

# HYDROGUARD® XP Master Tempering Valves Supply Fixture Series MM430 Bottom Inlets/Bottom Outlet – Wall Mounted Cabinet

# **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
- 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

# 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  $60 - 90^{\circ}F (16 - 32^{\circ}C)$ 

Hot Water Inlet Temperature Range . . . . . . . . . 120 – 180°F (49 – 82°C)

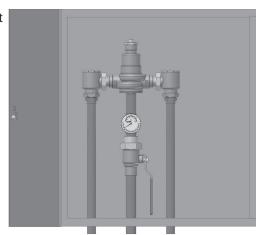
Cold Water Inlet Temperature Range ........  $40 - 80^{\circ}F$   $(4 - 27^{\circ}C)$ 

Listing/Compliance-Valve Only..... ASSE 1017, CSA B125

## Capacity ■

Flow Capacity at 50-50 Mixed Ratio								
		Pressure Drop Across Valve						
Model	Min. Flow		5psi	10psi	20psi	30psi	45psi	60psi
wodei	to ASSE 1017	Cv	(34 kPa)	(69 kPa)	(69 kPa)	(207 kPa)	(310 kPa)	(414 kPa)
MM431	3 gpm	6.32	14 gpm	20 gpm	28 gpm	35 gpm	42 gpm	49 gpm
IVIIVI431	11 lpm		53 lpm	76 lpm	106 lpm	132 lpm	159 lpm	185 lpm
MM432	4 gpm	9.49	21 gpm	30 gpm	42 gpm	52 gpm	64 gpm	74 gpm
IVIIVI432	15 lpm		80 lpm	114 lpm	159 lpm	197 lpm	242 lpm	280 lpm
MM433	5 gpm	16.44	37 gpm	52 gpm	74 gpm	90 gpm	110 gpm	127 gpm
IVIIVI433	19 lpm		140 lpm	197 lpm	280 lpm	341 lpm	416 lpm	481 lpm
N.A.N.A.D.A.	7 gpm	21.50	48 gpm	68 gpm	96 gpm	118 gpm	144 gpm	167 gpm
MM434	26 lpm		182 lpm	257 lpm	363 lpm	447 lpm	545 lpm	632 lpm
MM435	10 gpm	31.00	69 gpm	98 gpm	139 gpm	170 gpm	208 gpm	240 gpm
	38 lpm		261 lpm	371 lpm	526 lpm	644 lpm	787 lpm	908 lpm











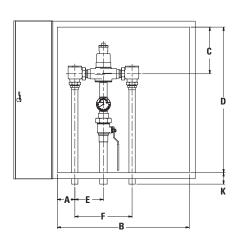
Advanced Thermal Activation

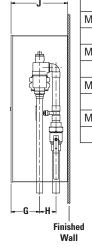
<sup>\*</sup>With equal pressure

<sup>\*\*</sup>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

<sup>\*\*\*</sup>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.

#### **Dimensions** ■





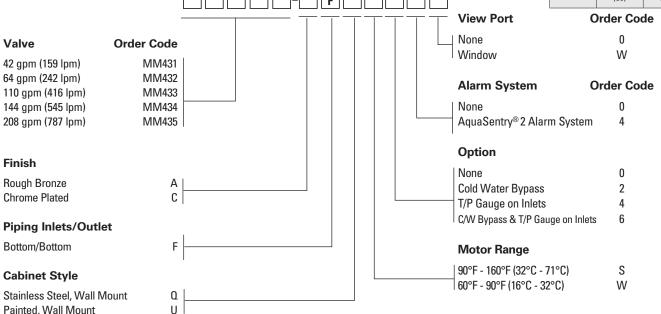
Valve	Α	В	С	D	E	F	G	Н	J	K
MM431	3-1/2"	20"	9-1/4"	24"	4-5/8"	9-1/4"	4-5/8"	2-5/8"	9"	2"
	(89)	(508)	(235)	(610)	(117)	(235)	(117)	(67)	(229)	(50)
MM432	3-1/2"	20"	9-1/4"	24"	4-5/8"	9-1/4"	4-5/8"	2-3/4"	9"	2"
	(89)	(508)	(235)	(610)	(117)	(235)	(117)	(70)	(229)	(50)
MM433	3-7/8"	29"	10-1/4"	32"	6-1/4"	12-1/2"	5-7/8"	3-3/8"	12"	2-1/2"
	(98)	(737)	(260)	(813)	(159)	(318)	(149)	(86)	(305)	(64)
MM434	3-7/8"	29"	10-1/4"	32"	6-1/4"	12-1/2"	5-7/8"	3-5/8"	12"	2-1/2"
	(98)	(737)	(260)	(813)	(159)	(318)	(149)	(92)	(305)	(64)
MM435	4-1/8"	38"	13-5/8"	38"	7-7/8"	15-3/4"	6"	4-1/4"	13"	2-1/2"
	(105)	(965)	(346)	(965)	(200)	(400)	(152)	(108)	(330)	(64)

Note:

Dimensions are shown  $\pm 1/2''$ 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 •



### **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), MM432 (4.0 gpm), MM433 (5.0 gpm), MM434 (7.0 gpm), MM435 (10.0 gpm).

ENGINEERING APPROVAL				
Project:				
Contractor:				
Architect/Engineer:				

Valve shall be a Powers model \_\_\_\_\_. All alternatives must have written approval prior to bidding.





SO 9001-2000 CERTIFIED