1-1⁄8"	9"	2"
	(89)	(508)	(235)	(610)	(117)	(235)	(89)	(70)	(29)	(229)	(50)
LFMM433	3-1/8"	29"	10-¼"	32"	6-¼"	12-1⁄2"	4-1⁄2"	3-¾"	1-¾"	12"	2-1⁄2"
	(98)	(737)	(260)	(813)	(159)	(318)	(114)	(86)	(35)	(305)	(64)
LFMM434	3-1/8"	29"	10-1⁄4"	32"	6-1⁄4"	12-1⁄2"	4-1⁄2"	3-5⁄8"	1-¾"	12"	2-1⁄2"
	(98)	(737)	(260)	(813)	(159)	(318)	(114)	(92)	(35)	(305)	(64)
LFMM435	4-1⁄8"	38"	13-%"	38"	7-1/8"	15-¾"	4"	4-1⁄4"	2"	13"	2-1⁄2"
	(105)	(965)	(346)	(965)	(200)	(400)	(102)	(108)	(50)	(330)	(64)

Note:
Dimensions are shown ±1/2"
Dimensions in parentheses are
in mm

(102)	(108	8)	(50)	(	330)	(64)
Val	Valve		Inlets	Outlet		
LFMM	LFMM431		<sup>3</sup> ⁄4" (20)		<sup>3</sup> ⁄4" (20)	
LFMM432		<sup>3</sup> ⁄4" (20)		1" (25)		
LFMM433			1-1⁄4" (32)			-1⁄4" 32)
LFMM434			1-¼" (32)		1-½" (40)	
LFMM	435		2" (50)		2" (50)	

# Ordering Information



# **Recirculation Piping Diagram**

Please see Piping Diagram Section of this catalog.

# Typical Specification — Supply Fixtures

Cabinet Supply Fixture (CSF) shall be factory assembled and tested and include a stainless steel or painted steel cabinet. CSF shall feature a HydroGuard<sup>®</sup> 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. CSF 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.

