

# **EXTROL**®

Hydronic Expansion Tanks





# **EXTROL**

Extrol expansion tanks accept expanded fluid in closed-loop hydronic systems to control pressure buildup, improve comfort and help reduce energy costs. Nearly seven decades after inventing the first diaphragm expansion tank, Amtrol's lineup now includes specialty models engineered for modern, higheficiency systems. None of it would have been possible without Extrol − The One That Started It All™.

# 7-Year Warranty: The Industry's Longest

Strong, deep-drawn steel construction

Water tight 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







#### InSight® Indicator Cap

- Patented sight glass changes color if tank needs replacing.
- Alerts user to a problem before damage can occur.



# **Models and Specifications**



## **Extrol® In-Line Models**

- · 7-Year limited warranty.
- Suitable for expansion control in most residential closed-loop boiler systems.
- Patented InSight® indicator cap provides visual check of tank condition.
- In-line mounting adds convenience and space savings.

	EX Series Specifications							
Model Number	Tank Volume (Gallons)	Max. Accept. Volume (Gallons)	Diameter (Inches)	Height (Inches)	System Connection (NPTM)	Shipping Weight (lbs.)		
EX-15	2.0	1.0	8	13	1/2	5		
EX-30	4.4	2.5	11	15	1/2	9		
EX-60	6.7	2.7	11	20	1/2	13		
EX-90	14.0	11.3	15	21	1/2	23		

Maximum operating temperature: 240° F. Maximum working pressure: 100 PSIG. Factory precharge: 12 PSIG.





 Combination Packages include Air Purger and Automatic Float Vent.

EX Combination Packages							
Model Number	EXTROL Model	Air Purger Model	Air Vent Model	Purger Connection (NPTF)	Shipping Weight (lbs.)		
EX-1500-100	EX-15	443	700-C	1	10		
EX-1500-125	EX-15	444	700-C	11/4	10		
EX-3000-100	EX-30	443	700-C	1	14		
EX-3000-125	EX-30	444	700-C	11/4	14		

Maximum operating temperature: 240° F. Maximum working pressure: 100 PSIG. Factory precharge: 12 PSIG



#### **Extrol Vertical Models**

- For use in large residential and light commercial applications.
- Floor-standing with rugged steel base.
- Additional capacity to handle larger boiler systems.
- 1-Year limited warranty.

SX Series Specifications							
Model Number	Tank Volume (Gallons)	Max. Accept. Volume (Gallons)	Diameter (Inches)	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	11/4	69	
SX-110V	62	34.0	22	47	11/4	92	
SX-130V	81	34.0	22	56	11/4	103	
SX-160V	86	46.0	26	47	11/4	123	

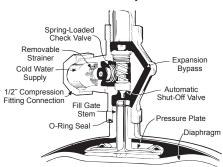
Maximum operating temperature: 240° F. Maximum working pressure: 100 PSIG. Factory precharge: 12 PSIG.

# **Specialty Models**



## Fill-Trol® System

- Eliminates the need for a separate, automatic fill valve.
- · Tank pressure controls system fill.
- Fully adjustable up to a maximum working pressure of 100 PSIG.
- 7-Year limited warranty.



	Fill-Trol <sup>®</sup> Specifications							
Model Number	Tank Volume (Gallons)	Max. Accept. Volume (Gallons)	Diameter (Inches)	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	6.7	2.7	11	20	1/2	14		
FT-112	14.0	11.3	15	23	1/2	24		

Note: A standard Extrol tank is not interchangeable with a Fill-Trol tank.

Cold water supply: 1/2 compression.

Maximum operating temperature: 240° F. Maximum working pressure: 100 PSIG.

Factory precharge: 12 PSIG.

FT 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®

- · For low temperature systems.
- Plastic liner with stainless steel connection; compatible with barrier and non-barrier tubing.
- · Suitable for use in glycol applications.
- 7-Year limited warranty.



Radiant Extrol® Specifications							
Model Number	Tank Volume (Gallons)	Max. Accept. Volume (Gallons)	Diameter (Inches)	Height (Inches)	System Connection	Shipping Weight (lbs.)	
RX-15	2.0	1.0	8	13	½ NPTM	5	
RX-30	4.4	2.5	11	16	½ NPTM	9	
BX-60	10.3	10.3	15	10	3/ NDTE	23	

Stainless steel system connection.

Maximum operating temperature: 200° F. Maximum working pressure: 100 PSIG. Factory precharge: 12 PSIG.



#### Solar Extrol®

- · For high-efficiency solar systems.
- Suitable for use in glycol applications.
- · 7-Year limited warranty.

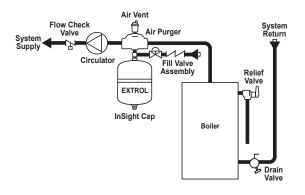


	Solar Extrol <sup>®</sup> Specifications								
Model Number	Tank Volume (Gallons)	Max. Accept. Volume (Gallons)	Diameter (Inches)	Height (Inches)	System Connection (NPTM)	Shipping Weight (lbs.)			
SE-15	2.0	1.0	8	13	1/2	5			
SE-30	4.4	2.5	11	16	1/2	9			

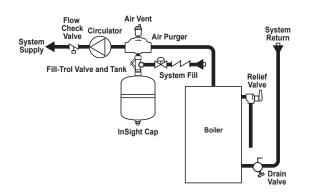
Maximum operating temperature: 250° F intermittent; 225° F continuous. Maximum working pressure: 150 PSIG. Factory precharge: 25 PSIG.

# **Typical Installations**

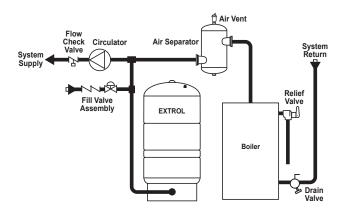
#### Extrol® EX Models



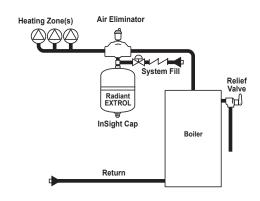
#### Fill-Trol® FT Models



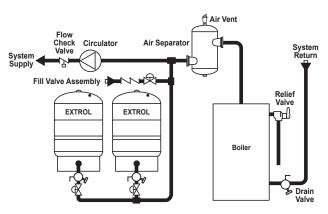
#### Extrol® SX Models



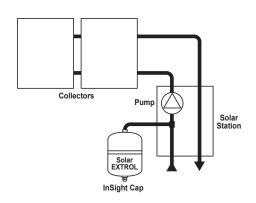
#### Radiant Extrol® RX Models



## **Piping Multiple SX Models**



#### Solar Extrol® SE Models





# **Extrol® Sizing**

### **Extrol EX Series Sizing**

Boiler	Type of Radiation				
Net BTU Output (Thousands)	Finned Baseboard	Convectors or Unit Heaters	Radiators Cast Iron	Baseboard Cast Iron	
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			
200	EX-60	EX-90			
250	EX-90	EX-90 See SX Series		Series	
300	EX-90				

Sizing based on: 12 PSIG fill; 30 PSIG relief Valve; 180° F average temperature. For sizing with fluids other than water, visit amtrol.com, download the AMTROL App or consult AMTROL Technical Support.

#### **Extrol SX Series Sizing**

Boiler	Type of Radiation and Piping System						
Net BTU Output (Thousands)	Finned Tube Baseboard or Radiant Panels	Convectors or Unit Heaters	Cast Iron Radiators One Pipe System	Cast Iron Radiators Series-Loop			
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: 12 PSIG fill; 30 PSIG relief Valve; 180° F average temperature.
For sizing with fluids other than water, visit amtrol.com, download the AMTROL App
or consult AMTROL Technical Support.

## Radiant Extrol® 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		AMTDOL	
30,000	RX-30	RX-60	Contact AMTROL			

Sizing based on: 12 PSIG fill; 30 PSIG relief valve; 120° F average temperature. System filled with water. For glycol applications, consult AMTROL Technical Support.

#### Solar Extrol<sup>®</sup> Sizing

System Volume		Average System Operating Temperature					
(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					
40	SE-30	SE-30	Contact AMTROL				
50	SE-30						

Sizing based on: 25 PSIG fill; 50 PSIG relief valve; 50% water and propylene glycol max. For other applications, consult AMTROL Technical Support.

## Comb. Package & Fill-Trol Equivalents

Extrol Model	EX Combination Package	Fill-Trol Model
EX-15	EX-1500	FT-109
EX-30	EX-3000	FT-110
EX-60	_	FT-111
EX-90	_	FT-112



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