

**HYDROGUARD® XP Master Tempering Valves Supply Fixture
Series MM430 Bottom Inlets/Top Outlet – Exposed**

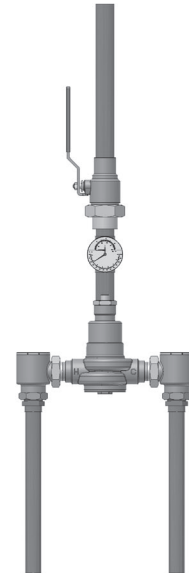
Product Specification

Features ■

- 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 valve and piping
- Rotatable union triple-duty checkstops with filters, dial-thermometer, ball valve
- 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 125psi (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–Valve Only..... ASSE 1017, CSA B125



Advanced Thermal Activation

*With equal pressure

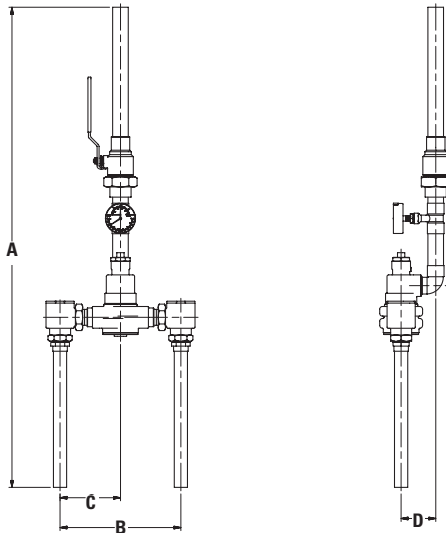
**Minimum flow when the valve is installed at or near hot water source w/recirculated tempered water with a properly sized continuously operating recirculating pump

***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	Cv	5psi (34 kPa)	10psi (69 kPa)	20psi (138 kPa)	30psi (207 kPa)	45psi (310 kPa)	60psi (414 kPa)
MM431	3 gpm 11 lpm	6.32	14 gpm 53 lpm	20 gpm 76 lpm	28 gpm 106 lpm	35 gpm 132 lpm	42 gpm 159 lpm	49 gpm 185 lpm
MM432	4 gpm 15 lpm	9.49	21 gpm 80 lpm	30 gpm 114 lpm	42 gpm 159 lpm	52 gpm 197 lpm	64 gpm 242 lpm	74 gpm 280 lpm
MM433	5 gpm 19 lpm	16.44	37 gpm 140 lpm	52 gpm 197 lpm	74 gpm 280 lpm	90 gpm 341 lpm	110 gpm 416 lpm	127 gpm 481 lpm
MM434	7 gpm 26 lpm	21.50	48 gpm 182 lpm	68 gpm 257 lpm	96 gpm 363 lpm	118 gpm 447 lpm	144 gpm 545 lpm	167 gpm 632 lpm
MM435	10 gpm 38 lpm	31.00	69 gpm 261 lpm	98 gpm 371 lpm	139 gpm 526 lpm	170 gpm 644 lpm	208 gpm 787 lpm	240 gpm 908 lpm

Dimensions ■

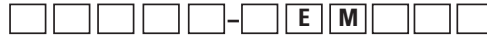


Valve	A	B	C	D
MM431	40" (1016)	9-1/8" (232)	4-1/2" (114)	2-5/8" (67)
MM432	40" (1016)	9-1/8" (232)	4-1/2" (114)	2-3/4" (70)
MM433	50" (1270)	12-5/8" (321)	6-1/4" (159)	3-3/8" (86)
MM434	50" (1270)	12-5/8" (321)	6-1/4" (159)	3-5/8" (92)
MM435	60-3/4" (1543)	15-5/8" (397)	7-7/8" (200)	4-1/4" (108)

Valve	Inlets	Outlet
MM431	3/4" (20)	3/4" (20)
MM432	3/4" (20)	1" (25)
MM433	1-1/4" (32)	1-1/4" (32)
MM434	1-1/4" (32)	1-1/2" (40)
MM435	2" (50)	2" (50)

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

Ordering Information ■



Valve

42 gpm (159 lpm)
64 gpm (242 lpm)
110 gpm (416 lpm)
144 gpm (545 lpm)
208 gpm (787 lpm)

Order Code

MM431
MM432
MM433
MM434
MM435

Finish

Rough Bronze
Chrome Plated

A
C

Piping Inlets/Outlet

Bottom/Top

E

Cabinet Style

None

M

Alarm System

None
AquaSentry® 2 Alarm System

Order Code

0
4

Option

None
Cold Water Bypass
T/P Gauge on Inlets
C/W Bypass & T/P Gauge on Inlets

0
2
4
6

Temperature Range

90°F - 160°F (32°C - 71°C)
60°F - 90°F (16°C - 32°C)

S
W

Recirculation Piping Diagram ■

Please see Piping Diagram Section of this catalog.

Typical Specification - Supply Fixtures ■

Supply Fixture shall be factory assembled and tested and feature a HydroGuard® XP MM430 series master-tempering valve with advanced, paraffin-based actuation technology. Supply fixture 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), a single seat design for positive shutoff and an approach temperature of 5°F (3°C). Valve shall be ASSE 1017 listed and CSA certified. Minimum flows to ASSE 1017 shall be MM431 (3.0 gpm, 11 lpm), MM432 (4.0 gpm, 15 lpm), MM433 (5.0 gpm, 19 lpm), MM434 (7.0 gpm, 26 lpm), MM435 (10.0 gpm, 38 lpm).

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

POWERS™

A Watts Water Technologies Company

ENGINEERING APPROVAL	
Project:	_____
Contractor:	_____
Architect/Engineer:	_____



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