

# HEATGUARD® ULTRA INSULATED



RMC's HEATGUARD® is a high performance and high temperature tempering valve that mixes hot and cold water to deliver tempered water at a constant temperature throughout an entire building or system.

## Catalogue Numbers

HEATGUARD® Ultra 15                      MIX15U  
HEATGUARD® Ultra 20                    MIX20U



## Description

HEATGUARD® is suitable for tempering the hot water supply to sanitary devices (that are intended for personal hygiene purposes) where outlet temperatures must not exceed a maximum of 50°C.

HEATGUARD® Ultra is ideal for use in installations where there are fluctuations in supply conditions as well as solar hot water installations where a booster pump is used. The compact design requires minimum space. HEATGUARD® Ultra is available in 15mm and 20mm configurations.

## Application

RMC's HEATGUARD® Ultra is a high performance and high temperature tempering valve suited for use with solar, instantaneous 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.

## Materials

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

## Features and Benefits

- High thermal endurance
- High performance specifications
- Designed especially for situations requiring high valve specification such as fluctuating supply pressures
- Union connections & compression fittings
- Easy to install and easy to remove for servicing of strainers - nuts and olives supplied
- EPP insulation limits energy loss and help protect against freezing - meets Australian standard AS/NZS 3500.4
- Strainers upstream of check valves
- Tamper-proof adjustment
- Dezincification resistant
- Meets Australian Standard for potable water supply AS/NZS 4020
- Individually tested and calibrated to ensure high quality performance



Uniquely Australian



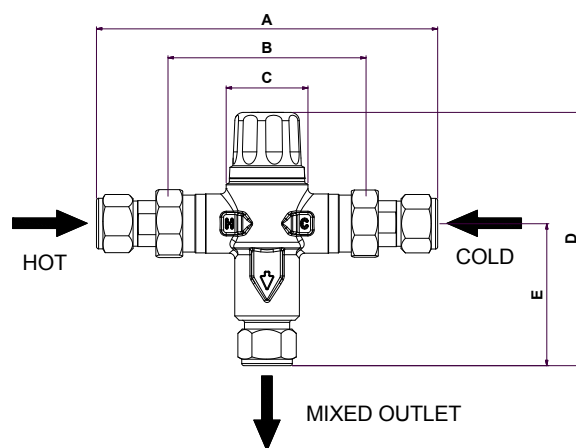
WaterMark  
AS4032.2 LIC WMKA 1593  
SAI GLOBAL

## Technical Specifications

|   |  |
|---|--|
| Cold water supply temperature   | 5°C - 30°C   |
| Hot water supply temperature  | 60°C - 99°C <sup>1</sup>                               |
| Optimum outlet temperature range  | 40°C - 50°C <sup>2</sup>                               |
| Set temperature   | Must be commissioned on site to achieve desired outlet |
| Accuracy of outlet temperature  | ± 3°C - tested to AS4032.2 between 40°C and 50°C       |
| Minimum temperature differential (Between hot supply and outlet temperature)  | 10°C <sup>3</sup>                                      |
| Supply pressure, static:  | 1600 kPa maximum                                       |
| Supply pressure imbalance, dynamic (At time of commissioning)   | 2 : 1 maximum <sup>4</sup>                             |
| Maximum permitted pressure variation in either supply, in order to control outlet temperature to ± 3°C: (From supply pressure at commissioning) | ± 15% maximum <sup>5</sup>                             |
| Minimum flow rate   | 4 litres/minute  |
| Compression Fittings Supplied   | Nuts, Olives, Strainers & Non-Return Checks included   |

## Dimensions

|   | 15mm | 20mm |
|---|------|------|
| A | 158  | 164  |
| B | 92   | 92   |
| C | 38   | 38   |
| D | 116  | 118  |
| E | 66   | 66   |



## Notes

- AS/NZS 3500.4 Clause 1.9 requires the minimum hot water storage temperature to be 60°C.
- For applications outside the requirements of AS/NZS 3500 and AS4032.2, it may be possible to set the valve as high as 55°C or as low as 35°C, depending on site conditions.
- The is the minimum difference required to ensure shut-off of outlet flow in the event of cold supply failure in accordance with AS4032.2, 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.

## Flow Characteristics

