



# Submittal Data Information

101-007

## 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

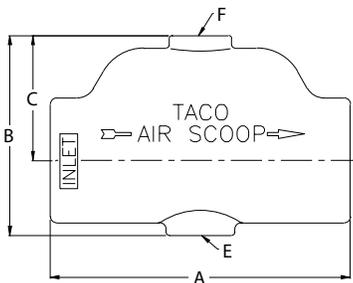
Taco Air Scoops are available in 1" through 3" cast iron threaded and 4" flanged cast iron. Each Air Scoop has an 1/8" vent connection on top for the installation of a Taco 400-3 or 416-1 Hy-Vent, and a 1/2" bottom tapping for a diaphragm expansion tank. The 1 1/2" through 4" Air Scoops also have an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

### Features

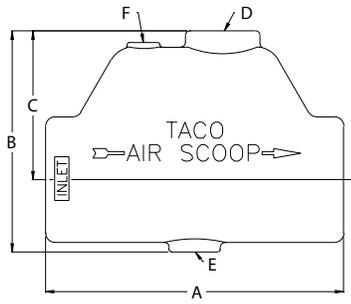
- One Piece Cast Iron Construction
- Engineered Baffle to Separate Air from Water
- Never Requires any Servicing

### Ratings

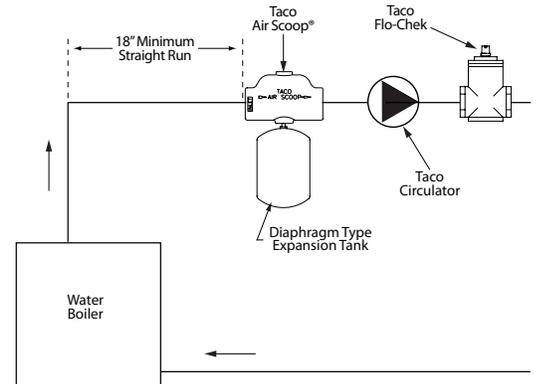
Maximum Operating Pressure: 125 PSI (862kPa)  
 Maximum Operating Temperature: 300°F (135°C)  
 Media: Water or Water / Glycol  
 Recommended Flow Rate: 4 ft. / sec.  
 Maximum Flow Rate: 8 ft. / sec.



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

**Do it Once. Do it Right.®**

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