

# Valvola anticondensa termostatica

Art. 1532



100% MADE IN ITALY 

**Function** Pintossi+C anti-condensation thermostatic valve is designed for the use in solid fuel heating systems. Its function is to keep at a given level the temperature of the fluid returning to the generator, defined on the basis of the valve setting. Keeping the high temperature on the fluid returning to the generator **prevents the formation of condensation** and the formation of unburnt fuel deposits and dust in the heat exchangers. Its service, in addition to improving the performance of the generator, increases the speed of the system set up. It is particularly suitable for boilers, thermo fireplaces, stoves using wood, pellets, etc. Otherwise, it can be installed in the returned circuit to the generator with a **mixing function**, or in the inlet circuit as **diverting valve**. These valves have a fixed temperature set point that cannot be modified. Yellow brass finishing.

Product range	Art.	Size	Set point
	Art. 0153250100	1"	Set point: 50°C
	Art. 0153260100	1"	Set point: 60°C
	Art. 0153270100	1"	Set point: 70°C

Technical specifications	Fluids:	Water or glycol solution
	Max glycole:	30%
	Max working temp.:	90°C
	Max working pressure:	10 bar
	By-pass closure temp.:	Temp. taratura + 5°C
	Temperature stability.:	+/- 3°C
	KV:	2,7 m³/h

Materials	Body:	Brass CW617N
	Shutter: <td>Brass CW614N</td>	Brass CW614N
	Gaskets: <td>NBR</td>	NBR
	Spring: <td>Stainless steel AISI302</td>	Stainless steel AISI302
	Sensor element: <td>Wax</td>	Wax

## Installation

The valve can be installed both vertically and horizontally, on both sides of the generator.

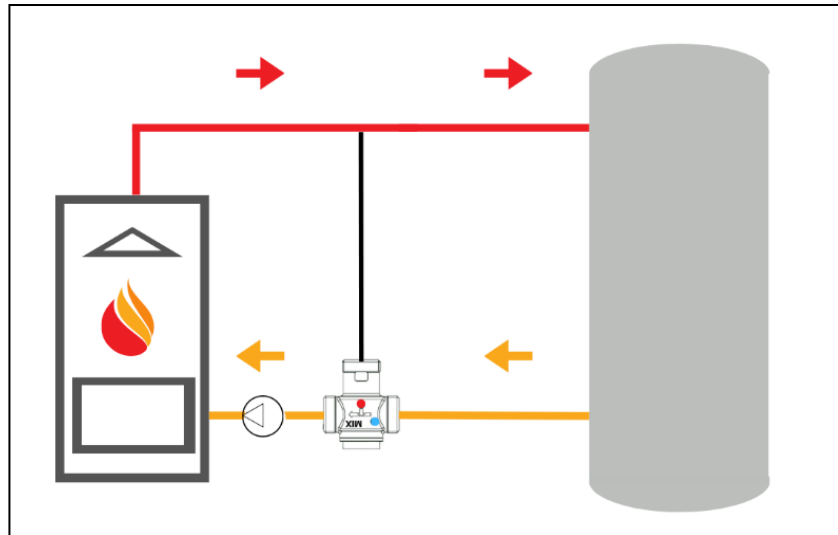
It is recommended the installation on the return in the boiler (mixing function), but it is allowed also the installation on the supply (deviation mode).

In order to avoid malfunctions due to dirt in the heat convector fluid it is advised the installation of filters such as art. 9023.

For every configuration it is important to respect the installation and the pipe connections as shown in the schemes below.

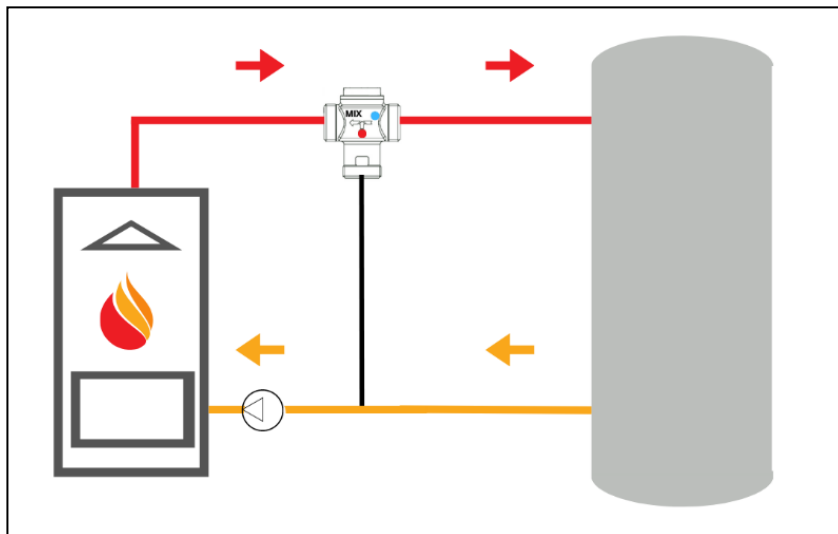
### MIXING VALVE (Recommended installation)

The installation of the valve on the RETURN circuit in the boiler will make it act in its classical function as anti-condensation mixing valve.



### DIVERTING VALVE

The installation of the valve on the SUPPLY circuit will ensure that the valve will act in its function as diverter valve. The inlet is represented by the connections with the writing MIX.

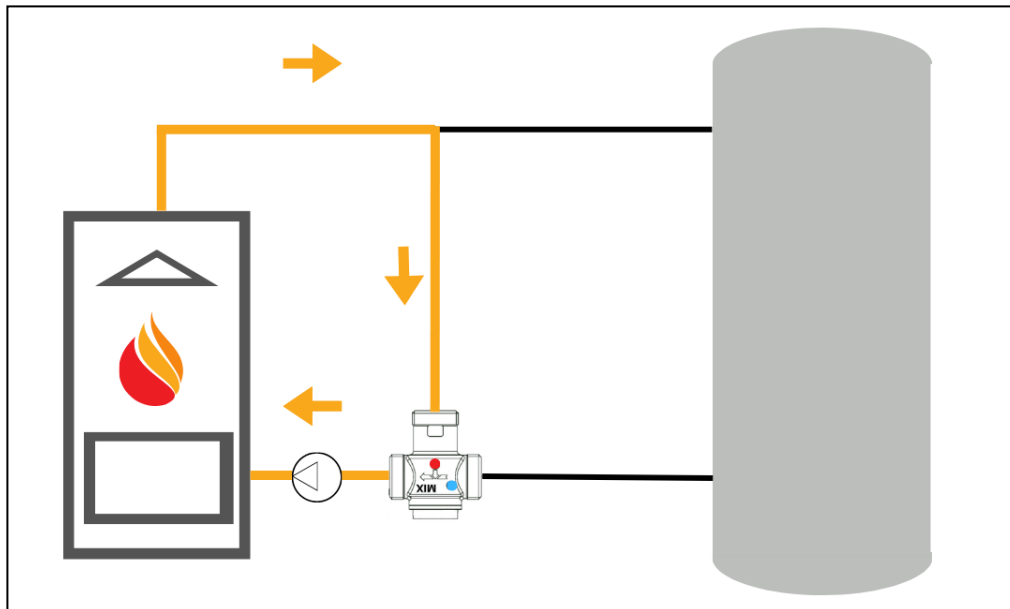


The functioning of the valve passes through 3 different situations until the system is put into operation:

1. Activation with  $T_a < T_{set}$
2. Loading system with  $T_{set} < T_a < T_{set} + 5^\circ\text{C}$
3. Operating system with  $T_a > T_{set} + 5^\circ\text{C}$  (by-pass closure)

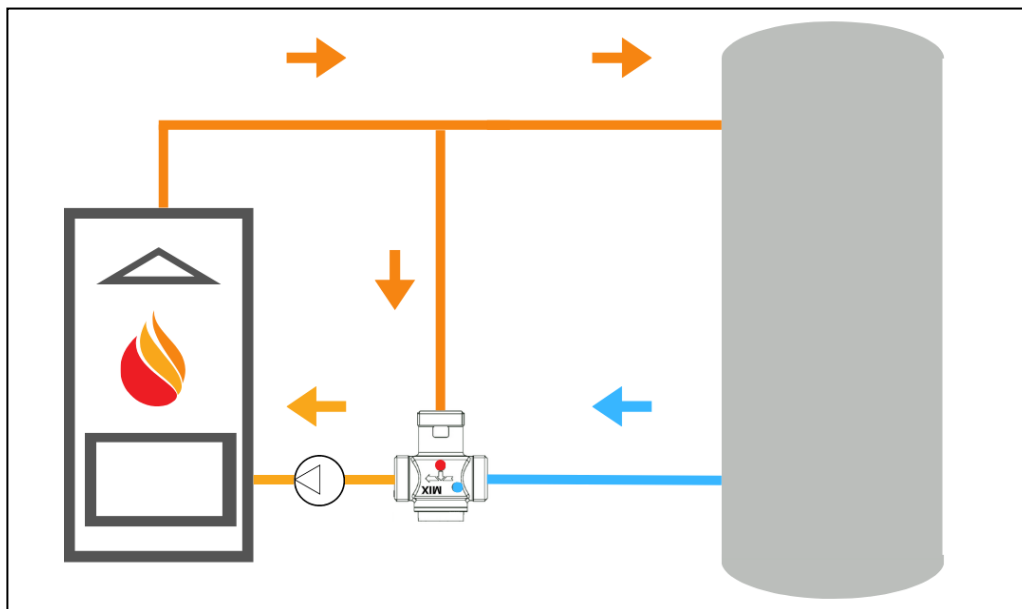
### 1. $T_a < T_{set}$

The by-pass of the valve is open with recirculation of all the thermoconvector fluid to the generator, to allow the increase of the temperature in a short time. The return is closed.



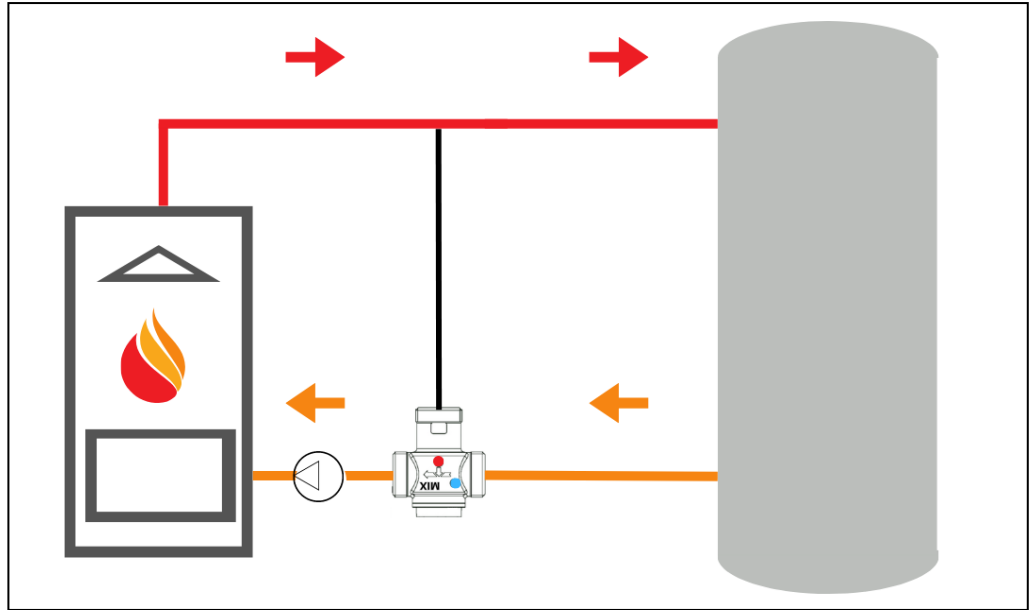
### 2. $T_{set} < T_a < T_{set} + 5^\circ\text{C}$

When the fluid reaches the calibration valve temperature, the return circuit starts to open. As the temperature increases, the inlet circuit will gradually increase its flow rate and the bypass will decrease.

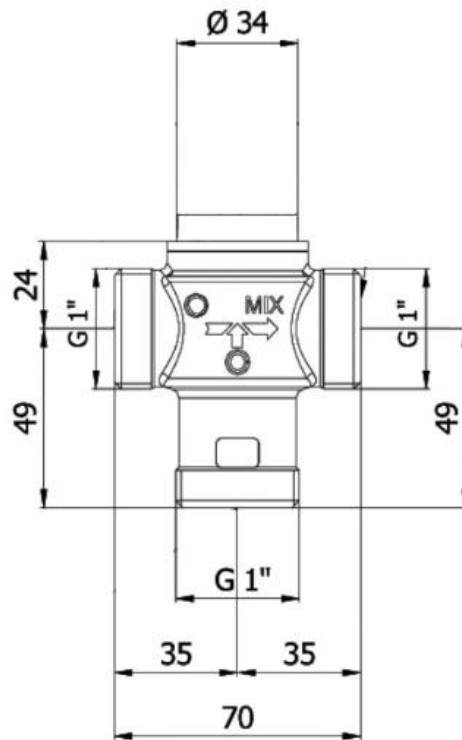


### 3. $T_a > T_{set} + 5^\circ\text{C}$

When the fluid exceeds the calibration valve temperature by more than 5 °C, the by-pass closes completely and the system is fully operational.



## Dimensions



## Fluid characteristics

Reference standard for water treatments in heating systems is Norm UNI 8065:2019 which regulates the parameters that must be observed to avoid scale and corrosion phenomena.

In order to grant product warranty, the fluid characteristics must comply with the rules in force in the country of relevance or at least present features not less to the ones prescribed by the Norm UNI 8065:2019.

In particular, minimum standards necessary but not sufficient to control are the following:

Fluid aspect: Limpid

PH: Between 7 and 8

Iron (FE): < 0,5 mg/kg (< 0,1 mg/kg for steam)

Copper (CU): < 0,1 mg/kg (< 0,05 mg/kg for steam)

Antifreeze: Passivated Propylene Glycol

Conditioning: as indicated by the producer

In any case when using antifreeze and conditioning solutions, is required to control and verify the correct compatibility between these substances and the construction materials stated in Pintossi+C technical datasheet.