

For Water Heater and Hot Water Storage Tank Applications

Job Name _____

Contractor _____

Job Location _____

Approval _____

Engineer _____

Contractor's P.O. No. _____

Approval _____

Representative _____

Series PLT

Potable Water Expansion Tanks

Series PLT Potable Water Expansion Tanks are designed to absorb thermal expansion and to maintain balanced pressure throughout the potable water supply system.

Heated water expands, and in a domestic hot water system the system may be closed when isolated from the public water supply by a one-way valve, pressure reducing valve, backflow preventer, check valve, etc. Provisions must be made for this expansion.

Series PLT expansion tanks absorb the increased volume of water created when the hot water storage tank is heated and keeps the system pressure below the relief setting of the T&P relief valve. It is a pre-pressurized steel tank with an expansion membrane that prevents contact of the water with the air in the tank. This prevents loss of air to the water and ensures long and trouble-free life for the system. These tanks may be used with all types of Direct Fired Hot Water Heaters (gas, oil or electric) and hot water storage tanks.



PLT-5



PLT-12

Features

- Polypropylene liner
- Rugged flexible butyl diaphragm
- Field adjustable pre-charge
- Can be used with most standard water heaters and storage tanks
- Made in Taiwan

Models

PLT-5 – 3/4" male connection, tank volume 2.1 gal.

PLT-12 – 3/4" male connection, tank volume 4.5 gal.

Specifications

The potable water expansion tank shall be of drawn steel construction and include a rigid polypropylene reservoir liner. It shall have a butyl diaphragm separating the air chamber from the water containing chamber. Inlet connector shall be stainless steel lined. Materials of manufacture for the liner and diaphragm shall be FDA approved. The potable water expansion tank shall be a Watts Regulator Company Series PLT.

Standards



PLT-5 and PLT-12 are Listed by IAPMO.
Certified to ANSI/NSF61.

Note: The potable water expansion tank shall be installed in the cold water service pipe line on the supply side of the water heater (or water storage tank). A pressure relief valve sized and installed in accordance with local codes must be incorporated in the system. In those systems requiring a combined temperature and pressure safety relief valve, the temperature and pressure relief valve should be sized and installed in accordance with local codes. Adequate drainage provisions should be provided where water flow will cause damage.



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.




Selection

This Quick Reference Selection Guide may be used as an alternative to using a formula to determine the correct expansion tank for the system. This table is based upon a relief valve setting of 150psi, and a maximum of 50°F temperature rise.

To select the correct PLT series tank, simply go to the supply pressure equal to the system supply pressure (for pressures between those shown use next highest supply pressure shown), read across the chart to the correct tank as indicated by the water heater capacity (for capacities between those shown, use next highest capacity).

To accommodate the thermal expansion required for higher temperature and/or higher pressure systems, Watts offers other tank models or multiple tanks may be used. Please contact the factory for sizing information.

SUPPLY PRESSURE (psi)	WATER HEATER (GALLONS)						
	20	30	40	50	80	100	120
40							
50							
55							
60							
70							
80							
90							
100							
110							
120							

	PLT-5
	PLT-12
	Multiple tanks required - consult factory

Materials

Diaphragm: Butyl rubber

Wetted Parts: Polypropylene Liner

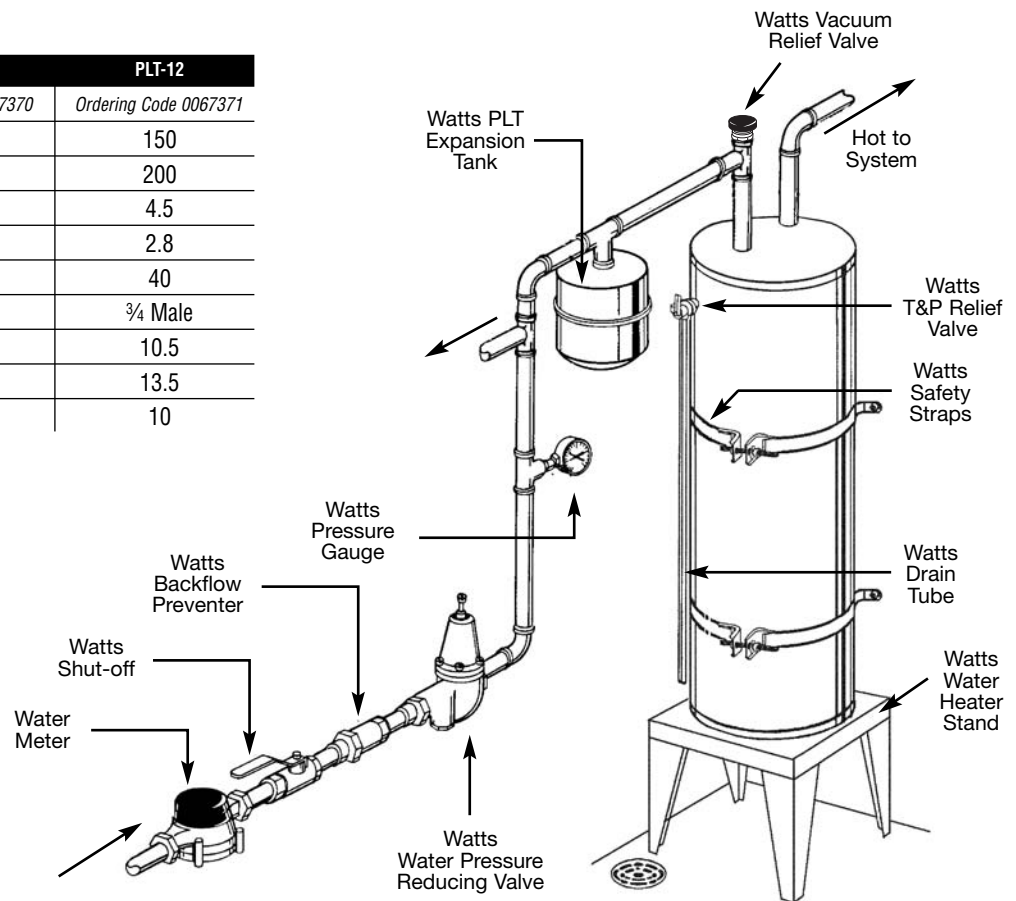
Inlet Connection: Stainless steel lined

Technical Information

DESCRIPTION	PLT-5	PLT-12
	<i>Ordering Code 0067370</i>	<i>Ordering Code 0067371</i>
Max. Pressure - psi	150	150
Max. Temp. - °F	200	200
Tank Volume - Gal.	2.1	4.5
Tank Acceptance - Gal.	1.26	2.8
Air Pre-charge - psi	40	40
Connections Size - Inches	¾ Male	¾ Male
Diameter - Inches	8	10.5
Length - Inches	11	13.5
Weight - lbs.	5.5	10

Acceptance Volume

AIR SIDE PRE-PRESSURE (psi)	WATER SIDE VOLUME AT 150PSI (GALLONS)	
	PLT-5	PLT-12
20	1.48	3.42
40	1.26	2.88
60	1.0	2.49
80	.80	1.85
100	.59	1.48
120	.36	.77
140	.12	.28
150	.03	.01



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