# Pressure and Temperature Relief Valves - 684





- Fully automatic pressure and temperature relief protection.
- Product certification in accordance with European Standard EN 1490 (for settings 4 7 10 bar).
- WRAS approved.
- Accurate and proven probe, exclusively designed and manufactured by WATTS INDUSTRIES.



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Self-closing P&T Relief Valves for hot water storage tanks and heaters . The combined 2 in 1 P&T 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.

#### **Typical installation:**

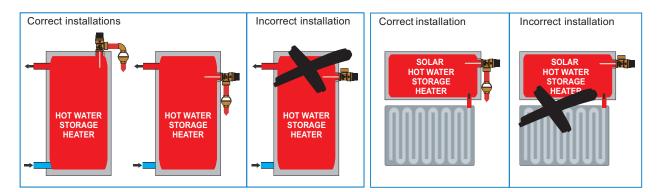
Please refer to local Regulation.

All recognized codes require that a temperature actuated relief valve be installed on a hot water storage 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 P&T 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 P&T must discharge through a tundish, to a safe and visible position to alert the householder of a fault condition with the system.

The P&T relief valves must be installed by qualified technical plumbers in accordance with current regulations. The P&T relief valve must be installed observing the direction of flow indicated by the arrow on the valve body. The 684 P&T relief valves can be fitted vertically or horizontally, but not overturned.



#### **Features:**

These P&T valves feature a unique probe with special thermo-bonded coating. Thermostat is accurate and proven. Exclusively designed and manufactured by WATTS INDUSTRIES.

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 P&T relief valves must have.

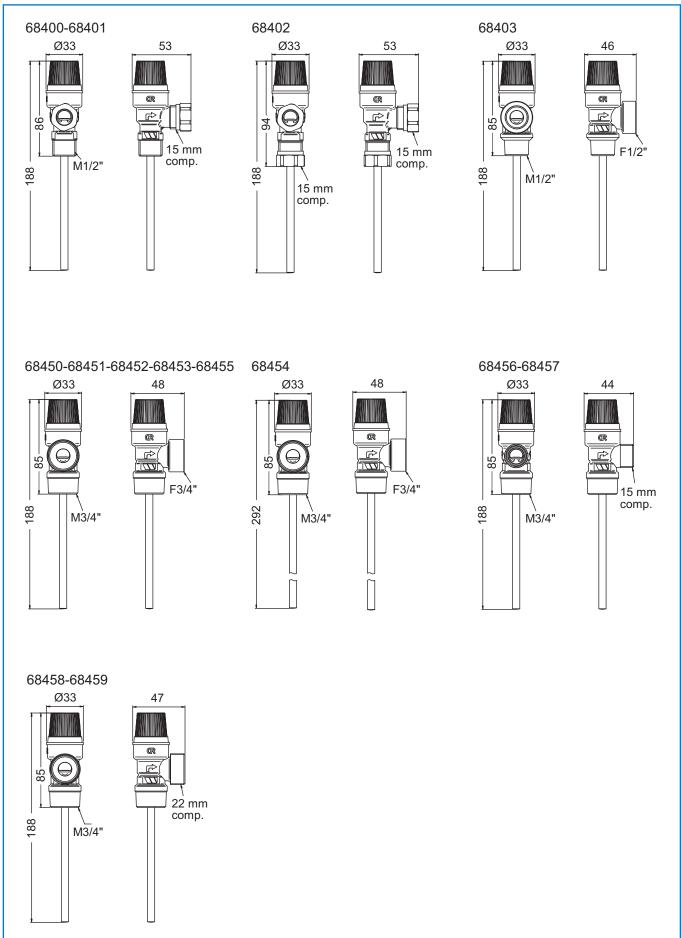
The WATTS INDUSTRIES series 684 P&T relief values are certified to comply with the requirements of this European Standard EN 1490 (for settings 4 - 7 - 10 bar).

## **Range PN10:**

Watts Art.Nr.	Туре	Size Ø inlet - outlet	ND	Setting	Weight
68400	P&T relief valve	M 1/2" - comp.15mm	1/2"	7 bar	190 gr.
68401	P&T relief valve	M 1/2" - comp.15mm	1/2"	10 bar	190 gr.
68402	P&T relief valve	Comp.15 mm - comp.15 mm	1/2"	7 bar	215 gr.
68403	P&T relief valve	M/F 1/2"	1/2"	7 bar	217 gr.
68404	P&T relief valve	M/F 1/2"	1/2"	10 bar	217 gr.
68450	P&T relief valve	M/F 3/4"	3/4"	3 bar	192 gr.
68451	P&T relief valve	M/F 3/4"	3/4"	4 bar	192 gr.
68452	P&T relief valve	M/F 3/4"	3/4"	6 bar	192 gr.
68453	P&T relief valve	M/F 3/4"	3/4"	7 bar	192 gr.
68454	P&T relief valve	M/F 3/4" - 9" probe	3/4"	7 bar	215 gr.
68455	P&T relief valve	M/F 3/4"	3/4"	10 bar	192 gr.
68456	P&T relief valve	M 3/4" - comp. 15 mm	3/4"	7 bar	202 gr.
68457	P&T relief valve	M 3/4" - comp. 15 mm	3/4"	10 bar	202 gr.
68458	P&T relief valve	M 3/4" - comp. 22 mm	3/4"	7 bar	230 gr.
68459	P&T relief valve	M 3/4" - comp. 22 mm	3/4"	10 bar	230 gr.



# **Dimensions (in mm):**



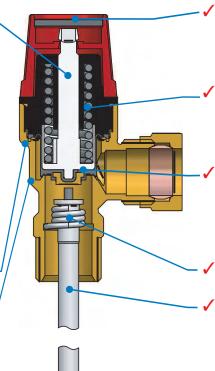


The valve stem is not in brass as other valve of the market, but made of PA6.6 fiberglass and reinforced high resistance polymer.

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.



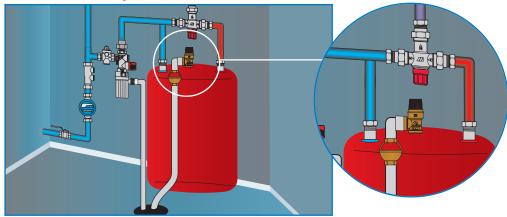
- The control knob made of PA6GF, instead of a lever type valve, is more aesthetic and with a modern design to complement the finish of today's systems.
- The pressure relief function is reliable and guaranteed by both a European ISO9001 production and a wealth of experience gained in its different world 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 INDUSTRIES.

## Installation example:



Approval: WRAS N°1003045

#### **Discharge rating:**

- 1/2" and 3/4" Ø 15 : 10 kW - 3/4" Ø 22 : 25 kW

Technical specifications Material specifica Pressure opening 3-4-6-7-10 bar **DZR Brass** Body Spring Temp. opening 92°C Steel Medium Sanitary water Control knob PA6 GF Nominal pressure EPDM PN 10 Diaphragm

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