



**EXTROL®**

Boiler System Expansion Tanks



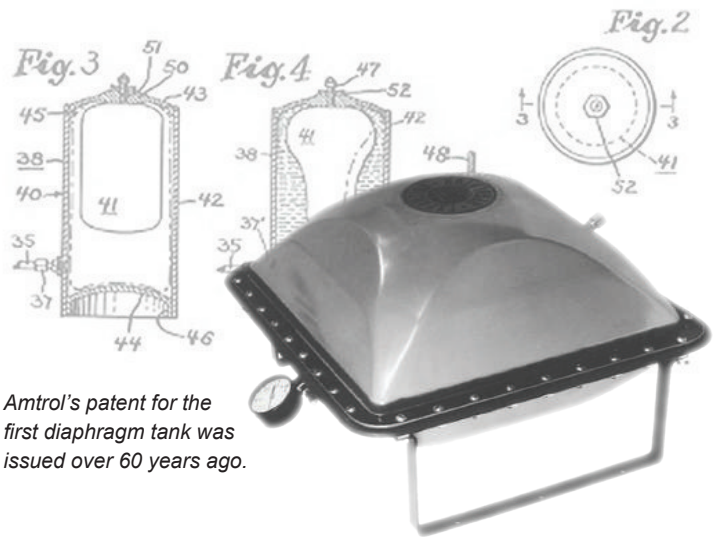
Extrol®. First In Expansion Control.



# 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.



Amtrol's patent for the first diaphragm tank was issued over 60 years ago.

American Tube Products founded in West Warwick, Rhode Island		Invented the pre-pressurized well tank		Built current Rhode Island manufacturing facility	Invented the indirect-fired Hot Water Maker®			 AMTROL registered ISO 9001		
<b>1946</b>		<b>1963</b>		<b>1972</b>	<b>1980</b>		<b>1988</b>	<b>1992</b>		
		<b>1954</b> Invented the diaphragm expansion tank		<b>1967</b> Invented the refrigerant gas cylinder		<b>1975</b> Entered the commercial products business		<b>1986</b> Invented the top coil indirect Hot Water Maker®	<b>1991</b> 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.*

<p>Acquired ALFA Cylinder Manufacturing in Portugal <b>1997</b></p>		<p>Invented the composite metal LP tank <b>2005</b></p>	<p>Launched Amtrol Rewards™ AMTROL registered ISO 9001:2008 <b>2009</b></p> 	<p>Tanks on Tour™ mobile education center hits the road</p> 	<p>Introduced ASME for propane vehicles <b>2014</b></p> 
	<p><b>2003</b> AMTROL registered ISO 9001:2000</p> 	<p><b>2007</b> Introduced XLite cylinder</p> 	<p><b>2010</b> Launched Next Generation Well-X-Trol® 20 millionth well tank shipped</p> 	<p><b>2012</b> Launched HydroMax® Hot Water Makers</p> 	<p><b>2016</b> Amtrol 70th Anniversary</p> 





# EXTROL<sup>®</sup>

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

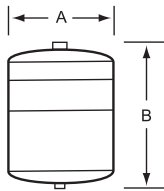
Strong, deep-drawn steel tank

Projection-welded air stem  
maintains precharge setting



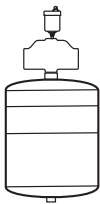
# Models and Specifications

## EX Series Specifications



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	½	5
EX-30	4.4	2.5	11	15	½	9
EX-60	7.4	2.5	11	23	½	14
EX-90	14.0	11.3	15	21	½	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 ¼	EX-15	444	700-C	10
EX-3000-100	1	EX-30	443	700-C	14
EX-3000-125	1 ¼	EX-30	444	700-C	14

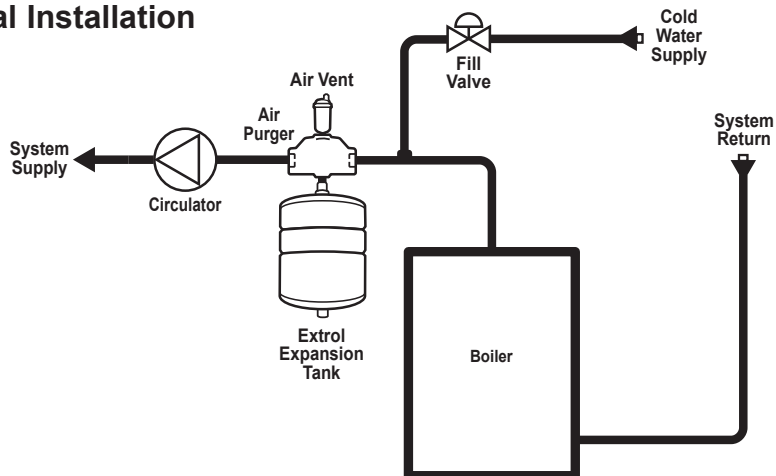
## EX Series Sizing

Boiler Net Output in 1000'S of BTU/Hr.	Type of Radiation			
	Finned Baseboard or Radiant Panels	Convectors or Unit Heaters	Radiators Cast Iron	Baseboard Cast Iron
MBH	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](http://amtrol.com), download the AMTROL App or consult AMTROL Technical Support.

## Typical Installation



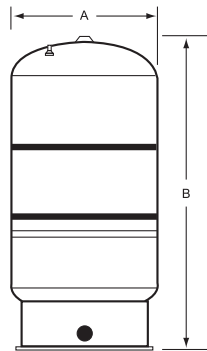


# Floor-Standing Models

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



Model Number	Tank Volume (Gallons)	Max. Accept. Volume (Gallons)	A Diameter (Inches)	B Height (Inches)	System Connection (NPTF)	Shipping Weight (lbs.)
SX-30V	14	11.3	15	24	1	25
SX-40V	20	11.3	15	32	1	33
SX-60V	32	11.3	15	48	1	43
SX-90V	44	34.0	22	36	1¼	69
SX-110V	62	34.0	22	47	1¼	92
SX-130V	81	34.0	22	56	1¼	103
SX-160V	86	46.0	26	47	1¼	123

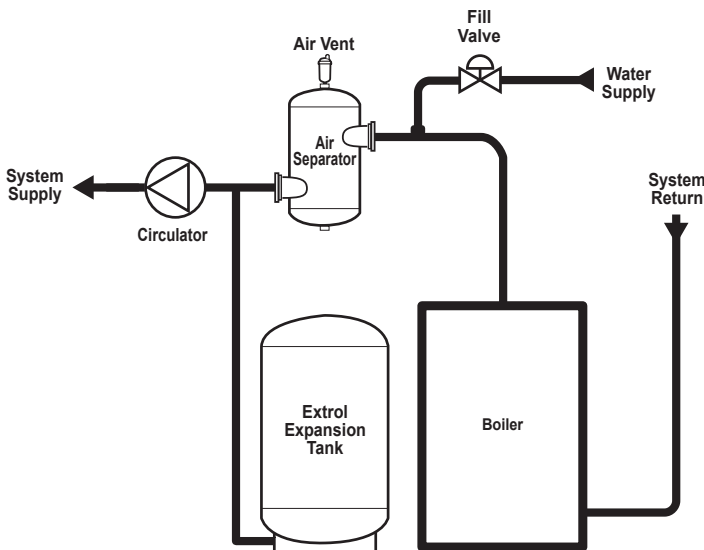
Factory pre-charge: 12 psig.  
 Maximum working pressure: 100 psig.  
 Maximum operating temperature: 240°F.

## Sizing

Boiler Net Output in 1000's of BTU	Type of Radiation and Piping System			
	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-90V	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.

## Typical Installation

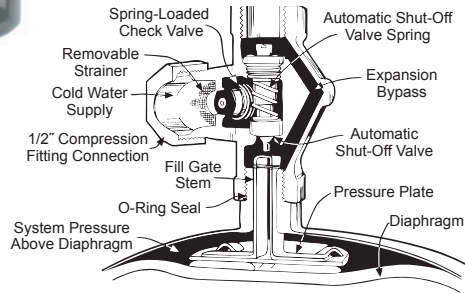


# Special Application Expansion Tanks



## 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.



## Fill-Trol® 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	½	6
FT-110	4.4	2.5	11	17	½	10
FT-111	7.4	2.5	11	25	½	15
FT-112	14.0	11.3	15	23	½	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	1¼	109	444	700-C	10
FT-110-100	1	110	443	700-C	14
FT-110-125	1¼	110	444	700-C	14
FT-111-125	1¼	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	¾ NPTF	23

## 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.



## Sizing

Feet of Tubing	Nominal Pex Tubing Size				
	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		
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® 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	½	5
SE-30	4.4	2.5	11	16	½	9
SE-60	7.4	2.5	11	23	½	14

For Precise Sizing, visit [www.amtrol.com](http://www.amtrol.com) or consult AMTROL Technical Support.

## 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.



## Sizing

System Volume (Gallons)	Average System Operating Temperature				
	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		
50	SE-60	SE-60			Contact Amtrol

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™ field training vehicle
- Amtrol Racing team



# AMTROL Advantage™



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