

## For Hydronic Heating Applications

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

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

## Series ET Non-Potable Water Expansion Tanks

Series ET Non-Potable Water Expansion Tanks are designed to absorb the increased volume of water created when the hot water boiler is heated and to keep system pressure below the relief setting of the relief valve. Series ET 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.

### Features

- Steel construction
- Rugged flexible diaphragm
- Precharged at 12psi (82 kPa)
- Compact size saves space and energy
- Compatible with glycol in systems

### Models

ET-15 1/2" male connection and tank volume of 2.1 gal.  
 ET-30 1/2" male connection and tank volume of 4.7 gal.  
 ET-60 1/2" male connection and tank volume of 6.6 gal.  
 ET-90 3/4" male connection and tank volume of 13 gal.

### Specifications

The non-potable water expansion tank shall be of drawn steel construction. It shall have a Butyl diaphragm separating the air chamber from the water containing chamber. Inlet connector shall be steel. The non-potable water expansion tank shall be a Watts Regulator Company Series ET.

Watts Series ET non-potable water expansion tanks may be installed in a tee or any other suitable tapping in the heating system and can be installed in a vertical or horizontal position.

**Note:** Tank must be supported when installed in a horizontal position.

| MODEL | SIZE (DN) | TANK CONN.   | ACCEPTANCE   | DIA.         | LENGTH       | WEIGHT    |
|-------|-----------|--------------|--------------|--------------|--------------|-----------|
|       |           | VOLUME       | VOLUME       |              |              |           |
|       | in. mm    | gals. liters | gals. liters | in. mm       | in. mm       | lbs. kgs. |
| ET-15 | 1/2 15    | 2.1 8        | 1.4 5.3      | 7 13/16 198  | 11 13/16 300 | 5 2.3     |
| ET-30 | 1/2 15    | 4.7 17.8     | 3.0 11.4     | 10 25/32 269 | 15 381       | 8 3.7     |
| ET-60 | 1/2 15    | 6.6 25       | 4.3 16.3     | 12 3/16 310  | 15 381       | 14 6.3    |
| ET-90 | 3/4 20    | 13.0 49      | 8.0 30.4     | 15 381       | 21 1/2 536   | 26.5 12.0 |



ET-15

### Pressure – Temperature

Maximum Design Temperature: 240°F (115.5°C)

Maximum Design Pressure: 60psi (413.7 kPa)

Hydrostatic Test Pressure: 75psi (206.7 kPa)

### Materials

Nipple - Steel

Tank - Steel

Diaphragm - Butyl

### Selection Guide

As an alternative to using a formula, you can use this Quick Reference Sizing Chart to select the correct tank for your system. This table is based upon a tank pre-charge of 12psi (82 kPa), a pressure relief valve setting of 30psi (2 bars) and a system operating temperature of 200°F (93°C). The chart takes into account typical system water volumes based upon boiler BTU's and type of radiation installed. Simply go to the boiler output BTU equal to or higher than the installed boiler, read across the chart to the correct tank model as indicated by the type of system radiation column on the chart.

| ET SERIES SIZING CHART                     |                             |                                    |                        |                        |       |
|--------------------------------------------|-----------------------------|------------------------------------|------------------------|------------------------|-------|
| Precharge: 12psi (82 kPa)                  |                             | Relief Pressure: 30psi (206.7 kPa) |                        |                        |       |
| System Operating Temperature: 200°F (93°C) |                             |                                    |                        |                        |       |
| Boiler Output<br>Net BTU's                 | TYPE OF RADIATION           |                                    |                        |                        |       |
|                                            | Finned<br>Tube<br>Baseboard | Convectors<br>or<br>Unit Heaters   | Radiators<br>Cast Iron | Baseboard<br>Cast Iron |       |
|                                            | 25,000                      | ET-15                              | ET-15                  | ET-15                  | ET-15 |
|                                            | 50,000                      | ET-15                              | ET-15                  | ET-30                  | ET-30 |
|                                            | 75,000                      | ET-30                              | ET-30                  | ET-30                  | ET-60 |
|                                            | 100,000                     | ET-30                              | ET-30                  | ET-60                  | ET-60 |
|                                            | 125,000                     | ET-30                              | ET-60                  | ET-60                  | ET-90 |
|                                            | 150,000                     | ET-30                              | ET-60                  | ET-90                  | ET-90 |
|                                            | 175,000                     | ET-60                              | ET-60                  | —                      | —     |
|                                            | 200,000                     | ET-60                              | ET-60                  | —                      | —     |
| 250,000                                    | ET-60                       | ET-90                              | —                      | —                      |       |
| 300,000                                    | ET-90                       | —                                  | —                      | —                      |       |

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.

**USA:** 815 Chestnut St., No. Andover, MA 01845-6098; [www.wattsreg.com](http://www.wattsreg.com)  
**Canada:** 5435 North Service Rd., Burlington, ONT. L7L 5H7; [www.wattscanada.ca](http://www.wattscanada.ca)

**WATTS®**  
REGULATOR

**ISO 9001**  
CERTIFIED