

# Pressure and Temperature Relief Valves - 684

*New  
range*



**WRAS**  
APPROVED  
PRODUCT

- 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.

**WATTS**  
INDUSTRIES<sup>®</sup>

A Division of Watts Water Technologies Inc.

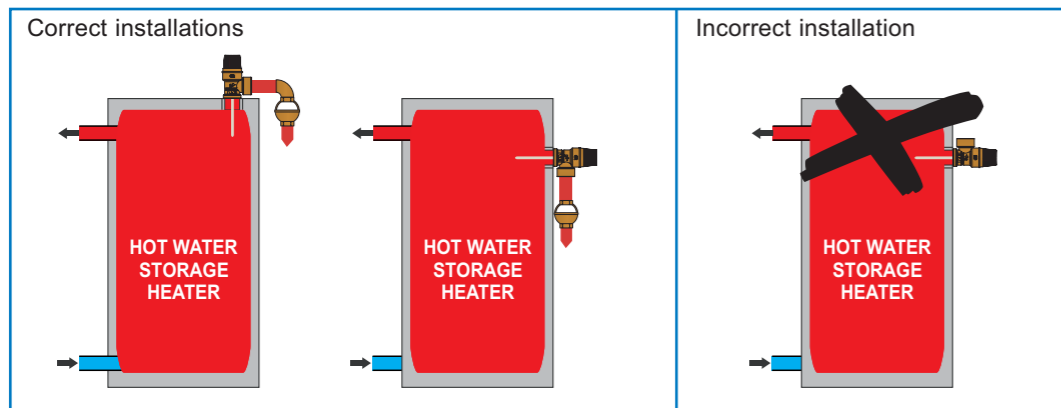


Self Closing P&T Relief Valves for Water Heaters.  
 The combined 2 in 1 P&T relief valves provides the least expensive and proven means for protection against both excessive pressure and temperature emergency conditions.  
 Provides fully automatic pressure and temperature relief protection for hot 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 and ensure installation is by a suitable qualified person.  
 All recognised 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 P&T valve and discharge into a floor drain. It is important that 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 is to a proper place of disposal otherwise through a tundish in 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 a qualified plumber 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 and the 684 P&T relief valve can be fitted vertically or horizontally, but not inverted, see below.

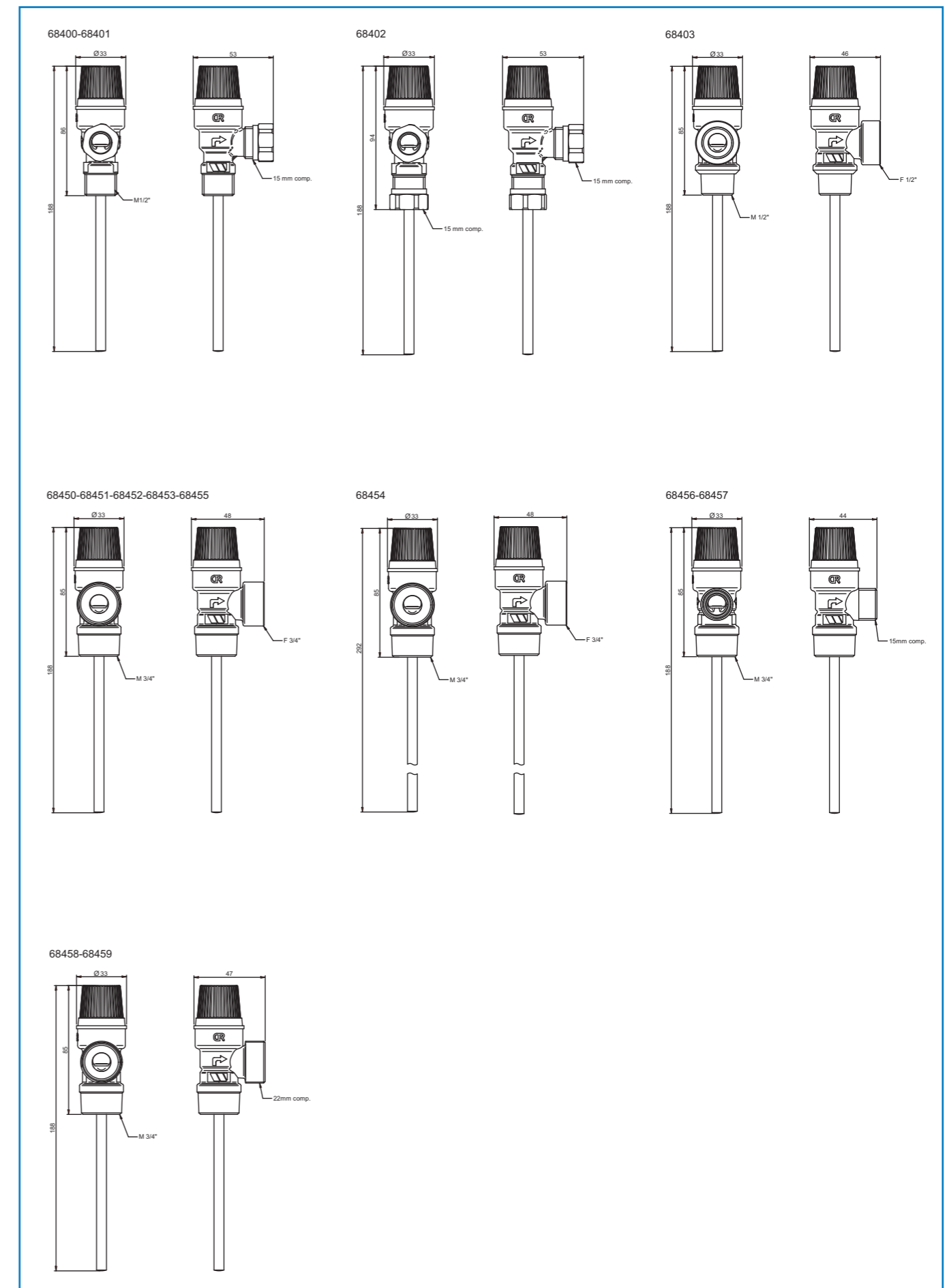


**Features:**  
 These P&T valves feature a unique special thermo-bonded coating. Thermostat is accurate and proven and are exclusively designed and manufactured by WATTS INDUSTRIES.  
 Temperature nominal setting: 92°C, the valve opens between 89°C and 95°C.  
 The European Standard EN 1490: 2000, entitled "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 valves are certified to comply with the requirements of this European Standard EN 1490 (for settings 4 - 7 - 10 bar).

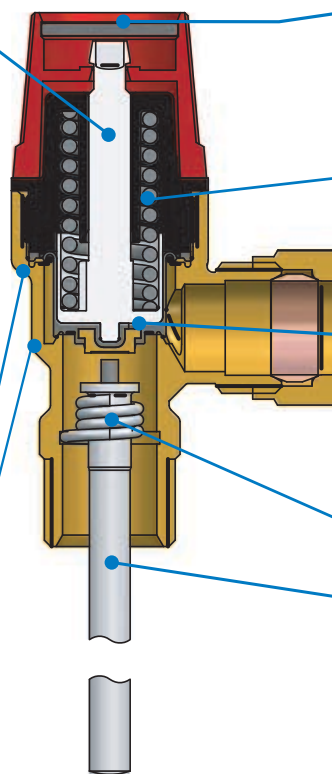
**Range PN10**

Watts Art.Nr.	Type	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 (mm)**

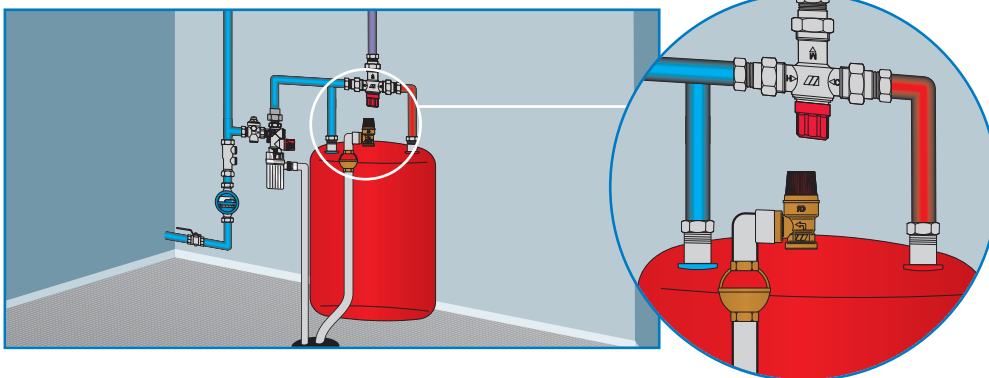


- ✓ The valve stem is not manufactured in brass like other valves on the market, but made of PA6.6 fiberglass reinforced high resistance polymer. This synthetic material presents exceptional mechanical resistance, and it is largely used in water meters and valves. 100% recyclable, PA6.6 is particularly 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 avoids 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 made of EPDM and sanitary approved. This piece of cast solid, the brass insert is vulcanised with a rubber diaphragm, providing a better reliability and no risk to escape.
- ✓ The probe is hung by an innovative 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	
Pressure opening	3-4-6-7-10 bar
Temp. opening	92°C
Medium	Sanitary water
Nominal pressure	PN 10

Material specifications	
Body	DZR Brass
Spring	Steel
Control knob	PA6 GF
Diaphragm	EPDM

The photographs, illustrations and descriptions contained in this brochure are given for information only. Watts Industries reserves the right to change the technical specifications or the design of these products without prior notice.

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