

POTABLE AND HYDRONIC SYSTEMS

POTABLE WATER

- PMC or TW Series
- Sizes 2-10 Gallons
- Working pressure 150 PSI

HYDRONIC

- PMET Series
- Sizes 2-14 Gallons
- Working pressure 100 PSI



PMC-5

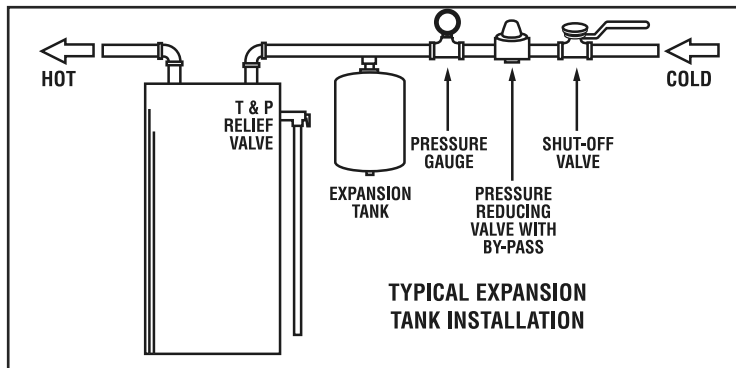
POTABLE WATER EXPANSION TANKS

Thermal expansion occurs when water is heated during non-use periods. The installation of a Pressure Reducing Valve (PRV), Check Valve or Back Flow Preventer “closes” the water system, leaving water with no room for expansion. National Standard Plumbing code: 10.5.7 requires backflow prevention, to prevent backflow into the water main.

Thermal expansion in a closed plumbing system can be damaging, dangerous and costly. Its effects include damage to water heater connections, gas water heater flue tubes, pumps serving washers and dishwashers, leaking faucets, “weeping” of water through the water heater T&P Relief Valve, and noisy water hammer in the pipes.



A properly sized Expansion Tank eliminates these problems, by giving water a place to go when thermal expansion occurs. When a water heating cycle ends, or when any fixture is opened within the system, the impact of thermal expansion is reduced, and water drains out of the expansion tank back into the system.



Expansion tanks are pre-charged with a 38 PSI air charge. If the inlet water pressure is higher than 38 PSI, the expansion tank’s air pressure must be adjusted to match that pressure but must not be higher than 80 PSI.

PMC Sizing Chart For Residential Water Heaters

Inlet Water Pressure*	Water Heater Capacity in Gallons					
	30	40	50	66	82	100
40 PSI	PMC-2	PMC-2	PMC-2	PMC-2	PMC-5	PMC-5
50 PSI	PMC-2	PMC-2	PMC-2	PMC-2	PMC-5	PMC-5
60 PSI	PMC-2	PMC-2	PMC-2	PMC-2	PMC-5	PMC-5
70 PSI	PMC-2	PMC-2	PMC-2	PMC-2	PMC-5	PMC-5
80 PSI	PMC-2	PMC-5	PMC-2	PMC-5	PMC-5	PMC-5

PMC Sizing Chart For Commercial Water Heaters

Water Temperature	Water Heater Capacity in Gallons						
	30	40	50	66	82	100	120
140°	PMC-2	PMC-2	PMC-5	PMC-5	PMC-5	PMC-10	PMC-10
150°	PMC-2	PMC-2	PMC-5	PMC-5	PMC-5	PMC-10	PMC-10
160°	PMC-5	PMC-5	PMC-5	PMC-5	PMC-5	PMC-10	PMC-10
170°	PMC-5	PMC-5	PMC-10	PMC-10	PMC-10	PMC-10	PMC-10
180°	PMC-5	PMC-5	PMC-10	PMC-10	PMC-10	PMC-10	PMC-10

TW Series Sizing Chart For Residential Water Heaters

Inlet Water Pressure*	Water Heater Capacity in Gallons					
	30	40	50	66	82	100
40 PSI	TW-5	TW-5	TW-5	TW-5	TW-12	TW-12
50 PSI	TW-5	TW-5	TW-5	TW-5	TW-12	TW-12
60 PSI	TW-5	TW-5	TW-5	TW-5	TW-12	TW-12
70 PSI	TW-5	TW-5	TW-5	TW-5	TW-12	TW-12
80 PSI	TW-5	TW-5	TW-5	TW-12	TW-12	TW-12

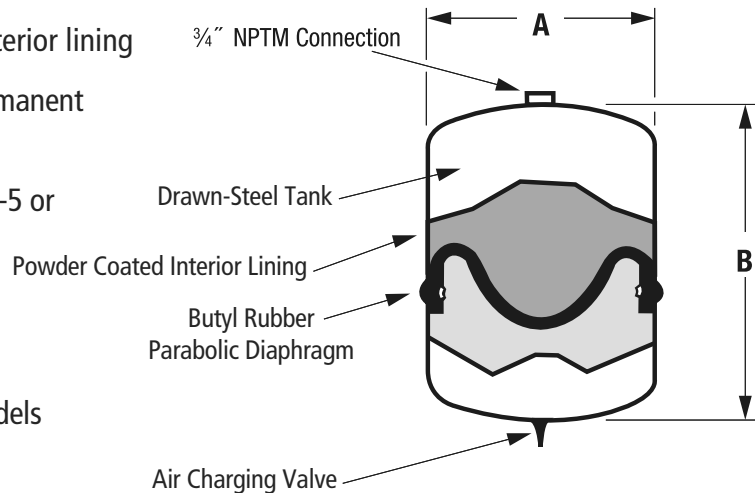
TW Series Sizing Chart For Commercial Water Heaters

Water Temperature	Water Heater Capacity in Gallons						
	30	40	50	66	82	100	120
140°	TW-5	TW-5	TW-12	TW-12	TW-12	N/A	N/A
150°	TW-5	TW-5	TW-12	TW-12	TW-12	N/A	N/A
160°	TW-12	TW-12	TW-12	TW-12	TW-12	N/A	N/A
170°	TW-12	TW-12	N/A	N/A	N/A	N/A	N/A
180°	TW-12	TW-12	N/A	N/A	N/A	N/A	N/A

*Highest recorded inlet water pressure in a 24-hour period of regulated water pressure.

POTABLE WATER EXPANSION TANKS

- Maximum Working Pressure: 150 PSI
- Maximum Temperature: 140°F Residential
180°F Commercial
- For use with residential and commercial water heaters
- In-line design, with 3/4" NPTM connection: installs in cold water line of water heater
- Field-adjustable 38 PSI air charge
- Drawn-steel tank with powder coated interior lining
- Butyl rubber parabolic diaphragm, for permanent separation of air and water
- 2-Gallon (PMC-2 or TW-5), 5-Gallon (PMC-5 or TW-12) and 10-Gallon (PMC-10)
- IAPMO Approved
- 5-Year Limited Warranty for PMC models
- 1-Year Limited Warranty for TW Series models



Water Heater Expansion Tanks - 5-year warranty

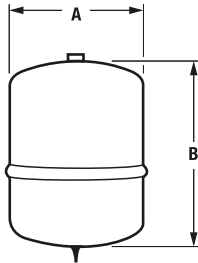
Model Number	Gallon Capacity	Maximum Acceptable Volume (Gallons)		Dimensions in Inches		Shipping Weight (Lbs.)
		40 PSI	60 PSI	A	B	
PMC-2	2.1	1.27	1.03	8 ¹ / ₄	10 ³ / ₁₆	5
PMC-5	4.4	3.05	2.19	11	14 ³ / ₄	9
PMC-10	9.21	6.55	5.25	15 ³ / ₈	15 ³ / ₄	20

TW Series Water Heater Expansion Tanks - 1-year warranty

Model Number	Gallon Capacity	Maximum Acceptable Volume (Gallons)		Dimensions in Inches		Shipping Weight (Lbs.)
		40 PSI	60 PSI	A	B	
TW-5	2.10	1.27	1.03	8 ¹ / ₄	10 ³ / ₁₆	5.5
TW-12	4.40	3.05	2.19	11	14 ³ / ₄	10

All Models: 150 PSIG Maximum Working Pressure

HYDRONIC EXPANSION TANKS



IN-LINE

ProMax® Sizing Guide	
Net Boiler Output in 1000s of Btu's	Recommended ProMax® Tank(s)
25 – 50	PMET-2
75 – 150	PMET-5
175 – 200	PMET-7
200 – 400	PMET-14

ProMax® Space Heating Expansion Tanks						
	Model Number	Gallon Capacity	Maximum Acceptable Volume (Gallons) 20 PSIG	Dimensions in Inches		Shipping Weight (Lbs.)
				A	B	
In-Line	PMET-2	1.96	1.53	8¼	10¾	5
	PMET-5	4.55	3.75	11	14¾	9
	PMET-7	7.3	4.6	11	21¼	12
	PMET-14	14.6	10.5	15¾	15¾	22

All Models: 100 PSIG Maximum Working Pressure
 All In-Line have ½" NPTM connections

- For use with space heating boilers in closed systems — not for use with potable water heating systems
- Models up to 14.6 gallons feature in-line design for installation directly into system piping
- Field-adjustable 12 PSI air charge
- Drawn-steel tank
- Butyl rubber parabolic diaphragm, for permanent separation of air and water
- Maximum Working Pressure: 100 PSI
- Maximum Temperature: 240°F
- 1-Year Limited Warranty

Promax® Expansion Tanks for closed space heating systems provide a place for expanding water to go during cycles of thermal expansion, eliminating the risk of damage to the boiler and piping in the system.

Sizing based on the following operating conditions: Cold pressure 12 PSI, Relief set 30 PSI, maximum temperature 240°F. Sizes shown are for fin-tubed baseboard radiation. For systems with converters and/or unit heaters, increase tank one size. For cast-iron radiation, increase tank two sizes.

For larger systems, it will be necessary to calculate the expansion of water within the system. Our engineering department can assist you, if you provide the size of the system in gallons, the pressure, and the maximum operating temperature. If you do not know the system capacity, it can be calculated from the amount and size of pipe used.

