



TLV106 – TLV106WM INSTALLATION & MAINTENANCE GUIDE

COMMISSIONING FOR TMV2 APPROVAL

Check the following:

- The designation of the thermostatic mixing valve matches the application.
- The supply pressures are within the valves operating range.
- The supply temperatures are within the valves operating range.
- Isolating valves (and strainers preferred) are provided.
- If all these conditions are met, proceed to set the mixed water temperature.

It is a requirement that all TMV2 approved valves shall be verified against the original set temperature results once a year. When commissioning/testing is due the following performance checks shall be carried out.

Measure the mixed water temperature at the outlet.

Carry out the cold water supply isolation test by isolating the cold water supply to the TMV, wait for five seconds if water is still flowing check that the temperature is below 46°C.

If there is no significant change to the set outlet temperature ($\pm 2^\circ\text{C}$ or less change from the original settings) and the fail-safe shut off is functioning, then the valve is working correctly and no further service work is required.

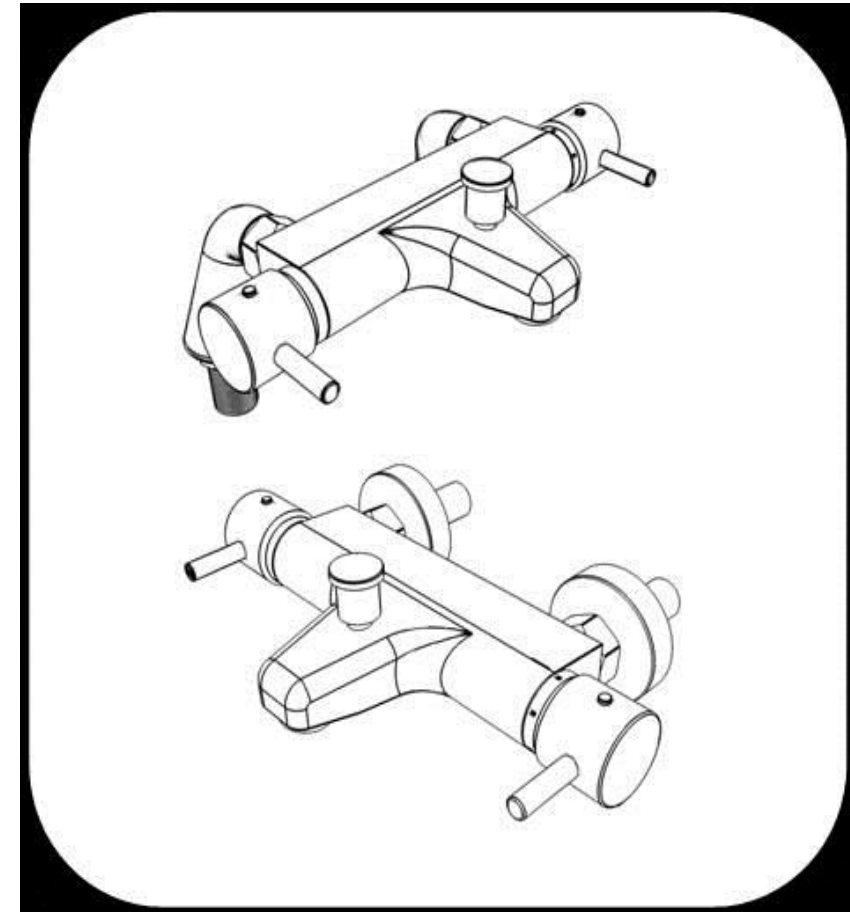
Notes

If there is a residual flow during the commissioning or the annual verification (cold water supply isolation test), then this is acceptable providing the temperature of the water seeping from the valve is no more than 2°C above the designated maximum mixed water outlet temperature setting of the valve.

Temperature readings should be taken at the normal flow rate after allowing for the system to stabilize.

The sensing part of the thermometer probe must be fully submerged in the water that is to be tested.

Any TMV that has been adjusted or serviced must be re-commissioned and re-tested in accordance with the manufacturers' instructions.



PLEASE RETAIN FOR FUTURE REFERENCE

Installation

Prior to installation you should fully flush the system to ensure there is no debris in the system that could cause damage to the product.

Installation should be carried out by a competent installer who after installation should check for leaks on both the product and the pipe work.

The product must be installed and used in a way as to not cause water damage. Therefore water from the product must be suitably directed and/or contained.

Cleaning

To maintain the surface finish of this product, wipe the surface with a clean damp cloth. The use of any abrasive cleaning agents or materials will affect the finish and will invalidate your guarantee.

For any further information on your product
please call
Customer care line
0800 195 1602

Temperature Setting

The mixer has been set in the factory under balanced pressures at 38°C. Where conditions are different from the above the temperature of the mixed water may vary from setting. You can adjust the calibration of the mixer to suit individual requirements.

Note:

46°C is the maximum mixed water temperature from the bath tap. The maximum temperature takes account of the allowable temperature tolerances inherent in thermostatic mixing valves and temperature losses in metal baths. It is not a safe bathing temperature for adults or children.

The British Burns Association recommends 37 to 37.5°C as a comfortable bathing temperature for children. In premises covered by the Care Standards Act 2000, the maximum mixed water outlet temperature is 43°C.

Calibration

The valve is set at 38°C. Check this is the case by using a thermometer in the water flow from the valve.

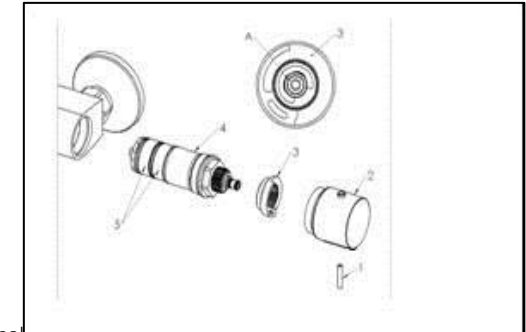
If you require a hotter flow, re-set the calibration.

Remove the cover (1), unscrew the screw (2). The control knob (3) can now be pulled off.

Turn the spindle (A) until the temperature is at the required level. Test again using a thermometer.

Control the right position of the stepped plastic washer (4).

When water temperature is at the required level re-fit the control knob.



CLEANING FILTERS

Through years of use impurities and lime scale could restrict flow of water through the filters (7) of the cartridge (6).

To clean the filter shut off water supply to both inlets. Unscrew mixer and clean filters.

Technical specification

	High Pressure
Maximum Static Pressure – Bar	10
Flow Pressure, Hot & Cold – Bar	0.5 to 5
Hot Supply Temperature – °C	55 to 65

NOTE: Valves operating outside these conditions cannot be guaranteed by the Scheme to operate as Type 2 valves.

Operating pressure (on hot and cold line) should be kept as balanced as possible in order to assure maximum efficiency.

When the dynamic pressure is higher than a 5 bar a pressure reducer is suggested to be fitted before valve.

The valves designation of use is for High Pressure (HP) BS EN 1111. and the recommended mixed water outlet for showers is 41°C

If a water supply is fed by gravity then the supply pressure should be verified to ensure the conditions of use are appropriate for the valve.

PLUMBING RECOMMENDATIONS

- An independent water supply (both hot and cold) is required for the shower system please refer to installation diagrams
- Large runs of pipe work will cause frictional loss of pressure.
- The recommended from both cylinder and water tank should be 22 mm minimum reducing to 15 mm within half a meter of valve.
- If more than one shower valve is installed the minimum feed from tank and cylinder should be 28 mm, reducing to 15 mm within half a meter valve. (Ensure adequate supply of both hot and cold water can be maintained).

In installations where a pump is required, install pump before shower mixer inlets.

The thermostatic mixing valve will be installed in such a position that maintenance of the TMV and its valves and the commissioning and testing of the TMV can be undertaken.

- The fitting of isolation valves is required as close as is practicable to the water supply inlets of the thermostatic mixing valve.
- The fitting of strainers is recommended as close as is practicable to the water supply inlets of the thermostatic mixing valve.
- The installation of thermostatic mixing valves must comply with the requirements of the Water Supply (Water Fittings) Regulations 1999.

Technical data

The temperature control knob is graduated from 15°C to 60°C.

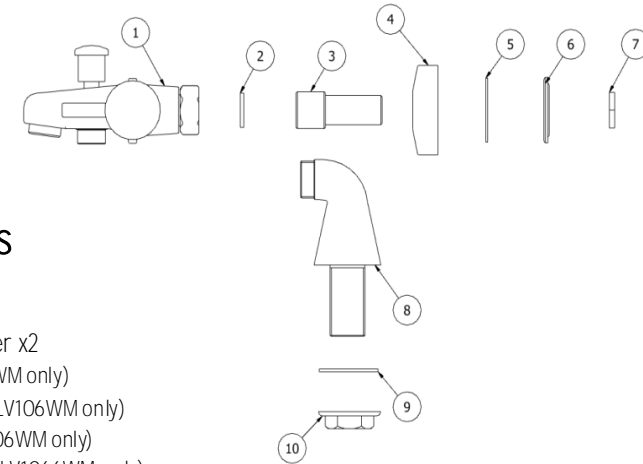
The mixer ports are supplied ¾" BSP threads.

The mixer is provided with an outlet at base of the mixer.

The mixed water temperature at the terminal fitting must never exceed 46°C.

Product features

Product maximum temperature set to 38°C with push button override to a maximum temperature of 46°C.



Box contents

1. Body x 1
2. Mesh Filter Washer x 2
3. Unions x 2 (TLV106WM only)
4. Wall Shroud x 2 (TLV106WM only)
5. Wall Seal x 2 (TLV106WM only)
6. Wall Washer x 2 (TLV1066WM only)
7. Back Nut x 2 (TLV106WM only)
8. Pillar x 2 (TLV106 only)
9. Back Nut Washer x 2 (TLV106 only)
10. Back Nut x 2 (TLV106 only)

Note:

This image is for illustration purposes only and may not represent your product entirely.

RECOMMENDED OUTLET TEMPERATURE

The scheme recommends the following maximum outlet temperature for use:

41c for showers

The mixed water temperature must never exceed 46c

The maximum mixed water temperature can be 2c above the recommended max set outlet temperature

NOTE

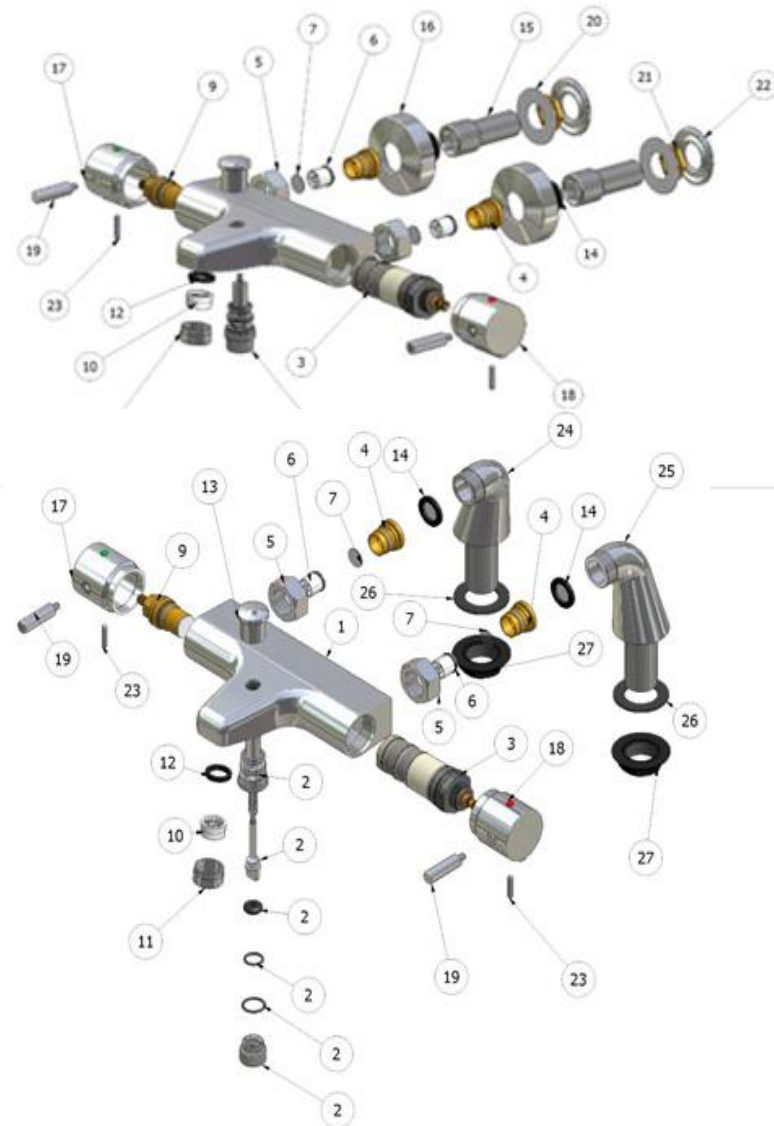
46c is the maximum mixed water temperature from the bath tap.

The maximum temperature takes into account the allowable temperature tolerances inherent in thermostatic mixing valves and temperature losses in metal baths.

IT IS NOT A SAFE BATHING TEMPERATURE FOR BABIES

The British Burns Association recommends 37 - 37.5c as a comfortable bathing temperature for children.

In premises covered by the Care Standards Act 2000, the maximum



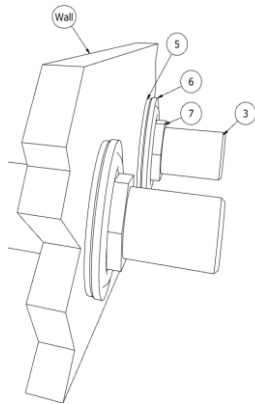
Fitting instructions

Ensure the system has been flushed before installing the product to prevent

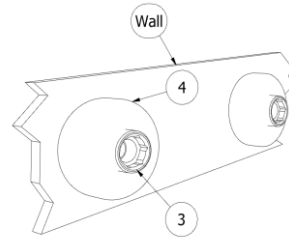
TLV106WM

NOTE* The water outlets must be connected to the unions from behind the wall. If the Water outlets are protruding through the wall an alternative union must be used.

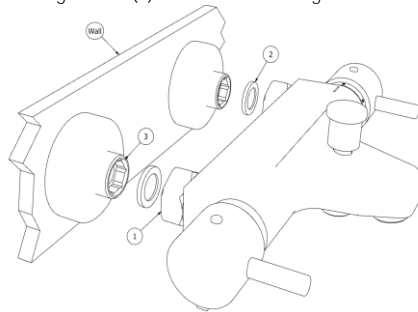
Assuming that the water outlets are already in the wall at 150mm spacing the unions (3) can be passed through and foam washer (5), steel washer (6) and back nut (7) can be inserted and tightened as per the below diagram. The water outlets may then be connected to the unions.



Looking at the wall from front on the wall shrouds (4) may be screwed over the protruding unions (3) and fixed tight up to the wall.



The body (1) may now be offered up to the protruding unions (3) and attached using the appropriate spanner. The mesh filter (2) must be inserted between the join.

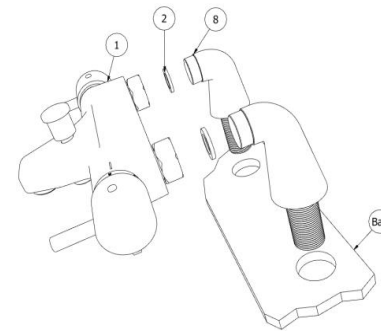


Ensure the system has been flushed before installing the product to prevent damage.

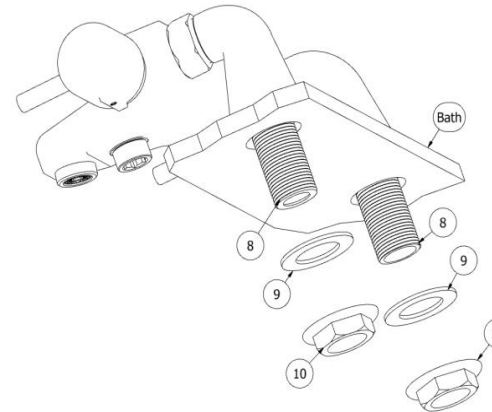
TLV106

Assuming that the hole spacing on the bath is 180mm between centres the product can be installed onto the bath.

To begin the install the pillars (8) need to be attached to the body (1) using the mesh filter (2) between the join. Using an appropriate spanner loosely tighten the nuts onto the pillars.



With the pillars loosely attached the pillars can be inserted through the holes on to the bath.



Once the pillars are inserted the back nut washer (9) can be placed over the thread followed by the back nut (10). With the whole setup loosely tightened perfect alignment can be gained. Once aligned tighten the body onto the pillars along with the back nuts. Once the product is installed onto the bath the water outlets may be attached to the ends of the pillars using the appropriate spanner.