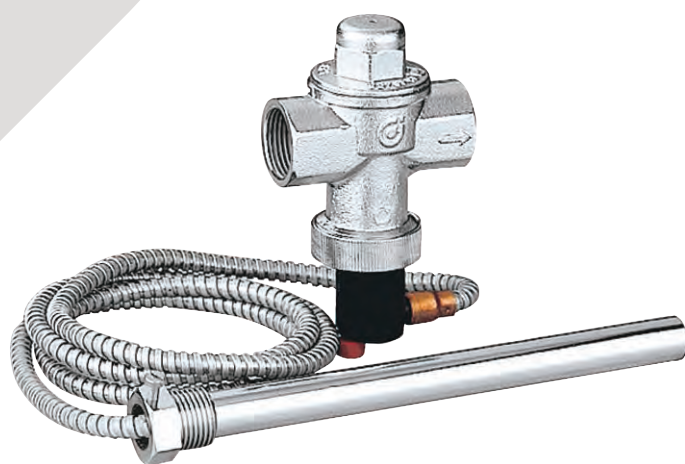


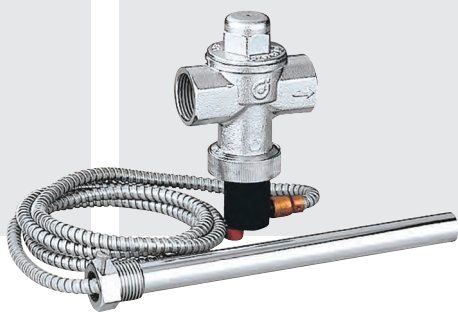
543

temperature safety
relief valve



altecnic

543 temperature safety relief valve



Application

The Altecnic 543 temperature safety relief valve is used in multi-fuel or solid fuel boilers with either a boiler incorporated or an emergency heat exchanger.

When the temperature reaches 95°C, the valve starts to discharge the necessary amount of water to keep the boiler temperature within safe limits.

It complies with BS EN 14597 and can be used on systems that comply with BS EN 12828, relating to solid fuel boilers with a power output less than 100 kW.

Construction Details

Component	Material	Grade
Body	Brass	BS EN 12165 CW617N
Control Stem	Brass	BS EN 12164 CW614N
Obturator Facing	EPDM	
Seals	EPDM	
Spring	Stainless Steel	
Protective Cover	PP Polymer	

Technical Data

Medium:	water
Max. working range:	10 bar
Temperature range:	5 to 110°C
Discharge flow rate at 110°C and Δp 1 bar:	3000 l/h
Ambient temperature range:	0 to 80°C
Action type (BS EN 14597)	2 kP
Max. temperature for the sensor:	130°C
PED category:	IV
Flexible tube length:	1.3 m

CE Mark

The 543 temperature safety relief valve meet the requirements of the European Directive 97/23/CE for pressurised equipment often referred to PED.

They are therefore classified in Category IV and granted the CE Mark.

In addition, the electrical components meet the requirements of Directive 73/23/CE.

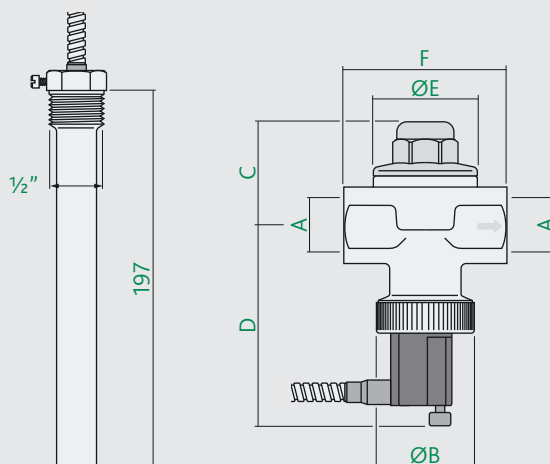
INAIL

The 543 valves is ISEPSL approved.

ISEPSL is the National Institute for Occupational Safety and Prevention.

INAIL is the Italian National Institute for Insurance at Work which took over the I.S.E.P.S.L. in 2010.

Dimensions

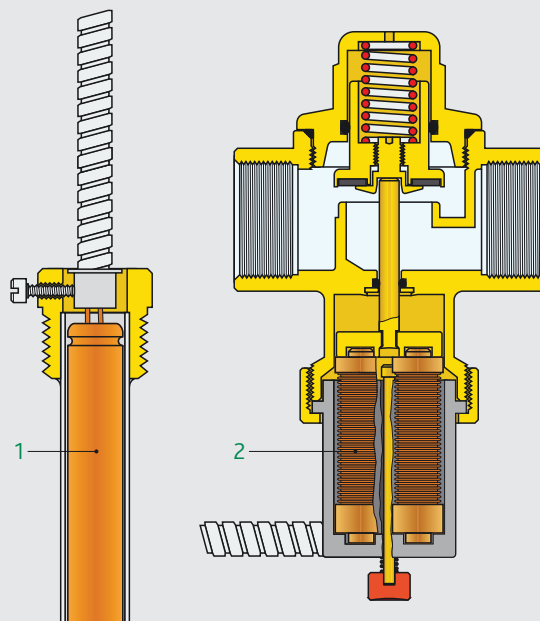


Prod Code	A	B	C	D	E	F	kg
543513	G¾	40	42	86	42	40	1.06

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 disc lifting it and opening the valve.

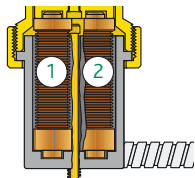


543 temperature safety relief valve

Construction Details

Failsafe contingency

The entire expansion system has a built-in failsafe contingency (1) and (2) to ensure maximum safety, so if one part of the sensor system fails the other part will perform the same functions as both sensor.

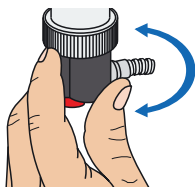


Pocket and sensor

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

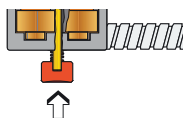
Bellows holder support

The bellows holder support is made of acetal resin and can be repositioned by loosening the knurled lock nut.



Drain

The lower part of the bellows housing has a button to allow the housing be drained.



BS EN 12828 Heating systems in buildings. Design for water-based heating systems.

BS EN 14597 Temperature control devices and temperature limiters for heat generating systems.

E & O.E

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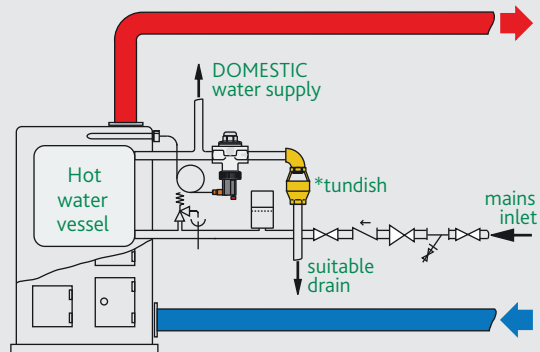
Registered in England No: 2095101

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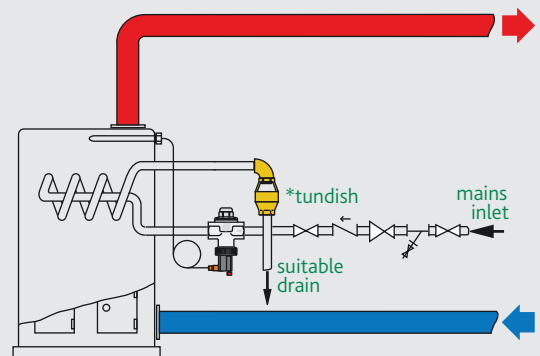
AL 181 14-10-14

Typical Installations

Installation in boilers with a water heating vessel.



Installation in the emergency heat exchanger.



* The discharge from a temperature relief valve should be through a tundish to a suitable drain.

Rules governing the installation of a tundish are specified in the Water Supply (Water Fittings) Regulations and the Water Byelaws in recommendation R19.3.

