POWERS

ES-P-SF-LFMM430-2V-HiLo-WMC

HYDROGUARD® XP Series LFMM430 2 Valve Hi/Lo Supply Fixture Wall Mount Cabinet

Product Specification

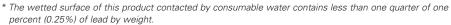
LEAD FREE*

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

Specifications **■**

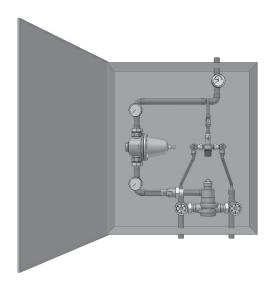
Connections	See chart on reverse
Maximum Hot Water Supply Temperature	200°F (93°C)
$\label{thm:minimum} \mbox{Minimum Hot Water Supply Temperature**} \ . \ .$	5°F (3°C) Above Set Point
Minimum Flow***	0.5 gpm (1.9 lpm)
Maximum Operating Pressure	125psi (861 kPa)
Temperature Adjustment Range****	90 - 160°F (32 - 71°C)
Hot Water Inlet Temperature Range	120 - 180°F (49 - 82°C)
Cold Water Inlet Temperature Range	$40-80^{\circ}F$ $(4-27^{\circ}C)$
Listing/Compliance (Valve Only)	ASSE 1017, CSA B125



^{**} With Equal Pressure

Capacity •

Flow Capacity at 50-50 Mixed Ratio										
	Pressure Drop Across Valve									
Model	Min. Flow	r	5psi	10psi	20psi	30psi	45psi	60psi		
iviouei	to ASSE 1017	C _v	(34 kPa)	(69 kPa)	(138 kPa)	(207 kPa)	(310 kPa)	(414 kPa)		
LFMM431HL	0.5 gpm	9.7	22 gpm	31 gpm	43 gpm	53 gpm	65 gpm	75 gpm		
LFIVIIVI431TL	1.89 lpm	9.7	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	10.0	44 gpm	63 gpm	86 gpm	108 gpm	133 gpm	153 gpm		
LFIVIIVI433FIL	1.89 lpm	19.8	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		
LLIMINIA94UF	1.89 lpm	24.9	212 lpm	299 lpm	420 lpm	515 lpm	632 lpm	731 lpm		
LENANAASELII	3.0 gpm	77.7	62 gpm	88 gpm	124 gpm	152 gpm	186 gpm	215 gpm		
LFMM435HL	11.0 lpm	27.7	235 lpm	333 lpm	469 lpm	575 lpm	704 lpm	814 lpm		









Advanced Thermal Activation

^{***} 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.

ES-P-SF-LFMM430-2V-HiLo-WMC

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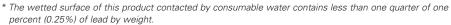
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Specifications **■**

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Minimum Flow***	0.5 gpm (1.9 lpm)
Maximum Operating Pressure	125psi (861 kPa)
Temperature Adjustment Range****	90 - 160°F (32 - 71°C)
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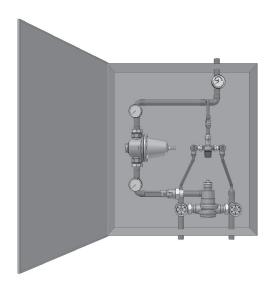
Listing/Compliance (Valve Only) ASSE 1017, CSA B125



^{**} With Equal Pressure

Capacity •

Flow Capacity at 50-50 Mixed Ratio										
	Pressure Drop Across Valve									
Model	Min. Flow	Cv	5psi	10psi	20psi	30psi	45psi	60psi		
Model	to ASSE 1017	Cγ	(34 kPa)	(69 kPa)	(138 kPa)	(207 kPa)	(310 kPa)	(414 kPa)		
LFMM431HL	0.5 gpm	9.7	22 gpm	31 gpm	43 gpm	53 gpm	65 gpm	75 gpm		
LFIVIIVI431HL	1.89 lpm	9.7	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		
LFIVIIVI432FIL	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		
LFIVIIVI433FIL	1.89 lpm	13.0	167 lpm	238 lpm	326 lpm	409 lpm	503 lpm	579 lpm		
LFMM434HL	0.5 gpm	24.0	56 gpm	79 gpm	111 gpm	136 gpm	167 gpm	193 gpm		
LFIVIIVI434FIL	1.89 lpm	24.9	212 lpm	299 lpm	420 lpm	515 lpm	632 lpm	731 lpm		
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LFMM435HL	11.0 lpm	27.7	235 lpm	333 lpm	469 lpm	575 lpm	704 lpm	814 lpm		







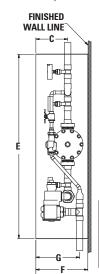


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Е



Outlet

Valve	Α	В	C	G	Inlets	Outlet
LFMM431HL	9-1/8"	3-5/8"	4-3/4"	6-3/4"	3/4"	3/4"
LI IVIIVI43 II IL	232mm	92mm	121mm	171mm	20mm	20mm
LFMM432HL	9-1/8"	3-1/8"	5"	6-3/4"	3/4"	1"
LFIVIIVI432FIL	232mm	79mm	127mm	171mm	20mm	25mm
LFMM433HL	12-1/2"	4-5/8"	6-3/4"	9-1/4"	1-1/4"	1-1/4"
LFIVIIVI433FIL	318mm	117mm	171mm	235mm	32mm	32mm
LFMM434HL	12-1/2"	2-1/2"	6-1/2"	8-3/4"	1-1/4"	1-1/2"
LFIVIIVI434FIL	318mm	64mm	165mm	222mm	32mm	40mm
LFMM435HL	12-1/2"	2-7/8"	6-1/2"	8-3/4"	1-1/4"	1-1/2"
LFIVIIVI433FIL	318mm	73mm	165mm	222mm	40mm	40mm

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

	LFMM431HL & LFMM432HL			LFMM4	33HL & LI	MM434HL	LFMM435HL		
Cabinet	D	E	F	D	E	F	D	E	F
Dimensions	25"	32"	8"	34"	39"	11"	34"	42"	11"
	635mm	813mm	203mm	864mm	991mm	279mm	864mm	1067mm	279mm

Ordering Information ■ Valve Inlets LFI M490/LFMM431 3/4" (20mg

LFLM490/LFMM431 3/4" (20mm) 3/4" (20mm)
LFLM490/LFMM432 3/4" (20mm) 1" (25mm)
LFLM490/LFMM433 1-1/4" (32mm) 1-1/4" (32mm)
LFLM490/LFMM434 1-1/4" (32mm) 1-1/2" (40mm)
LFMM431/LFMM434 1-1/4" (32mm) 1-1/2" (40mm)

LFMM431HL LFMM432HL LFMM433HL LFMM434HL LFMM435HL

Α

В

N

Order Code

Piping

Finish Rough Bronze

Bottom/Top

Chrome Plated

Cabinets

Stainless Steel, Wall Mount Painted Steel, Wall Mount

Alarm

None

View Port

None Window

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, LFMM433HL, and 3.0 gpm (11 lpm) for LFMM435HL.

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

ENGINEERING APPROVAL
Project:
Contractor:
Architect/Engineer:

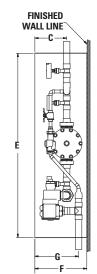




SO 9001-2000

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E



Valve	Α	В	С	G	Inlets	Outlet
LFMM431HL	9-1/8"	3-5/8"	4-3/4"	6-3/4"	3/4"	3/4"
LFIVIIVI431TIL	232mm	92mm	121mm	171mm	20mm	20mm
LFMM432HL	9-1/8"	3-1/8"	5"	6-3/4"	3/4"	1"
LFIVIIVI432FIL	232mm	79mm	127mm	171mm	20mm	25mm
LFMM433HL	12-1/2"	4-5/8"	6-3/4"	9-1/4"	1-1/4"	1-1/4"
LFIVIIVI433FIL	318mm	117mm	171mm	235mm	32mm	32mm
LFMM434HL	12-1/2"	2-1/2"	6-1/2"	8-3/4"	1-1/4"	1-1/2"
LFIVIIVI434FIL	318mm	64mm	165mm	222mm	32mm	40mm
LFMM435HL	12-1/2"	2-7/8"	6-1/2"	8-3/4"	1-1/4"	1-1/2"
LFIVIIVI433TL	318mm	73mm	165mm	222mm	40mm	40mm

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

	LFMM43	1HL & LF	MM432HL	LFMM4	33HL & LF	MM434HL	LFMM435HL		
Cabinet	D	Е	F	D	E	F	D	E	F
Dimensions	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	3/4" (20mm)	3/4" (20mm)	LFMM431HL	
LFLM490/LFMM432	3/4" (20mm)	1" (25mm)	LFMM432HL	
LFLM490/LFMM433 LFLM490/LFMM434	1-1/4" (32mm) 1-1/4" (32mm)	1-1/4" (32mm) 1-1/2" (40mm)	LFMM433HL - LFMM434HL	
LFMM431/LFMM434		1-1/2" (40mm)	LFMM435HL	
Finish				
Rough Bronze			А	
Chrome Plated			A B	
Piping				
Bottom/Top			E -	
·			'	
Cabinets Stainless Steel, Wall	Mount		0	
Painted Steel, Wall M			Ü	
Alauma				
Alarm None			0 -	
140110			3	
View Port			0	
None			0 [

W

Recirculation Piping Diagram ■

Window

Please see Piping Diagram Section of this catalog.

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