

Series PLT

Potable Water Expansion Tanks

Models PLT-5, PLT-12, PLT-20, and PLT-35

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 prepressurized 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.



Standards

Models PLT-5, PLT-12 and PLT-20 are Listed by IAPMO. Certified to ANSI/NSF 61

Model PLT-35 Certified to ANSI/NSF 61



(73°F/23°C)

Selection Guide

SUPPLY PRESSURE		WATER HEATER Gallons (Liters)						
		20 (76)	30 (114)	40 (152)	50 (190)	80 (304)	100 (380)	120 (456)
psi	bar							
40	2.7							
50	3							
55	3.7							
60	4							
70	4.8							
80	5.5							
90	6							
100	6.9							
110	7.5							
120	8.2							

- PLT-5
- PLT-12
- PLT-20
- PLT-35
- Multiple tanks required - consult authorized Watts agent

Features

- Rugged flexible butyl diaphragm
- Field adjustable pre-charge
- In-line and free standing models
- Can be used with most standard hot water heaters and storage tanks

Models

PLT-5 has 3/4" male connection, tank volume 2.1 gal.
 PLT-12 has 3/4" male connection, tank volume 4.5 gal.
 PLT-20 has 3/4" male connection, tank volume 8.5 gal.
 PLT-35 has 1" female connection, tank volume 14.0 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 Series PLT.

For additional information, request literature ES-PLT.

This table is based upon a relief valve setting of 150psi (10.3 bar), a maximum of 40°F (4°C) temperature rise, and a 20psi (138 kPa) precharge.*

*It is recommended that tanks be precharged to supply pressure (up to 80psi (5.5 bar)). Equalizing precharge pressure to supply pressure increases the application range over those shown in the table.

Model	Connection Size (DN)		Max. Pressure		Max. Temp.		Tank Volume		Tank Acceptance		Air Precharge		Diameter		Length		Weight	
	in.	mm	psi	bar	°F	°C	gal.	liters	gal.	liters	psi	kPa	in.	mm	in.	mm	lbs.	kgs.
PLT-5	3/4 M	20	150	10.3	200	93	2.1	8	1.26	4.8	20	138	8	203	11	279	5.5	2.5
PLT-12	3/4 M	20	150	10.3	200	93	4.5	17	2.8	10.6	20	138	10.5	267	13½	343	10	4.5
PLT-20	3/4 M	20	150	10.3	200	93	8.5	32	3.2	12.1	20	138	12.5	318	19.2	488	15	6.8
PLT-35	3/4 M	20	150	10.3	200	93	14.0	53	5.6	21.2	20	138	16.0	406	21.7	551	32	14.5