ANTARES® for water & fire

EN

Art. E.206.03
Temperature safety relief valve

Temperature safety relief valve size 3/4"

General description

Temperature safety relief valves are manufactured by Antares S.r.l. in compliance with the essential requirements contained in Directive 97/23/EC of the European Parliament and of the Council of the European Union to harmonise member state regulations on pressure equipment.

Function

The temperature safety relief valves limit the temperature of water in multifuel or non-pulverized solid fuel generators equipped with built-in storage or emergency heat exchanger.
When the setting temperature in the generator is reached the valve begins to discharge the quantity of domestic water required to maintain the temperature of the generator within the safety limits.
The valve complies with EN 14597. It can be coupled with non-pulverized solid fuel generators, with thermal power lower than 100 kW, according to system prescriptions by standards EN 12828 and EN 303-5.

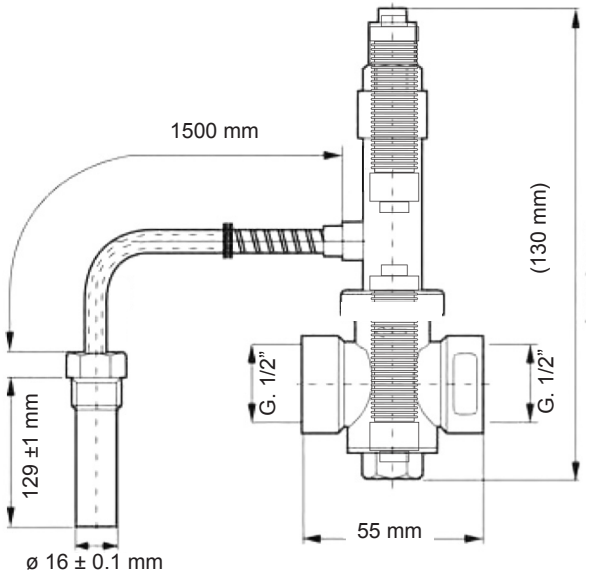
Technical specification

Materials

Body:	brass EN 12165 CW617N, chrome plated
Control spindle:	brass EN 12164 CW617N
Obturator seal:	EPDM
Seals:	EPDM
Spring:	stainless steel
Protection cover:	POM

Performance:

Max. working pressure:	10 bar
Setting temperature:	95°C (+0°C -4°C)
Working temperature range:	5 ÷ 110°C
Discharge flow rate at 110°C and Δp 1 bar:	2000 lt./h
Ambient temperature range:	0 ÷ 80°C
Action type (EN 14597):	2 KP (certified - double sensor -5000 cycle test)
Max. temperature of the sensor:	130°C
Liquid:	water
PED category:	IV
Connections:	1/2"
Probe pocket:	1/2" M.
Capillary length:	1500 mm.



Manufacture details

Pocket and capillary tubes

The size of the pocket is such that it is always in contact with the sensors, which improves heat transmission and keeps thermal inertia to a minimum. The capillary tubes are protected by a galvanized sheath.

Drain

The lower part of the valve contains a button in order to drain the system.

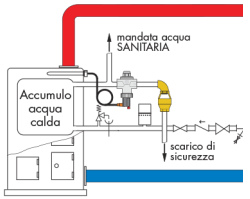
Operating principle

When the temperature rises, the fluid contained within the sensor (1) undergoes a change of state from liquid to gas. The consequent volume increase creates a mechanical movement causing the expandable bellows (2), inside the valve, to push on the obturator and lift it up.

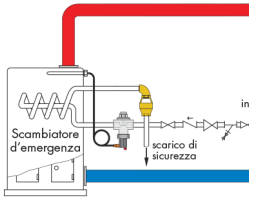
Installation

Note: it is recommended to respect current standards concerning the installation of solid fuel boilers with open or closed expansion vessel: EN 12828, EN 303-5, UNI 10412-2.

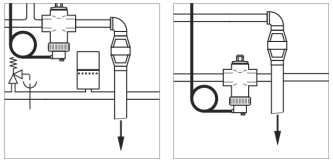
Installation of the temperature safety relief valve in boilers with built-in heater.



Installation of the temperature safety relief valve in the emergency heat exchanger.

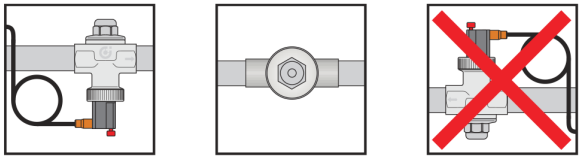


The valve should be installed only on horizontal pipe, with the obturator axis in vertical position. It is allowed the installation of the valve laying on the side (with the obturator axis in horizontal position) but never upside down.



Accessories

We recommend inserting a visible discharge tundish when connecting the device to the discharge pipe.



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