

HERZ Flanged Air & Dirt Separator

Data sheet for HVADS Issue 0123



Order number	Α	В	С	D	E	Vol (I)	Kg
HVADS-21	DN50	420	343	668	169	8.8	12.7
HVADS-22	DN65	420	343	668	169	8.8	14.3
HVADS-23	DN80	500	368	773	220	18.3	22.4
HVADS-24	DN100	504	368	773	220	18.3	24.7
HVADS-25	DN125	635	478	993	324	56.7	46.5
HVADS-26	DN150	635	478	993	324	56.7	47.3
HVADS-27	DN200	766	525	1083	400	107	72

💟 Materials

Component	Material			
Body	Carbon Steel			
Diffuser Screen	Stainless Steel			
1⁄2" AAV	Brass			
1" Drain Valve	Brass			
¹ / ₂ " Commissioning Valve	Brass			

💟 Technical Data

Max working temperature: Max working pressure: Max test pressure: Minimum particle size: Connections: 0 – 95°C 10 bar 1.5 x working pressure 11 μm Flanged PN16 to EN 1092-2



Application

The HVADS is an Automatic Micro Bubble Air and Dirt separator and is used to continuously remove the debris and air contained in the hydraulic circuits of heating and cooling systems.

The large air collection chamber can accommodate a large volume of air before being released automatically. At the same time the valve separates debris and impurities contained in the system which collect in the lower part of the collection chamber from which they may be expelled via the blowdown valve.

The circulation of fully de-aerated water enables equipment to operate under optimum conditions, free from any noise, corrosion, localised overheating or mechanical damage, important for reducing energy demands and ongoing running costs.

☑ Selection

To enable efficient air and dirt removal the air and dirt separator should be line size.

☑ Location

Micro Bubbles are easily released from circulating water where the highest temperature and lowest pressure conditions occur in the system, for this reason the separators should normally be fitted where water is at the highest temperature and the lowest pressure available.

The examples shown below are typical installation layouts, but other acceptable and efficient locations for the separator exist.

When selecting the position for the separator please be aware that pressure also has a major effect on the release of micro bubbles. For temperatures normally found within heating systems a one meter drop in head pressure is equivalent to a rise in temperature of four degrees centigrade. Where lower temperatures are involved in cooling applications system pressure becomes the determining factor of the position of the separator.

Herz HVADS Micro Bubble air and dirt separators should be installed in horizontal pipework, the direction of flow is optional.





☑ Installation

The automatic air vent should be fitted to the top of the separator, commissioning valve on the side and drain valve on the base, as shown above. The commissioning valve is used to quickly remove air when filling the system.

Flexible hose or fixed pipework should be installed to enable dirty water to be drained to a convenient safe place. Please ensure the 'O' ring is installed between the AAV and the Separator top.

☑ Maintenance

The automatic air vent should be checked periodically to ensure it is functioning correctly. To prevent sediment build up and maintain efficiency the separator should be flushed at regular intervals. Dirt sludge and solid particles can be removed by opening the drain valve on the base of the separator until the water runs clear.

WARNING To prevent scalding safe practice must be observed when venting hot water at pressure.

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