

## Two Valve PowerStation™ Capacity up to 271 gpm @ 45psi

### Product Specification

# LEAD FREE\*

#### Features ■

- Features Lead Free\* construction to comply with low lead installation requirements.
- Paraffin-based advance 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
- Mounted on heavy-duty welded struts and factory tested as a complete unit
- Includes Pressure/Temperature Gauges, Ball valves
- Internal bypass loop for quick & easy set-up

#### Specifications ■

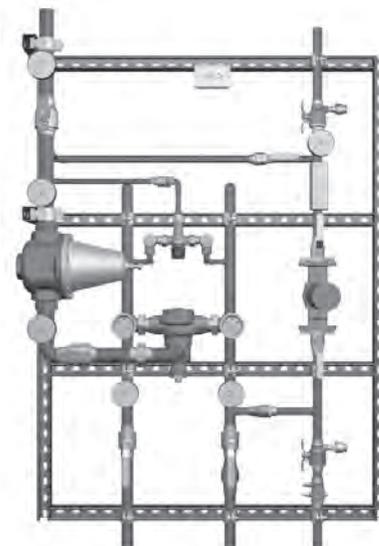
Connections ..... See ordering information  
 Maximum Operating Pressure ..... 125psi (861 kPa)  
 Maximum Hot Water Supply Temperature .... 200°F (93°C)  
 Minimum Hot Water Supply Temperature\*\* .. 5°F (3°C) above set point  
 Hot Water Inlet Temperature Range ..... 120 – 180°F (49 – 82°C)  
 Cold Water Inlet Temperature Range ..... 40 – 80°F (4 – 27°C)  
 Minimum Flow\*\*\* ..... 0.5 gpm (1.89 lpm)  
 Temperature Adjustment Range\*\*\*\* ..... 90 – 160°F (32 – 71°C)  
 Listing/Compliance–Valves 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 2VPS is installed at or near hot water source 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.

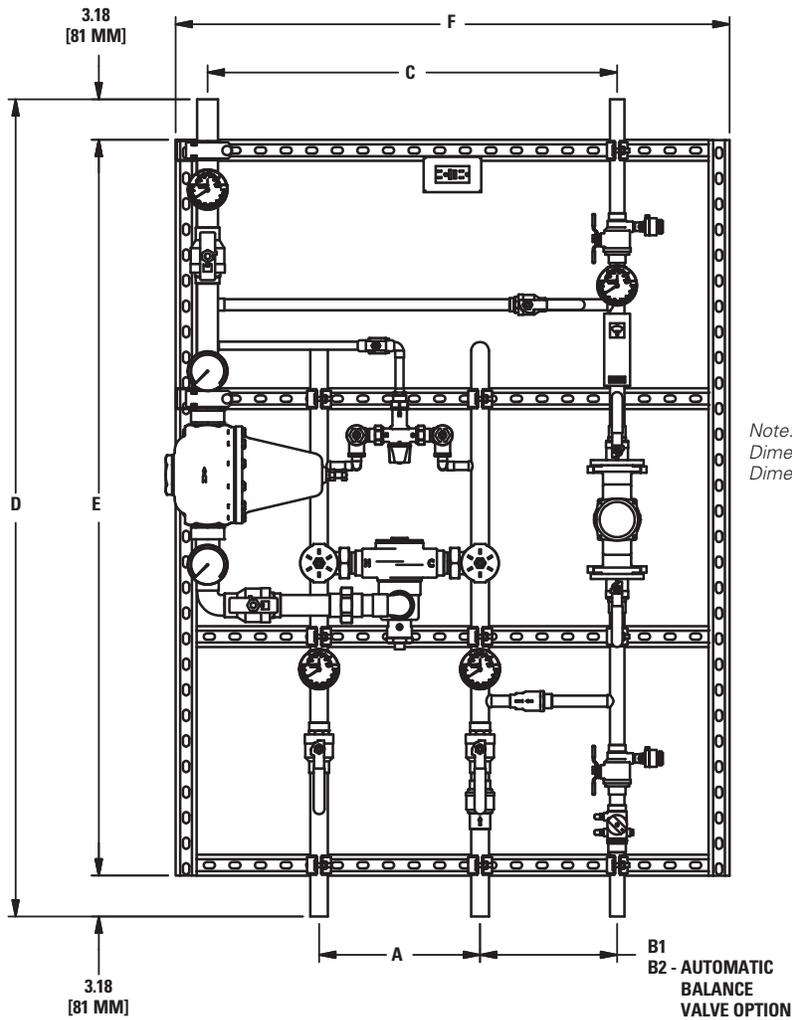


Advanced Thermal Activation

#### Capacity ■

Flow Capacity at 50-50 Mixed Ratio								
		Pressure Drop Across Valve						
Model	Min. Flow to ASSE 1017	Cv	5psi (34 kPa)	10psi (69 kPa)	20psi (138 kPa)	30psi (207 kPa)	45psi (310 kPa)	60psi (414 kPa)
LFMM431HL	0.5 gpm 1.89 lpm	9.70	22 gpm 83 lpm	31 gpm 117 lpm	43 gpm 163 lpm	53 gpm 201 lpm	65 gpm 246 lpm	75 gpm 284 lpm
LFMM432HL	0.5 gpm 1.89 lpm	13.00	29 gpm 110 lpm	41 gpm 155 lpm	58 gpm 220 lpm	66 gpm 250 lpm	87 gpm 329 lpm	93 gpm 352 lpm
LFMM433HL	0.5 gpm 1.89 lpm	19.80	44 gpm 167 lpm	63 gpm 238 lpm	86 gpm 326 lpm	108 gpm 409 lpm	133 gpm 503 lpm	153 gpm 579 lpm
LFMM434HL	0.5 gpm 1.89 lpm	24.90	56 gpm 212 lpm	79 gpm 299 lpm	111 gpm 420 lpm	136 gpm 515 lpm	167 gpm 632 lpm	193 gpm 731 lpm
LFMM435HL	3.0 gpm 11.0 lpm	27.70	62 gpm 235 lpm	88 gpm 333 lpm	124 gpm 469 lpm	152 gpm 575 lpm	186 gpm 704 lpm	215 gpm 814 lpm
LFSH1432DV	2 gpm 8 lpm	27.40	61 gpm 231 lpm	87 gpm 329 lpm	123 gpm 466 lpm	150 gpm 568 lpm	184 gpm 697 lpm	213 gpm 806 lpm
LFSH1434DV	2 gpm 8 lpm	37.40	84 gpm 318 lpm	118 gpm 447 lpm	167 gpm 632 lpm	205 gpm 776 lpm	251 gpm 950 lpm	290 gpm 1098 lpm
LFSH1432HL	1 gpm 4 lpm	30.00	67 gpm 254 lpm	95 gpm 360 lpm	134 gpm 507 lpm	164 gpm 621 lpm	201 gpm 761 lpm	232 gpm 878 lpm
LFSH1434HL	1 gpm 4 lpm	40.40	90 gpm 341 lpm	128 gpm 485 lpm	181 gpm 685 lpm	221 gpm 837 lpm	271 gpm 1026 lpm	313 gpm 1185 lpm

**Dimensions ■**



Valve	Inlets	Outlets	A	B1	B2	C	D	E	F
LFMM431HL	3/4"	3/4"	9-1/8"	10-3/8"	14-3/8"	24"	56-1/2"	50-1/8"	35-1/4"
	20 mm	20 mm	233 mm	264 mm	365 mm	610 mm	1435 mm	1274 mm	895 mm
LFMM432HL	3/4"	1"	9-1/8"	10-3/8"	14-3/8"	24"	56-1/2"	50-1/8"	35-1/4"
	20 mm	25 mm	233 mm	264 mm	365 mm	610 mm	1435 mm	1274 mm	895 mm
LFMM433HL	1-1/4"	1-1/4"	12-5/8"	10-3/4"	14-3/4"	32"	63-7/8"	57-1/2"	43 1/4"
	32 mm	32 mm	320 mm	272 mm	373 mm	813 mm	1623 mm	1461 mm	1099 mm
LFMM434HL	1-1/4"	1-1/2"	12-5/8"	10-3/4"	14-3/4"	32"	63-7/8"	57-1/2"	43-1/4"
	32 mm	40 mm	320 mm	272 mm	373 mm	813 mm	1623 mm	1461 mm	1099 mm
LFMM435HL	1-1/4"	1-1/2"	12-5/8"	10-3/4"	14-3/4"	32"	63-7/8"	57-1/2"	43-1/4"
	32 mm	40 mm	320 mm	272 mm	373 mm	813 mm	1623 mm	1461 mm	1099 mm
LFSH1432HL	1-1/2"	2"	12-5/8"	10-3/4"	14-3/4"	30-1/2"	63-7/8"	57-1/2"	41-1/4"
	40 mm	50 mm	320 mm	272 mm	373 mm	775 mm	1623 mm	1461 mm	1048 mm
LFSH1432DV	1-1/2"	2"	12-5/8"	10-3/4"	14-3/4"	30-1/2"	63-7/8"	57-1/2"	41-1/4"
	40 mm	50 mm	320 mm	272 mm	373 mm	775 mm	1623 mm	1461 mm	1048 mm
LFSH1434HL	2"	2-1/2"	12-5/8"	10-3/4"	14-3/4"	30-1/2"	63-7/8"	57-1/2"	43-1/4"
	50 mm	65 mm	320 mm	272 mm	373 mm	775 mm	1623 mm	1461 mm	1099 mm
LFSH1434DV	2"	2-1/2"	12-5/8"	10-3/4"	14-3/4"	30-1/2"	63-7/8"	57-1/2"	43-1/4"
	50 mm	65 mm	320 mm	272 mm	373 mm	775 mm	1623 mm	1461 mm	1099 mm

## Ordering Information ■

Valve	Inlets (in)	Outlet (in)	Order Code	L	F	P	S					
LFMM431HL	3/4 (20mm)	3/4 (20mm)	H									
LFMM432HL	3/4 (20mm)	1 (25mm)	J									
LFMM433HL	1 1/4 (32mm)	1 1/4 (32mm)	K									
LFMM434HL	1 1/4 (32mm)	1 1/2 (40mm)	L									
LFMM435HL	1 1/4 (32mm)	1 1/2 (40mm)	M									
LFSH1432HL	1 1/2 (40mm)	2 (50mm)	P									
LFSH1434HL	2 (50mm)	2 1/2 (65mm)	Q									
LFSH1432DV	1 1/2 (40mm)	2 (50mm)	S									
LFSH1434DV	2 (50mm)	2 1/2 (65mm)	T									
<b>Controls</b>												
None			O									
Aquastat			A									
<b>Balancing Valve</b>												
None			O									
Automatic Balancing Valve			B									
<b>Return Pipe Size</b>												
1/2"			A									
3/4"			B									
1"			C									
1-1/4"			D									
1-1/2"			E									
2"			F									
<b>Assigned by Factory</b>												
<b>Pump Information:</b>												
Pump Manufacturer: _____												
Their Part #* _____												

\* If the pump is not selected or if you are using Automatic Balancing Valve (ABV), the following must be provided:  
 System Head Loss \_\_\_\_\_  
 Required Flow to Maintain Recirculating Temperature \_\_\_\_\_

## Recirculation Piping Diagram ■

Please see Piping Diagram Section of this catalog.

## Typical Specification ■

Water temperature control system should include two thermostatic mixing valves capable of maintaining water temperature to 5°F (3°C) above set point within the range of 90°F to 160°F (32 to 71°C). Valve must compensate for temperature fluctuation due to inlet temperature or pressure changes. 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. Valve should have triple-duty checkstops and must have an advanced, paraffin-based thermal actuator in order to guarantee a precise control when tested in accordance with ASSE 1017 & CSA B125. Control system should be mounted on a heavy-duty welded strut with corrosion resistant coating and factory tested as a complete unit. System should include an internal bypass loop for fast and easy set up. It should also include GFCI protection, engineer specified circulator, and combination temperature/pressure gauges. The system should feature optional Aquastat and Automatic Balancing valve to maintain system balance. The control system shall be a Powers' Power Station Series PSLF. Any alternate must have a written approval prior to bidding.

### ENGINEERING APPROVAL

Project: \_\_\_\_\_

Contractor: \_\_\_\_\_

Architect/Engineer: \_\_\_\_\_

# POWERS™

A Watts Water Technologies Company



**ISO 9001-2008**  
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