

AQUAECO

WASHROOM AND PLUMBING SOLUTIONS

Installation Guide



AQE-WRM-T123-CP

AQUAECO THERMOSTATIC ANGLE VALVE 1/2"

A member of SANIPEXGROUP

INSTALLATION INSTRUCTIONS

Before installing the product, please check that all the components listed are included in the package.

The system must be checked before installation to ensure that its operational conditions correspond to the working range of the mixer, e.g. water supply temperatures and pressures; etc.

The system where the mixer is to be installed must be purged and cleaned so as to remove any dirt or debris that may have formed during assembly. Failure to remove the dirt may affect the performance and void the manufacturer's guarantee.

We recommend installing filters of proper capacity at the water inlets.

For areas subject to highly calcareous water, we recommend treating the water properly before running it through the valve.

SANIPEX B02 mixers must be installed following the diagrams included in this manual and in compliance with all the applicable standards and Codes of Practice.

The mixers can be installed both in vertical and horizontal direction.

Hot and cold water inlet supplies are indicated on the mixer body:

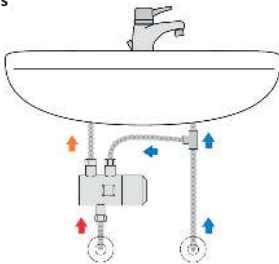
- hot water inlet – red
- cold water inlet – blue

Check valves should be installed in thermostatic mixer systems so as to prevent undesired backflows.

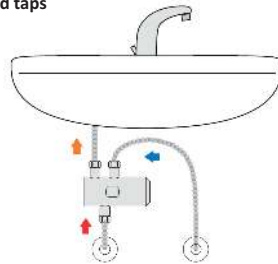
The valve should be easy to access so as to facilitate the maintenance of the mixer or connections. Do not use the pipings to support the weight of the valve.

TYPICAL INSTALLATION DETAILS

For single lever mixers



For timed and infrared taps



COMMISSIONING

Should any specification of the installation or system not correspond to the indicated requirements, do not activate the system till properly adjusted.

- 1) Check that the system is clean and free from any debris before activating the thermostatic mixer.
- 2) We recommend to adjust the temperature by using a properly calibrated digital thermometer. The valve must be started up by measuring the temperature of the mixed water at the outlet point of use.
- 3) The outlet temperature must be adjusted based on the use and corresponding evaluation of the risks, so as not to endanger the user and to comply with the current applicable regulations.
- 4) The temperature of the valve drain must be adjusted based on the fluctuations caused by simultaneous collections. All the above mentioned conditions must be stabilized before starting the system.
- 5) Set the temperature by adjusting the hexagonal screw of the thermostatic mixer
 - a) Adjust the temperature of the mixed water to the desired setting.
 - b) Measure and record the temperatures of the hot and cold water at the inlet.
 - c) Measure and record the temperatures of the water at the faucet outlet with the highest and lowest capacity.
 - d) Execute the anti-scalding thermic shut-off function.
 - e) Measure and record the the maximum temperature of the mixed water. This value must not exceed the values indicated by applicable regulations or codes of practice.
 - f) Reset the inlet cold water supply and measure the temperature at the outlet after it has stabilized. The final temperature measured during this test must not exceed the allowed values $\pm 2^{\circ}\text{C}$.

We recommend to record all the above mentioned data in the start up report and to update the maintenance report at every service.

SETTING TEMPERATURE

- Unscrew the protection cap
- Using a wrench, turn half round the working rod to obtain the desired temperature
- Tighten the protection cap back on



MAINTENANCE

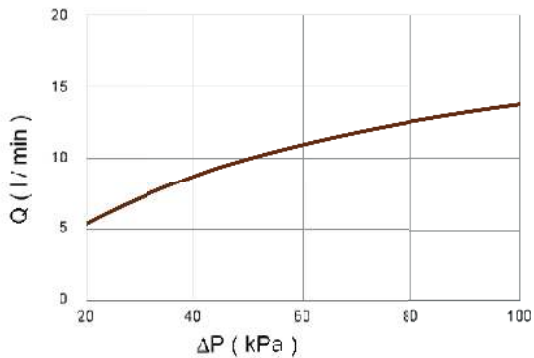
Operational tests should be carried out to regularly monitor the performance of the mixer. Erratic performances may call for maintenance of the valve and/or system. Should the temperature of the mixed water drastically vary during these tests versus the previous ones, please refer to the "Installation" and "Start Up" sections and carry out the maintenance. We recommend carrying out the following operations periodically, at least once a year or more frequently if required, to ensure an optimal performance of the mixer.

- 1) Check and clean the system filters.
- 2) Examine the upstream check valves for any debris or dirt and make sure they are working properly.
- 3) Remove any limescale from the internal components by immersing them in a suitable descaling fluid.
- 4) Start up the system only after checking the maintainable components.

TECHNICAL DATA

Temperature setting range :	25 ÷ 50°C	
Preset temperature :	38°C	
Temperature stability :	±2°C	
Max working pressure :		
	(static)	10 bar
	(dynamic)	5 bar
Max inlet temperature :	90°C	
Maximum inlet pressure ratio (H/C or C/H) :	5 : 1	
Min. temperature differential to ensure fail safe between supply and mixed water :	10°C	

HYDRAULIC CHARACTERISTICS



Recommended minimum flow rates to ensure correct operation
4,5 l/min

PROBLEM SOLVING

In normal working conditions, the SANIPEX B02 thermostatic mixers guarantee high levels of performance. However problems may occur in specific circumstances and when not following our maintenance program:

Symptom	Cause	Solution
Hot water supplied to the cold water faucets	<ul style="list-style-type: none"> a) The inlet check valves do not work properly and seal is not ensured b) No check valve connected to the system 	<ul style="list-style-type: none"> · Replace the damaged check valves
Temperature fluctuations of the mixed water	<ul style="list-style-type: none"> a) Incorrect inlet water temperature b) Inlet water supply failing c) Incorrect start up 	<ul style="list-style-type: none"> · Recalibrate the inlet conditions respecting the valve limits
Wrong capacity from the valve outlet	<ul style="list-style-type: none"> a) Insufficient water supply b) Fluctuations of the inlet temperature / pressure conditions c) Adverse conditions created by other points of collection within the system 	<ul style="list-style-type: none"> · Stabilize the supply conditions at the inlet
No water flowing out of the valve	<ul style="list-style-type: none"> a) In-line filters clogged b) Insufficient supply pressure c) Adverse conditions created by other points of collection within the system 	<ul style="list-style-type: none"> · Clean the filters · Reset the supply conditions · Remove any dirt or limescale from the valve
The valve doesn't activate its anti-scalding feature when tested	<ul style="list-style-type: none"> a) Installation not complying with the instructions given b) Minimum temperature difference not reached c) Internal mechanism clogged 	<ul style="list-style-type: none"> · Carry out the installation as recommended · Increase the hot water temperature · Remove any dirt or limescale from the valve

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