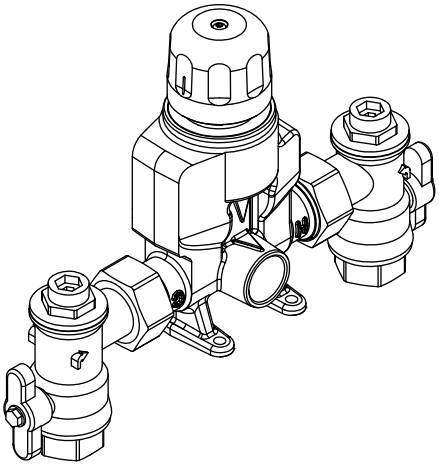
Masterguard® Series

DESCRIPTION



MASTERGUARD®
THERMOSTATIC MIXING VALVES

The Masterguard® Series is a range of six high flow rate Temperature Actuated Mixing Valves from 3/4" to 2" that mix hot water with cold to deliver tempered water at a controlled temperature, typically 120˚F (49˚C), 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 whole section of a building.

The Masterguard® valves are state of the art, incorporating the latest in Thermostatic Technology for superior performance. **The Masterguard®** thermostatic mechanism is based on proven expanding wax technology that provides greater accuracy, faster response to temperature changes and greater resistance to corrosion and failure than earlier technology. **The Masterguard®** Series incorporates fast acting, high quality thermostatic elements that sense the outlet water temperature and react to maintain a stable delivery temperature even under varying and extremely low flows. The valves also greatly reduce the outlet flow in the event of a cold water supply failure.

The Masterguard® valves feature 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 ASSE 1017 listed.

The Masterguard® valves feature an adjusting handle 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 **Masterguard®** valve has integral mounting feet to allow it to be securely fixed to a wall or frame.

The Masterguards® are complete with 4in1 Service Fittings on each inlet. The 4in1 Service Fittings provide:

1. Integral ball valve isolator
2. Large area cylindrical strainer
3. Gauge/flushing port, to measure pressure or as flushing point
4. Check valves to prevent cross-connection of hot to cold

The Service Fittings have a female inlet thread and connect to the base valve via union connections. The valve outlets are female NPT threaded. **The Masterguard®** valves range in size from 3/4" to 2".

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 based on proven Thermostatic Technology:
Superior reliability, improved user safety.

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

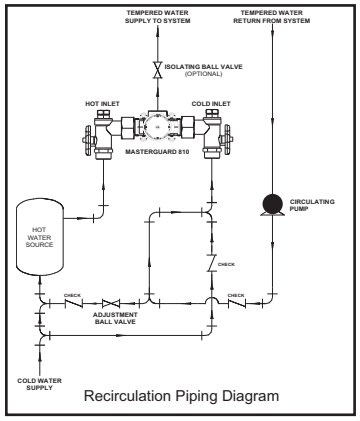
SPECIFICATION

A Temperature Actuated Mixing Valve shall be installed at the hot water source to distribute tempered water throughout the domestic hot water system at a maximum 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. Each valve shall have integral poppet style check valves on both inlets with a positive seal of the poppet onto an elastomer seat to prevent cross connection from hot to cold. 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®**:

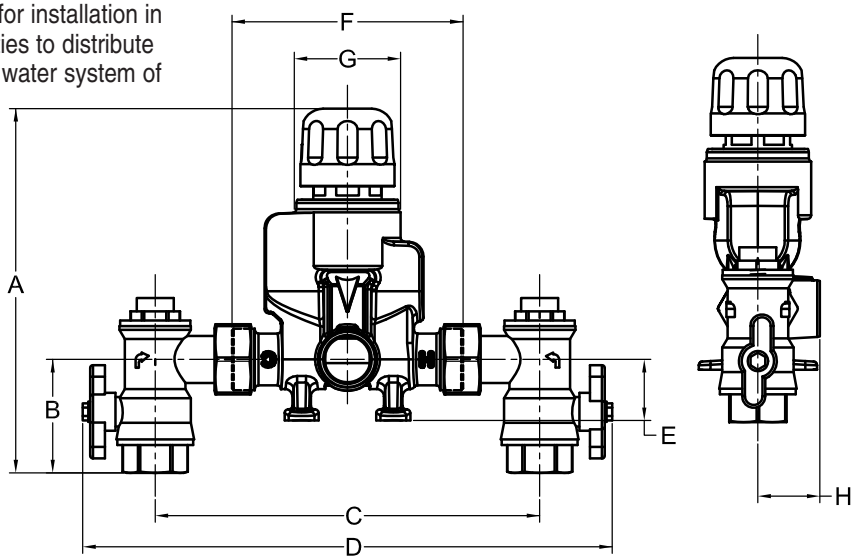
Masterguard® Series

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 a whole section of a building.



Recirculation Piping Diagram



SPECIFICATION DATA

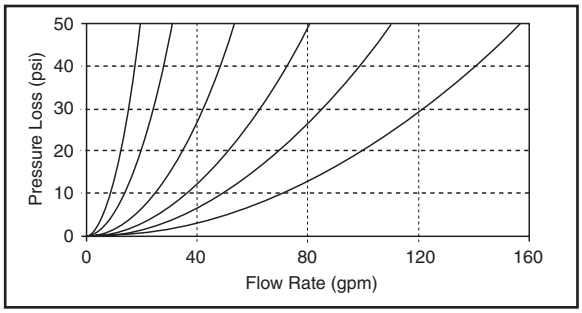
Measurement in inches

Product	Inlet	Outlet	Flow at 45 psi	Min flow rate*	A	B	C	D	E	F	G	H
810	1/2"	3/4"	19 gpm	1 gpm	5.5	2.2	7.1	9.8	1.2	3.9	2.0	1.1
820	3/4"	3/4"	30 gpm	2.5 gpm	6.7	2.4	8.1	11.3	1.3	4.9	2.4	1.3
830	3/4"	1"	51 gpm	4 gpm	9.2	2.4	10.0	13.1	1.7	6.7	3.5	1.9
840	1"	1 1/4"	75 gpm	8 gpm	10.2	2.8	10.2	13.6	1.7	6.5	3.5	1.9
850	1 1/4"	1 1/2"	105 gpm	13 gpm	12.75	2.5	13.7	16.3	1.9	9.3	5.1	1.9
860	1 1/2"	2"	149 gpm	18.5 gpm	13.0	2.5	13.7	16.3	1.9	9.3	5.1	1.9

*Valve can regulate temperature of lower flow rates with a properly designed recirculating system.

Performance:

Outlet temperature range . . . . . 95 - 150˚F (35 - 65˚C)
Temperature hot supply . . . . . 195˚F (90˚C) maximum
Temperature cold supply . . . . . 40 - 80˚F (4 - 27˚C)
Temperature stability . . . . . +/- 5˚F (3˚C)
Working pressure Maximum. . . . 145 psi (1,000 kPa)



Materials:

Body . . . . . Bronze, nickel plated
Seals. . . . . Nitrile elastomer
Springs . . . . . Stainless steel
Fitting . . . . . Brass
Internal . . . . . Brass
Piston . . . . . Engineered polymer (810-820), PTFE Coated Brass (830-860)

CERTIFICATIONS*

The Cash Acme Masterguard® Series is certified to **ASSE 1017** and **CSA B125.3.**
The Cash Acme Masterguard® Series is listed by **ASSE** and **IAPMO**.