



Bulletin A-308B

**Bell & Gossett®**



## **Model IAS In-Line® Air Separator**

- One piece cast iron construction
- Efficiently separates air
- Never requires servicing
- No moving parts
- Compact design
- Easily installed

Bell & Gossett®



**ITT Industries**  
*Engineered for life*

## DESCRIPTION

The B&G In-Line Air Separator is specifically designed to efficiently separate air from circulating water in hydronic heating and cooling systems to assure quiet operation.

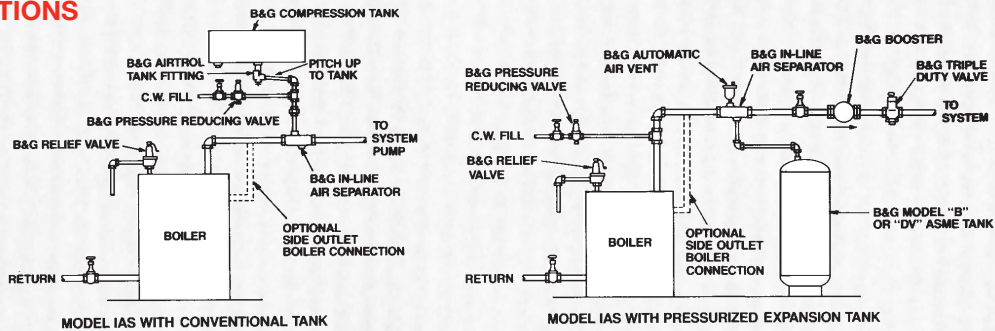
## OPERATING DATA

Maximum Working Pressure: 175 psig (1,207 kPa)  
Maximum Operating Temperature: 300°F (149°C)

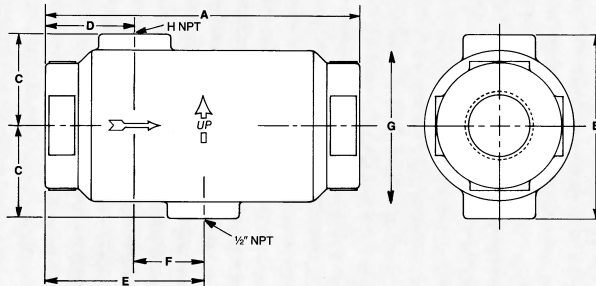
## CONSTRUCTION

One Piece Cast Iron

## TYPICAL APPLICATIONS



## DIMENSIONS & WEIGHTS



MODEL NUMBER	PART NUMBER	SIZE INCHES NPT	DIMENSIONS - INCHES (MM)								APPROX. SHPG. WT. LBS. (KG)
			A	B	C	D	E	F	G	H (NPT)	
IAS-1	112118	1"	6 <sup>1</sup> / <sub>8</sub>	3 <sup>1</sup> / <sub>2</sub>	1 <sup>3</sup> / <sub>4</sub>	1 <sup>3</sup> / <sub>4</sub>	3 <sup>1</sup> / <sub>16</sub>	1 <sup>5</sup> / <sub>16</sub>	2 <sup>7</sup> / <sub>8</sub>	1/8"	3 <sup>3</sup> / <sub>4</sub> (1.7)
IAS-1 <sup>1</sup> / <sub>4</sub>	112119	1 <sup>1</sup> / <sub>4</sub> "	(156)	(89)	(45)	(45)	(78)	(33)	(73)		3 <sup>1</sup> / <sub>2</sub> (1.6)
IAS-1 <sup>1</sup> / <sub>2</sub>	112097	1 <sup>1</sup> / <sub>2</sub> "	8 <sup>1</sup> / <sub>8</sub>	4 <sup>1</sup> / <sub>2</sub>	2 <sup>1</sup> / <sub>4</sub>	2 <sup>3</sup> / <sub>16</sub>	4 <sup>1</sup> / <sub>16</sub>	1 <sup>7</sup> / <sub>8</sub>	4	3/4"	8 <sup>1</sup> / <sub>2</sub> (3.9)
IAS-2	112098	2"	(207)	(114)	(57)	(56)	(103)	(48)	(102)		7 <sup>1</sup> / <sub>2</sub> (3.4)
IAS-2 <sup>1</sup> / <sub>2</sub>	112099	2 <sup>1</sup> / <sub>2</sub> "	10 <sup>1</sup> / <sub>8</sub>	6 <sup>3</sup> / <sub>8</sub>	3 <sup>3</sup> / <sub>16</sub>	2 <sup>3</sup> / <sub>4</sub>	5 <sup>1</sup> / <sub>16</sub>	2 <sup>5</sup> / <sub>16</sub>	5 <sup>5</sup> / <sub>8</sub>		23 (10.4)
IAS-3	112100	3"	(257)	(162)	(81)	(70)	(129)	(59)	(149)		21 <sup>1</sup> / <sub>2</sub> (9.8)

## TYPICAL SPECIFICATIONS

Furnish and install as shown on plans a horizontal in-line air separator designed to effectively separate free air in hydronic heating/cooling systems. The air separator shall be heavy duty cast iron designed to function satisfactorily at working pressures up to 175 psi (12.1 bar) and liquid temperatures up to 300°F (149°C). The air separator shall have an integral weir designed to decelerate system flow to maximize air separation.

**NOTE:** Choose either A or B to complete this specification.

### A. For Use with Conventional Compression Tanks (Excludes IAS-1 and IAS-1<sup>1</sup>/<sub>4</sub>)

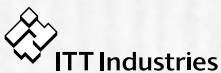
The in-line air separator shall also assist in controlling free air in the system by directing the air to a conventional compression

tank while reduced oxygenated water is circulated to the system. The in-line air separator shall allow expansion of the system fluid to be directed to the compression tank.

### B. For Use with Precharged Bladder and Diaphragm Expansion Tanks

The in-line air separator shall also assist in eliminating free air from the system by directing the air to an air vent attached to the separator while reduced oxygenated water is circulated to the system. The in-line air separator shall allow expansion of the system fluid to be directed to a precharged (CHOOSE ONE: BLADDER OR DIAPHRAGM) \_\_\_\_\_ expansion tank.

The in-line air separator shall be ITT Bell & Gossett Airtrol Model No. IAS-\_\_\_\_\_ In-Line Air Separator.



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