Job Name _____ Contractor _____

Job Location _____ Approval _____

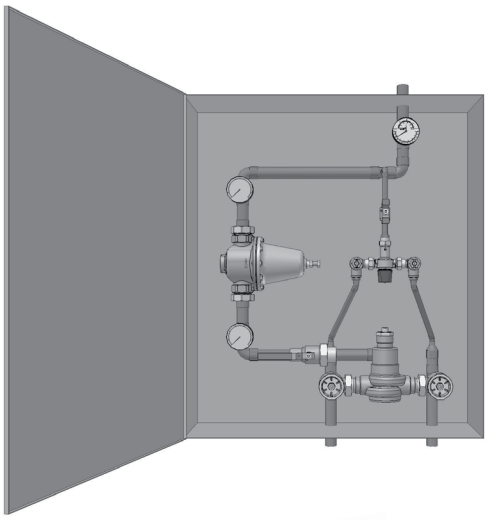
Engineer _____ Contractor's P.O. No. _____

Approval _____ Representative _____

**LEAD FREE***

# HydroGuard® XP Series LFMM430 2 Valve Hi/Lo

## Supply Fixture Wall Mount 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
- Factory tested as a complete unit
- Stainless steel or white painted cabinet
- Pressure/Temperature Gauges, Ball valves

Advanced Thermal Activation

### 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, CSA 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 Hi/Lo 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 | $C_V$ | 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<br>1.89 lpm | 9.7 | 22 gpm<br>83 lpm | 31 gpm<br>117 lpm | 43 gpm<br>163 lpm | 53 gpm<br>201 lpm | 65 gpm<br>246 lpm | 75 gpm<br>284 lpm |
| LFMM432HL | 0.5 gpm<br>1.89 lpm | 13.0 | 29 gpm<br>110 lpm | 41 gpm<br>155 lpm | 58 gpm<br>220 lpm | 66 gpm<br>250 lpm | 87 gpm<br>329 lpm | 93 gpm<br>352 lpm |
| LFMM433HL | 0.5 gpm<br>1.89 lpm | 19.8 | 44 gpm<br>167 lpm | 63 gpm<br>238 lpm | 86 gpm<br>326 lpm | 108 gpm<br>409 lpm | 133 gpm<br>503 lpm | 153 gpm<br>579 lpm |
| LFMM434HL | 0.5 gpm<br>1.89 lpm | 24.9 | 56 gpm<br>212 lpm | 79 gpm<br>299 lpm | 111 gpm<br>420 lpm | 136 gpm<br>515 lpm | 167 gpm<br>632 lpm | 193 gpm<br>731 lpm |
| LFMM435HL | 3.0 gpm<br>11.0 lpm | 27.7 | 62 gpm<br>235 lpm | 88 gpm<br>333 lpm | 124 gpm<br>469 lpm | 152 gpm<br>575 lpm | 186 gpm<br>704 lpm | 215 gpm<br>814 lpm |



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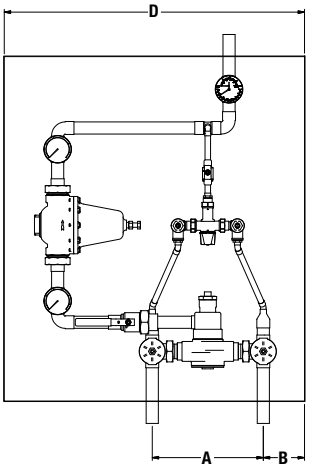
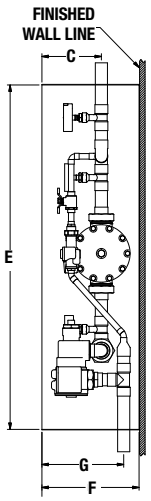
## Dimensions



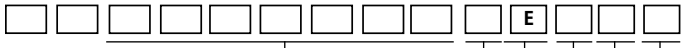

| Valve | A | B | C | G | Inlets | Outlet |
|---|---|---|---|---|---|---|
| LFMM431HL | 9-⅛" | 3-⅝" | 4-¾" | 6-¾" | ¾" | ¾" |
| | 232mm | 92mm | 121mm | 171mm | 20mm | 20mm |
| LFMM432HL | 9-⅛" | 3-⅛" | 5" | 6-¾" | ¾" | 1" |
| | 232mm | 79mm | 127mm | 171mm | 20mm | 25mm |
| LFMM433HL | 12-½" | 4-⅝" | 6-¾" | 9-¼" | 1-¼" | 1-¼" |
| | 318mm | 117mm | 171mm | 235mm | 32mm | 32mm |
| LFMM434HL | 12-½" | 2-½" | 6-½" | 8-¾" | 1-¼" | 1-½" |
| | 318mm | 64mm | 165mm | 222mm | 32mm | 40mm |
| LFMM435HL | 12-½" | 2-⅞" | 6-½" | 8-¾" | 1-¼" | 1-½" |
| | 318mm | 73mm | 165mm | 222mm | 40mm | 40mm |

*Note: Dimensions are shown ±½" Dimensions in parentheses are in mm*

| Cabinet Dimensions | LFMM431HL & LFMM432HL | | | LFMM433HL & LFMM434HL | | | LFMM435HL | | |
|---|---|---|---|---|---|---|---|---|---|
| | D | E | F | D | E | F | D | E | F |
| | 25" | 32" | 8" | 34" | 39" | 11" | 34" | 42" | 11" |
| | 635mm | 813mm | 203mm | 864mm | 991mm | 279mm | 864mm | 1067mm | 279mm |

## Ordering Information

| Valve | Inlets | Outlet | Order Code |
|---|---|---|---|
| LFLM490/LFMM431 | ¾" (20mm) | ¾" (20mm) | LFMM431HL |
| LFLM490/LFMM432 | ¾" (20mm) | 1" (25mm) | LFMM432HL |
| LFLM490/LFMM433 | 1-¼" (32mm) | 1-¼" (32mm) | LFMM433HL |
| LFLM490/LFMM434 | 1-¼" (32mm) | 1-½" (40mm) | LFMM434HL |
| LFMM431/LFMM434 | 1-¼" (32mm) | 1-½" (40mm) | LFMM435HL |




**Finish**

| | |
|---|---|
| Rough Bronze | A |
| Chrome Plated | B |

**Piping**

| | |
|---|---|
| Bottom/Top | E |

**Cabinets**

| | |
|---|---|
| Stainless Steel, Wall Mount | Q |
| Painted Steel, Wall Mount | U |

**Alarm**

| | |
|---|---|
| None | 0 |
| AquaSentry2 for LFMM431HL | 1 |
| AquaSentry2 for LFMM432HL | 2 |
| AquaSentry2 for LFMM433HL | 3 |
| AquaSentry2 for LFMM434HL | 4 |
| AquaSentry2 for LFMM435HL | 5 |

**View Port**

| | |
|---|---|
| None | 0 |
| Window | W |

## 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 include a stainless steel or painted steel cabinet. It shall include two thermostatic mixing valves capable of maintaining water temperature to 5°F (3°C) above set point. 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 include HydroGuard® XP LFMM430 and/or LFLM490 Series Master-Tempering Valve with advanced, paraffin-based actuation technology. 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.

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