

# CLEANVENT

An Air (Deaerator) Separator.

- 1 High capacity auto air vent
- 2 Fast bleed Valve



Model No.	Dimensions (mm)							Tested to
	A	B	C	D	E	F	G	
<b>CVA-50</b>	50	430	114	170	25	390	504	21 bar
<b>CVA-65</b>	65	430	120	170	25	384	504	21 bar
<b>CVA-80</b>	80	490	141	220	25	459	600	21 bar
<b>CVA-100</b>	100	490	154	220	25	446	600	21 bar
<b>CVA-125</b>	125	630	193	325	25	585	778	21 bar
<b>CVA-150</b>	150	630	207	325	25	571	778	21 bar
<b>CVA-200</b>	200	810	295	410	50	665	960	21 bar
<b>CVA-250</b>	250	880	367	510	50	871	1238	21 bar
<b>CVA-300</b>	300	1100	418	610	50	982	1400	21 bar
<b>CVA-350</b>	350	1500	468	770	50	1063	1531	21 bar
<b>CVA-400</b>	400	1500	493	770	50	1301	1794	21 bar
<b>CVA-450</b>	450	1750	559	920	50	1254	1813	21 bar
<b>CVA-500</b>	500	2000	659	1220	50	1266	1925	21 bar

**POD INSULATED READY**

## Deaeration

The word Deaeration describes the removal of dissolved gases from liquids such as air from water. When water is heated or the pressure reduced gas microbubbles are released into the system. Microbubbles can be the cause of major problems such as pump failure, corrosion and energy loss.

## The Solution

The stainless steel CleanVent Air Separator Installed at the hottest point in the system the stainless steel CleanVent will eliminate these micro bubbles from heating and chilled water systems.

## Features and Benefits

- Greatly reduced commissioning times after initial fill.
- Longer system life (through air elimination)
- Low-pressure drop
- Bi-directional flow
- Maximum Temperature - 110 °c.
- Max working pressure - 10 bar (Higher MWP available on request)
- Tested to 21 bar
- All stainless steel construction.
- Air collects in the air chamber before being automatically vented
- An internal stainless steel concentrator to aid removal of air
- Smooth surfaces with Stainless Steel lead to lower friction
- Stainless will not degrade in service thanks to its excellent resistance to corrosion.
- Stainless Steel is extensively more resistant to oxidation by water and biocides than carbon steel. Therefore Stainless Steels are not contributing to oxidation, sludge's etc;
- Thermal properties of stainless steel. They are far superior to iron or carbon steel.
- Maximum velocity up to 3m/sec

## Stainless Steel: Safe, Clean, Efficient and Hygienic

- Stainless is highly resistant against micro bacteria attacks plus lower bacteria colonization
- Hygienic and cleanable material (Smooth surface internally & externally). Due to their very high passive film (protecting the surface)
- Lower adhesion of deposits (dirt and sludge) with the smooth internals of Stainless Steels. Sludge & magnetite is washed/ removed from the collection chamber far easier than the inferior iron/ carbon steel
- Stability, Stainless Steel is basically inert in water. Leaching of alloying elements is within safe limits. As a result, they provide better quality water. No turbidity problems. All resulting in less bacterial slime, low energy consumption, low cleaning costs, good for conveying wet solids.
- Excellent durability and abrasion resistance, as Stainless Steels are resistant to crevice corrosion, cavitations and wear in pure and polluted waters as well as in atmosphere (even polluted), they are cost effective for long term use and do not cause environmental pollution.

### CleanVent location

This unit (our model ref CVA) must be installed at the hottest part of the system (before the pumps). In a heating system this is the main flow from the boilers.

In a chilled water system the unit must be located in the return close to the chiller.

The static head must not exceed 60 metres in a Heating system.

Maximum static head must not exceed 40 metres in a chilled water system.

N.B. if the static head is greater than these figures the efficiency of the CleanVent & MagVent is reduced

### **Flanges**

All flanges are drilled to BS4504 PN16 as standard. Other flange ratings are available on request.

### Commissioning

The CleanVent requires no special commissioning. All units are fitted with a fast bleed valve, which should be used when initially filling the system. The same valve is used for draining off floating scum and also prevents the possibility of dirt clogging the air vent.

Most of the dissolved air will be removed in a few days. However, this may vary from system to system, in large systems it may take several weeks.