

# THERMXTROL.

Water Heater Expansion Tanks





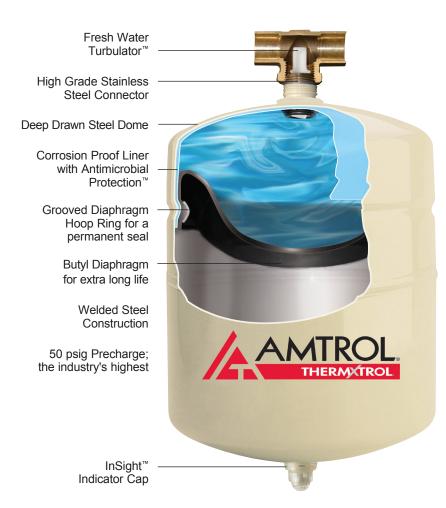






## THERMXTROL

Amtrol invented the thermal expansion tank to control pressure build-up in closed, potable water systems. This prevents the water heater pressure relief valve from opening, saves energy and eliminates a potential safety hazard. All Therm-X-Trol expansion tanks are made in the USA in our ISO 9001:2008 registered facilities.



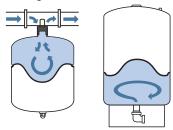






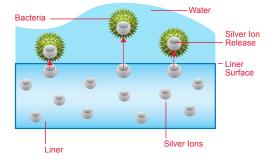
### Fresh Water Turbulator™

- Patented diffuser agitates incoming water to keep it tasting fresh and clean.
- Water-jet scrubbing action prevents sediment from collecting inside the tank.



#### **Antimicrobial Liner Protection**

- Safe, Silver-Ion technology targets active microorganisms; neutralize bacteria on contact.
- Compound is molded into the water reservoir lining; lasts the life of the tank.



### InSight™ Indicator Cap

- Patent-pending sight glass changes color if tank needs replacing.
- Alerts homeowner or plumber to a problem before damage can occur.





### ST-1 for Tankless and POU Water Heaters



- Absorbs thermal expansion and water hammer to protect the heat exchanger.
- Patented air cell technology requires no precharge adjustment or maintenance.
- 304L SS Waterway.
- Big protection in a compact size.

### **Thermal Expansion Tanks**



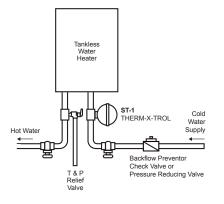
### Therm-X-Trol® for Tankless and POU

- Accepts expanded water as system temperature rises and returns hot water to system when demand occurs.
- · Patented air cell eliminates water hammer to protect heat exchanger.
- Required by most building codes and water heater warranties.

| Specifications  |     |     |                                |                              |  |  |  |  |
|-----------------|-----|-----|--------------------------------|------------------------------|--|--|--|--|
| Model<br>Number |     |     | System<br>Connection<br>(NPTM) | Shipping<br>Weight<br>(lbs.) |  |  |  |  |
| ST-1            | 3.2 | 3.9 | 1/2                            | 1                            |  |  |  |  |

Stainless Steel Waterway.

Maximum Intermittent Temperature: 180°F. Maximum Working Pressure: 150 psig.



### **Therm-X-Trol In-Line Models**

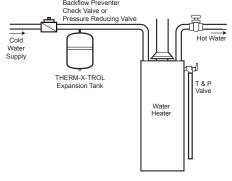
- Accepts expanded water as system temperature rises and returns hot water to system when demand occurs.
- Required by most building codes and water heater warranties.
- · 50 PSI factory precharge; the industry's highest.
- InSight<sup>®</sup> Indicator Cap, Antimicrobial Liner<sup>™</sup> and Turbulator<sup>™</sup>

| Specifications  |                             |  |                      |                    |                                |                              |  |  |  |
|-----------------|-----------------------------|--|----------------------|--------------------|--------------------------------|------------------------------|--|--|--|
| Model<br>Number | Tank<br>Volume<br>(Gallons) | Max.<br>Accept.<br>Volume<br>(Gallons) | Diameter<br>(Inches) | Height<br>(Inches) | System<br>Connection<br>(NPTM) | Shipping<br>Weight<br>(lbs.) |  |  |  |
| ST-5            | 2.0                         | 0.9                                    | 8                    | 13                 | 3/4                            | 5                            |  |  |  |
| ST-8            | 3.2                         | 1.9                                    | 9                    | 15                 | 3/4                            | 7                            |  |  |  |
| ST-12           | 4.4                         | 3.2                                    | 11                   | 15                 | 3/4                            | 9                            |  |  |  |

Stainless Steel System Connection.

Maximum Operating Temperature: 200°F. Maximum Working Pressure: 150 psig.

Factory Precharge: 50 psig.





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### Therm-X-Trol Vertical Models

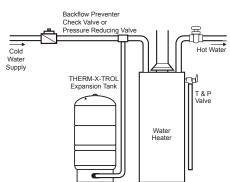
- Designed for large residential and light commercial (non-ASME) applications.
- · Visit amtrol.com for sizing information.

| Specifications  |                             |                              |    |                    |                                |                              |  |  |
|-----------------|-----------------------------|------------------------------|----|--------------------|--------------------------------|------------------------------|--|--|
| Model<br>Number | Tank<br>Volume<br>(Gallons) | Max. Accept. Volume (Inches) |    | Height<br>(Inches) | System<br>Connection<br>(NPTF) | Shipping<br>Weight<br>(lbs.) |  |  |
| ST-25V          | 10.3                        | 10.3                         | 15 | 19                 | 3/4                            | 23                           |  |  |
| ST-30V          | 14.0                        | 11.3                         | 15 | 24                 | 3/4                            | 25                           |  |  |
| ST-42V          | 20.0                        | 11.3                         | 15 | 32                 | 3/4                            | 33                           |  |  |
| ST-60V          | 34.0                        | 34.0                         | 22 | 30                 | 1 <sup>1</sup> / <sub>4</sub>  | 61                           |  |  |
| ST-80V          | 44.0                        | 34.0                         | 22 | 36                 | 1 <sup>1</sup> / <sub>4</sub>  | 69                           |  |  |
| ST-180V         | 62.0                        | 34.0                         | 22 | 47                 | 1 <sup>1</sup> / <sub>4</sub>  | 92                           |  |  |
| ST-200V         | 81.0                        | 34.0                         | 22 | 56                 | 1 <sup>1</sup> / <sub>4</sub>  | 103                          |  |  |
| ST-210V         | 86.0                        | 46.0                         | 26 | 47                 | 1 <sup>1</sup> / <sub>4</sub>  | 123                          |  |  |

Stainless Steel System Connection.

Maximum Operating Temperature: 200°F. Maximum Working Pressure: 150 psig

Factory Precharge: 40 psig.





## **Selection & Selling Tools**



Homeowner Brochure (MC10230) explains how Therm-X-Trol controls thermal expansion to provide a better, safer system.

### Therm-X-Trol® Quick Sizing Charts

| Maximum Temperature Setting 140°F   |               |       | Maximum Temperature Setting 160°F |               |       |                         | Maximum Temperature Setting 180°F |                        |        |        |        |
|-------------------------------------|---------------|-------|-----------------------------------|---------------|-------|-------------------------|-----------------------------------|------------------------|--------|--------|--------|
| Water<br>Heater                     | Heater (psig) |       | Water<br>Heater<br>Size           | Heater (psig) |       | Water<br>Heater<br>Size |                                   | Supply Pressure (psig) |        |        |        |
| (gals.)                             |               |       | (gals.)                           | 40            | 60    | 80                      | (gals.)                           | 40                     | 60     | 80     |        |
| Tankless<br>& P.O.U<br>up to 2 gal. | ST-1          | ST-1  | ST-1                              | 40            | ST-5  | ST-5                    | ST-8                              | 40                     | ST-8   | ST-8   | ST-8   |
| 40                                  | ST-5          | ST-5  | ST-5                              | 50            | ST-5  | ST-8                    | ST-8                              | 50                     | ST-8   | ST-8   | ST-12  |
| 50                                  | ST-5          | ST-5  | ST-5                              | 60            | ST-8  | ST-8                    | ST-12                             | 60                     | ST-8   | ST-12  | ST-25V |
| 60                                  | ST-8          | ST-8  | ST-8                              | 60            | 51-8  | 51-8                    | 51-12                             | 60                     | 51-8   | 51-12  | S1-25V |
| 80                                  | ST-8          | ST-8  | ST-12                             | 80            | ST-8  | ST-12                   | ST-25V                            | 80                     | ST-12  | ST-25V | ST-25V |
| 120                                 | ST-12         | ST-12 | ST-25V                            | 120           | ST-12 | ST-25V                  | ST-25V                            | 120                    | ST-25V | ST-25V | ST-25V |

Sizing based on: 40°F incoming water temperature; 150 psi T&P safety relief valve; Precharge equal to static supply pressure (ST-5 and above). ST-1 for Tankless and Point-Of-Use (POU) Heaters up to 2 gallons. For larger applications: Visit amtrol.com, download the AMTROL App or contact Technical Support at 401 535.1216.

Quick Sizing Card (MC8520) makes selecting the right tank fast and easy.



The Amtrol App is your mobile toolkit. Also, visit amtrol.com for selection, installation and service tips.











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