

# **Product Guide**

# **SYSTEM PRODUCTS AMF AIR & DIRT SEPARATORS**

**Inventive Engineering** 





















# **AMF & AMF-M Air & Dirt Separators**







Removal of air and dirt from heating and cooling systems improves life longevity and efficiency.

The Arbe range of air and dirt separators offer a complete solution for various applications where dirty water may be possible. The units have been designed to remove the dirt particles and sludge from heating and cooling systems, reducing damage and premature wear on all the system accessories such as boilers, chillers, pumps and heat exchangers

There are 2 options available with the units

- AMF Air & dirt separator removing air from the system and filtering dirt and sludge
- AMF-M As the AMF but with additional magnets installed for extra protection in particularly old heating systems



The AMF & AMF-M can be installed to remove the requirement for a separation plate heat exchanger in heating systems such as where a new boiler system has been installed. This reduces on installation costs and time as it negates the need for extra pumps, valving and pressuriation equipment. It also reduces the footprint of the new installation. Maintenance of the system is also made easier as the unit can be easily dismantled to clean the filters and magnets, unlike a plate heat exchanger where specialist engineers may be required to dismantle, clean and re-assemble the unit.

The unit is supplied with a pair of pressure gauges for manual checking of the pressure drop across the unit, which gives a visual indication that the unit requires cleaning. A pressure differential switch may also be fitted to give an automatic indication of blockage

Characteristics	Standard	Optional			
Capacity	40 - 430 Litres				
Orientation	Vertical				
Material	Carbon Steel	Stainless Steel AISI 316L			
Internal Coating	None - Self Colour				
External Coating	Anti-Rust Primer				
Insulation	DN40,50 & 65 - 80mm Hard Foam PU Injected				
	DN80, 100, 125, 150 & 200 - 105mm Hard Foam PU Injected				
	Density: 40-42 kg/m3, Av. Conductivity 0.019 W/mK - 45 DegC (CFC & HCFC Free)				
Cladding	Stucco Aluminium Cladding	High Strength Removable PVC			
Accessories	Standard	Optional			
	Clean Side Pressure Gauge	Flanged Connections (DN40 & DN50)			
	Dirty Side Pressure Gauge	Plugs / Blank Flanges, Bolts & Gaskets			
	Automatic Air Vent	Drain Valve			
		Spare Filter Screens & Magnets			
		Differential Pressure Switch			



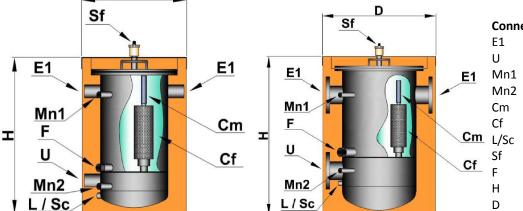
# **AMF & AMF-M Air & Dirt Separators**











# **Connections/Equipment**

Unit Inlet(s)

Unit Outlet (Clean Water) Mn1 Pressure Gauge (Dirty Water)

Pressure Gauge (Clean Water) Cm Magnetic Candle (AMF-M Only)

Filter Screen Cf

Sf

Drain/Filter Backwashing

Automatic Air Vent

Sludge Drain

Н **Height Dimension** 

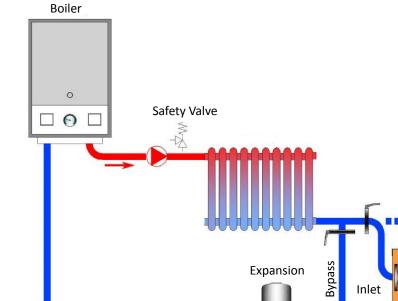
D Diameter (Including Insulation)

Dimensions		AMF & AMF-M Size							
		40	50	65	80	100	125	150	200
Connection Size	DN	40	50	65	80	100	125	150	200
Connection Type		BSP F	BSP F	PN16	PN16	PN16	PN16	PN16	PN16
Maximum Flowrate	m³/Hr	15	20	30	40	70	120	150	200
D	mm	460	460	510	610	610	710	940	940
Н	mm	673	798	805	857	857	992	1025	1275
L/Sc	BSP	1/2"	1/2"	1/2"	1/2"	1/2"	1/2"	3/4"	3/4"
F	BSP	1"	1"	1"	1½"	2"	2"	2½"	2½"
Capacity	Litres	40	48	66	91	91	166	334	430
Quantity of Filters	Qty	3	4	4	6	7	9	13	16
Quantity of Magnets (AMF-M)	Qty	3	4	5	6	7	9	13	16

Inlet

Outlet

### Installation



Clean Water

Maximum Maximum Model Temperature Pressure 110°C 6 BarG AMF AMF-M 110°C 6 BarG

The AMF & AMF-M units should be installed in the return feed of the boiler or chiller. The water is forced through the filters removing particles and heavy sludge from the water

The unit has 2 inlets and either can be used, with the other connection blanked off as required. In some cases, both inlets may be used so more than one system can be piped back together ready for return to the boiler

Alternative Inlet

# Welcome to Arbe Integrated Engineering

Arbe Integrated Engineering offer a range of products and services for the HVAC building services industry, ranging from bare heat exchangers and storage cylinders to fully packaged plantrooms and associated equipment. With over 20 years of design experience, our design and technical team can offer a complete solution for a wide range of project requirements.

#### **Seamless Integration:**

With our next generation range of equipment, our products offer complete integration with renewable and future energies, ensuring all available energy is utilised, reducing fossil fuel usage. In addition, our HevaSys products offers a unique next generation range of equipment with integral BMS style controls that can be adapted to any installation and can provide a standalone management system for buildings where the heating and hot water generation is relatively small, such as a leisure centre or a school.

#### **Inventive Engineering:**

In addition to our standard equipment, including heat exchangers, storage calorifiers and packaged solutions, we also design and manufacture bespoke equipment to end user or consultant specifications and we carry out extensive research and development to invent new products and enhance current designs.

### **Application Solutions:**

With our complete range of products, we have solutions to cover most applications. With our ability to carry out complete bespoke design, we have a solution for each and every project requirement. Our end users include:

- Hotels
- Schools
- Universities
- Leisure Centres & Gyms
- Hospitals







#### **Products Include:**

Calorifiers **Indirect Cylinders Direct Cylinders** Thermal Stores Pressure Vessels Plate Heat Exchangers Brazed Heat Exchangers Shell & Tube Exchangers Heat Exchanger Packages TwinHeat DHW/LTHW Systems Gas Fired Calorifiers Boilers & Associated Equipment Packaged Boiler Houses Packaged Plant Rooms Solar Energy Packages **Heat Pumps** Booster Sets & Pressurisation Bespoke Engineering Packages Suitable for Heating Systems Suitable for Potable Systems

Suitable for Chilled Systems







Suitable for Steam Systems





Suitable for Renewable Systems

Key to product Suitability



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