

## Engineering Specification

Job Name \_\_\_\_\_

Contractor \_\_\_\_\_

Job Location \_\_\_\_\_

Approval \_\_\_\_\_

Engineer \_\_\_\_\_

Contractor's P.O. No. \_\_\_\_\_

Approval \_\_\_\_\_

Representative \_\_\_\_\_

# LEAD FREE\*

## Series LFLL40, LFLLL40 Extended Inlet Shank Automatic Reseating T&P Relief Valves

### ⚠ WARNING

FOLLOWING INSTALLATION, THE VALVE LEVER MUST BE OPERATED AT LEAST ONCE A YEAR TO ENSURE THAT THE WATERWAYS 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 THE 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 or property damage may result. If no water flows, the 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.

### ⚠ WARNING

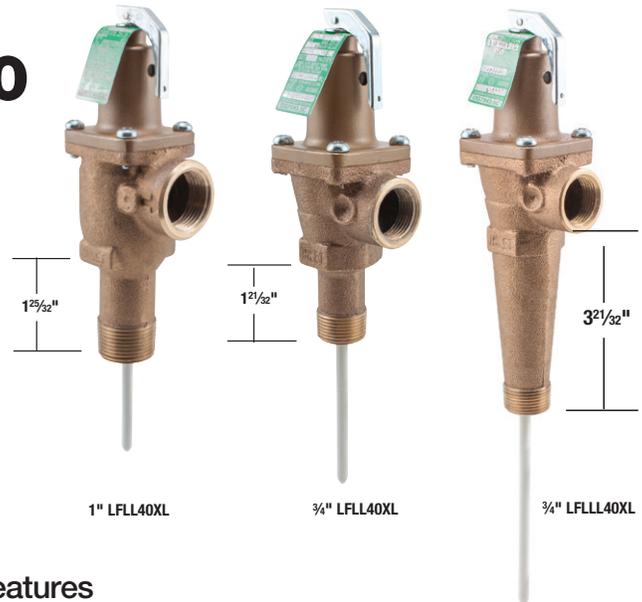
REINSPECTION OF T&P RELIEF VALVE: TEMPERATURE AND PRESSURE RELIEF VALVES SHOULD BE REINSPECTED AT LEAST ONCE EVERY 2 TO 4 YEARS by a licensed plumbing contractor or authorized inspection agency, to ensure that the product has not been affected by corrosive water conditions and that the valve and discharge 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.

The combined 2-in-1 Temperature & Pressure Relief Valves provide a means for protection against both excessive temperature and pressure emergency conditions. The valves are fully automatic and reseal independently after relieving. Constructed with Lead Free\* materials to comply with Lead Free\* installation requirements.

Inlet connections are male NPTF offered in different extended shank lengths to allow for thicker tank insulations.

Thermostat tubes are also offered in multiple lengths to allow for required water contact and are made with a thermo-bonded coating. These valves eliminate the use of an extension nipple required with standard shank length models.

\*The wetted surface of this product contacted by consumable water contains less than 0.25% of lead by weight.



### Features

- Lead Free\* cast copper silicon alloy
- Nonmechanical seat-to-disc alignment
- Tamper-resistant bonnet screws
- Higher relieving capacity for larger residential and commercial applications
- Available in diameters from 3/4" to 1"
- Optional SentryPlus Alert® discharge line flood sensor which when paired with a connection kit (sold separately) can detect excessive water discharges from the relief valve (Refer to ES-FS-ReliefValve.)

### NOTICE

A relief valve functions in an emergency by discharging water. Therefore, a discharge line MUST be piped from the valve 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" above the floor drain where any discharge can be clearly seen. (For more information on Series 100DT drain tubes, download ES-100DT.)

### NOTICE

The information contained herein is not intended to replace the full product installation and safety information available or the experience of a trained product installer. You are required to thoroughly read all installation instructions and product safety information before beginning the installation of this product.

Inquire with governing authorities for local installation requirements.

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.

## Specification

Each hot water storage heater shall be equipped with an automatic temperature and pressure relief valve to protect the heater from excessive pressure and temperature. The device shall be certified as meeting the requirements of ASME low pressure heating boiler code and ANSI Z21.22. The BTU discharge capacity of the device shall be in excess of the BTU input rating of the heater. The device shall be constructed using Lead Free\* cast copper silicon alloy material. The Lead Free\* automatic resetting T&P relief valve shall comply with states codes and standards, where applicable requiring reduced lead content. The valve shall be a Watts Series LF40 and shall include a sensor for flood detection. (Sensor activated by add-on connection kit, sold separately.)

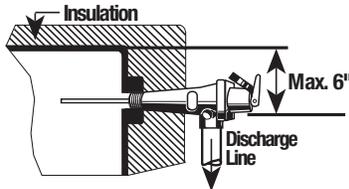
### Direct Side Tapping

#### For External Flue Heaters

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

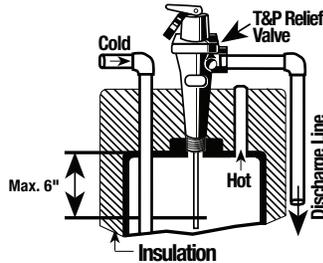
#### For Internal Flue Heaters

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



### For Heaters with Direct Top Tapping

Use a standard or an extra length extension thermostat.



## Certifications and Listings



CSA certified and listed to ANSI Z21.22/CSA 4.4

NBBI certified to ASME BPVC Section XIII as an HV designated valve

NSF certified to NSF/ANSI/CAN 372

### Pressure – Temperature

Temperature relief 210°F (98.9°C). Pressure range 75 – 150 psi (5.17 – 10.34 bar). Standard setting 75, 100, 125 or 150 psi (5.17, 6.9, 8.61, and 10.34 bar).

### General Recommendations

For gas, electric, or oil-fired storage water heaters between 180,000 and 205,000 BTU/hr rating: USE ¾" SERIES 40 TESTED UNDER ANSI Z21.22 WITH RATINGS AS CERTIFIED AND LISTED BY CSA.

For gas or oil-fired storage water heaters between 205,000 and 500,000 BTU/hr rating and for compliance with applicable water heater labeling requirements: USE 1" 40 SERIES TESTED UNDER ANSI Z21.22 WITH RATINGS AS CERTIFIED AND LISTED BY CSA.

For the full range of high capacity temperature and pressure relief valves, refer to ES-LF40\_LF140\_LFN240\_LF340.

MODEL	INLET X OUTLET	THERM LENGTH (IN.)	HEIGHT (IN.)	WIDTH (IN.)	WEIGHT (LB)	CSA TEMP				
						STEAM RATING	ASME @75	ASME @100	ASME @125	ASME @150
LFLL40XL	3/4M x 3/4F	3.5	6.66	2.64	1½	205,000	778,000	998,000	1,218,000	1,438,000
LFLL40XL	3/4M x 3/4F	5	8.66	2.64	2	205,000	778,000	998,000	1,218,000	1,438,000
LFLL40XL	1M x 1F	3	7.71	2.81	2	500,000	1,155,000	1,481,000	1,808,000	2,135,000

M=Male; F=Female

ASME capacities are steam pressure ratings and do not reflect the CSA temperature relieving capacity of the valves for selection purposes.

