

# EXTROL.

Boiler System Expansion Tanks



Extrol<sup>®</sup>. First In Expansion Control.



## EXTROL

Amtrol Inc. designed and patented the first Extrol® diaphragm expansion tank

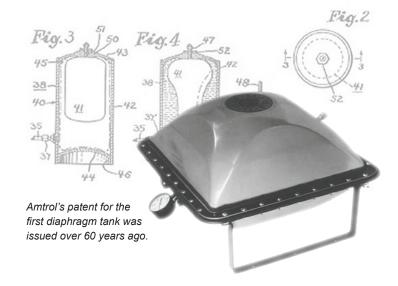
in 1954 to control system pressure and help reduce energy consumption

in heating and chilled water systems. Over six decades later, Extrol is

still the world's leading expansion tank brand, setting the standard

for quality, reliability and innovation.

All Extrol tanks are made in the USA at our ISO registered facilities by American workers dedicated to producing the highest quality expansion tanks in the world.









Built current Invented the Rhode Island manufacturing indirect-fired facility Hot Water Maker® 1972 1980







AMTROL registered ISO 9001 1992



1954 Invented the diaphragm expansion tank



1967 Invented the refrigerant gas cylinder



1975 Entered the commercial products business



top coil indirect Hot Water Maker®

1986

Invented the

1991 Invented the thermal expansion tank



## The One That Started It All.



The complete line of Extrol tanks includes inline, floor-standing, air elimination packages and special application models.





## **EXTROL**®

Automatic Air Vent eliminates system air

Air Purger separates air from water

System connection sets the point of no pressure change

Watertight reservoir for expanded water

Thick, heavy duty Butyl/EPDM diaphragm for long service life

Sealed air cushion — factory pre-charged and 100% tested

Factory precharge: 12 psig Max. working pressure: 100 psig Max. operating temperature: 240°F

Strong, deep-drawn steel tank

Projection-welded air stem maintains precharge setting



## **Models and Specifications**

### **EX Series Specifications**

— A —	Model Number	Tank Volume (Gallons)	Max. Acceptance Factor (Gallons)	A Diameter (Inches)	B Height (Inches)	System Connection (NPTM)	Shipping Weight (lbs.)
	EX-15	2.0	1.0	8	13	1/2	5
B B	EX-30	4.4	2.5	11	15	1/2	9
	EX-60	7.4	2.5	11	23	1/2	14
$\bigcup \hspace{0.1cm} \downarrow$	EX-90	14.0	11.3	15	21	1/2	23

### **EX Series Combination Packages**

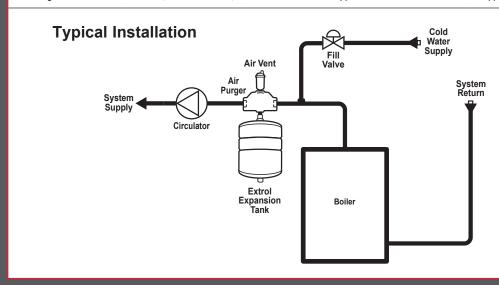


Model Number	System Connections (NPTF)	EXTROL Model	Air Purger Model	Air Vent Model	Shipping Weight (lbs.)
EX-1500-100	1	EX-15	443	700-C	10
EX-1500-125	1 1/4	EX-15	444	700-C	10
EX-3000-100	1	EX-30	443	700-C	14
EX-3000-125	1 1/4	EX-30	444	700-C	14

### **EX Series Sizing**

Boiler	Type of Radiation							
Net Output in 1000'S of BTU/Hr.	Finned Baseboard or Radiant Panels	Convectors or Unit Heaters	Radiators Cast Iron	Baseboard Cast Iron				
МВН	Use Model	Use Model	Use Model	Use Model				
25	EX-15	EX-15	EX-15	EX-15				
50	EX-15	EX-15	EX-30	EX-30				
75	EX-30	EX-30	EX-30	EX-60				
100	EX-30	EX-30	EX-60	EX-60				
125	EX-30	EX-60	EX-60	EX-90				
150	EX-30	EX-60	EX-90	EX-90				
175	EX-60	EX-60	SX Series	SX Series				
200	EX-60	EX-60	SX Series	SX Series				
250	EX-60	EX-90	SX Series	SX Series				
300	EX-90	SX Series	SX Series	SX Series				

Sizing based on: 12 psig Fill; 30 psig Relief Valve; 200°F Average Temperature.
For sizing with fluids other than water, visit amtrol.com, download the AMTROL App or consult AMTROL Technical Support.





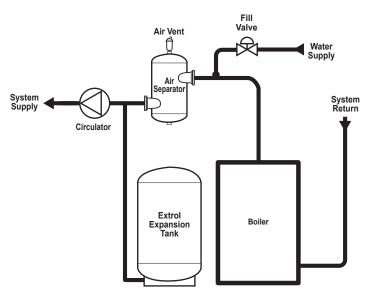
## **Floor-Standing Models**

Extrol floor-standing models are designed for large residential and light commercial applications. These non-ASME tanks are available in sizes up to 86 gallons and can be used with high output boilers up to 1,500,000 BTU's (see sizing charts). ASME Commercial tanks are also available and can be found in catalog MC 2682.



#### **SX Series Specifications** Max. Accept. Volume Tank Volume A Diameter В System Connection Shipping Weight Model Height Number (Gallons) (Inches) (Inches) (NPTF) (Gallons) SX-30V 14 11.3 15 24 25 SX-40V 20 11.3 15 32 33 SX-60V 32 11.3 15 48 43 1 SX-90V 44 34.0 22 36 11/4 69 SX-110V 62 34.0 22 47 11/4 92 103 SX-130V 81 34.0 22 56 11/4 86 123 SX-160V 46.0 26 47 11/4 Factory pre-charge: 12 psig. Maximum working pressure: 100 psig. Maximum operating temperature: 240°F.

#### **Typical Installation**



	Sizing							
Boiler		Гуре of Radiation a	and Piping System					
Net Output in 1000's of BTU	Finned Tube Baseboard or Radiant Panels with Series Loop System	Convectors or Unit Heaters with One Pipe System	Radiators or One Pipe System	Cast Iron Radiators with Series Loop System				
200	SX- 30V	SX-30V	SX-30V	SX-30V				
250	SX- 30V	SX-30V	SX-30V	SX-40V				
300	SX- 30V	SX-30V	SX-40V	SX-40V				
350	SX-30V	SX-30V	SX-40V	SX-60V				
400	SX-30V	SX-40V	SX-60V	SX-60V				
450	SX-40V	SX-40V	SX-60V	SX-90V				
500	SX-40V	SX-40V	SX-60V	SX-90V				
550	SX-40V	SX-60V	SX-60V	SX-90V				
600	SX-40V	SX-60V	SX-90V	SX-90V				
650	SX-60V	SX-60V	SX-90V	SX-90V				
700	SX-60V	SX-60V	SX-90V	SX-90V				
750	SX-60V	SX-60V	SX-90V	SX-110V				
800	SX-60V	SX-90V	SX-90V	SX-110V				
850	SX-60V	SX-90V	SX-90V	SX-110V				
900	SX-60V	SX-90V	SX-110V	SX-110V				
950	SX-90V	SX-90V	SX-110V	SX-110V				
1,000	SX-90V	SX-90V	SX-110V	SX-110V				
1,100	SX-90V	SX-90V	SX-110V	SX-130V				
1,200	SX-90V	SX-90V	SX-110V	SX-130V				
1,300	SX-90V	SX-110V	SX-130V	SX-160V				
1,400	SX-110V	SX-130V	SX-160V	SX-160V				
1,500	SX-110V	SX-130V	SX-160V	(2)SX-110V				

Sizing based on: Average Boiler Water Volume; Average Water Volume; Fill Pressure 12 psig; Relief Pressure 30 psig

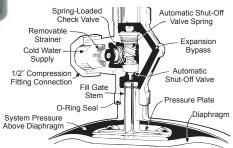
For other boiler sizes or operating conditions, consult AMTROL Technical Support.

## **Special Application Expansion Tanks**



#### FILL-TROL® System

- Eliminates the need for a separate, automatic fill valve.
- · Tank pressure controls system fill.
- Factory pre-charge: 12 psig.
- Fully adjustable up to a maximum working pressure of 100 psig.





#### RADIANT EXTROL®

- · For low temperature systems.
- Plastic liner is compatible with barrier and non-barrier tubing.
- Suitable for use in glycol applications.
- Stainless steel connection for corrosion resistance.
- · Factory pre-charge: 12 psig.
- Maximum working pressure: 100 psig.
- · Maximum operating temperature: 200°F.





#### SOLAR EXTROL®

- · For high-efficiency solar systems.
- · Suitable for use in glycol applications.
- · Factory pre-charge: 25 psig.
- Maximum working pressure: 150 psig.
- · Maximum operating temperature: 250°F.



	Fill-Trol <sup>®</sup> Specifications							
Model Number	Tank Volume (Gallons)	Max. Accept. Volume (Gallons)	A Diameter (Inches)	B Height (Inches)	System Connection (NPTF)	Shipping Weight (lbs.)		
FT-109	2.0	1.0	8	15	1/2	6		
FT-110	4.4	2.5	11	17	1/2	10		
FT-111	7.4	2.5	11	25	1/2	15		
FT-112	14.0	11.3	15	23	1/2	24		

Note: A standard EXTROL tank is not interchangeable with a FILL-TROL tank. FT-109 is equivalent to EX-15; FT-110 is equivalent to EX-30;

FT-111 is equivalent to EX-60 and FT-112 is equivalent to EX-90.

Combination Packages							
Model Number	System Connections (NPTF)	FILL-TROL Model	Air Purger Model	Air Vent Model	Shipping Weight (lbs.)		
FT-109-100	1	109	443	700-C	10		
FT-109-125	11/4	109	444	700-C	10		
FT-110-100	1	110	443	700-C	14		
FT-110-125	11/4	110	444	700-C	14		
FT-111-125	11/4	111	444	700-C	18		

Radiant Extrol® Specifications							
Model Number	Tank Volume (Gallons)	Max. Accept. Volume (Gallons)	A Diameter (Inches)	B Height (Inches)	System Connection	Shipping Weight (lbs.)	
RX-15	2.0	0.9	8	13	½ NPTM	5	
RX-30	4.4	3.2	11	15	½ NPTM	9	
RX-60	10.3	10.3	15	19	<sup>3</sup> ∕ <sub>4</sub> NPTF	23	

	Sizing							
Feet of		Nominal Pex Tubing Size						
Tubing	3/8"	1/2"	5/8"	3/4"	1"			
1,000	RX-15	RX-15	RX-15	RX-15	RX-15			
5,000	RX-15	RX-15	RX-15	RX-30	RX-30			
7,500	RX-15	RX-15	RX-30	RX-30	RX-60			
10,000	RX-15	RX-30	RX-30	RX-60	RX-60			
14,000	RX-15	RX-30	RX-60	RX-60				
18,000	RX-30	RX-60	RX-60	RX-60				
22,000	RX-30	RX-60	RX-60 Contact Amtrol					
30,000	RX-30	RX-60		———— Contact Amtrol				

Sizing based on: Fill Pressure 12 psig; Relief Pressure 30 psig; Average Temperature 120°F; System filled with water. For glycol applications, consult AMTROL Technical Support.

	Solar Extrol <sup>®</sup> Specifications								
Model Number	Tank Volume (Gallons)	Max. Accept. Volume (Gallons)	A Diameter (Inches)	B Height (Inches)	System Connection (NPTM)	Shipping Weight (lbs.)			
SE-15	2.0	1.0	8	13	1/2	5			
SE-30	4.4	2.5	11	16	1/2	9			
SE-60	7.4	2.5	11	23	1/2	14			

For Precise Sizing, visit www.amtrol.com or consult AMTROL Technical Support.

Sizing								
System		Average	System Operati	ng Temperature				
Volume (Gallons)	140°F	160°F	180°F	200°F	220°F			
10	SE-15	SE-15	SE-15	SE-15	SE-15			
20	SE-30	SE-30	SE-30	SE-30	SE-30			
30	SE-30	SE-30	SE-60	SE-60	SE-60			
40	SE-60	SE-60	SE-60	Contact Amtrol				
50	SE-60	SE-60						

Sizing based on: 50% Water and Propylene Glycol Max; 25 psig Fill; 50 psig Relief Valve. For other applications, consult AMTROL Technical Support.



## **Amtrol Advantage™**

Whenever you choose Amtrol, you're getting more than just a great product.

The Amtrol Advantage™ combines the Industry's best brands with world class customer service and valuable installer initiatives.

- Amtrol Rewards™ installer points program
  - Tanks on Tour<sup>™</sup> field training vehicle
    - Amtrol Racing team













