

HeatGuard Ultra

Description

RMC's *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.

The *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.

HeatGuard Ultra 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.

HeatGuard Ultra is available in 15 mm and 20 mm configurations.



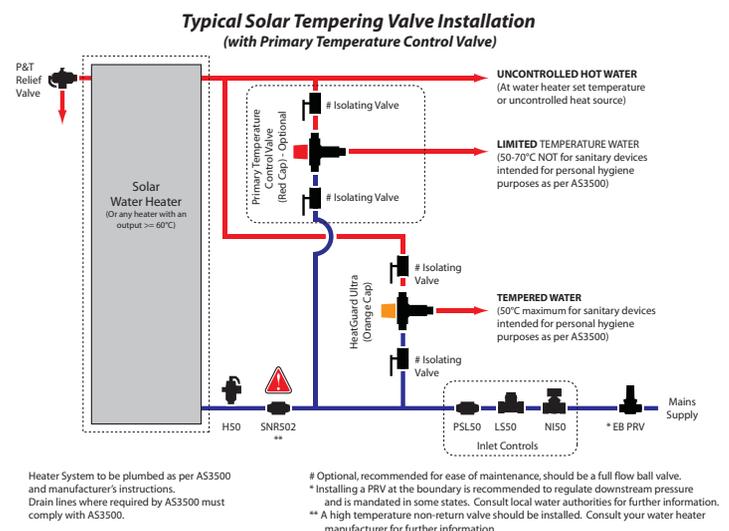
Features and Benefits

- ❖ High thermal endurance
 - » Will endure the extreme temperatures present in solar installations
- ❖ High Performance specifications
 - » Designed especially for situations requiring high valve specification such as fluctuating supply pressures
- ❖ Union Connections
 - » Valve easy to install and easy to remove for servicing of strainers
- ❖ Performance
 - » More accurate control of outlet temperature – safer installations
- ❖ Strainers upstream of checks
 - » Protects valve and check valves from impurities in the water supply
- ❖ Tamper-proof adjustment
 - » Special adjuster key eliminates chances of accidental adjustment
- ❖ Dezincification resistant
 - » Meets Australian Standard for potable water supply
- ❖ Individually tested and calibrated
 - » Every valve is tested to ensure higher quality and performance

Application

RMC's *HeatGuard Ultra* is a High Performance and High Temperature Tempering Valve suited for use with solar, instantaneous and heat exchange (continuous flow), and pumped ring main hot water distribution systems. *HeatGuard Ultra* is suitable for use as a point of use tempering device.

DO NOT USE on steam supplied systems.



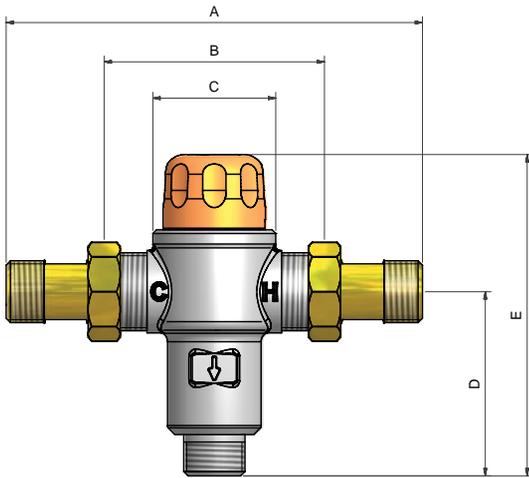
HeatGuard Ultra

Specification

Cold water supply temperature:	5° C - 30° C
Hot water supply temperature:	60° C - 99° C ¹
Optimum outlet temperature range:	40 C – 50° C ²
Set temperature:	Must be commissioned on site to achieve desired outlet temperature
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 ³
Supply pressure, static:	1600 kPa 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 ^{5,6}
Minimum flow rate:	4 litres/min.
Fittings Supplied	Male BSP Thread

Notes:

- AS3500.4.2 Clause 1.6 requires the minimum hot water storage temperature to be 60° C.
- For applications outside the requirements of AS3500 and AS4032.2, it is 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 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.
- Note that rapid changes in supply pressure can result in a spike in the outlet temperature beyond ±3° C. Following a rapid change in supply pressure it may take a number of seconds for the temperature to return to within a ±3° C limit. Steps should be taken on-site to eliminate any cause of rapid supply pressure variation.



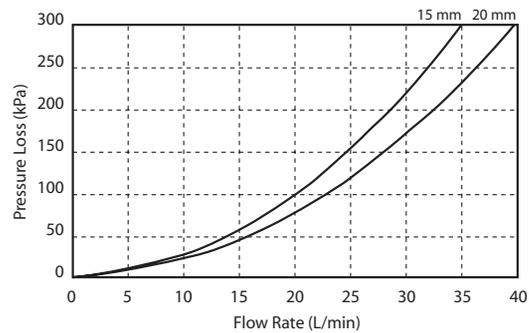
Dimensions

Valve Size	A	B	C	D	E
HeatGuard Ultra 15	142	74	42	63	109
HeatGuard Ultra 20	165	74	42	63	109

Catalogue Numbers

Model	Catalogue Number
HeatGuard Ultra 15	MIX11116
HeatGuard Ultra 20	MIX11117

Flow Characteristics



Materials

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

Product Notes

This product replaces both the HeatGuard HP (MIX11016 and MIX11017) and the HeatGuard Solar HP (MIX11093 and MIX11094) offering the benefits of a High Performance Solar tempering valve.