Tempering and Pressure Relief Valve

Application

Sizes: 15mm and 20mm inlet (1/2" and ¾")
Complies with AS1357.1 Self-closing T & P Relief Valves for Water Heaters
The combined 2 in 1 T&P relief valve provides the least expensive and proven means for protection against both excessive temperature and pressure emergency conditions. Provides fully automatic temperature and pressure relief protection for hot water storage tanks and water heaters. Model C100XL furnished with test lever and extension thermostat for installation in the hot water outlet line or directly in the tank tapping. Temperature sensing element must be immersed in the water within the top 152 mm (6") of the tank. Male inlet and female outlet.

Features

1. Complies with AS1357.1
2. Features a unique thermostat with special thermo-bonded coating
3. An all bronze body
4. Stainless steel spring
5. Thermostat is accurate and proven. Exclusively designed and manufactured by Watts
6. Temperature relief at 93 -99 ° C
7. Pressure relief at 1000kpa or 1400kpa depending on model
8. Auxiliary pressure relief device
9. Precision machined
10. Compact design
11. Endurance Tested to Australian Standards (10000 cycles temperature relief and re tested, 25000 cycles pressure relief and re tested)
12. Field Tested in high use commercial hot water applications
13. Two year guarantee against faulty materials and manufacturing. Refer website for terms and conditions.

⚠ WARNING

Following installation, the valve lever MUST be operated AT LEAST ONCE A YEAR to ensure that the water-ways are clear. Certain naturally occurring mineral deposits may adhere to the valve, rendering it inoperative. When manually operating the lever, water will discharge and precautions must be taken to avoid contact with hot water and to avoid water damage. BEFORE **operating lever**, 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. If no water flows, valve is inoperative. **TURN OFF THE WATER HEATER AND CALL A PLUMBER IMMEDIATELY.**

This device is designed for emergency safety relief and shall not be used as an operating control.

REINSPECTION OF T&P RELIEF VALVE: Temperature and Pressure Relief Valves should be reinspected AT LEAST ONCE EVERY THREE YEARS by a licensed plumbing contractor or authorized inspection agency, to insure that the product has not been affected by corrosive water conditions and to insure that the valve and discharge line have not been altered or tampered with illegally. Certain naturally occurring conditions may corrode the valve or its components over time, rendering the valve inoperative. Such conditions are not detectable unless the valve and its components are physically removed and inspected. Do not attempt to conduct this inspection on your own. Contact your plumbing contractor for a reinspection to assure continuing safety. **FAILURE TO REINSPECT THIS VALVE AS DIRECTED COULD RESULT IN UNSAFE TEMPERATURE OR PRESSURE BUILD-UP WHICH CAN RESULT IN SERIOUS INJURY OR DEATH AND/OR SEVERE PROPERTY DAMAGE.**

IMPORTANT: A relief valve functions in an emergency by discharging water. Therefore, it is essential that a discharge line be piped from the valve in order to carry the overflow to a safe place of disposal. The discharge line must be the same size as the valve outlet and must pitch downward from the valve and terminate at least 6"(152mm) above the floor drain where any discharge will be clearly visible. For 100DT discharge line consult your Watts agent.

Technical Parameters

Max Temperature: 99 ° C
Working Medium: Potable Water

Watts product specifications in U.S. customary units and metric are approximate and are provided for reference only. For precise measurements, please contact Watts Technical Service. Watts reserves the right to change or modify product design, construction, specifications, or materials without prior notice and without incurring any obligation to make such changes and modifications on watts products previously or subsequently sold.

Main Materials

Part Name	Body	Spring	Thermostat Probe
Material	Bronze C83600 MOD MAX Lead 4.5%	Stainless Steel 302 ASTM A313 UNS S30200	Tube: Copper C12200 Coating: Nylon 11

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IMPORTANT: INQUIRE WITH GOVERNING AUTHORITIES FOR LOCAL INSTALLATION REQUIREMENTS

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◆ Mounting Options

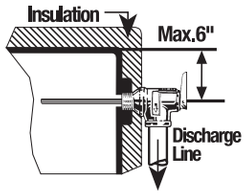
Direct Side Tapping

For External Flue Heaters

Use extra length extension thermostat to extend into water storage tank.

For Internal Flue Heaters

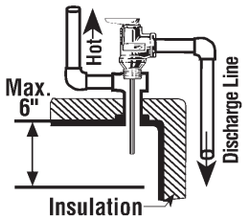
Use short or standard length thermostat. Vertical discharge line must be installed with its direction downward.



Alternate

Only when the tappings are not provided

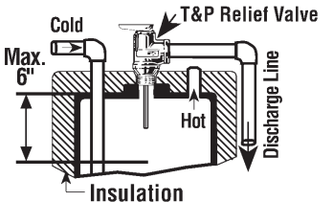
Use standard or extra length exten- thermostat.



Direct Top Tapping

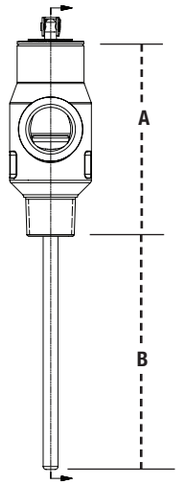
For Heaters

Use standard or extra length extension thermostat.

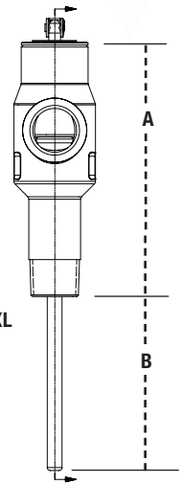


Insulation
The insulation supplied must be attached to the valve with the cable ties siupplied.

C100XL



CL100XL



◆ Dimensions/Weights

SIZE (DN)		MODEL	ORDER CODE	DIMENSIONS				WEIGHT		PRESSURE SETTING	TEMP. RELIEF	RATING
				A		B						
in.	mm			in.	mm	in.	mm	kg.	lbs.			
1/2	15	C100XL	0066190	3.25	82.60	3.94	100.00	0.34	0.74	1000 kPa	99°C	10kW
1/2	15	C100XL	0066191	3.25	82.60	3.94	100.00	0.34	0.74	1400 kPa	99°C	10kW
3/4	20	C100XL	0066192	3.25	82.60	3.94	100.00	0.37	0.81	1000 kPa	99°C	47kW
3/4	20	C100XL	0066193	3.25	82.60	3.94	100.00	0.37	0.814	1400 kPa	99°C	47kW
1/2	15	CL100XL	0066194	4.25	108.00	2.94	74.60	0.34	0.74	1000 kPa	99°C	10kW
1/2	15	CL100XL	0066195	4.25	108.00	2.94	74.60	0.34	0.74	1400 kPa	99°C	10kW
3/4	20	CL100XL	0066196	4.25	108.00	2.94	74.60	0.37	0.81	1000 kPa	99°C	47kW
3/4	20	CL100XL	0066197	4.25	108.00	2.94	74.60	0.37	0.81	1400 kPa	99°C	47kW

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Specifications

Tempering and Pressure Relief Valve

◆ Installation Instructions

WARNING:
FAILURE TO COMPLY WITH THESE INSTRUCTIONS REGARDING THIS VALVE CAN RESULT IN SERIOUS PERSONAL INJURY OR DEATH AND/OR SEVERE PROPERTY DAMAGE.

ANNUAL OPERATION OF T&P RELIEF VALVES
WARNING: Following installation, the valve lever MUST be operated AT LEAST ONCE A YEAR by the water heater user/consumer to ensure that waterways are clear. Certain naturally occurring mineral deposits may adhere to the valve, blocking waterways, rendering it inoperative. When the lever is operated, hot water will discharge if the waterways are clear. PRECAUTIONS MUST BE TAKEN TO AVOID PERSONAL INJURY FROM CONTACT WITH HOT WATER AND TO AVOID PROPERTY DAMAGE. **BEFORE operating lever**, 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. If water does not flow freely when the lever is operated, replacement of the valve is required. TURN THE WATER HEATER "OFF" (see instruction manual) AND CALL A PLUMBER IMMEDIATELY.

REINSPECTION OF T & P RELIEF VALVES:

WARNING: Temperature and Pressure Relief Valves should be inspected and replaced, if necessary, **AT LEAST ONCE EVERY TWO TO FOUR YEARS** depending on local water conditions and the advice of a local licensed plumber or qualified service technician. If corrosion or scaling of the valve is evident, the replacement of the valve and the valve's installation environment should be assessed. Certain naturally occurring conditions may corrode the valve or its components over time, rendering the valve inoperative. Such conditions can only be detected if the valve and its components are physically removed and inspected. Do not attempt to conduct an inspection on your own. Contact your plumbing contractor for a reinspection to assure continuing safety.

WARNING: FAILURE TO REINSPECT THIS VALVE AS DIRECTED COULD RESULT IN UNSAFE TEMPERATURE OR PRESSURE BUILD-UP WHICH CAN RESULT IN SERIOUS INJURY OR DEATH AND/OR SEVERE PROPERTY DAMAGE.

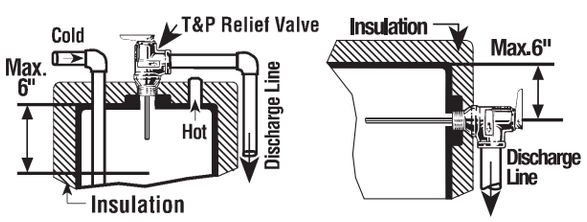
If discharge occurs, CALL A PLUMBER IMMEDIATELY.
Discharge may indicate that an unsafe temperature or pressure condition exists which requires immediate attention by a qualified service technician or licensed plumbing contractor.
THIS ENGINEERING SHEET IS NOT INTENDED TO PROVIDE FULL INSTALLATION INSTRUCTIONS OR SAFETY INFORMATION.
IN ORDER TO AVOID PROPERTY DAMAGE OR INJURY SEE INSTALLATION MANUAL AND SAFETY INFORMATION PROVIDED WITH PRODUCT.

WARNING: To avoid water damage and/or scalding due to valve operation, a discharge line must be connected to valve outlet and run to a safe place of disposal. The discharge line shall be installed to allow complete drainage of both the valve and the discharge line. No reducing coupling or other restriction shall be installed in the discharge line. The discharge line must pitch downward from the valve and terminate with a 6" (152mm) air gap from an approved location or building drain. The discharge line must terminate through plain (unthreaded) pipe. Discharge line material must conform to local plumbing code or A.S.M.E. requirements. Excessive length - more than 30 feet (9.14m), use of more than four elbows or bends in discharge piping, or reduction of discharge line size will cause a restriction and reduce the discharge capacity of the valve. No shut-off valve shall be installed between the relief valve and tank, or in the discharge line.

To ensure proper operation, this valve **must** be installed by a qualified service technician or licensed plumbing contractor in accordance with these instructions and local plumbing codes and standards.

WARNING:
FAILURE TO COMPLY WITH THESE INSTRUCTIONS REGARDING THIS VALVE CAN RESULT IN SERIOUS PERSONAL INJURY OR DEATH AND/OR SEVERE PROPERTY DAMAGE.

Combination temperature and pressure relief valves with extension thermostats must be installed so that the temperature-sensing element is immersed in the water in the top 6" (152mm) of the water storage tank. They must be installed either in the hot outlet service line or directly in a tank tapping. Valves must be located so as to assure isolation from flue gas heat or other ambient conditions that are not indicative of stored water temperature. See other instructions regarding the discharge line.
This device is designed for emergency safety relief and must not be used as an operating control.
Repair or alteration of valve in any way is prohibited by national safety standards/local codes.



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