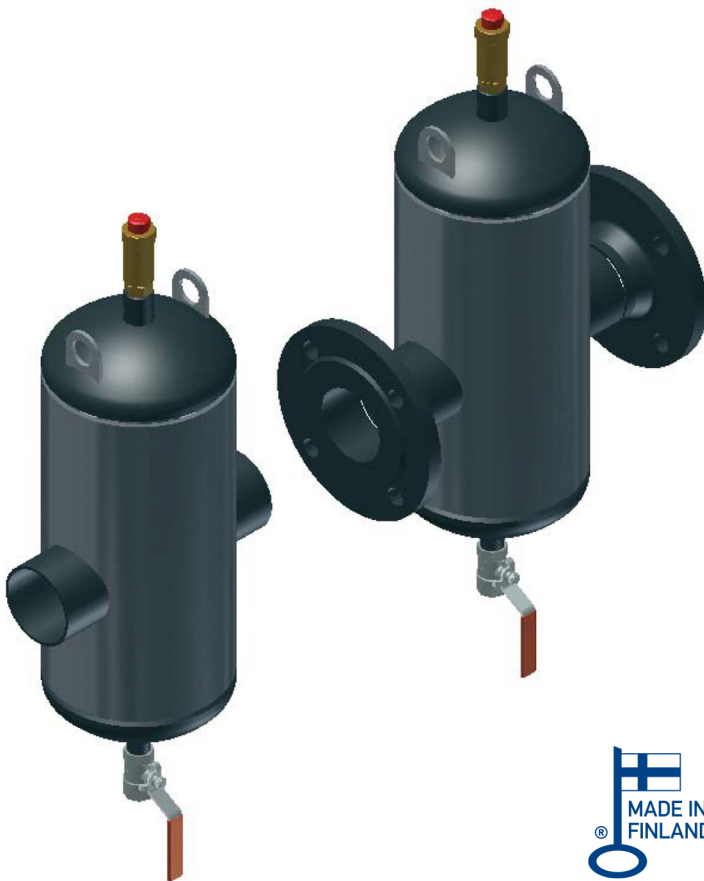




Högfors
GST
Energy used wisely.

AirDirtVec



Air and dirt separator for heating and cooling systems

AirDirtVec air and dirt separator is technically advanced, easy-to-use product with simplistic design and unmatched installability.

HögforsGST's air and dirt separators are available on MagiCAD.

Please note before choosing your air and dirt separator:

Air and dirt can cause several issues in heating and cooling systems. Among the most common problems are corrosion, reduced component service life, reduced heat transfer and increased maintenance costs.

Key Factors:

- Installability
- Ease of Use
- Living Comfort (no excessive noise)
- Serviceability

AirDirtVec's benefits:

- Premium components
- Minimized risk of corrosion
- Extended life cycle of components
- Improved heat transfer
- Reduced commissioning time
- Fast delivery time
- Extensive warranty

AirDirtVec's operating principle and separating capability (PN10/16/25)

AirDirtVec removes loose and dissolved air as well as particulate impurities. Inside the AirDirtVec unit, the water's flow rate decreases rapidly, effectively separating microbubbles and particulates. Air bubbles automatically rise to the air bleeding valve at the top while particles that are heavier than water sink to the bottom of the unit. The collected residue is thus removed from the main flow and does not cause increased pressure loss.

A traditional dirt separator can typically only separate impurities larger than 300 µm (0.3 mm), but AirDirtVec's separating capability covers particulates as small as 5 µm (0.005 mm)! In other words, the separating capability of AirDirtVec units is several orders of magnitude higher than that of traditional dirt separators, even covering impurities invisible to the naked eye (< 0.1 mm).

The most common causes of problems in water circuits and their approximate size ranges:

	µm	mm
magnetite	5-500	0.005-0.5
hemph	20-70	0.02-0.07
hematite	20-900	0.02-0.9
sand	70-3000	0.07-3
welding waste	400-5000	0.4-5

Equipment

Standard equipment:

- Automatic deaerator
- Drain valve

Custom models and sizes are also available.

AirDirtVec DN50 – DN250

For network deaeration and dirt separation.

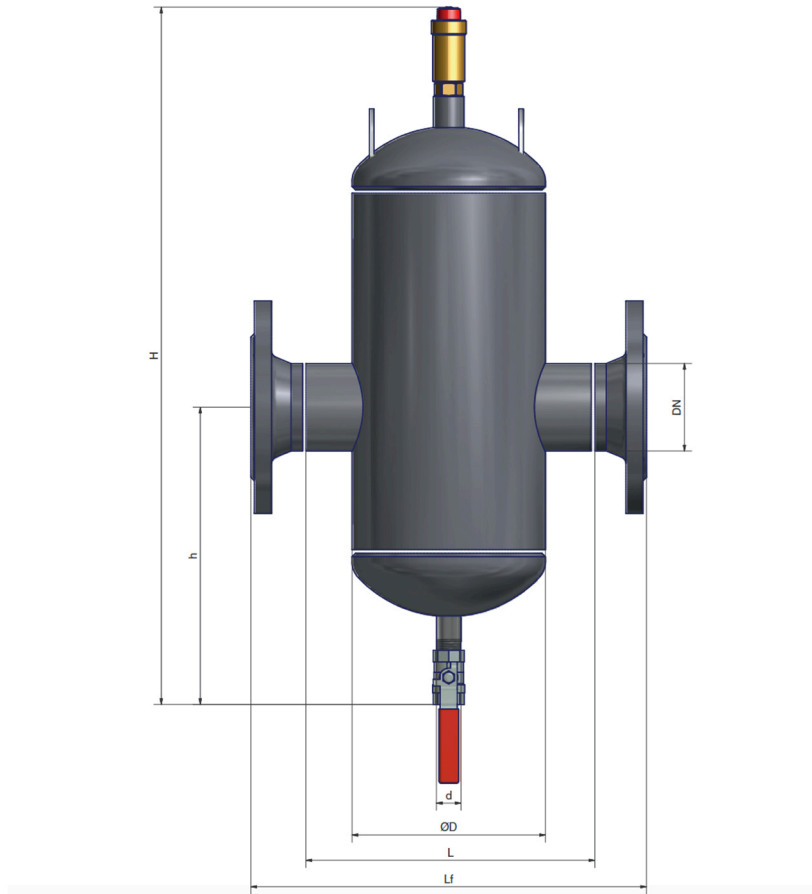
Material: steel, with welded connections / flanges.

Also available in different materials.

Max. operating temperature 120°C.

Max. operating pressure 10/16/25 bar.

Dimensions

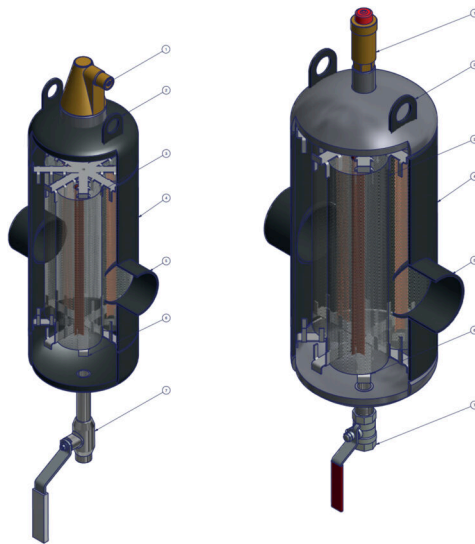


AirDirtVec technical data DN50-DN250

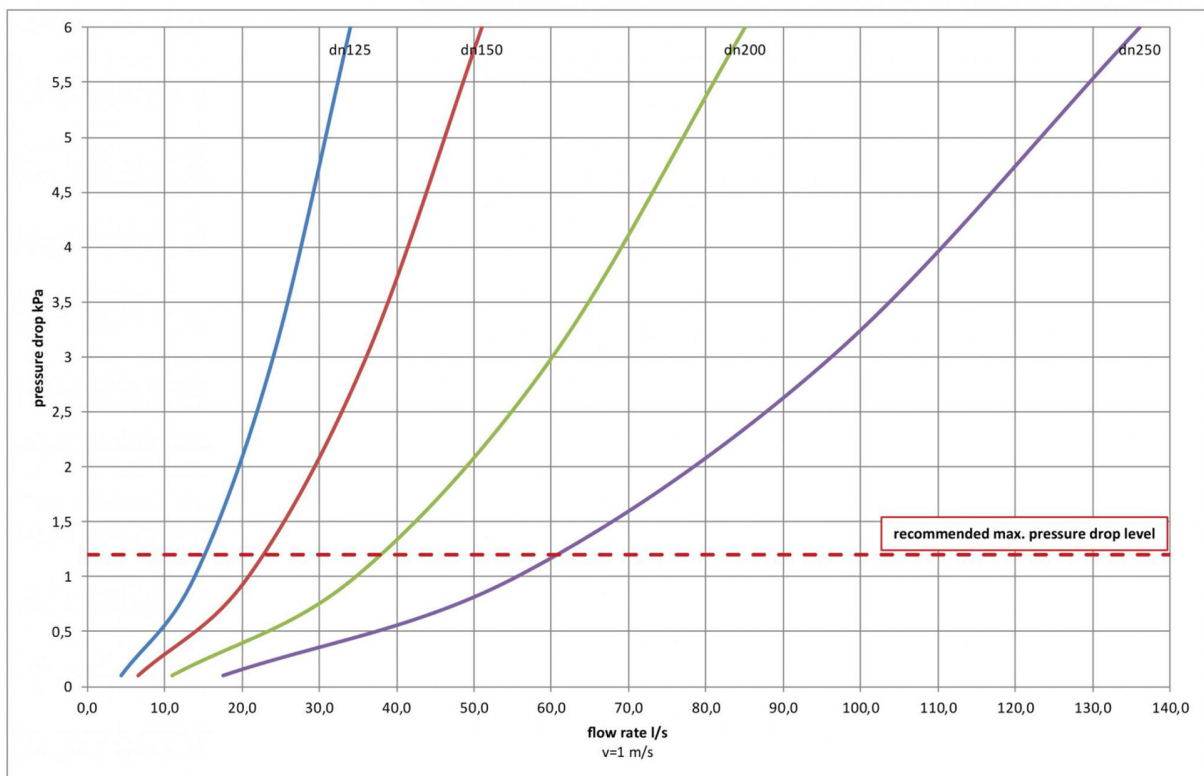
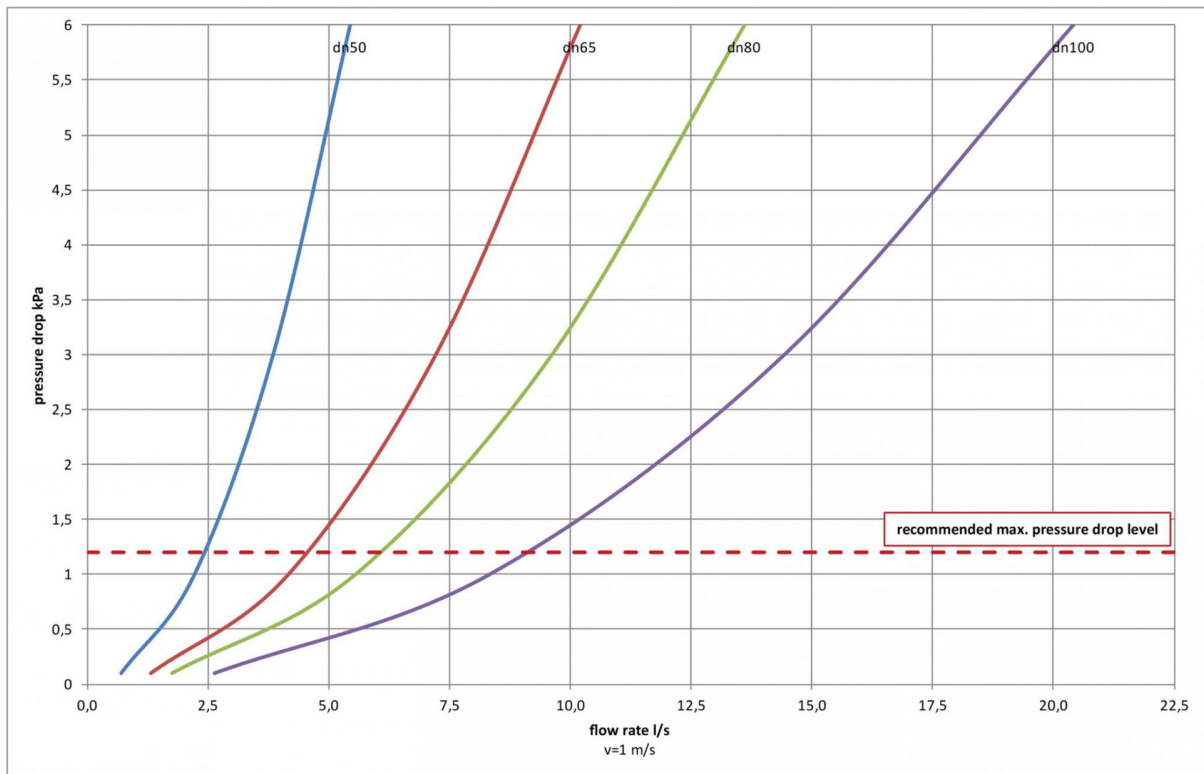
Connection size DN (flange DIN2642) /mm (weld)	DN50 / Ø60.3	DN65 / Ø76.1	DN80 / Ø88.9	DN100 / Ø114.3	DN125 / Ø139.7	DN150 / Ø168.3	DN200 / Ø219.1	DN250 / Ø273
H, mm	596	596	772	772	1016	1016	1324	1574
h, mm	254	254	330	330	438	438	581	691
d (internal thread), G	½ "	½ "	¾ "	¾ "	1 "	1 "	1 "	1 "
ØD, mm	168	168	219	219	324	324	406	508
L, mm	248	248	299	339	444	434	546	678
Lf, mm	344	344	405	449	560	550	676	824
Flow rate, l/s	2.2	4.2	5.6	8.3	13.9	20.8	34.7	55.6
Weight weld/flange, kg	10/15	10/15	19/26	19/28	47/59	47/62	97/119	164/196

Construction

1. AirDirtVecs include an automatic vent valve (Flexvent), which is provided with a shut-off valve part whereby the vent valve can be closed.
2. The lifting lugs allows for easy installation.
3. AirDirtVec's unique FoxisTube is designed to remove even the smallest micro bubbles and small particles of dirt without the flow resistance increasing too much.
4. Body:
 - P235GH (EN 10217-2),
 - Exterior coating: RAL 7043, thickness of coating: > 40 µm
5. Storage range is up to DN250 (273 mm)
Weld end and the flanges
 - Weld ends: P235GH (EN 10217-2),
 - Flanges: EN 1092-1 (PN16 / PN25)
6. Thanks to large precipitate housing the drain interval is long.
7. AirDirtVec is provided with a flush valve, (½ " - 1" PN10) from which the dirt that is collected on the bottom may be removed when the system is in use.



Flow resistance



Model indications

AirDirtVec 50-NSW-16

AirDirtVec = Product family name

50 = Pipe size (dn)

N = Model, N = normal

S = Material, S = steel, SS = stainless steel

W = Connection, W = welded, F = flanged

16 = Pressure category, 10 = 10 bar, 16 = 16 bar, 25 = 25 bar

Long warranty and short delivery time

All AirDirtVecs and components come with a competitive warranty. Exact terms of warranty are market based, fulfilling however all area requirements and standards. All terms are stated in HögforsGST warranty conditions.

Our products are not only premium quality; AirDirtVec air and dirt separators are also delivered fast! Ensuring fast delivery times is a key part of our operations.



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HögforsGST – Energy used wisely.

HögforsGST specializes in the manufacture, sale and marketing of high-quality heating systems. The company has solid experience in heating systems both domestically and in export markets.

Our professionalism is based on experience in production, serial manufacture, mass tailoring and project production as well as HVAC procurement channel and logistics expertise in Finland and abroad.

Our operations are based on determining requirements for sustainable business operations on the market, customer-orientedness and reliability. We are equally uncompromising in terms of our high-quality products and services.

We reserve the right to make changes.