

For Non-Health Hazard Applications

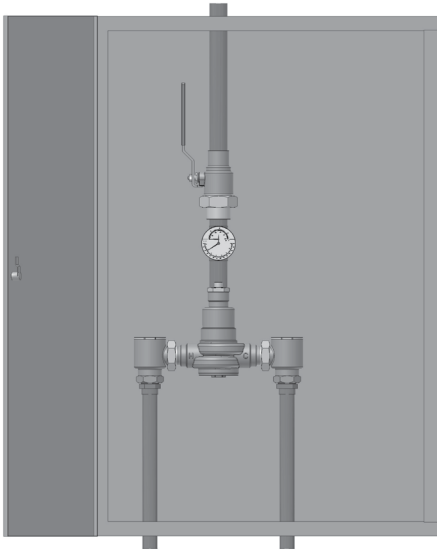
Job Name _____ Contractor _____
Job Location _____ Approval _____
Engineer _____ Contractor's P.O. No. _____
Approval _____ Representative _____

HydroGuard® XP Master Tempering Valves Supply Fixture

Series MM430 Bottom Inlets/Top Outlet – Wall Mounted Cabinet

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
- Stainless steel or white painted cabinets
- Factory tested valve and piping
- Rotatable union triple-duty checkstops with filters, dial-thermometer, ball valve
- Rough bronze and chrome finishes



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*** 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

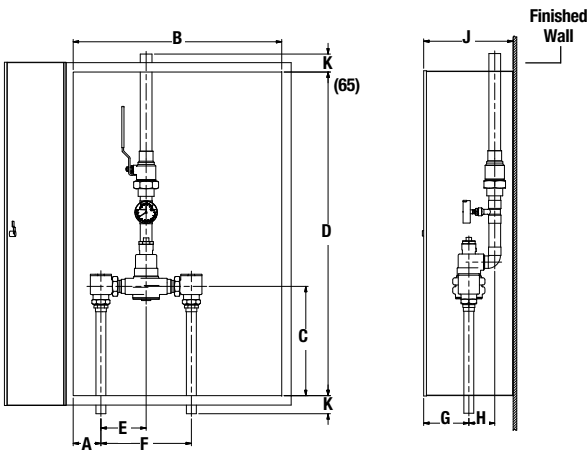
**With equal pressure*
 **Minimum flow when the valve is installed at or near hot water source w/ recirculated tempered water with a properly sized continuously operating recirculating pump
 ***Note: Low limit cannot be less than the cold water temperature. For best operation, hot water should be at least 5°F (3°C) above desired set point.

Capacity

Flow Capacity at 50-50 Mixed Ratio								
Model	Min. Flow to ASSE 1017	Cv	Pressure Drop Across Valve					
			5 psi (34 kPa)	10 psi (69 kPa)	20 psi (138 kPa)	30 psi (207 kPa)	45 psi (310 kPa)	60 psi (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

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.

Dimensions



Valve	A	B	C	D	E	F	G	H	J	K
MM431	3-1/2" (89)	20" (508)	9-1/4" (235)	36" (914)	4-5/8" (117)	9-1/4" (235)	4-5/8" (117)	2-5/8" (67)	9" (229)	2" (50)
MM432	3-1/2" (89)	20" (508)	9-1/4" (235)	36" (914)	4-5/8" (117)	9-1/4" (235)	4-5/8" (117)	2-3/4" (70)	9" (229)	2" (50)
MM433	3-7/8" (98)	29" (737)	10-1/4" (260)	45" (1143)	6-1/4" (159)	12-1/2" (318)	5-7/8" (149)	3-3/8" (86)	12" (305)	2-1/2" (64)
MM434	3-7/8" (98)	29" (737)	10-1/4" (260)	45" (1143)	6-1/4" (159)	12-1/2" (318)	5-7/8" (149)	3-5/8" (92)	12" (305)	2-1/2" (64)
MM435	4-1/8" (105)	38" (965)	13-5/8" (346)	55-3/4" (1416)	7-7/8" (200)	15-3/4" (400)	6" (152)	4-1/4" (108)	13" (330)	2-1/2" (64)

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

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)

Ordering Information

Valve		Order Code	
42 gpm (159 lpm)	MM431	<input type="checkbox"/>	<input type="checkbox"/>
64 gpm (242 lpm)	MM432	<input type="checkbox"/>	<input type="checkbox"/>
110 gpm (416 lpm)	MM433	<input type="checkbox"/>	<input type="checkbox"/>
144 gpm (545 lpm)	MM434	<input type="checkbox"/>	<input type="checkbox"/>
208 gpm (787 lpm)	MM435	<input type="checkbox"/>	<input type="checkbox"/>

Finish		Order Code	
Rough Bronze	A	<input type="checkbox"/>	<input type="checkbox"/>
Chrome Plated	C	<input type="checkbox"/>	<input type="checkbox"/>

Piping Inlets/Outlet		Order Code	
Bottom/Top	E	<input type="checkbox"/>	<input type="checkbox"/>

Cabinet Style		Order Code	
Stainless Steel, Wall Mount	Q	<input type="checkbox"/>	<input type="checkbox"/>
Painted, Wall Mount	U	<input type="checkbox"/>	<input type="checkbox"/>

View Port		Order Code	
None		<input type="checkbox"/>	<input type="checkbox"/>
Window		<input type="checkbox"/>	<input type="checkbox"/>

Alarm System		Order Code	
None		<input type="checkbox"/>	<input type="checkbox"/>
AquaSentry® 2 Alarm System		<input type="checkbox"/>	<input type="checkbox"/>

Option		Order Code	
None		<input type="checkbox"/>	<input type="checkbox"/>
Cold Water Bypass		<input type="checkbox"/>	<input type="checkbox"/>
T/P Gauge on Inlets		<input type="checkbox"/>	<input type="checkbox"/>
C/W Bypass & T/P Gauge on Inlets		<input type="checkbox"/>	<input type="checkbox"/>

Temperature Range		Order Code	
90°F – 160°F (32°C – 71°C)		<input type="checkbox"/>	<input type="checkbox"/>
60°F – 90°F (16°C – 32°C)		<input type="checkbox"/>	<input type="checkbox"/>

Recirculation Piping Diagram

Please see Piping Diagram Section of this catalog.

Typical Specification — Supply Fixtures

Cabinet Supply Fixture (CSF) shall be factory assembled and tested and include a stainless steel or painted steel cabinet. CSF shall feature a HydroGuard® XP MM430 series master-tempering valve with advanced paraffin-based actuation technology. CSF 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, 27 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 Brand

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