

CENTRIFUGAL AIR AND DIRT SEPARATORS FOR LIQUID SYSTEMS AS and AS/F

DESCRIPTION

The AS series centrifugal air and dirt separators are designed to be used in the flow line of a hydronic heater or cooling system. The operation is based on the principle of centrifugal force, instead of relying on low velocity separation, offering the advantage of efficient separation in a smaller form factor.

The inside strainer protects against any dirt present in the system such as sand, welding residues and other foreign matter. The strainer screen position has a particular advantage compared with external pipe strainers since dirt is removed from the water flow and is collected in the bottom of the unit, avoiding pressure losses.

MAIN FEATURES

- No moving parts.
- Integrated strainer.
- Maximum separation efficiency with minimum space requirements.

OPTIONS: Different connections and ratings on request.

USE: To remove air and dirt in hydronic heating, cooling and pumping systems.

AVAILABLE MODELS:

- AS/S - carbon steel body.
- AS/SS - stainless steel body.
- AS/SF - carbon steel with strainer.
- AS/SSF - stainless steel with strainer.

SIZES: DN 32 to DN 300.

CONNECTIONS: Flanged EN 1092-1 PN 16.
 Flanged ASME B16.5 Class 150.
 Standard PN 16 DN 65 flanges are supplied with 4 holes. 8 holes, according to EN 1092, on request.

INSTALLATION: The AS separators should be installed at the highest temperature and lowest pressure points, where solubility is lower. Ideally, they should be installed after boilers or heat exchangers, before chillers and before pump suction. Horizontal installation, always with the drain discharge pointing downwards. The installation of an ADCA AE series air eliminator is recommended, to remove the air.



CE MARKING – GROUP 2 (PED – European Directive)

PN 16	Category
DN 32 to 300	SEP

BODY LIMITING CONDITIONS – AS/S *

FLANGED PN 16		FLANGED CLASS 150	
ALLOWABLE PRESSURE	RELATED TEMPERATURE	ALLOWABLE PRESSURE	RELATED TEMPERATURE
16 bar	50 °C	16 bar	50 °C
14 bar	100 °C	14 bar	100 °C
13 bar	195 °C	13 bar	195 °C
12 bar	250 °C	–	–

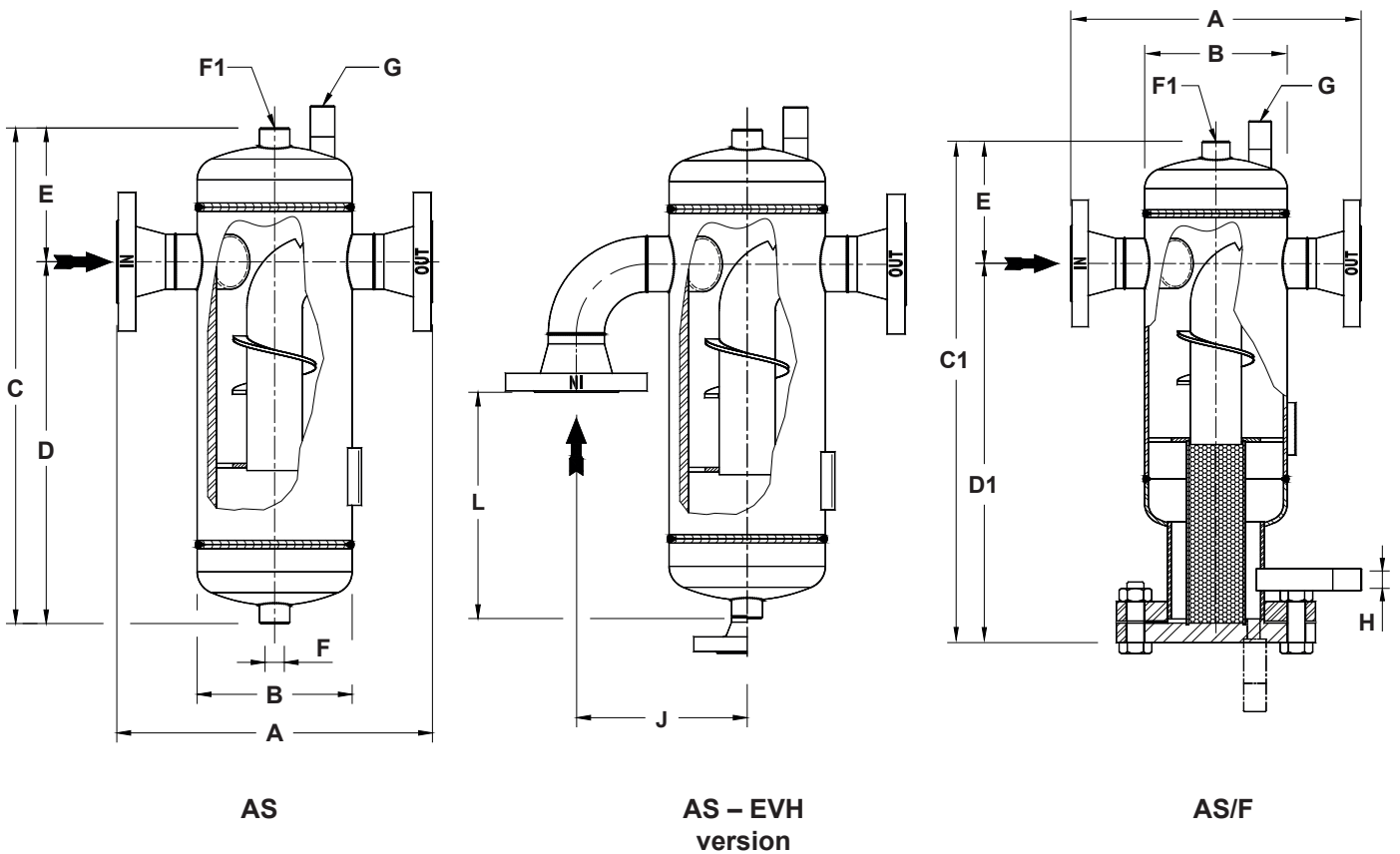
* Rating according to EN 1092-1:2018; Minimum operating temperature: -10 °C; Design code: AD-Merkblatt.

BODY LIMITING CONDITIONS – AS/SS

FLANGED PN 16 *		FLANGED CLASS 150 **	
ALLOWABLE PRESSURE	RELATED TEMPERATURE	ALLOWABLE PRESSURE	RELATED TEMPERATURE
16 bar	50 °C	15,3 bar	50 °C
15 bar	100 °C	13,3 bar	100 °C
12,7 bar	200 °C	11,1 bar	200 °C
12 bar	250 °C	–	–

* Rating according to EN 1092-1:2018; ** Rating according to EN 1759-1:2004.
 Minimum operating temperature: -10 °C; Design code: AD-Merkblatt.

DIMENSIONS



APPROXIMATE DIMENSIONS (mm) *

SIZE	A PN 16	A CL.150	B	C	C1	D	D1	E	F **	F1 **	G **	H **	VOL. (L)	WGT. (kg)
DN 32	260	290	140	395	495	285	385	110	3/4"	1/2"	1/2"	3/4"	6	13
DN 40	260	294	140	435	535	325	425	110	3/4"	1/2"	1/2"	3/4"	6,7	14,3
DN 50	310	341	168	505	605	385	485	120	3/4"	1/2"	1/2"	3/4"	11,7	21
DN 65 ***	380	430	219	550	670	410	530	140	1"	3/4"	3/4"	1"	19,8	31,5
DN 80	400	440	219	610	730	462	582	148	1"	3/4"	3/4"	1"	27	40
DN 100	485	533	273	715	835	528	648	187	1 1/4"	3/4"	3/4"	1 1/4"	38	59,8
DN 125	535	605	324	845	995	630	780	215	1 1/4"	1"	1"	1 1/4"	54	84
DN 150	565	635	356	962	1131	692	841	290	1 1/2"	1"	1"	1 1/2"	79	161
DN 200	605	685	406	1170	1320	880	1030	290	1 1/2"	1"	1"	1 1/2"	146	202
DN 250	720	784	508	1540	1710	1140	1310	400	1 1/2"	1"	1"	1 1/2"	288	330
DN 300	840	913	610	1700	1870	1172	1342	528	1 1/2"	1"	1"	1 1/2"	412	475

F – Drain connection; F1 – Automatic air eliminator connection; G – Manual start-up air drain connection; H – Strainer drain connection.

* For certified values, consult factory. Volume and weight refer to AS/SF PN 16 flanged version. Other versions may have slightly different values.

** As standard, in separators manufactured with EN 1092-1 flanges, these connections are female threaded ISO 7 Rp. In models with ASME B16.5 flanges, these connections are female threaded NPT. For the drains, alternative EN 1092-1 or ASME B16.5 flanged connections can be supplied (ASME on the same class as main connections).

*** Standard PN 16 DN 65 flanges are supplied with 4 holes. 8 holes, according to EN 1092-1, on request.

MATERIALS

DESIGNATION	MATERIAL
Body	EN 10216-2 / P235GH / 1.0325
Heads	EN 10028-2 / P265GH / 1.0425
Inlet / Outlet pipes	EN 10216-2 / P235GH / 1.0325
EN flanges	EN 10222-2 / P250GH / 1.0460
ASME flanges	ASTM A105 / 1.0432
Sockets	ASTM A105 / 1.0432
Internals	EN 10025-2 / S235JR / 1.0038

EN 10204 3.1 certificate available if requested with the order.

FLANGE CONNECTIONS

RATING	SIZE	EN STANDARD	ASME STANDARD
PN 16	* DN 15 to DN 50	EN 1092-1 PN 40	ASME B16.5 Cl. 150
PN 16	DN 65 to DN 300	EN 1092-1 PN 16	ASME B16.5 Cl. 150

* Flanges EN 1092-1 PN 16 and PN 40, from DN 15 to DN 50, have the same number and size of holes.