

HeatGuard® Ultra SharkBite®

Scope of Use/Specification Sheet

The RMC HeatGuard® Ultra is a high performance and high temperature tempering valve that mixes hot water with cold water to deliver tempered water at a constant temperature throughout an entire house, building, or system.



MIXF11116I

Product Code

| Model | Catalogue Number |
|-------------|------------------|
| DN15 Copper | MIXRA11116I |
| 16mm PEX | MIXF11116I |
| 20mm PEX | MIXF11117I |

Materials

| | |
|-----------------------|-----------------|
| Body | Forged Brass |
| Internal Components | DZR Brass |
| Seals | Viton® |
| Springs | Stainless Steel |
| Piston | Polysulfone |
| Fittings | DZR Brass |
| Strainers | Stainless Steel |
| Non-Return Cartridges | PPO-GF (Noryl®) |

Description

HeatGuard® Ultra is suitable for most domestic applications and for sanitary devices intended for personal hygiene purposes, where outlet temperature must not exceed a maximum of 50°C.

The valve is ideal for use in installations where there are fluctuations in supply conditions and in solar hot water installations where a booster pump is used. The compact design requires minimum space.

Features and Benefits

- High thermal endurance
- Will endure the extreme temperature present in solar installations
- High performance specifications
- Designed especially for situations requiring high valve specification such as fluctuating supply pressures
- SharkBite® Inlet Connection Fittings
- Polyurethane insulation
- Limit energy loss and help protect against freezing – Meets Australian Standard
- Strainers upstream of check valves and protect valve from impurities in the water supply; check valves eliminate backflow contamination
- Tamper-proof adjustment
- Dezincification Resistant
- Easy to install, individually tested and calibrated, and meets Australian Standard for potable water supply

Application

RMC's HeatGuard® Ultra is a high performance and high temperature tempering valve. It is suited for use with solar, instantaneous and heat exchange (continuous flow), and pumped ring main hot water distribution systems. HeatGuard® Ultra is suitable as a point of use tempering device.

Do NOT use on steam supplied systems.

Installation

Installation is subject to the requirements of the applicable regulatory authority, the National Construction Code Volume Three – Plumbing Code of Australia, associated reference standards as applicable at the time and AS/NZS 3500.1.



HeatGuard® Ultra SharkBite®

Technical Specifications

| | |
|--|--|
| Cold water supply temperature | 5°C to 30°C |
| Hot water supply temperature | 60°C to 99°C ¹ |
| Optimum outlet temperature range | 40°C to 50°C ² |
| Set temperature | Must be commissioned on site to achieve desired outlet temperature |
| Accuracy of outlet temperature | ± 3°C - tested to AS 4032.2 between 40°C and 50°C |
| Minimum temperature differential (between hot supply and outlet temperature) | 10°C ³ |
| Supply pressure (static) | 1600kPa maximum |
| Supply pressure imbalance, dynamic (at time of commissioning) | 2:1 maximum ⁴ |
| Maximum permitted pressure variation in either supply, in order to control outlet temperature to ± 3°C (from supply pressure at commissioning) | ± 15% maximum ⁵ |
| Minimum flow rate | 4L/min |
| SharkBite® Fittings Supplied | Inlet connections (strainers and non-return checks included) |

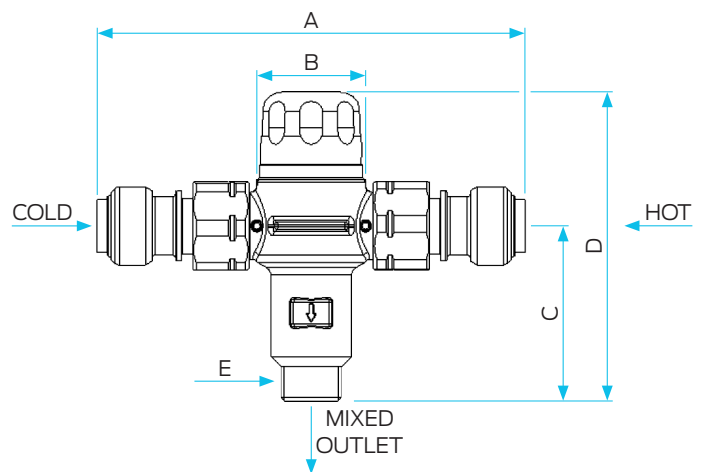
Notes

- AS 3500.4.2 Clause 1.6 requires the minimum hot water storage temperature to be 60°C.
- For applications outside the requirements of AS/NZS 3500 and AS 4032.2, it may be possible to set the valve as high as 55°C or as low as 35°C, depending on site conditions.
- This is the minimum difference required to ensure shut-off of outlet flow in the event of cold supply failure, in accordance with AS 4032.2, providing the valve is set between 40°C and 50°C.
- The maximum permitted ratio of supply pressures, under dynamic (flow) conditions. For optimum performance it is recommended that the hot and cold pressures at commissioning are as close as possible to equal.
- The maximum permitted variation in either supply pressure from the pressure at commissioning in order to control the outlet temperature to ± 3°C.

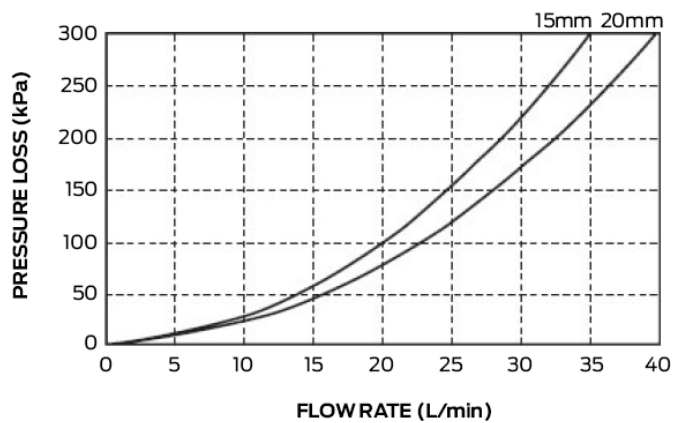
Dimensions

| Size | A | B | C | D | E |
|----------------------------|-----|----|----|-----|----|
| HeatGuard® Ins DN15 Copper | 148 | 37 | 60 | 107 | ½C |
| HeatGuard® Ins 16mm PEX | 148 | 37 | 60 | 107 | ½C |
| HeatGuard® Ins 20mm PEX | 158 | 38 | 60 | 107 | ¾C |

Note: All measurements in mm unless otherwise stated.



Flow Characteristics



Standards and Approvals



AS 4032.2
WMKA1593