

Pressure and temperature valve Series MSL/PT



Main features

- Combined Safety valve pressure and temperature self-closing.
- Approved in accordance with European standard EN 1460 (for settings 4-7-10 bar).

WATTS®

Description

Self-closing MSL/PT series Relief Valves for Water Heaters. The combined 2 in 1 MSL/PT relief valve provides the least expensive and proven means for protection against both excessive pressure and temperature emergency conditions. Provides fully automatic pressure and temperature relief protection for hot water storage tanks and heaters.

Application:

Fully automatic pressure and temperature relief protection for domestic hot water supply tanks and heaters.

MSL/PT



Combined temperature and pressure valve to protection tank build up. Models with threaded male/female connections or male/fitting connection for copper pipes. Nominal temperature: 92°C. Nominal pressure: 10 bar. Body CW617N, stainless steel spring, diaphragm EPDM; suitable for plumbing water.

According to EN 1490

| Type | Part no. | Dn | Setting (bar) | Weight (g) |
|--------|----------|--------|---------------|------------|
| MSL/PT | 0206930 | 3/4"MF | 3 | 192 |
| MSL/PT | 0206940 | 3/4"MF | 4 | 192 |
| MSL/PT | 0206960 | 3/4"MF | 6 | 192 |
| MSL/PT | 0206970 | 3/4"MF | 7 | 192 |
| MSL/PT | 0206999 | 3/4"MF | 10 | 192 |

Operation

The valve is equipped with two sensitive elements. One for pressure and another one for temperature of the storage tank. The **pressure** of the fluid in the tank pushes on the diaphragm that is counteracted by the spring.

When it exceeds the calibration value. The shutter opens, discharging into the atmosphere a quantity of liquid sufficient to restore the conditions of safety.

The probe increasing the **temperature** of the fluid in which it is immersed, dilates acting on the valve itself. Reaching the calibration temperature opens the valve and release the liquid into the atmosphere. The valve closes automatically when the temperature of the liquid decreases to a value lower than one of calibration, due to the mixing with refilling cold water.

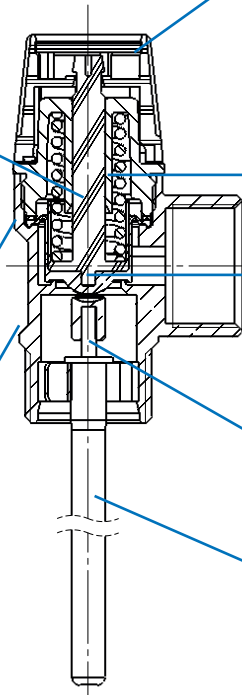
These MSL/PT valves feature a unique probe with special thermo-bonded coating. Thermostat is accurate and proven. Exclusively designed and manufactured by WATTS. Temperature nominal setting : 92°C, the valve opens between 89°C and 95°C. The European Standard EN 1490: 2000, entitled "Building valves - Combined pressure and temperature relief valves – Tests and requirements", describes the constructional and performance specifications that MSL/PT relief valves must have.

The series MSL/PT relief valves are certified to comply with the requirements of this European Standard EN 1490 (for settings 4 – 7 – 10 bar).

The valve stem is not in brass as other valve of the market, but made of PA6.6 fiberglass and reinforced high resistance polymer. This synthetic material presents exceptional mechanical resistance, and it is largely used in water meters and valves. 100% recyclable, PA6.6 is particularly appreciated by leading-edge industries for its endurance, insulation, and total absence of corrosion. This ensures correct operations even with corrosive atmosphere (ie close to the sea) or with an outside installation as solar roof top and avoid any risk of binding or locking.

Robust and low complexity construction providing superior reliability and longevity.

Dezincification resistant brass housing.



The control knob made of PA6GF, instead of a lever type valve, is more aesthetic and with a modern design to complement the finish of today's systems.

The pressure relief function is reliable and guaranteed by both a European ISO9001 production and a wealth of experience gained in its different world markets.

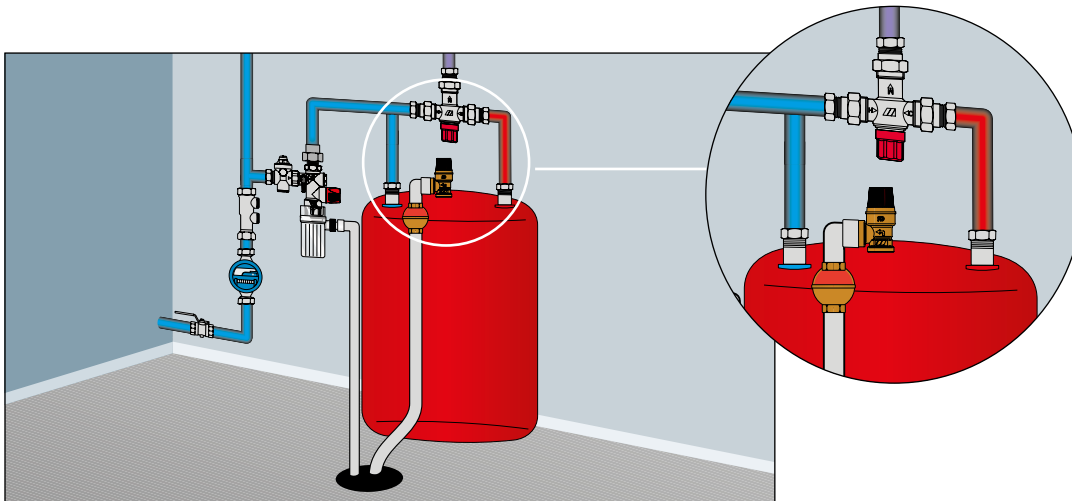
The diaphragm is in EPDM and sanitary approved.

This piece is cast solid, the brass insert is vulcanized with the rubber diaphragm, providing a better reliability and no risk of escape.

The probe is hung by a innovating attachment unit.

The probe is accurate and proven. Exclusively designed and manufactured by WATTS.

Example of installation



Technical specifications

| | |
|---------------------|----------------|
| Nominal pressure | PN 10 |
| Pressure opening | 3-4-6-7-10 bar |
| Temperature opening | 92 °C |

Materials

| | |
|--------------|-----------|
| Body | DZR Brass |
| Spring | Steel |
| Control knob | PA6 GF |
| Diaphragm | EPDM |

Installation

Please refer to local Regulation.

All recognized codes require that a temperature actuated relief valve be installed on a storage water heater, generally in such a manner that the temperature sensing element is in contact with hot water in the **top 6 inches (152mm)** of the tank. A drain line must be fitted to each MSL/PT valve.

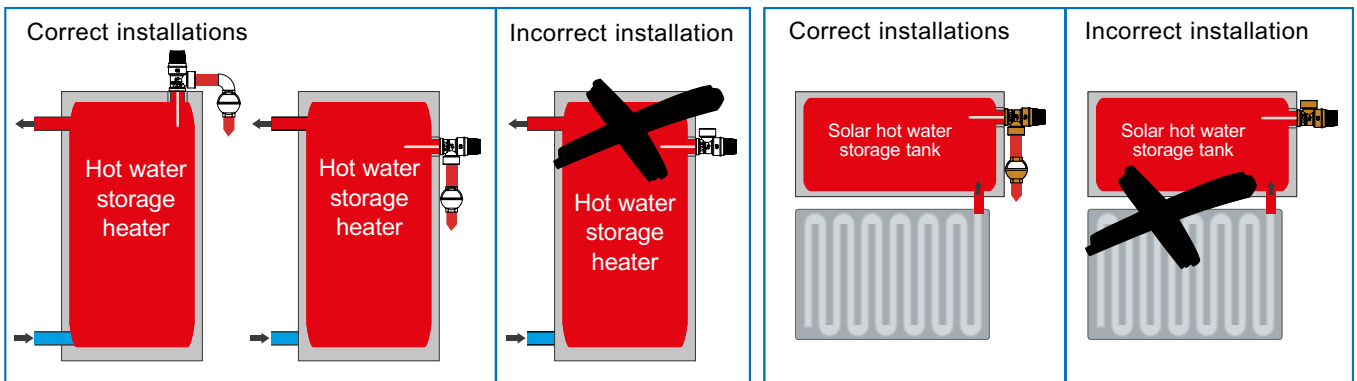
The drain line should discharge into a floor drain, check to see that a discharge line is connected to this valve directing the flow of hot water from the valve to a proper place of disposal otherwise personal injury may result.

The drain pipe from the MSL/PT must discharge through a tundish, to a safe and visible position to alert the householder of a fault condition with the system.

The MSL/PT relief valves must be installed by qualified technical plumbers in accordance with current regulations.

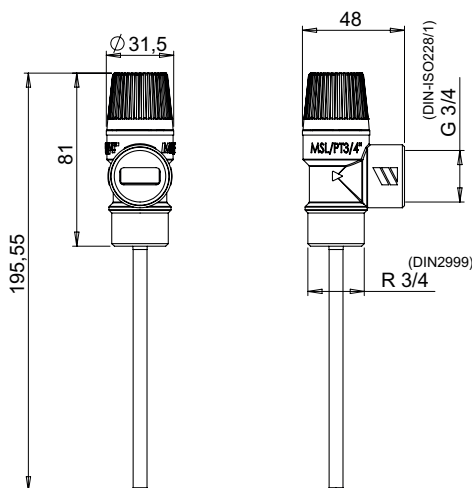
The MSL/PT relief valve must be installed observing the direction of flow indicated by the arrow on the valve body.

The MSL/PT relief valves can be fitted vertically or horizontally, but not overturned.



Overall dimensions (mm)

MSL/PT



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