

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.

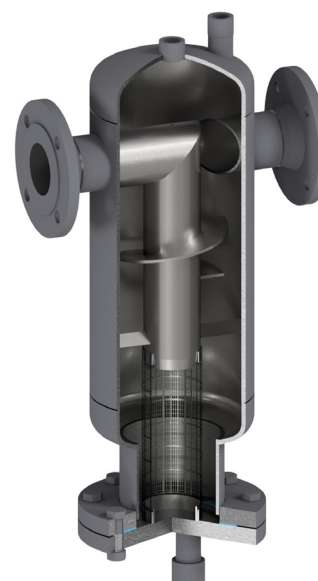
AVAILABLE MODELS:

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.
Female threaded ISO7 Rp or NPT, 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 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 |

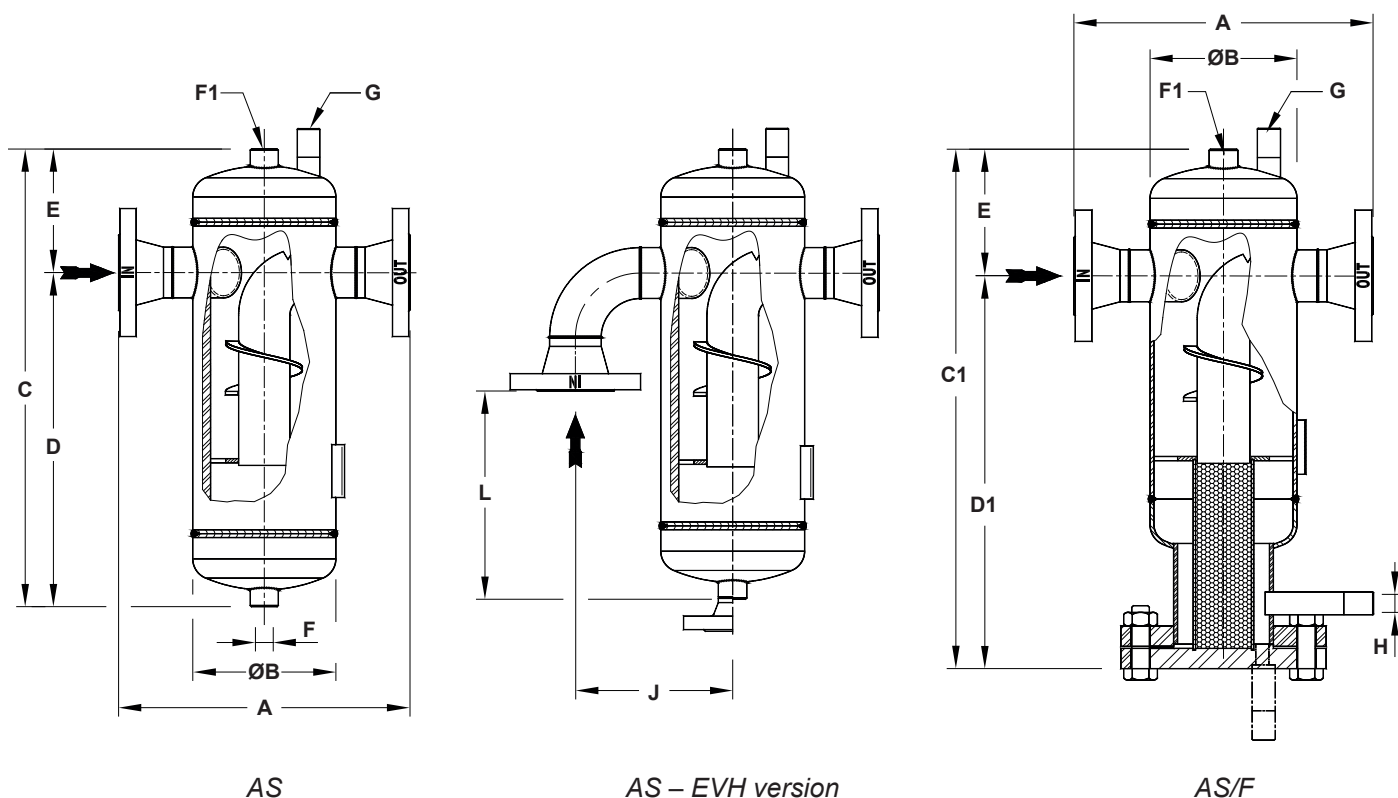
LIMITING CONDITIONS

| | |
|------------------------------------|--------|
| PS – Maximum allowable pressure | 10 bar |
| TS – Maximum allowable temperature | 110 °C |

Minimum operating temperature: -10 °C.

Design code: AD-Merkblatt.

Remark: Other conditions on request.



APPROXIMATE DIMENSIONS (mm) *

| SIZE | PN 16 | | | | | | | | | | | CLASS 150 | VOL. (L) | WGT. (kg) |
|-----------|-------|-----|------|------|------|------|-----|--------|-------|------|--------|-----------|----------|-----------|
| | A | ØB | C | C1 | D | D1 | E | F ** | F1 ** | G ** | H ** | A | | |
| DN 32 | 260 | 140 | 395 | 495 | 285 | 385 | 110 | 3/4" | 1/2" | 1/2" | 3/4" | 290 | 6 | 13 |
| DN 40 | 260 | 140 | 435 | 535 | 325 | 425 | 110 | 3/4" | 1/2" | 1/2" | 3/4" | 294 | 6,7 | 14,3 |
| DN 50 | 310 | 168 | 505 | 605 | 385 | 485 | 120 | 3/4" | 1/2" | 1/2" | 3/4" | 341 | 11,7 | 21 |
| DN 65 *** | 380 | 219 | 550 | 670 | 410 | 530 | 140 | 1" | 3/4" | 3/4" | 1" | 430 | 19,8 | 31,5 |
| DN 80 | 400 | 219 | 610 | 730 | 462 | 582 | 148 | 1" | 3/4" | 3/4" | 1" | 440 | 27 | 40 |
| DN 100 | 485 | 273 | 715 | 835 | 528 | 648 | 187 | 1 1/4" | 3/4" | 3/4" | 1 1/4" | 533 | 38 | 59,8 |
| DN 125 | 535 | 324 | 845 | 995 | 630 | 780 | 215 | 1 1/4" | 1" | 1" | 1 1/4" | 605 | 54 | 84 |
| DN 150 | 565 | 356 | 962 | 1131 | 692 | 841 | 290 | 1 1/2" | 1" | 1" | 1 1/2" | 635 | 79 | 161 |
| DN 200 | 605 | 406 | 1170 | 1320 | 880 | 1030 | 290 | 1 1/2" | 1" | 1" | 1 1/2" | 685 | 146 | 202 |
| DN 250 | 720 | 508 | 1540 | 1710 | 1140 | 1310 | 400 | 1 1/2" | 1" | 1" | 1 1/2" | 784 | 288 | 330 |
| DN 300 | 840 | 610 | 1700 | 1870 | 1172 | 1342 | 528 | 1 1/2" | 1" | 1" | 1 1/2" | 913 | 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 |
| Head | EN 10028-2 / P265GH / 1.0425 |
| Inlet / Outlet pipe | EN 10216-2 / P235GH / 1.0325 |
| EN flange | EN 10222-2 / P250GH / 1.0460 |
| ASME flange | ASTM A105 / 1.0432 |
| Socket | 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 50 | EN 1092-1 PN 40 | ASME B16.5 Class 150 |
| PN 16 | DN 65 to 300 | EN 1092-1 PN 16 | ASME B16.5 Class 150 |

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