

22mm Low Pressure Solar Thermostatic Mixing Valves

Connection: 22mm

This valve prevents very high temperature water from entering the DHWS taps and outlets.

Note: *This valve can be used in conjunction with TMV2 and TMV3 – but not instead of.*



Technical specification

Temperature stability	± 2 °C
Inlet temperature range supply	55 – 65 °C hot supply ≤ 25 °C cold
BS EN1287 working pressure range	0.1 – 1.0 low pressure
Min temperature differential mix to hot	
For fail safe	10 °C
Max pressure inlet differential	5:1
Max inlet operating temperature	110 °C

Materials:

Body:	DZR Brass EN 12165 CW602N, Chrome Plated
Shutter:	Brass or brass PTFE coated
Springs:	Stainless Steel
Seals:	EPDM

Flow rate @ 46 °C

Mixed Water @ 46 °C						
Pressure (bar)	0.2	0.3	0.5	1.0	1.5	2.0
Litres/minute	15	18	22	30	36	42

Function:

High temperature water burns and it is the industries and the home owner's duty of care to consider how they may safeguard against accidents that may occur by using extremely hot water. This mixing valve is designed to work at the extreme end of the temperature range and provide a level of protection should other safety switches fail.

Storing energy from the sun in the form of hot water, can lead to water arriving at the taps at a higher than normal temperature. In some cases, the cylinder maximum store temperature can be raised to as high as 80 °C, which is delivered through a tap or any outlet, would present a severe danger of possible scalding.

The Solar Thermostatic Mixing valve is designed to temper the water temperature to a safer level. Unlike the under basin, or bath/shower type valves we are familiar with on the market, the Solarmix is designed to function continuously at high temperatures, something a standard TMV2 valve could not code with.

Fitted close to the HW outlet from the cylinder, the Solarmix blends the high temperature hot water with cold, to provide safe water supplies. Flow rates are also greater on these valves and are suitable for use on pressurized systems (please note though, they may not be suitable for use on some LP gravity DHWS)

Solar thermostatic mixing valves should not be installed instead of TMV2 OR TMV3 valves, and are used in a different context to these valves!

It is essential before installing any of the series 60007 thermostatic mixing valves, that you ensure that the supply conditions of the system to which the valve is intended to be fitted are checked to confirm compliance with the parameters as quoted within the technical specifications and conditions on which the approval is granted i.e. verify supply temperatures, supply pressure and risk assessment.

The supply system to which the series 60007 thermostatic mixing valve is to be installed, must be thoroughly flushed and cleaned to remove any debris which may have accumulated during installation. Failure to remove any debris will affect the performance and the manufacturer's warranty of the product. Independent filters/check valves and isolation valves must be fitted in conjunction with the valve. In areas that are subject to aggressive water, provision must be made to treat the supplies prior to the supplies entering any Intaeco product. The maximum flow rate of the valve will only be achieved when the supply conditions are achieved as quoted within the technical specification, with flow conditions under 1 bar differential pressure.

The Intaeco low pressure thermostatic mixing valve has been designed to be installed in any position whether vertical or horizontal. It can be surface mounted or within a supply duct. But it is essential that access to the valve is not obstructed to allow for any future maintenance that may be required to the valve or associated fittings.

The hot and cold water supplies must be connected to the valve strictly in accordance with the indications on the body of the valve i.e. hot water supply to the hot water port of the valve.

In a situation where one or both of the water supplies are excessive, it is possible to fit a pressure reducing valve to reduce the pressure(s) to within the limits quoted previously.

Full bore isolation valves and Y pattern strainers can be used in conjunction with the low pressure solar thermostatic mixing valve, but on gravity systems the open vent must NOT be obstructed in any way or at any time.

If a water supply is fed by gravity, then the supply pressure should be verified to ensure that the conditions of use are appropriate for the valve. The installation of thermostatic mixing valves must comply with the requirements of the Water Supply (Water Fittings) regulation 1999.