Högfors GST
Energy used wisely.

AirVec



Deaerators for heating and cooling systems

AirVec deaerator is a 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 deaerator:

Air / oxygen 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 noise.

Key factors:

- Installability
- Ease of use
- Living comfort (no excessive noise)
- Serviceability

AirVec deaerator benefits:

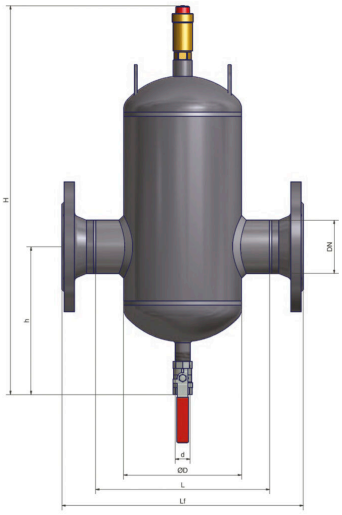
- Premium components
- Minimized risk of corrosion
- Extended life cycle of components
- Improved heat transfer
- Reduced commissioning time
- Fast delivery time

AirVec operating principle and separating capability (PN10/16/25)

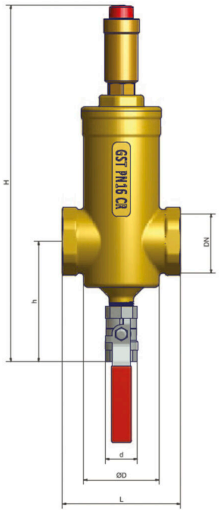
AirVec removes loose and dissolved air as well as particulate impurities.

Inside the AirVec 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. AirVec deaerators remove all microbubbles starting from 15 µm. AirVec units equipped with dirt separation also remove particulate impurities as small as 5 µm.

AirVec DN50-DN250



AirVec G1 1/4 – G2



AirVec technical data G1 1/4 – G2

Connection size DN (internal thread) G	11/4″	11/2″	2″
H, mm	302	302	362
h, mm	102	102	132
d (internal thread), G	½”	½”	½”
ØD, mm	69	69	100
L, mm	100	100	140
Lf, mm	–	–	–
Flow rate, l/s	1.0	1.4	1.8
Weight, kg	2.8	2.7	3.5

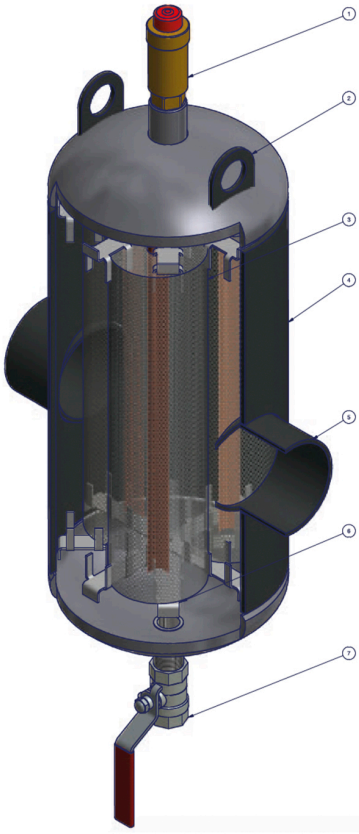
AirVec technical data DN50-DN250

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	631	631	778	778	999	999	1289	1519
h, mm	211	211	259	259	344	344	470	556
H open, mm	630	630	810	810	1036	1036	1254	1454
h open, mm	209	209	291	291	381	381	435	491
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	9/14	9/14	17/24	17/26	42/54	42/57	89/110	151/183
Weight open weld./flange, kg	19/24	19/24	33/40	33/42	69/81	69/83	125/147	197/229

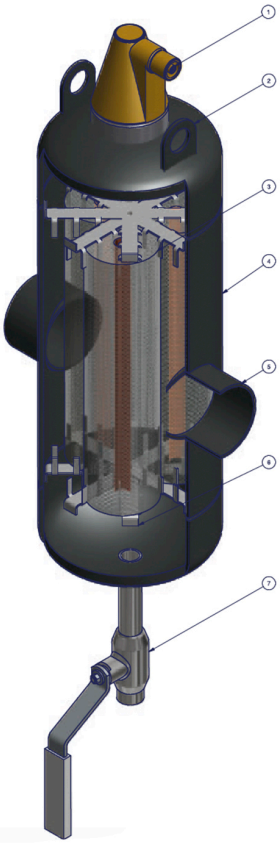
Construction

1. AirVec includes an automatic vent valve (Flexvent PN10), which is provided with a shut-off valve part whereby the vent valve can be closed. Flexvent Max PN16/25 is provided with a set screw whereby the vent valve can be closed. The outlet of the Flexvent MAX has a 22 millimetre connection for a drainage pipe.
2. The lifting lugs allow for easy installation.
3. AirVec'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, coating thick. of > 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. AirVec is provided with flush valve, (½ "- 1" PN10) (Naval ball valve (DN15 / ½ "- DN25 / 1" PN16/25) which the dirt is collected on the bottom may be removed when the system is in use

PN10



PN16-25



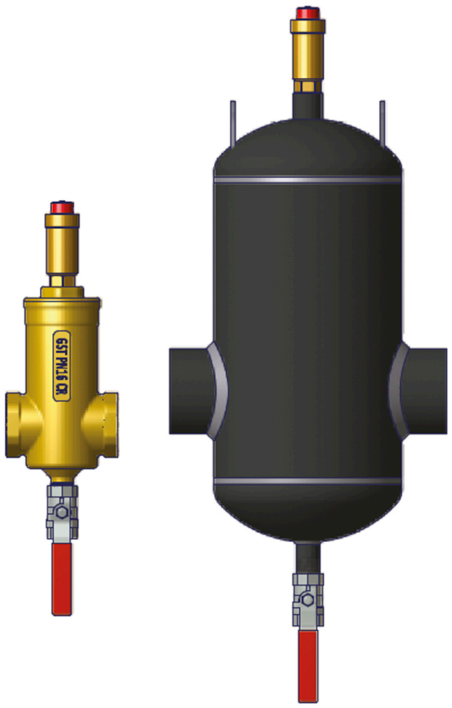
Equipment

Standard equipment:

- Automatic deaerator
- Drain valve

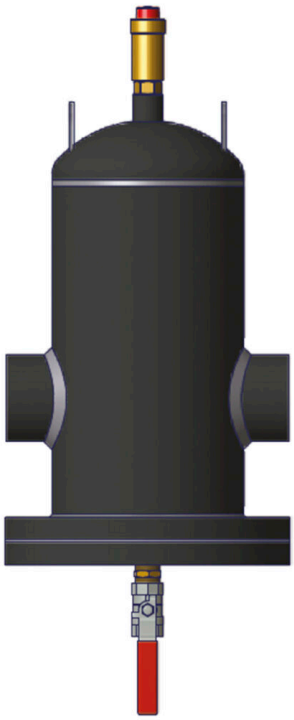
AirVec DN32 – DN250

For network deaeration. Can also be used for dirt separation.
Sizes DN50 – DN250 available in steel with welded connections / flanges. Sizes DN32 – DN50 (G11/4″ – G2″) available in brass, threaded connections.
Additional materials and sizes available on demand.
Max. operating temperature 120°C.
Max. operating pressure 10/16/25 PN.

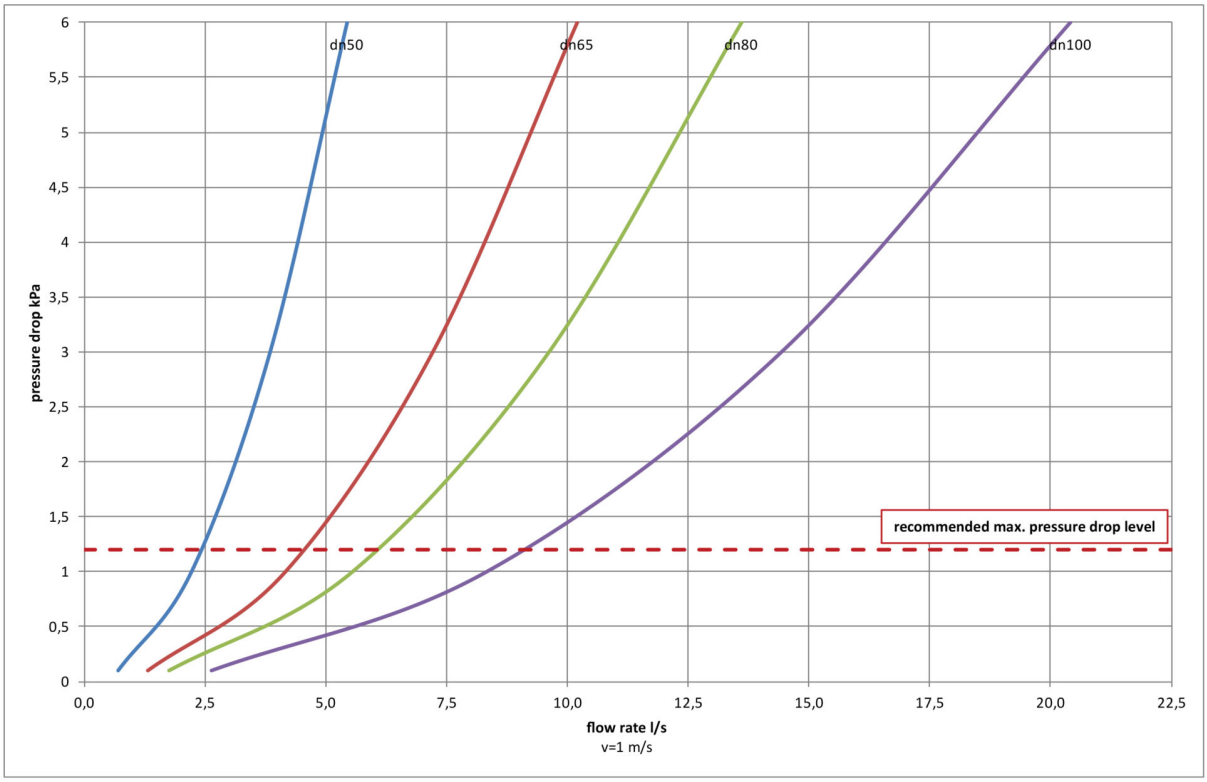


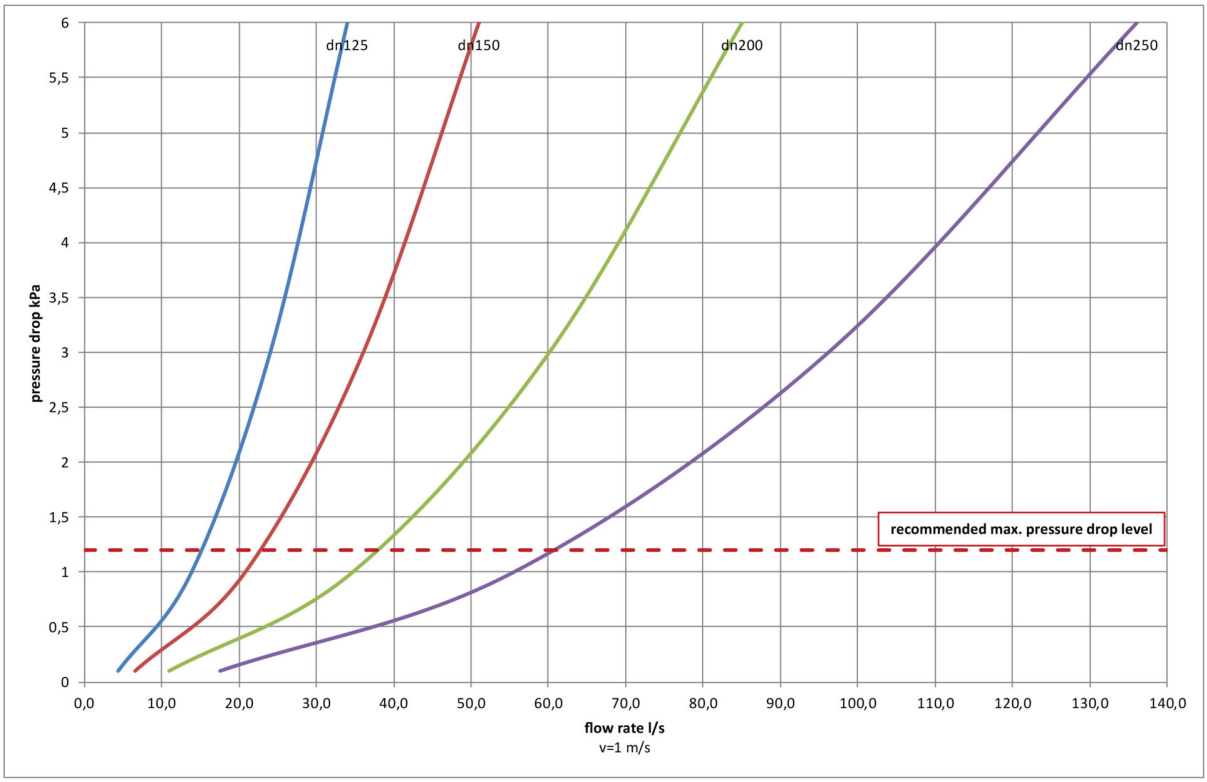
AirVec open DN50 – DN250

For network deaeration and dirt separation in locations with above average precipitation. Available in steel, welded connections / flanges.
Additional materials and sizes available on demand.
Max. operating temperature 120°C.
Max. operating pressure 10/16/25 PN.
DirtVec dirt separator is available for dirt separating applications.

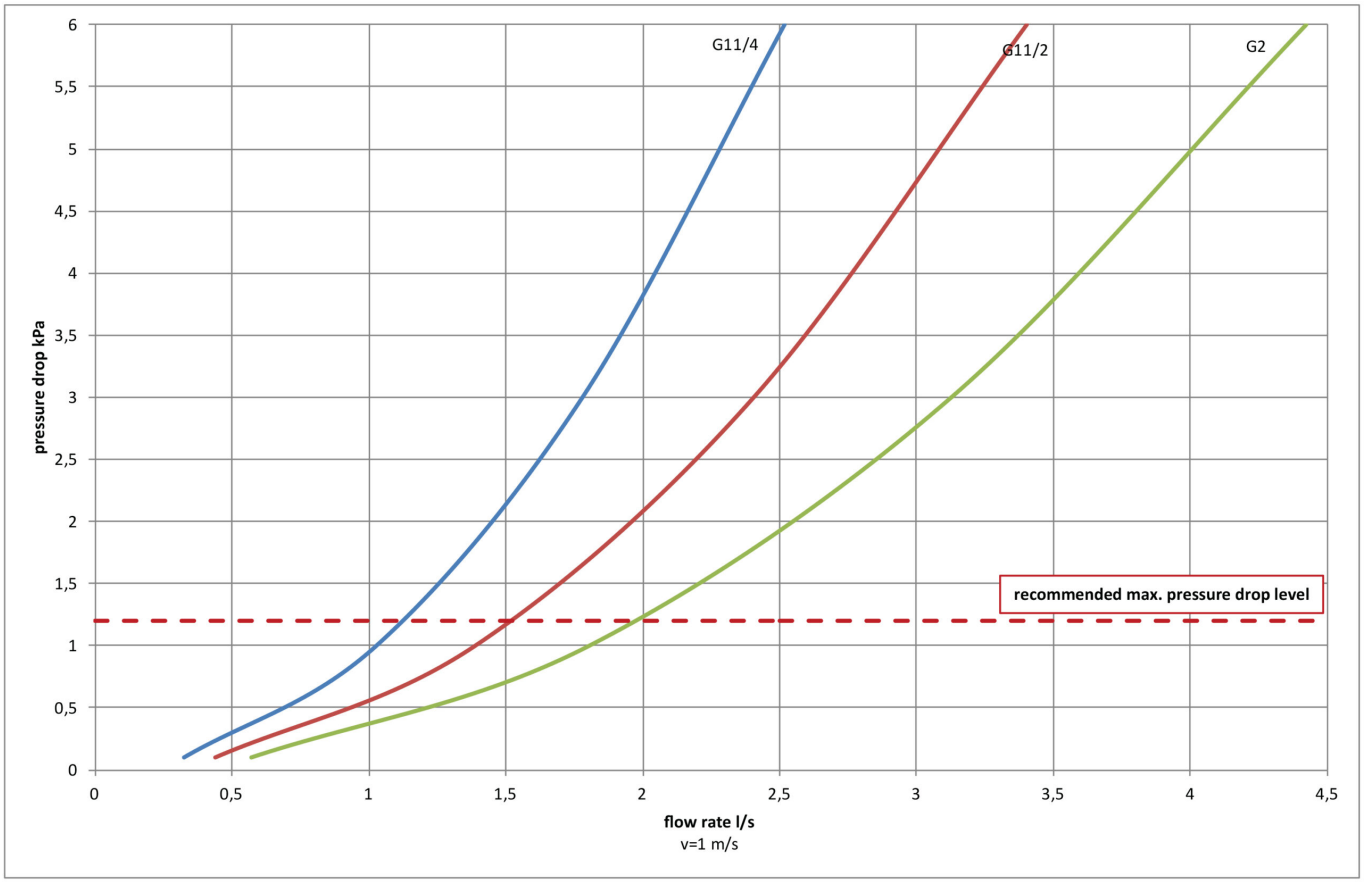


Flow resistance





Flow resistance



Model indications

AirVec 50-NCSW-16

AirVec = Product family name

50 = Pipe size (dn)

N = Model, N = normal, O = open

CS = Material, CS = steel, SS = stainless, B = brass

W = Connection, W = welded, F = flanged, G = threaded

16 = Pressure Category, 10 = 10 bar, 16 = 16 bar, 25 = 25 bar

Warranty

Your Airvec deaerators and components have always 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.

MagiCAD

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

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.

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