



# EXTROL®

Hydronic Expansion Tanks: EX and FT Series

## 100 PSIG Working Pressure

### Construction

Shell	Steel
Diaphragm	Heavy Duty Butyl/EPDM
System Connection	Steel
Finish	Urethane Topcoat
Air Valve	Projection Welded
Factory Precharge	12 PSIG (0.8 bar)

### Application

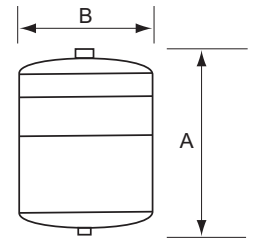
- For use in closed, non-potable, hydronic heating systems.
- Accepts expanded water as system temperature rises to reduce pressure build-up.
- Helps reduce energy consumption and reduces system wear.
- Fill-Trol® models eliminate the need for a separate automatic fill valve. Tank pressure controls system fill.

### Performance

Maximum Operating Temperature	240°F (115.6°C)
Maximum Working Pressure	100 PSIG (6.9 bar)
Warranty	5 Year

### EXTROL In-Line Models

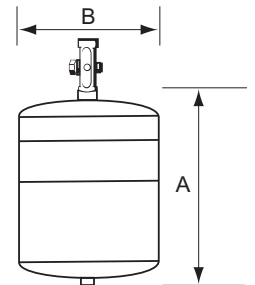
Model Number	Tank Volume		Max. Acceptance Factor	A Tank Height		B Tank Diameter		System Connection (NPTM)	Shipping Weight	
	Gal	Lit		In	mm	In	mm		Lbs	Kg
EX-15	2.0	8	.50	13	330	8	203	½	5	2.3
<b>EX-30</b>	<b>4.4</b>	<b>17</b>	<b>.57</b>	<b>16</b>	<b>406</b>	<b>11</b>	<b>279</b>	<b>½</b>	<b>9</b>	<b>4.0</b>
EX-60	7.6	33	.34	23	584	11	279	½	14	6.4
EX-90	14.0	53	.81	21	533	15	390	½	23	10.4



All dimensions and weights are approximate.

### FILL-TROL In-Line Models

Model Number	Tank Volume		Max. Acceptance Factor	A Tank Height		B Tank Diameter		System Connection (NPTM)	Shipping Weight	
	Gal	Lit		In	mm	In	mm		Lbs	Kg
FT-109	2.0	8	.50	13	330	8	203	½	6	2.7
FT-110	4.4	17	.57	16	406	11	279	½	10	4.5
FT-111	7.6	33	.34	23	584	11	279	½	15	6.8
FT-112	14.0	53	.81	21	533	15	390	½	24	10.9



All dimensions and weights are approximate.

Job Name _____	Notes _____
Engineer _____	_____
Contractor _____	_____
P.O. No. _____	_____
Sales Rep. _____	_____
Model No. _____	_____



## Air Scoop

Effective: July 23, 2007

Supersedes: March 1, 2007

JOB \_\_\_\_\_ ENGINEER \_\_\_\_\_ CONTRACTOR \_\_\_\_\_ REP. \_\_\_\_\_

ITEM	QUANTITY	MODEL NUMBER	SIZE
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### Purpose

The Taco Air Scoop® is specifically designed to provide a noiseless, air-free hydronic heating, cooling or combination system, by efficiently separating out the air from the water in any of these systems.

### Operation

Air being lighter than water, it travels along the upper portion of a horizontal pipe in low velocity hydronic systems. As the air and water enter the Air Scoop their velocity decreases, permitting the air bubbles to be scooped up by the baffle and directed to the top of the chamber. The air reaching the top of the air scoop is either immediately vented through a Hy-Vent® or it moves into a conventional

plain steel expansion tank (models 433, 434, 435, 436, and 437), if used. Should the air completely fill the plain steel tank and back down into the Air Scoop, the excess will be removed by the Hy-Vent without disturbing the operation of the system.

### Size and Connections

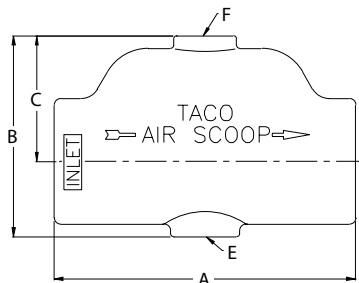
Taco Air Scoops are available in 1" through 3" cast iron threaded and 4" flanged cast iron. Each Air Scoop has an 1/8" vent connection on top for the installation of a Taco 400-3 or 416-1 Hy-Vent, and a 1/2" bottom tapping for a diaphragm expansion tank. The 1 1/2" through 4" Air Scoops also have an additional top tapping for the connection of a plain steel expansion tank.

### Features

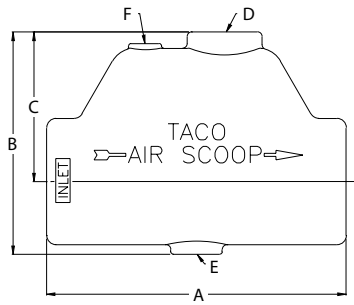
- One Piece Cast Iron Construction
- Engineered Baffle to Separate Air from Water
- Never Requires any Servicing

### Ratings

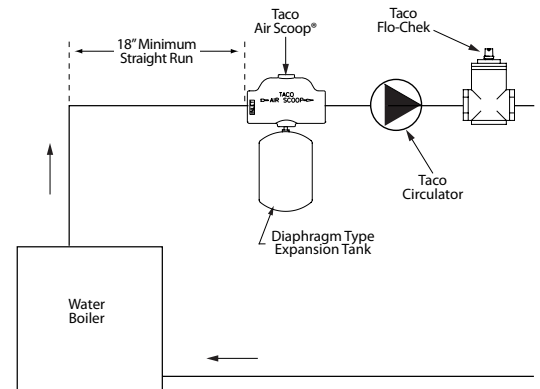
Maximum Operating Pressure: 125 PSI (862kPa)  
 Maximum Operating Temperature: 300°F (135°C)  
 Media: Water or Water / Glycol  
 Recommended Flow Rate: 4 ft. / sec.  
 Maximum Flow Rate: 8 ft. / sec.



431, 432



433, 434, 435, 436, 437



### Dimensions & Weights

Product Number	Size	A	B	C	D	E	F	Cv	Weight	
									Lbs.	Kg
431	1"	6"	4"	2 1/2"	**	1/2" NPT	1/8" NPT	31.4	4	1.8
432	1 1/4"	6"	4"	2 1/2"	**	1/2" NPT	1/8" NPT	53.5	4	1.8
433	1 1/2"	8"	6"	4"	3/4" NPT	1/2" NPT	1/8" NPT	61	7	3.2
434	2"	8"	6"	4"	3/4" NPT	1/2" NPT	1/8" NPT	106.6	7	3.2
435	2 1/2"	10"	8"	5 1/2"	1" NPT	1/2" NPT	1/8" NPT	140	15	6.8
436	3"	10"	8"	5 1/2"	1 1/4" NPT	1/2" NPT	1/8" NPT	276	14	6.4
437*	4"	16 5/16"	11 5/8"	7 1/8"	1 1/2" NPT	1/2" NPT	1/8" NPT	600	52	23.6

\*This size has 125 lb. flanged ends

\*\*No conventional plain steel expansion tank tapping





# Submittal Data Information

## Automatic Air Vents

101-2.3

Effective: November 15, 2016

Supersedes: June 1, 2010

Job: \_\_\_\_\_ Engineer: \_\_\_\_\_ Contractor: \_\_\_\_\_ Rep: \_\_\_\_\_

ITEM NO.	MODEL NO.	

### 417 Coin Vent

Installed on water or steam radiators the Taco automatic coin vent is the ideal air purging device. The coin vent features special hygroscopic cellulose discs in the valve body. When dry the discs allow air to be released from the system. Once all the air is purged the discs would then come in contact with system water, where upon they would swell to create a positive shut-off. This continuous cycle prevents the radiators from becoming air bound and speeds the process of filling the system. The vent can also be manually shut-off by means of an internal ball check. The 417 coin vent is suitable for use in water and low pressure steam applications.

### Hy-Vent®

The Taco Hy-Vent® has become the industry standard for dependable long life service. Available in 1/8", 1/4" and 1/2" x 3/4" threaded connections, the high capacity float style vents can be placed either on the boiler or at the high points throughout the system. Now with operating pressure ratings of up to 250 psi, the brass body, nickel plated vents meet the system requirements of even the largest installation. The vents are also easily serviceable if needed, by just unscrewing the vent cap.

### 409 Vent

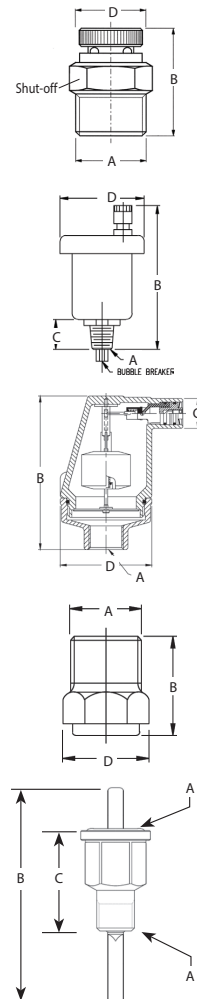
The Taco 409 air vent is a heavy duty brass vent rated to 150 psi system operating pressure. The conical shape of the vent significantly increases the clearance between the water level and internal mechanisms, reducing the potential that dirt floating on the top of the water could foul the venting operation. It features a convenient outlet connection for a 3/4" ID flex tube waste connection. It's high capacity design makes it ideal for placement throughout commercial systems.

### Hy-Vent® Waste Connector

The Hy-Vent® Waste Connector screws onto the outlet connection of the Hy-Vents (models 400, 426, 418, 416) to provide a worry-free installation. The 1/4" threads easily connect to a waste line, preventing water damage if the vent ever leaks.

### Hy-Vent® Service Check Valve

For easy removal of 1/8" Hy-Vents (models 400 and 416 only). The service check screws onto the Hy-Vent and allows the vent to be replaced without having to drain any fluid from the system.



### Dimensions

Product Number	Description	A	B	C	D	Bubble Breaker	Quantity Per Box	Max. System Conditions	Max. Venting Pressure
417	Taco-Vent® Coin Vent	1/8" NPT	1"	---	35/64"	No	12	125 psi, 240°F*	125 psi
400	Hy-Vent®	1/8" NPT	3-3/16"	13/32"	1-13/16"	Yes	1	150 psi, 240°F	50 psi
416	Slim-Line Hy-Vent®	1/8" NPT	3-1/8"	13/32"	1-1/2"	Yes	14	150 psi, 240°F	115 psi
426	Hy-Vent®	1/4" NPT	3-3/16"	13/32"	1-13/16"	Yes	1	150 psi, 240°F	50 psi
418	Hy-Vent®	1/2" x 3/4" NPT	3-11/32"	17/32"	1-13/16"	No	1	150 psi, 240°F	50 psi
419	High Pressure Hy-Vent®	1/2" x 3/4" NPT	3-1/2"	17/32"	1-13/16"	No	1	250 psi, 240°F	150 psi
409	Commercially Rated Brass Vent**	3/4" NPT	4-3/4"	**	2-13/16"	No	1	150 psi, 240°F	150 psi
414	Waste Connector	1/4" NPT	3/4"	----	5/8"	----	1	150 psi, 240°F	----
415	Hy-Vent® Service Check Valve	1/8" NPT	2-1/4"	1"	---	----	1	150 psi, 240°F	----

\* Suitable for use in low pressure steam systems.

\*\* Outlet connection fits 3/4" ID Flex tubing.

