

**For Non-Health Hazard Applications**

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

# LEAD FREE\*

## HydroGuard® XP Series

### LFMM430 2 Valve Hi/Lo

#### Supply Fixture 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 as a complete unit
- Pressure/Temperature Gauges, Ball valves

**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**** . . . . .	90 – 160°F (32 – 71°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, GSA B125

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

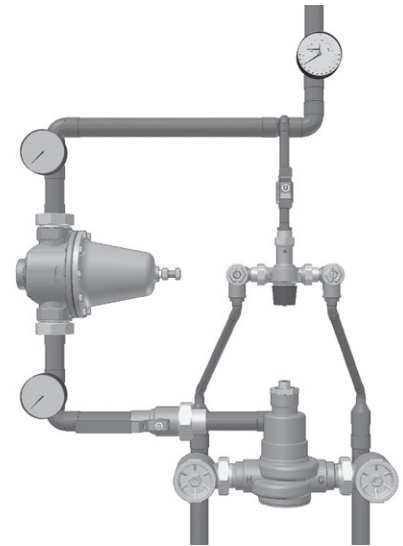
\*\* With Equal Pressure

\*\*\* Minimum flow when HiLo valve is installed at or near hot water source w/recirculating 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**

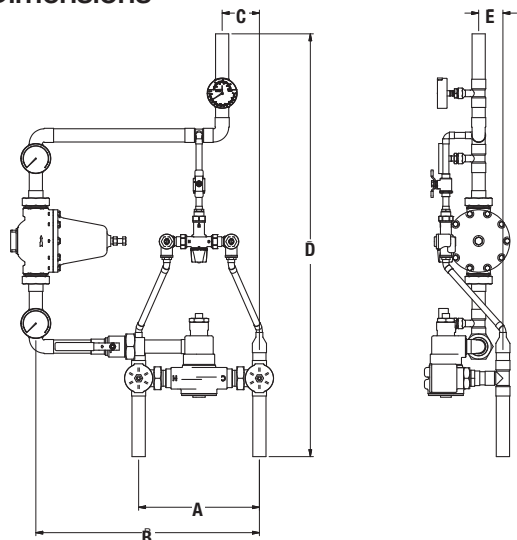
Flow Capacity at 50-50 Mixed Ratio								
		Pressure Drop Across Valve						
Model	Min. Flow to ASSE 1017	C <sub>v</sub>	5 psi (34 kPa)	10 psi (69 kPa)	20 psi (138 kPa)	30 psi (207 kPa)	45 psi (310 kPa)	60 psi (414 kPa)
LFMM431HL	0.5 gpm	9.7	22 gpm	31 gpm	43 gpm	53 gpm	65 gpm	75 gpm
	1.89 lpm		83 lpm	117 lpm	163 lpm	201 lpm	246 lpm	284 lpm
LFMM432HL	0.5 gpm	13.0	29 gpm	41 gpm	58 gpm	66 gpm	87 gpm	93 gpm
	1.89 lpm		110 lpm	155 lpm	220 lpm	250 lpm	329 lpm	352 lpm
LFMM433HL	0.5 gpm	19.8	44 gpm	63 gpm	86 gpm	108 gpm	133 gpm	153 gpm
	1.89 lpm		167 lpm	238 lpm	326 lpm	409 lpm	503 lpm	579 lpm
LFMM434HL	0.5 gpm	24.9	56 gpm	79 gpm	111 gpm	136 gpm	167 gpm	193 gpm
	1.89 lpm		212 lpm	299 lpm	420 lpm	515 lpm	632 lpm	731 lpm
LFMM435HL	3.0 gpm	27.7	62 gpm	88 gpm	124 gpm	152 gpm	186 gpm	215 gpm
	11.0 lpm		235 lpm	333 lpm	469 lpm	575 lpm	704 lpm	814 lpm



Advanced Thermal Activation

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	A	B	C	D	E	Inlets	Outlet
LFMM431HL	9-1/8" (232)	16-3/4" (425)	2-3/4" (70)	37" (940)	2" (51)	3/4" (20)	3/4" (20)
LFMM432HL	9-1/8" (232)	17-1/2" (445)	2-1/2" (64)	37" (940)	2-1/4" (57)	3/4" (20)	1" (25)
LFMM433HL	12-1/2" (318)	23-1/4" (591)	3-7/8" (99)	44" (1118)	2-1/2" (64)	1-1/4" (32)	1-1/4" (32)
LFMM434HL	12-1/2" (318)	26-3/4" (679)	3-1/2" (89)	44-3/4" (1137)	2-3/8" (60)	1-1/4" (32)	1-1/2" (40)
LFMM435HL	12-1/2" (318)	26-3/4" (679)	3-1/2" (89)	47" (1194)	2-3/8" (60)	1-1/4" (32)	1-1/2" (40)

Note:  
Dimensions are shown  $\pm 1/2$ "  
Dimensions in parentheses  
are in mm

## Ordering Information

Valve	Inlets	Outlet	Order Code
LFLM490/LFMM431	3/4" (20mm)	3/4" (20mm)	LFMM431HL
LFLM490/LFMM432	3/4" (20mm)	1" (25mm)	LFMM432HL
LFLM490/LFMM433	1-1/4" (32mm)	1-1/4" (32mm)	LFMM433HL
LFLM490/LFMM434	1-1/4" (32mm)	1-1/2" (40mm)	LFMM434HL
LFMM431/LFMM434	1-1/4" (32mm)	1-1/2" (40mm)	LFMM435HL

### Finish

Rough Bronze

### Piping

Bottom/Top

### Cabinets

Exposed, No Cabinet

### Alarm

None  
AquaSentry2 for LFMM431HL  
AquaSentry2 for LFMM432HL  
AquaSentry2 for LFMM433HL  
AquaSentry2 for LFMM434HL  
AquaSentry2 for LFMM435HL

Order Code	Finish	Piping	Cabinets	Alarm
LFMM431HL	A	E	M	0
LFMM432HL	A	E	M	0
LFMM433HL	A	E	M	0
LFMM434HL	A	E	M	0
LFMM435HL	A	E	M	0

## Recirculation Piping Diagram

Please see Piping Diagram Section of this catalog.

## Typical Specification — Supply Fixtures

Hi/Lo Water Temperature Control System shall be factory assembled and tested and shall include two thermostatic mixing valves capable of maintaining water temperature to 5°F (3°C) above set point. Hi/Lo shall include HydroGuard® XP LFMM430 and/or LFLM490 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. Hi/Lo 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), and a single seat design for positive shutoff. Valve shall be ASSE 1017 listed and CSA certified. Minimum flows to ASSE 1017 shall be 0.5 gpm (1.9 lpm) for LFMM431HL, LFMM432HL, LFMM433HL, LFMM434HL, and 3.0 gpm (11 lpm) for LFMM435HL.

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

# POWERS™

A WATTS Brand

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