



# Masterguard® 800 Series—Lead Free

## DESCRIPTION

The **Masterguard Series** is a High Flow Temperature Actuated Mixing Valve that mixes hot water with cold to deliver tempered water at a controlled temperature up to 150°F (65°C) maximum.

The **Masterguards** are central mixers intended for installation in the plant room of commercial and industrial facilities to distribute controlled temperature water to the domestic hot water system of a whole building or a section of the building.

The **Masterguard** incorporates a fast acting, high quality thermostatic element that senses the outlet water temperature and reacts to maintain a stable delivery temperature even under changing flows or variations in supply temperatures. The valve also greatly reduces the outlet flow in the event of a cold water supply failure.

The **Masterguard** features a robust design based on the expertise gained from years of experience in the design and manufacture of safety valves. Every valve is tested for performance on an automated testing station during the assembly process. The valves are third party listed to ASSE 1017 and CSA B 125.3 standards.

The **Masterguard** valves have an adjusting knob that can be locked at a desired temperature. Alternatively it can function in an adjusting mode, with the handle clearly marked to indicate the direction to turn to achieve hotter or colder water temperatures.

Each valve has integral mounting feet to allow it to be securely fixed to a wall or frame.

The **Masterguard** is shipped complete as a kit with 4-in-1 service fittings (integral ball valve, strainer, gauge/flushing port and check valves) on each inlet. The service fittings have a female inlet thread that secure to the base through union connections. The mix water outlet is female NPT. The **Masterguard** series are available in sizes from ¾" to 2".



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## FEATURES AND BENEFITS

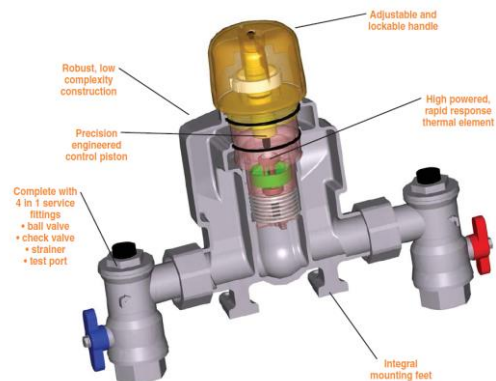
Accurate temperature control, even at very low flows.  
*Faster to commission, greater user comfort and safety.*

Integral mounting feet on valve body:  
*No extra brackets to buy, lower cost and more secure installation.*

Fast reaction to changes in flow rate or supply temperature:  
*Constant outlet temperature for greater comfort!*

Robust, low complexity construction:  
*Superior reliability, improved user safety.*

Listed by IAPMO and ASSE:  
*Inspector friendly, peace of mind!*



## SPECIFICATION

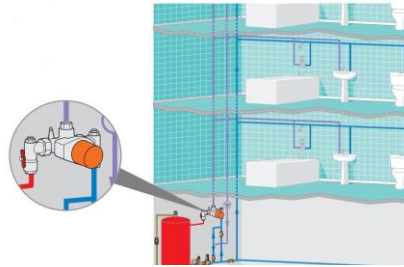
A Temperature Actuated Mixing Valve shall be installed at hot water source to distribute tempered water throughout the domestic hot water system at a maximum temperature of 150°F (65°C). The valve shall have a thermostatic control mechanism based on the expanding wax principle and shall have integral mounting feet. The valve shall be certified to ASSE 1017, CSA B 125.3, NSF 372 and NSF/ANSI 61 standards and shall be listed by a third party. The valve shall be complete with integral ball valve isolators, strainers, check valves and gauge/flushing ports on each inlet. The valve shall be a Cash Acme Masterguard®.



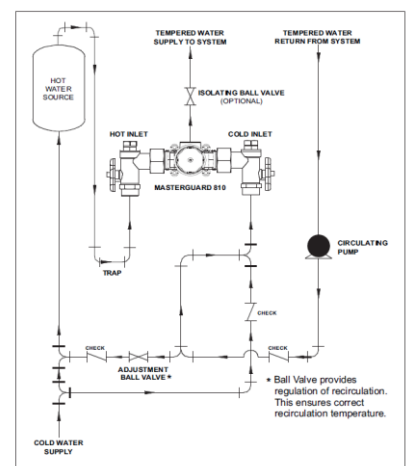
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## TYPICAL INSTALLATION

The **Masterguards** are central mixers intended for installation in the plant room of commercial and industrial facilities to distribute controlled temperature water to the domestic hot water system of a whole building or section of a building.



RECIRCULATION PIPING DIAGRAM



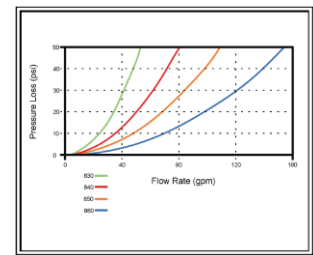
## SPECIFICATION DATA

### Performance:

Outlet temperature range	95 – 150°F (35 – 65°C)
Factory set temp. range	117.5°F ± 3.6°F (47.5°C ± 2°C)
Temp. hot supply	120 – 180°F (48.9 – 82.2°C)
Temp. cold supply	39 – 80°F (3.9 – 26.7°C)
Maximum pressure	145 psi (1000 kPa)

### Materials:

Body	Bronze
Seals	EPDM
Springs	Stainless Steel
Internal cap	Brass
Piston	Engineered Polymer
Guide tube	Noryl GFN2



### Measurement in inches

Product	Inlet (NPT)	Outlet (NPT)	Flow @ 45 psi	Min flow rate	A	B	C	D	E	F	G	H
830	3/4"	1"	51 gpm	4 gpm	10.6	3.2	10.3	13.8	1.7	6.5	3.5	2.7
840	1"	1 1/4"	75 gpm	8 gpm	11.0	3.6	10.3	13.8	1.7	6.5	3.5	2.8
850	1 1/4"	1 1/2"	105 gpm	13 gpm	13.2	4.2	14.6	19.8	2.5	9.3	5.1	2.7
860	1 1/2"	2"	149 gpm	18.5 gpm	13.7	4.7	14.6	19.8	2.5	9.3	5.1	1.9

## AVAILABLE CONNECTIONS

Product	Inlet (NPT) x Outlet (NPT)
Masterguard® 830	3/4" x 1"
Masterguard® 840	1" x 1 1/4"
Masterguard® 850	1 1/4" x 1 1/2"
Masterguard® 860	1 1/2" x 2"

## CERTIFICATIONS

The Cash Acme **Masterguard** is certified to ASSE 1017, CSA B125.3, and listed by IAPMO for use in accordance with U.S and Canadian plumbing codes.

