

## Introduction

This catalogue features the exclusive Brownall range of Automatic Air Eliminator products. All manufactured in non-dezincifiable body materials, resistant to fungal growth.

Automatic Air Eliminators covering low, medium & high pressure applications suitable for use with water, aviation fuel, diesel & light oils.

Three-way vent valves, offering efficient performance, reliable service combined with potential savings in time & cost by simplifying the venting system for single/multi boiler or calorifier installations, complimented by vent cocks are also available upon request.

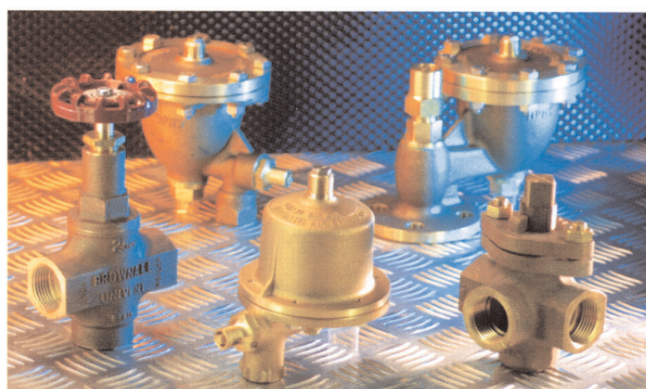
## Air Separation saves the System!

Air in a central heating system leads to reduced heat emission and has harmful consequences for the installation as a whole - particularly the pump, which is often the first component to suffer. Air is the enemy of the pump and leads to a noisy installation, loss of performance, corrosion and premature failure. With the installation of good venting equipment these problems can be alleviated.

## The Importance of a Clean System

Dirt or other foreign matter can cause problems, reducing the efficiency of a system, particularly when applied to air elimination. It is therefore recommended that prior to the installation of automatic air eliminators the system is thoroughly flushed. In addition, a pipeline strainer should be installed immediately before the inlet to the AAE.

It is recommended that discharge pipe work should always be fitted to the outlet of the valves to allow for venting & water carry-over.



## Selection of the most Suitable Automatic Air Eliminator

With several types of air eliminator available, product evaluation relating to system requirements is essential. With this in mind, the following factors should be taken into consideration:-

- **System Parameters:**  
Select the correct type, ensuring that the pressure & temperature rating meet the requirement of the system.
- **Materials of Construction:**  
Quality of manufacture & materials used in construction are critical. Corrosion and clogging of valve mechanisms is a potential problem if incorrect materials are used.
- **Reliability:**  
An automatic valve, usually operating in an inaccessible roof space or system header, must be capable of long term trouble free operation.

With proven reliability extending over many years the Brownall range of Automatic Air Eliminators meets the above criteria and is number one choice with professional building services consulting engineers and specifying authorities.

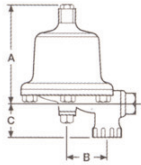
The Brownall guide to Air Elimination in Fluid Systems is available on request.



## Brownall AAE Technical Specification

TYPE	PART No.	DETAILS
Type A	AE-A	Vertical Inlet. Available Special Order.
Type B	AE-B	Vertical Inlet with Integral Lockshield Isolating Valve.
Type C	AE-C	Vertical Inlet with Integral Lockshield Isolating Valve & Check Valve.
Type D	AE-D	Side Inlet Available Special Order.
Type MPHW	AE-MPHW-015	Vertical Inlet with Integral Lockshield Isolating Valve.
Type HPHW	AE-MPHW-F	BST 'F' Vertical Inlet with Integral Lockshield Isolating Valve.
Type HPHW	AE-MPHW-H	BST 'H' Vertical Inlet with Integral Lockshield Isolating Valve.
Type HPHW	AE-MPHW-16	PN16 Vertical Inlet with Integral Lockshield Isolating Valve.

Type	A	B	C	Weight kg
A	102	43	35	1.25
B	102	43	35	1.28
C	108	43	35	1.28



### Technical Data

Connections: Screwed 1/2" BSP Female Inlet  
1/8" BSP Male Outlet

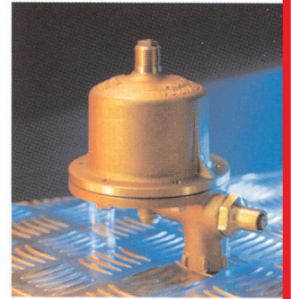
Pressure Rating: Up to 10 bar (150 lbf/in<sup>2</sup>)  
Non-Shock

Temp. Rating: Up to 93°C (200°F)

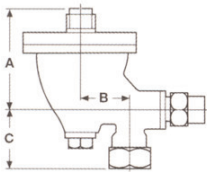
Recommended Min. Working Pressure: 0.15 bar (5ft effective head)

### Materials of Construction

Body and Dome: Gunmetal  
Spindle and Seating: Stainless Steel  
Valve: PTFE  
Float: Stainless Steel



Product Type	A	B	C	Weight kg
MPHW	108	43	41	2.4



### Technical Data

Connections: Screwed 1/2" BSP Female Inlet  
1/8" BSP Male Outlet

Pressure Rating: Up to 7 bar (100 lbf/in<sup>2</sup>)

Temp. Rating: Up to 149°C (300°F)

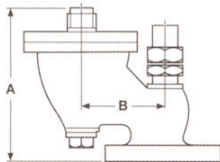
Recommended Min. Working Pressure: 0.15 bar (5ft effective head)

### Materials of Construction

Body and Dome: Gunmetal  
Spindle and Seating: Stainless Steel  
Valve: Monel  
Float: Nickel Alloy Silver Brazed



Type	A	B	Weight kg
BST 'F'	152	83	3.85
BST 'H'	152	83	3.85
PN16	152	83	3.85



### Technical Data

Connections: Flanged 1/2" BST 'F' (HPHW/F) or BST 1/2" 'H' (HPHW flanges can be supplied drilled to ASA 150 or PN16 Outlet 1/8" BSP Male)

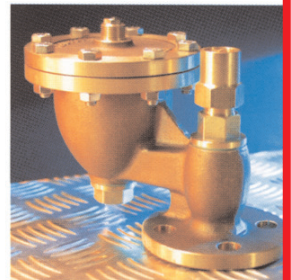
Pressure Rating: HPHW/F 10.5 bar (150 lbf/in<sup>2</sup>)  
HPHW/H 17 bar (250 lbf/in<sup>2</sup>)

Temp. Rating: HPHW/F 182°C (360°F)  
HPHW/H 204°C (400°F)

Recommended Min. Working Pressure: 0.15 bar (5ft effective head)

### Materials of Construction

Body and Dome: Gunmetal  
Spindle and Seating: Stainless Steel  
Valve: Monel  
Float: Nickel Alloy Silver Brazed



## Service Kits (Float Assembly) Types A, B (AE-SP-ABD) & C (AE-SP-C)

Types B and C Automatic Air Eliminators are manufactured with in-built isolating valves which, when closed, enable the dome to be removed and the float assembly replaced.

Type A requires an additional gate valve on the inlet, to isolate it from the system prior to removing the float assembly.

