# **CLEANVENT**

An Air (Deaerator) Separator.

2

1 High capacity auto air vent Fast bleed Valve



В

Model No.   A   B   C   D   E   F   G   Te     CVA-50   50   430   114   170   25   390   504   21     CVA-65   65   430   120   170   25   384   504   21     CVA-65   65   430   120   170   25   384   504   21     CVA-80   80   490   141   220   25   459   600   21     CVA-100   100   490   154   220   25   446   600   21     CVA-125   125   630   193   325   25   585   778   21     CVA-120   200   810   295   410   50   665   960   21     CVA-200   200   810   295   410   50   665   960   21     CVA-200   200   810   295   410   50   871   12			Dimon	cione (m	m )				
Model No.   A   B   C   D   E   F   G     CVA-50   50   430   114   170   25   390   504   21     CVA-65   65   430   120   170   25   384   504   21     CVA-65   65   430   120   170   25   384   504   21     CVA-80   80   490   141   220   25   459   600   21     CVA-100   100   490   154   220   25   446   600   21     CVA-125   125   630   193   325   25   585   778   21     CVA-150   150   630   207   325   25   571   778   21     CVA-200   200   810   295   410   50   665   960   21     CVA-250   250   880   367   510   50   871   1238	Dimensions (mm)								
CVA-65   65   430   120   170   25   384   504   21     CVA-80   80   490   141   220   25   459   600   21     CVA-100   100   490   154   220   25   446   600   21     CVA-125   125   630   193   325   25   585   778   21     CVA-150   150   630   207   325   25   571   778   21     CVA-200   200   810   295   410   50   665   960   21     CVA-200   200   810   295   410   50   665   960   21     CVA-200   200   810   295   410   50   665   960   21     CVA-250   250   880   367   510   50   871   1238   21     CVA-300   300   1100   418   610   50   982 <th>Model No.</th> <th>А</th> <th>В</th> <th>С</th> <th>D</th> <th>E</th> <th>F</th> <th>G</th> <th>Tested to</th>	Model No.	А	В	С	D	E	F	G	Tested to
CVA-80804901412202545960021CVA-1001004901542202544660021CVA-1251256301933252558577821CVA-1501506302073252557177821CVA-2002008102954105066596021CVA-25025088036751050871123821CVA-300300110041861050982140021CVA-3503501500468770501063153121CVA-4004001500493770501301179421CVA-4504501750559920501254181321	CVA-50	50	430	114	170	25	390	504	21 bar
CVA-1001004901542202544660021CVA-1251256301933252558577821CVA-1501506302073252557177821CVA-2002008102954105066596021CVA-25025088036751050871123821CVA-300300110041861050982140021CVA-3503501500468770501063153121CVA-4004001500493770501301179421CVA-4504501750559920501254181321	CVA-65	65	430	120	170	25	384	504	21 bar
CVA-125 125 630 193 325 25 585 778 21   CVA-150 150 630 207 325 25 571 778 21   CVA-200 200 810 295 410 50 665 960 21   CVA-250 250 880 367 510 50 871 1238 21   CVA-250 250 880 367 510 50 871 1238 21   CVA-300 300 1100 418 610 50 982 1400 21   CVA-300 300 1500 468 770 50 1063 1531 21   CVA-400 400 1500 493 770 50 1301 1794 21   CVA-450 450 1750 559 920 50 1254 1813 21	CVA-80	80	490	141	220	25	459	600	21 bar
CVA-1501506302073252557177821CVA-2002008102954105066596021CVA-25025088036751050871123821CVA-300300110041861050982140021CVA-3503501500468770501063153121CVA-4004001500493770501301179421CVA-4504501750559920501254181321	CVA-100	100	490	154	220	25	446	600	21 bar
CVA-200   200   810   295   410   50   665   960   21     CVA-250   250   880   367   510   50   871   1238   21     CVA-300   300   1100   418   610   50   982   1400   21     CVA-350   350   1500   468   770   50   1063   1531   21     CVA-400   400   1500   493   770   50   1301   1794   21     CVA-450   450   1750   559   920   50   1254   1813   21	CVA-125	125	630	193	325	25	585	778	21 bar
CVA-250   250   880   367   510   50   871   1238   21     CVA-300   300   1100   418   610   50   982   1400   21     CVA-350   350   1500   468   770   50   1063   1531   21     CVA-400   400   1500   493   770   50   1301   1794   21     CVA-450   450   1750   559   920   50   1254   1813   21	CVA-150	150	630	207	325	25	571	778	21 bar
CVA-300   300   1100   418   610   50   982   1400   21     CVA-350   350   1500   468   770   50   1063   1531   21     CVA-400   400   1500   493   770   50   1301   1794   21     CVA-450   450   1750   559   920   50   1254   1813   21	CVA-200	200	810	295	410	50	665	960	21 bar
CVA-3503501500468770501063153121CVA-4004001500493770501301179421CVA-4504501750559920501254181321	CVA-250	250	880	367	510	50	871	1238	21 bar
CVA-400   400   1500   493   770   50   1301   1794   21     CVA-450   450   1750   559   920   50   1254   1813   21	CVA-300	300	1100	418	610	50	982	1400	21 bar
<b>CVA-450</b> 450 1750 559 920 50 1254 1813 21	CVA-350	350	1500	468	770	50	1063	1531	21 bar
	CVA-400	400	1500	493	770	50	1301	1794	21 bar
	CVA-450	450	1750	559	920	50	1254	1813	21 bar
CVA-500 500 2000 659 1220 50 1266 1925 21	CVA-500	500	2000	659	1220	50	1266	1925	21 bar

POD INSULATED READY



1

## CLEANVENT

#### 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. (Higher temperature units available on request)
- 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 flow rate up to 3m/sec



## CLEANVENT

### 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

## 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.

### Flanges

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

