

For Air Removal from Liquid Systems  
All Stainless Steel Construction  
To 400 psi at 500 F

**Series AE 1800  
and AE 1800R  
AIR  
ELIMINATOR**

## Applications

Series AE 1800 air eliminator provides immediate and continuous discharge of large amounts of air, and non-condensable gases. This air vent will handle the large capacities required on such services as:

- Storage Tanks
- Condensate Systems
- Heat Exchangers
- Water Cooled Engines
- Water Cooled Compressors
- Liquid Mixing
- Water Heating Systems
- Liquid Lines

## Features

- All Stainless Steel internals-for long service life
- High Capacity air removal
- Float controlled Air eliminator adjusts to load variations
- Field repairable unit available: AE1800R

## How It Works

The Air Eliminator relies on the weight of the float and lever assembly to automatically pull the stainless steel ball valve off the seat, allowing the air to escape from the system. When the liquid level rises, the buoyant force created by the float actuates the lever mechanism to the closed position, preventing the loss of any liquid to atmosphere.



AE 1800



AE 1800R

Watson McDaniel reserves the right to change the designs and/or materials of its products without notice



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Manufacturers of:

**PRESSURE & TEMPERATURE REGULATORS - RELIEF VALVES - STEAM TRAPS - CLEAN STEAM PRODUCTS  
LIQUID DRAINERS - PRESSURE PUMPS - EJECTORS - SPECIALTY PRODUCTS**



ASME Sect VIII Div I  
SP-545  
1/01

SPECIALTY  
PRODUCTS

## Series AE 1800 Air Eliminator Specifications

### Installation & Maintenance

The Air Eliminator should be mounted vertically at the highest point of the piping system or equipment where air collects. The outlet should be piped to a safe place. Isolate the AE 1800 before attempting to repair. If the seat orifice has become clogged, clean out by inserting a small diameter wire.

### Design Pressure/Temperature Rating

All Models  
400 PSIG (PMA) @ 500° F (TMA)

### Construction Materials

No.	Name	Material
1	Body, shell	Stainless Steel, AISI 304
2	Inlet, fitting -3/4"	Stainless Steel, AISI 304
3	Outlet, fitting - 1/2"	Stainless Steel, AISI 304
4	Float Assembly	Stainless Steel, AISI 304
5	Valve & Lever Assembly	Stainless Steel, AISI 420F
6	Seat	Stainless Steel, AISI 420
7	Washer, seat	Garlock
8	Gasket	Garlock
9	Bolt, Hex, HD	Stainless Steel, AISI 316
10	Nut	Stainless Steel, 18-8

### Capacity - scfm

INLET PRESSURE psig	Model	AE1810	AE1820	AE1830
	Orifice	.078	.101	.125
5		1.0	1.7	2.5
7		1.1	1.9	3.0
9		1.3	2.1	3.4
12		1.5	2.4	3.9
15		1.7	2.6	4.3
20		1.9	3.1	5.1
25		2.2	3.5	5.8
30		2.5	4.0	6.5
35		2.8	4.4	7.3
40		3.1	4.8	8.0
50		3.4	5.3	8.7
60		3.7	5.7	9.5
70		4.2	6.6	10.9
80		5.4	8.4	13.9
90		6.0	9.3	15.4
100		6.8	10.2	16.9
110		7.2	11.1	18.4
120		7.5	12	19.9
125		7.9	12.4	20.5
150		9.4	14.5	24.4
200		12.5	19.1	-
250		15.4	23.5	-
300		18.4	28	-
400		24.4	-	-

Available Connections	
AE 1801	3/4" in x 1/2" out
AE 1802	3/4" in x 3/4" out
AE 1803	1/2" in x 1/2" out

\* Note: The last digit of part number specifies end connections

