

## For Commercial Water Heater Applications

Job Name \_\_\_\_\_  
 Job Location \_\_\_\_\_  
 Engineer \_\_\_\_\_  
 Approval \_\_\_\_\_

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

# Series LL40 and LLL40

## Extended Inlet Shank Automatic Re-seating T&P Relief Valves

Sizes: 3/4" and 1" (20, 25mm)

The combined 2-in-1 Temperature & Pressure relief valve provides the least expensive and proven means for protection against both excessive temperature and pressure emergency conditions.

Full automatic temperature and pressure relief protection for commercial hot water supply tanks and heaters based on the latest ANSI Z21.22 listing requirements for temperature discharge capacity.

LL40XL and LLL40XL with test lever and extended inlet shank for use with the new generation of water heaters with extra thick insulation. These valves eliminate the use of an extension nipple required with standard shank length models.

Watts self-closing combination T&P relief valves are design certified and listed by CSA and ASME.

### FEATURES

- Bronze body construction
- Non-mechanical seat-to-disc alignment.
- Thermostat is accurate and proven. Exclusively designed and manufactured by Watts.
- Tamper-resistant bonnet screws.
- Unique thermostat with a special thermo-bonded coating

### SPECIFICATIONS

#### Temperature & Pressure Relief Valves

Each hot water storage heater shall be equipped with an automatic temperature and pressure relief valve to protect the heater from excessive pressure and excessive 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. Watts Regulator Company Series 40.

### STANDARDS

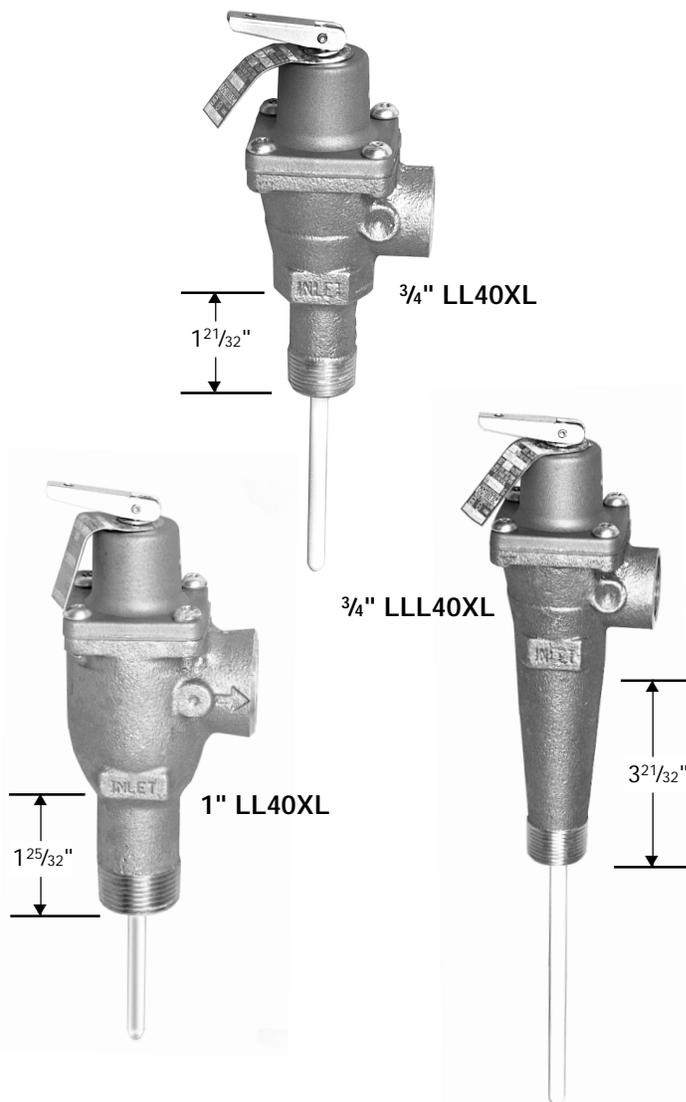


ASME rated, ANSI Z21.22. Design certified and listed by CSA. Meets current FHA and ANSI Z21.22 requirements in addition to Military Spec. MIL-V 136-12D, Type I.

### PRESSURE - TEMPERATURE

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

Watts product specifications in U.S. customary units and metric are approximate and are provided for reference only. 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.



Following installation, the valve lever **MUST** be operated **AT LEAST ONCE A YEAR** by the water heater owner to ensure that the 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.

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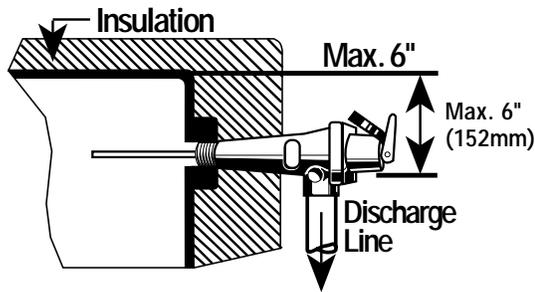
### Direct Side Tapping

#### For External Flue Heaters

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

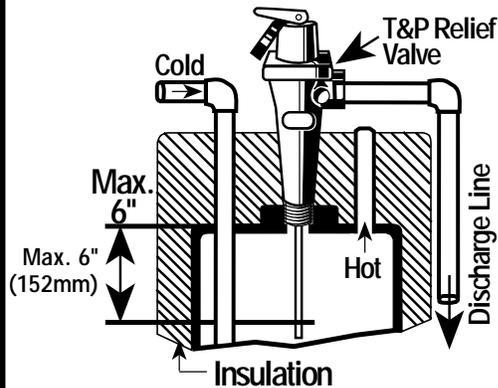
#### For Internal Flue Heaters

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



### For Heaters with Direct Top Tapping

Use standard or extra length extension thermostat.



## GENERAL RECOMMENDATIONS

For gas, electric or oil-fired storage water heaters between 180,000 to 200,000 BTU/Hr. rating: Use 3/4" (20mm) Series 40 tested under ANSI Z21.22 with ratings as certified and listed by CSA.

For gas or oil-fired storage water heaters between 200,000 and 500,000 BTU/Hr. rating and for compliance with applicable water heater labeling requirements: Use 1" (25mm) 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 Series 40, 140, 240, 340 and 342. See ES-40, 140, 240, 340.

Valve No.	Size	Ordering Codes	
		Set @ 125 psi	Set @ 150 psi
LL40XL	3/4"	0163800	0163801
LL40XL	1"	0163804	0163805
LLL40XL	3/4"	0163802	0163803

Valve No.	Model	Inlet X Outlet (in.)	Thermostat Length (in.) (Below Inlet thread)	Dimensions (in.)		Weight Lbs.	CSA Temp. Steam Rating BTU/HR	** ASME Pressure Steam Rating BTU/HR			
				Height (Less Thermostat)	Width			@75psi set pres.	@100psi set pres.	@125psi set pres.	@150psi set pres.
LL40XL	M15	3/4 M x 3/4 F	3 1/2	5 5/8	2 5/8	1 1/2	200,000	777,600	997,600	1,217,600	1,437,600
LLL40XL	M15	3/4 M x 3/4 F	5	7 5/8	2 5/8	2	200,000	777,600	997,600	1,217,600	1,437,600
LL40XL	M15	1M x 1F	3	6 1/2	2 3/4	2	500,000	1,155,000	1,481,000	1,808,000	2,134,000

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.

Temperature and Pressure Relief Valves should be inspected AT LEAST ONCE EVERY THREE YEARS, and replaced, if necessary, by a licensed plumbing contractor or qualified service technician, to ensure that the product has not been affected by corrosive water conditions and to ensure 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 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 re-inspection to assure continuing safety.



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