

Customer/technical services

For any technical or installation queries please contact Vado on 01934 745163.

Guarantee

This product is guaranteed against manufacturing defects from the date of purchase until the expiry of the relevant guarantee period shown below.

The guarantee is only valid if:-

1. The product has been installed, used and maintained in accordance with Vado's instructions and subjected to normal use only.
2. The defect is not due to use of an unsuitable or inadequate water or power supply.
3. The defect is not due to accident, misuse, neglect or repair other than by Vado or Vado authorised agents or damage caused by foreign objects or substances.
4. We have received from you the completed Guarantee Registration Form. Vado accepts no responsibility for any forms lost in the post and returns by registered means is therefore recommended.

Under this guarantee (which is non-transferable) Vado will, at its option, repair or replace free of charge any product (or replacement part) found to be defective. The guarantee does not extend to any consequential loss or damage. After repair or replacement the relevant guarantee period will be calculated from the original date of purchase.

The relevant guarantee periods are:-

1. Twelve years on chrome finish products.
2. Six years on Vado Identity products.
3. Three years on all other products with the exception of Stuart Turner Pumps which carry a 2 year Guarantee on Monsoon Range and 1 Year Guarantee on Showermate Range.

All claims under the guarantee must be submitted in writing to the person who supplied the product to you and must be received no later than the last day of the relevant guarantee period. All claims must be accompanied by proof of purchase (sales receipt or delivery note).

Vado operates a policy of continuous product development and therefore reserves the right to change the product, packaging and documentation specifications without notice.

This guarantee is in addition to and does not affect your statutory rights as a consumer.

Vado

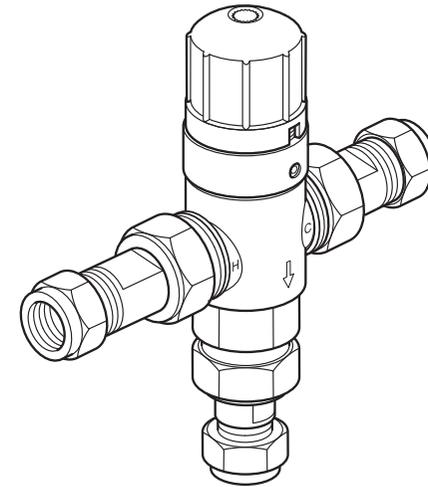
Wedmore Road, Cheddar, Somerset, England BS27 3EB
tel 01934 744466. fax 01934 744345
technical@vado-uk.com
www.vado-uk.com

GUARANTEE REGISTRATION

NAME				
ADDRESS				
	POSTCODE			
RETAILER				
ADDRESS				
	POSTCODE			
PURCHASE DATE	ARTICLE NUMBER	(SEE BOX)		
PRODUCT DESCRIPTION				
WHO INSTALLED THE PRODUCT?	RETAILER	PLUMBER	BUILDER	SELF
FOR VADO USE				



Installation & maintenance instructions



PRO-5001-N/P

Thermostatic mixing valve with 15mm fittings

Please leave these instructions with the customer

Important - please read

Please read these instructions carefully before starting installation and keep for future reference.

Remove all packaging and check the product for missing parts or damage before starting installation.

Any alterations made to this product and fittings may infringe water regulations and will invalidate the guarantee.

The installation must comply with all Local/National Water Supply Authority Regulations/Byelaws and Building and Plumbing (UK:BS6700) Regulations.

We strongly recommend that you use a qualified and registered plumber.

IMPORTANT: Failure to comply with the installation and commissioning instructions as detailed will invalidate the product warranty.

General installation

Thermostatic Valves

The thermostatic mixing valve Vado PRO-5001-N/P has been specifically designed and manufactured to meet the requirements of BS EN1111 The valve has been independently tested and approved as a TYPE 2 valve under the TMV2 scheme.

Where instantaneous heaters are used, the flow of hot water sufficient to start and go on burning must reach the minimum flow required – as specified by the heater manufacturer.

These fittings are mixing devices and therefore water supplies must be reasonably balanced.

This product has single check valves fitted on the hot and cold inlets. However, depending on the installation setup, additional check valves may be required.

Please check with the local water undertaker if you are uncertain.

This product must be installed in accordance with, and meet the requirements of the Water Supply (Water Fittings) Regulations 1999 and Scottish Byelaws 2004.

Before making any inlet pipe connections, all supply pipes MUST be thoroughly flushed to remove debris. Failure to do so could result in damage or low flow from the mixer unit. Water Supply (Water Fittings) Regulations 1999 Schedule 2 Section 13.

The fitting of isolating valves to the inlet feeds is advised for ease of maintenance.

The fitting of strainers is recommended to the inlet connections.

Please take great care when installing this mixer not to damage its surface.

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

Note: When pressure is higher than 5 bar a pressure reducer is required to be fitted before the valve.

Please note if installing in an enclosed environment, access should be left for servicing and maintenance. No costs relating to inadequate access can be accepted.

Installers/users notes

Working Parameters And Technical Specification

Factory Temperature Setting	38° C
Temperature Setting Range	35° C to 46° C
Temperature (Hot Supply)	55° C to 65° C
Temperature (Cold Supply)	< 25° C
Minimum Hot To Mix Differential Temperature	10° C
Temperature Stability	±2° C
Working Pressure, Static	10 Bar Max
Working Pressure, Dynamic High Pressure	0.5–5 Bar
Maximum Pressure Loss Ratio	10:1

NOTES: Designations of use in table, refer to HP only.

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

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

Approvals & Application

BuildCert Approval Number BC1612

Operating specifications

Hot Water Supply Temperature:

Maximum: 80° C

Minimum: 10° C higher than the maximum required mixed temperature (advise 65° C)

Operating Pressure

Maximum: 5 bar

Minimum: 0.2 bar

Recommended outlet temperatures

The BuildCert TMV scheme recommends the following mixed water outlet temperature for use in all premises:

44° C for bath fill but see notes below;

41° C for showers;

41° C for washbasins;

38° C for bidets.

The mixed water temperatures must never exceed 46° C.

The maximum mixed water temperature can be 2° C above the recommended maximum set outlet temperature.

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.

Cleaning

This thermostatic valve is fitted with a single filtering facility. Filters are fitted on the thermostatic cartridge.

Depending on the water quality, filters may become dirty, causing reduced flow and inefficient working of the valve.

Cartridge Filters

To clean the filters, you must first remove the cartridge from the housing.

Shut off the water supply to both inlets at the isolating valves before commencing any work.

Clean the filters by rinsing them in water to remove the dirt and soaking them in vinegar or descaling agent.

Before reassembling the cartridge, clean its housing with a wet cloth and grease the 'O' rings using a suitable silicone lubricant.

Place the cartridge back into the valve and secure with the grub screw located at the front of the body.

Make sure everything is tight and secure and turn on the water supply at the isolating valves.

Now check the water temperature to ensure correct calibration see page 7 for temperature resetting.

Care of the valve

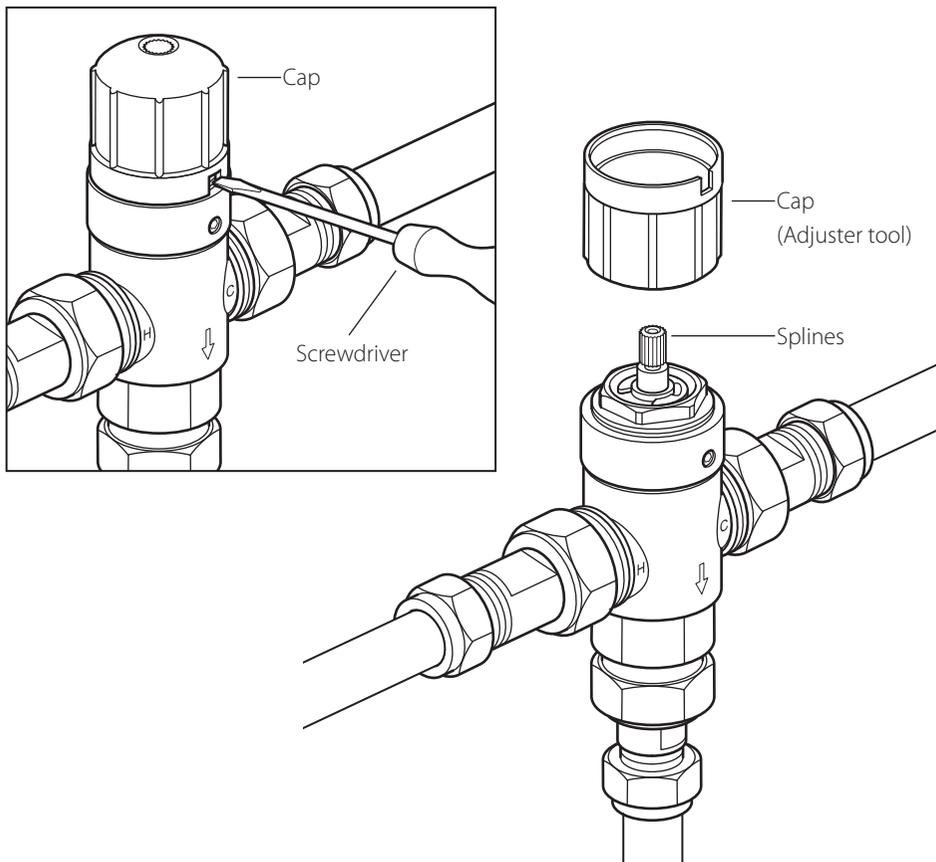
Our products are finished to the highest standard and due care needs to be taken to ensure their looks are retained.

We recommend cleaning all products with a soft damp cloth ONLY and advise strongly against the use of ALL cleaning products i.e. powders and liquids.

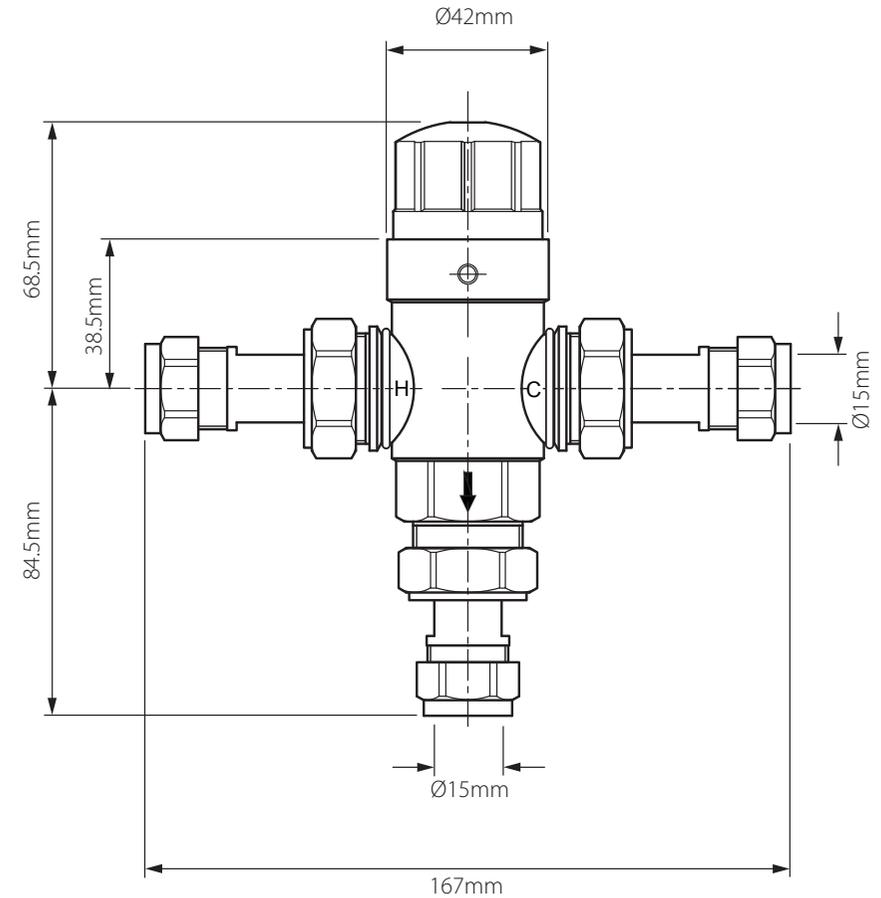
If the above instructions are not followed this will invalidate your guarantee in the event of a problem occurring.

Commissioning & resetting temperature

The temperature range can be reset between 35°C to 46°C see below for adjustment. Ensure that the commissioning of the valve is done under normal use conditions. Using a small screwdriver prise the cap from the top of the valve. Turn upside down and place onto the splines of the valve. With both the hot and cold supplies turned fully on and the terminal fitting open, adjust the temperature to the required setting. Using the adjuster tool supplied, turn the adjuster clockwise to decrease or anti-clockwise to increase the temperature. A digital hand-held thermometer should be used to measure the outlet temperature correctly.



Dimensions



Operating Specifications

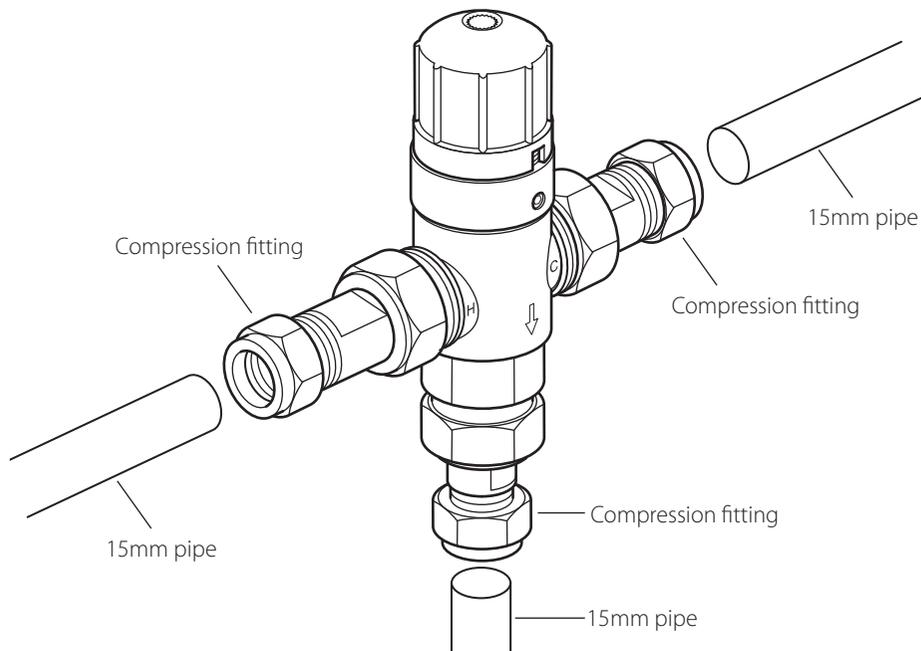
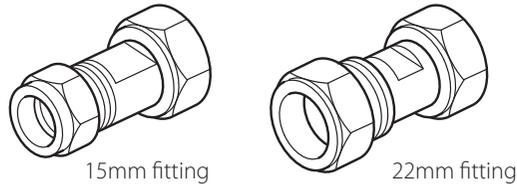
Hot Water Supply Temperature:
Maximum: 85° C
Minimum: 10° C higher than the maximum required mixed temperature (advise 65° C)

Operating Pressure
Minimum operating pressure 0.2 bar
Maximum operating pressure 5 bar

Installation

22mm Compression fittings.

The PRO-5001 comes with 15mm compression fittings as standard. 22mm compression fittings are available as an optional extra.



For illustrative purposes only the valve is shown with 15mm compression fittings. Please follow the same procedure to install using the 22mm compression fittings. Before installing your new mixer, flush through the pipe work to ensure removal of debris, turn off the water supply. Connect the hot and cold supply to the correct inlets as designated on the valve body. Ensure there are no leaks around these connections. Connect the bottom outlet as required.

Commissioning & resetting temperature

Commissioning notes for Thermostatic Mixing Valves.

The first step in commissioning a thermostatic mixing valve is to check the following:

1. The designation of the thermostatic mixing valve matches the application.
2. The supply pressures are within the valves operating range.
3. The supply temperatures are within the valves operating range.
4. Isolating valves (and strainers preferred) are provided.

If all of these conditions are met, proceed to set the temperature as stipulated in the manufacturer installation instructions.

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

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 stabilise.

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.

The installation of thermostatic mixing valves must comply with the requirements of the Water Supply (Water Fittings) Regulations 1999.

The thermostatic valve is factory set at 38°C.