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

HydroGuard[®] XP Master Tempering Valves

Series LFMM430

Features

- Lead Free* brass body and checkstops for durability and to comply with Lead Free* installation requirements.
- Valve utilizes 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
- Rotatable union triple-duty checkstops
- 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	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/re-circulated tempered water with a properly sized continuously operating re-circulating pump

Capacity

Flow Capacity at 50-50 mixed ratio									
		Pressure Drop Across Valve							
Model	Min. Flow		5psi	10psi	20psi	30psi	45psi	60psi	70psi
	to ASSE 1017	Cv	(34 kPa)	(69 kPa)	(138 kPa)	(207 kPa)	(310 kPa)	(414 kPa)	(517 kPa)
LFMM431	3 gpm	6.32	14 gpm	20 gpm	28 gpm	35 gpm	42 gpm	49 gpm	53 gpm
	11 lpm		53 lpm	76 lpm	106 lpm	132 lpm	159 lpm	185 lpm	201 lpm
LFMM432	4 gpm	9.49	21 gpm	30 gpm	42 gpm	52 gpm	64 gpm	74 gpm	79 gpm
	15 lpm		80 lpm	114 lpm	159 lpm	197 lpm	242 lpm	280 lpm	299 lpm
LFMM433	5 gpm	16.44	37 gpm	52 gpm	74 gpm	90 gpm	110 gpm	127 gpm	138 gpm
	19 lpm		140 lpm	197 lpm	280 lpm	341 lpm	416 lpm	481 lpm	522 lpm
LFMM434	7 gpm	21.50	48 gpm	68 gpm	96 gpm	118 gpm	144 gpm	167 gpm	180 gpm
	26 lpm		182 lpm	257 lpm	363 lpm	447 lpm	545 lpm	632 lpm	681 lpm
LFMM435	10 gpm	31.00	69 gpm	98 gpm	139 gpm	170 gpm	208 gpm	240 gpm	259 gpm
	38 lpm		261 lpm	371 lpm	526 lpm	644 lpm	787 lpm	908 lpm	980 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.





Valve	Α	В	C	D	E	F	G
LFMM431	9-7⁄16"	4-3⁄4"	11-5⁄8"	1-%"	4"	3-1⁄4"	1-5⁄8"
	(240)	(121)	(295)	(48)	(102)	(83)	(41)
	9-7⁄16"	4-3⁄4"	11-5⁄8"	1-%"	4"	3-1⁄4"	1-5⁄8"
LFMM432	(240)	(121)	(295)	(48)	(102)	(83)	(41)
LFMM433	12-1⁄4"	7"	15-¼"	2-1⁄2"	5-3⁄4"	3-1⁄2"	2-1⁄16"
LFIVIIVI433	(311)	(178)	(387)	(64)	(146)	(89)	(52)
	12-¼"	7"	15-1⁄4"	2-1⁄2"	5-¾"	3-1⁄2"	2-1/16"
LFMM434	(311)	(178)	(387)	(64)	(146)	(89)	(52)
LFMM435	15-%"	7-1⁄8"	19-¼"	2-¾"	7-%"	4-3⁄8"	2-3⁄8"
	(397)	(181)	(489)	(70)	(200)	(111)	(60)

Valve	Inlets NPT	Outlet NPT
LFMM431	3⁄4"	3⁄4"
LFMM432	3⁄4"	1"
LFMM433	1-1⁄4"	1-¼"
LFMM434	1-1⁄4"	1-1⁄2"
LFMM435	2"	2"
lata		

Note:

Dimensions are shown $\pm \frac{1}{4}$ " Dimensions in brackets are in mm

Ordering Information

Valve	Order Code
42 gpm (159 lpm)	LFMM431
64 gpm (242 lpm)	LFMM432
110 gpm (416 lpm)	LFMM433
144 gpm (545 lpm)	LFMM434
208 gpm (787 lpm)	LFMM435
Finish/ Temperatur	e Range
Rough Bronze, Standard	1
Chrome Plated, Standard	2
Rough Bronze, Low	3
Chrome Plated, Low	4

Recirculating Piping Diagram

Please see Piping Diagram Section of this Catalog.

Typical Specification

Master mixing valve shall feature paraffin-based, thermal actuation technology for precise temperature control. Valve shall be listed to ASSE 1017 and certified to CSA B125 and have an approach temperature of 5° F (3°C). Valve shall have an outlet temperature range from 90 – 160°F (32 – 71°C) with a lockable temperature-setting feature. Body shall be constructed using Lead Free* brass material which shall comply with state codes and standards, where applicable, requiring reduced lead content. Valve shall also be manufactured of corrosion resistant materials and feature a single-seat design for positive shutoff. Valves shall come standard with union check stops. 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).

Master mixing valves shall be of Powers series LFMM430. Any alternate must have a written approval prior to bidding.

