



THERMAL EXPANSION TANKS

TYPICAL SPECIFICATIONS

THERM-X-TROL® ST-C Series Thermal Expansion Tank (Replaceable Bladder)

The potable water heating system shall include a THERM-X-TROL, bladder type expansion tank which will suspend expanded water created within the normal operating temperature range. By function, the tank will limit pressure increases at all system components to their maximum constructed allowable pressure, maintaining system nominal operating pressure. Furnish and install as shown on plans a _____ gallon, _____ in. diameter X _____ in. (high) AMTROL, model ST- _____ (-C). The expansion tank shall be welded carbon steel construction, tested and stamped in accordance with Section VIII, Division 1 of the ASME Code for a working pressure of (125) (150) (175) (250) (300) _____ PSIG, factory air pre-charged to 25psi, requiring a field adjustment to match system static pressure prior to installation. All welds compliant to ASME Section IX. Tank bladder shall conform with NSF 61 regulations and approvals. The tank shall be constructed with a base (integral ring mount) for vertical installation. This ASME vessel will include a low mounted, 1-1/4" InSight Glass™ Port, angled upward with a buoyant red ball visible behind a clear Plexi-glass plate from eye level. With a stainless-steel perforated plate behind the ball, the InSight Port acts as a tank performance indicator when the ball is still. When the ball floats and churns in the sight port, this is an indication that the tank requires service. Each tank shall be provided with an internal butyl/EPDM butyl bladder to isolate the air charge from system water.

THERM-X-TROL® ST-C Series Thermal Expansion Tank (Head & Shell Fixed Diaphragm)

The potable water heating system shall include a THERM-X-TROL, diaphragm type expansion tank which will suspend expanded water created within the normal operating temperature range. By function, the tank will limit pressure increases at all system components to their maximum constructed allowable pressure, maintaining system nominal operating pressure. Furnish and install as shown on plans a _____ gallon, _____ in. diameter X _____ in. (high) AMTROL, model ST- _____ (-C). The expansion tank shall be welded carbon steel construction, tested and stamped in accordance with Section VIII, Division 1 of the ASME Code for a working pressure of (150) (175) (250) (300) _____ PSIG, factory air pre-charged to 55psi, requiring a field adjustment to match system static pressure prior to installation. All welds compliant to ASME Section IX. All internal parts shall conform with NSF 61 regulations and approvals. The tank shall be either suspended or constructed with a base (integral ring mount) for a vertical installation. This ASME vessel will include a low mounted, 1-1/4" InSight Port, angled upward with a buoyant red ball visible behind a clear Plexi-glass plate from eye level. With a stainless-steel perforated plate behind the ball, the InSight Glass™ Port acts as a tank performance indicator when the ball is still. When the ball floats and churns in the sight port, this is an indication that the tank requires service. Each tank shall be provided with an internal butyl/EPDM diaphragm or butyl bladder to isolate the air charge from system water. Diaphragm tanks shall be internally lined with a Polypropylene material fitted to the tank shell, infused with silver ion, tested to ISO Standard JIS Z 2801 to suppress Legionella, E. Coli, and Staph among others. Diaphragm tanks shall include a flow diverting turbulator to reduce water stagnation by creating tank water movement.

THERM-X-TROL® ST-CDD Series Thermal Expansion Tank Tank (Deep Drawn Fixed Diaphragm)

The potable water heating system shall include a THERM-X-TROL, diaphragm type expansion tank which will suspend expanded water created within the normal operating temperature range. By function, the tank will limit pressure increases at all system components to their maximum constructed allowable pressure, maintaining system nominal operating pressure. Furnish and install as shown on plans a _____ gallon, _____ in. diameter X _____ in. (high) AMTROL, model ST- _____ (-CDD). The expansion tank shall be welded carbon steel, form constructed in the deep-drawn extrusion method, tested and stamped in accordance with Section VIII, Division 1 of the ASME Code for a working pressure of (150) (175) _____ PSIG, factory air pre-charged to 55psi, requiring a field adjustment to match system static pressure prior to installation. All welds compliant to ASME Section IX. All internal parts shall conform with NSF 61 regulations and approvals. The tank shall be either suspended or constructed with a base (integral ring mount) for vertical installation. This ASME vessel will include a low mounted, 1-1/4" InSight Port, angled upward with a buoyant red ball visible behind a clear Plexi-glass plate from eye level. With a stainless-steel perforated plate behind the ball, the InSight Glass™ Port acts as a tank performance indicator when the ball is still. When the ball floats and churns in the sight port, this is an indication that the tank requires service. Each tank shall be provided with an internal butyl/EPDM diaphragm or butyl bladder to isolate the air charge from system water. This diaphragm tank shall be internally lined with a Polypropylene material fitted to the tank shell, infused with silver ion, tested to ISO Standard JIS Z 2801 to suppress Legionella, E. Coli, and Staph among others. Diaphragm tanks shall include a flow diverting turbulator to reduce water stagnation by creating tank water movement.

All ASME tanks shall be provided with a free from factory construction defects warranty for a full 3 years from date of installation.



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