

Thermal Balancing Valves

Scope of Use / Specification Sheet

RMC's Thermal Balancing Valves are thermostatic circuit control valves which automatically control the temperature within a circulating hot water system to ensure a balanced water temperature throughout the system.

Available in 15mm and 20mm configurations, the valves are adjustable from 40°C to 65°C, and are factory set at 58°C.



TBV501

Product Code

Size	Product Code
15mm	TBV501
20mm	TBV701

Materials

Body	Forged DZR Brass
Internal Components	DZR Brass
Seals	Viton®
Spring	Stainless Steel
Thermal Element	Wax-based

Application

RMC's Thermal Balancing Valve automatically controls the temperature within a circulating hot water system by dynamically adjusting the flow rate in a branch or circuit, depending on the temperature of the hot water. A built-in disinfection function is included to allow high-temperature treatment of circuits to protect against Legionella.

The Thermal Balancing Valve should be fitted on the return line, observing the direction of the flow arrow on the valve. The valve can be installed in any orientation.

Features and Benefits

- Easy temperature adjustment between 40°C and 65°C
- Tamper-proof cap
- Built-in disinfection function to protect against Legionella
- Dry-fit push in thermometer
- Supplied with insulation
- Meets Australian Standard for potable water supply
- Individually tested and calibrated
- Every valve is tested to ensure higher quality and performance

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.

Standards and Approvals



ATS 5200.468:2019
WMK25991

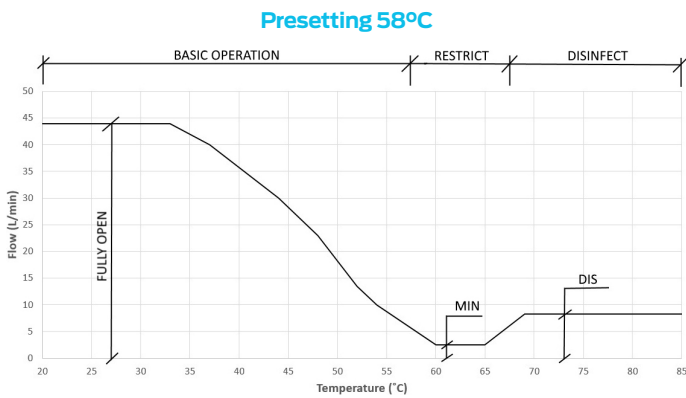


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Performance Specifications

Temperature Set Range	40°C – 65°C
Factory Preset Temperature	58°C
Temperature Range for Thermal Disinfection	>70°C
Maximum Working Pressure	1000kPa
Test Pressure	1600kPa
Maximum Working Temperature	99°C
Accuracy	±2°C
Temperature Gauge	0°C – 100°C

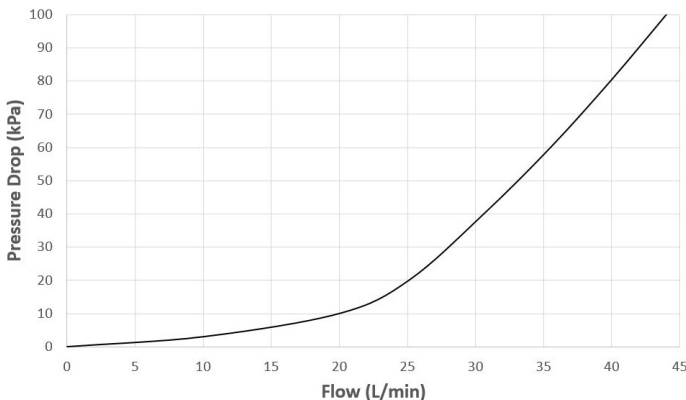
Flow Characteristics



Flow (L/min) $\Delta P = 100\text{kPa}$

Min	2.5
Dis	8.3
Fully Open	44

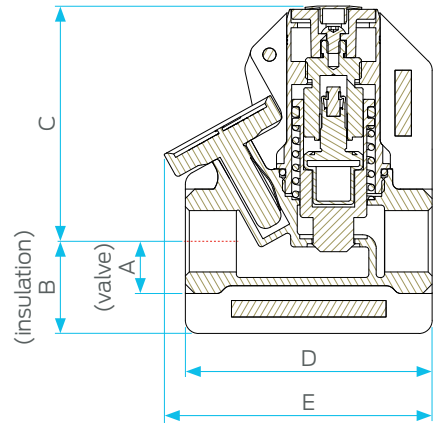
TBV501/TBV701 Flow Curve (58°C Set, 20°C Flow)



Dimensions

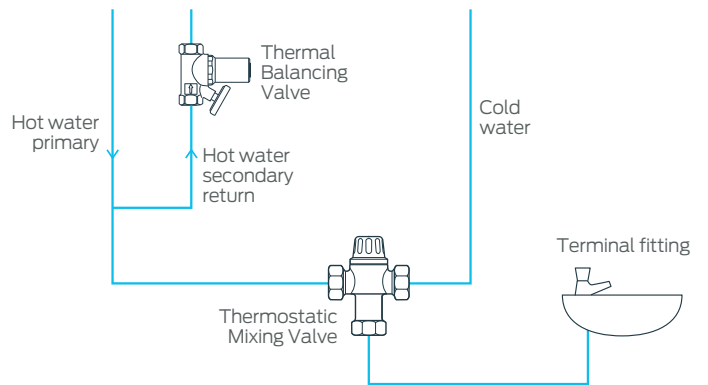
Size	A	B	C	D	E
15mm	16	28	72	75	82
20mm	18	32	72	80	85

Note: All measurements in mm unless otherwise stated.



Note

The Thermal Balancing Valve can be installed to serve an individual outlet, or to control a group of outlets fed from a branch, as determined by the required flow rate to the circulating loop.



Warranty

Reliance Worldwide Corporation (Aust.) Pty. Ltd. (RWC) will either replace or repair any defective goods where the defect arose as a result of manufacture within the warranty period. You may contact RWC at the phone number, address or e-mail shown below for further information or to make a claim.

Visit www.rmc.com.au/warranty to view the warranty statement in full and for further important information.