#### customer/technical services

For any technical or installation gueries 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. 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.

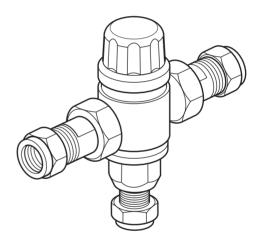
#### Vado

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 I	DATE		ARTICLE NUMBE	ΕR	(SEE BOX)
PRODUCT D	ESCRIPTION				
WHO INSTAI	LLED THE PRODUCT?	RETAILER	PLUMBER	BUILDER	SELF
FOR VADO L	JSE				



## installation & maintenance instructions



# pro-5001-w/np

thermostatic mixing valve

please leave these instructions with the customer

# important - please read

## Pro-5001-w/np ADJ35~46C Max: 1000kPa 85C

The TMV3 has been specifically designed and manufactured to meet the rigorous requirements of current TMV3 standards

The valve has been independently tested and certified as meeting the requirements of the D08 specifications under the TMV3 scheme.

The valve has been approved for use in the following designations.

Code	Operating Pressure	Application	
HP-S	High Pressure	Shower – temperature 41.2°C	
HP-W	High Pressure	Washbasin–temperature 41.º °C	
HP-B	High Pressure	Bidet – temperature 38.º℃	
HP-T44	High Pressure	Bath fill – temperature 44.2°C	
HP-T46	High Pressure	Bath fill – temperature 46.2°℃	
LP-S	Low Pressure	Shower – temperature 41.2°C	
LP-W	Low Pressure	Washbasin–temperature 41.º℃	
LP-B	Low Pressure	Bidet – temperature 38.º℃	

Table 1: Approved designations

# approvals & application

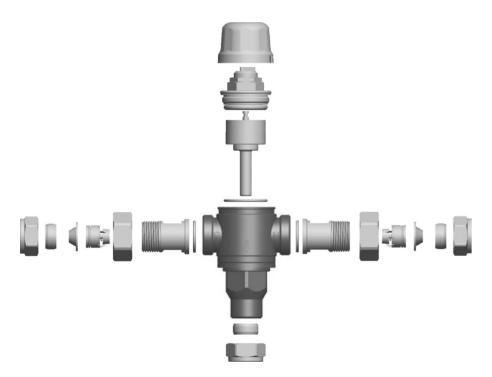
Certificate No: BC577/1009



## installers/users notes

## cleaning the valve

- Isolate the hot and cold supplies and remove the valve body from the installation by undoing the adaptor union nuts. Make note of the orientation of the parts as they are removed so that they can be reassembled in the correct manner.
- Remove the check valves and strainers fitted in the adaptors and check for damage, rinse in clean potable water.
- To clean the internals of the main valve body, first remove the cap and then carefully remove the valve headwork by unscrewing the large hex nut.
- Slide the piston and thermostat assembly out of the valve body and clean all internal surfaces and O Rings with a weak solution of scale remover, approved for use with potable water.
- After cleaning, reassemble the TMV3 Valve. Exercise, reset and test the valve as lay out in the commissioning section.



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

# general installation

#### Conditions of normal use

Operating pressure range	High pressure	Low pressure	
Flow pressure , hot and cold	1 to 5 bar	0.2 to 1 bar	
Hot supply temperature -°C	52 - 65	52 - 65	
Cold supply temperature -°C	5 - 20	5 - 20	

Table 2: Conditions of normal use

**Note:** The valve may perform adequately outside these conditions but the TMV3 scheme approval does not apply.

If it is required to work with other conditions, an engineer must carry out his own risk assessment and satisfy himself that the valve is still suitable for use.

Technical Specification				
Factory Temperature Setting	38° C			
Temperature Setting Range	35° C to 46° C			
Temperature (Hot Supply)	52° C to 65° C			
Temperature (Cold Supply)	5° C to 25° C			
Minimum Hot To Mix Differential Temperature	10° C			
Temperature Stability	±2°C			
Working Pressure, Static	10 Bar Max			
Working Pressure, Dynamic	Low Pressure 0.2–1 Bar High Pressure 1–5 Bar			
Flow Rate @ 1 Bar Pressure Loss	21 L/MIN			

Table 3: Technical specifications

#### installation

The TMV3 is suitable for single outlet applications only.

Ensure that the designations of the valve matches the intended applications.

The valve can be installed in any orientation.

Flush both supply pipes before connecting the valve.

### commissioning & resetting temperature

Since the installed supply conditions may differ from those used in testing and setting the valves during final inspection and a valve may have several designations. It is necessary to reset the mix temperature proceeding as follows.

- Ensure that the commissioning of the valve is done under normal use conditions.
- 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.
- Once the correct outlet temperature has been achieved, the valves internal mechanism should be exercised at least three times by alternately isolating the hot and cold supplies. This will cause the piston to travel its full stroke and will ensure that the valve is operating correctly. If the set temperature has drifted after this operation, then the commissioning operation should be repeated. Once the valve has been commissioned, a fail-safe shut off test should be performed. Isolate the cold supply. The flow should reduce to a trickle within a couple of seconds depending on site conditions.
- If the temperature has not altered, repeat the test for the hot supply. If either fail-safe function does not operate, ensure that supply pressures and temperatures are within the valves normal operating parameters. In addition, check that the hot supply temperature is at least 10°C above the valves set mixed outlet temperature, i.e. hot to mix differential temperature.

#### maintenance

To comply with TMV3 approval, the TMV3 valve should be tested against the original performance results once a year after installation. When testing is due the following performance checks shall be carried out. Performance checks that should be carried out at routine maintenance times are:

- Measure the mixed water temperature at the outlet.
- Carry out the cold fail-safe shut off tests by isolating the cold water supply to the TMV. Wait for five seconds, if the water is still flowing check that the temperature is below  $46^{\circ}C$
- If there is no significant change to the set outlet temperature (2°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.