

## WARRANTY

If any material defect arising from the manufacturing process is found in a new tap or valve Waterware Services Ltd. will undertake to repair or replace it (at its option). This undertaking will not apply if:

1. The defect is brought to Waterware's attention later than 5 years from the date of manufacture.
2. Failure by any person to follow installation instructions or installation in an environment outside the recommended limitations or relevant NZ and or Australian Standards and local plumbing codes. No installation should proceed without installation instructions and claims instructions were missing are not accepted as a means of avoiding this condition.
3. Evidence cannot be produced which confirms that the relevant tap or valve was purchased from a known customer of Waterware Services Ltd.
4. Repair work is undertaken without prior arrangement with Waterware Services Ltd.
5. Normal maintenance requirements, refer to specific product maintenance guides.

Waterware Services Ltd. shall in no way be liable for any loss, damage (direct, indirect or consequential), cost or expense suffered or incurred by the purchaser. Obligations accepted by Waterware Products Ltd. are.....

..... in addition to all other rights and remedies had by the Purchaser in law in respect of the valve and does not limit the right the Consumer may have under the Consumers Guarantee Act 1993.

..... subject to the exceptions and conditions previously listed. All expressed or implied conditions, statements or warranties as to the quality or fitness on any purpose of a tap or valve or otherwise are hereby expressly excluded to the fullest extent permitted by law except under conditions and warrants which cannot be legally excluded by law and which are intended in the contract for the supply of the valve by the Trade Practises and any other Act of Law.

**WATERWARE**

PH 09 273 9191 | [info@waterware.co.nz](mailto:info@waterware.co.nz)

PO Box 58 776 Botany, Manukau

[waterware.co.nz](http://waterware.co.nz)



GENERAL  
PLUMBING



TEMPERING VALVE  
Installation Manual

**CTV15**

15mm Tempering valve

**CTV20**

20mm Tempering valve

  
**WATERWARE**

waterware.co.nz

## SPECIFICATIONS

Approv.	AS4032:2 2005
Quality Assured	ISO9001
Temp Adjustment Range	30 - 50°C
Temp Control	+/- 3°C
Max Op. Temp.	85°C
Operating Press. Range	20 - 500kPa
Max. Inlet Press. Differential	6:1
Max Test Press.	1000kPa
Flow Rates	see graph
Min. Flow Rate	4L/min
Material	DR Brass
Sizes available	15, 20mm
Min. Operating Failsafe Temp. Differential	10°C



\*The failsafe feature of this valve conforms to testing at 300kPa, valve shut off bypass will occur at higher pressures.

## APPLICATIONS

Thermostatic tempering valves are design to control water temperature and provide a fail safe solution. These valves are designed to be used at the end of line not at point of use.

They will deliver up to 30L/min. If point of use temperature control is required please select TMV521312/TMV521319 Caleffi Health Approved thermostatic mixer incl isolators.

## FAILSAFE FEATURE

The failsafe feature is designed to prevent the flow of water discharging from the mixed water outlet in the event of the hot or cold water supplies failing. Failsafe standards are tested at a maximum of 300kPa and requires a minimum 10°C temperature differential between the valve set point and the hot inlet temperature is required to ensure the correct operation of this feature.

Caleffi valves are designed to resist scaling but over time the proper operation of the valve will inevitably deteriorate. In particular, the fail-safe facility should be regularly tested by isolating either the hot or cold supplies.

## INSTALLATION TIPS

Important - The requirements of the Water Bye-laws and any other relevant regulations should always be complied with.

- Valve can be installed in vertical or horizontal position (any orientation).
- Hot and cold inlet pressures variations should be kept to a minimum (preferably the same), but in any case if this pressure differential (hot to cold) is excessive, a Pressure Reducing Valve should be installed in the appropriate higher pressure supply

- A tempering valve provides a possible cross connection between hot & cold supplies, check valves are provided in cold supply only.
- It is necessary to set the desired temperature outflow after the hot water system has been commissioned and heated.
- Never install a tempering valve in an open vent pipe.
- It is recommended that isolation valves are installed close to the valve for ease of service and testing.
- Where there is a danger of water born matter flushing through the valve it is recommended that it is protected using a Y-strainer on the cold supply.
- The valve must not be subjected to extreme temperatures either during installation or in use. In particular, avoid brazing or soldering near the valve.
- Before final installation and commissioning the system must be thoroughly flushed out to ensure removal of all debris (See above on Y-Strainers). In known hard water areas, the use of a water softener in the system should be considered to promote ongoing trouble-free operation of controls and fittings, as well as giving the benefits of softer water.

