

DirtVec



Dirt separators for heating and cooling systems

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

Please note before choosing your dirt separator:

Dirt can cause several issues in heating and cooling systems. Among the most common problems are corrosion, reduced component service life and breakage, increased servicing needs and costs.

Key factors:

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

DirtVec dirt separator benefits:

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

DirtVec operating principle and separating capability (PN10)

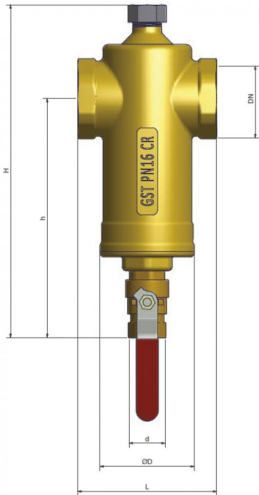
DirtVec removes solid, heavier than water impurities (particulates) from circulation water. Inside the DirtVec unit the tank's flow volume causes the fluid's flow rate to decrease rapidly, effectively separating solid impurities and causing them to sink to the discharge chamber located at the bottom of the tank. 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 DirtVec's separating capability covers particulates as small as 5 µm (0.005 mm)! In other words, the separating capability of DirtVec units is several orders of magnitude higher than that of traditional dirt separators, even covering impurities invisible to the naked eye (< 0.1 mm).

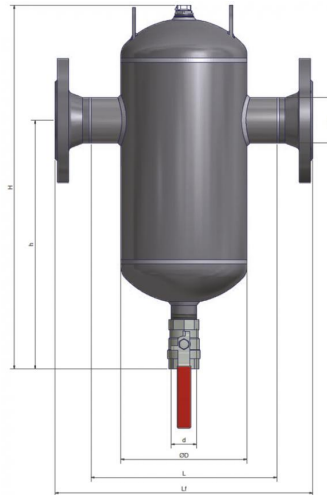
The most common causes of problems in water circuits and their approximate size ranges:

	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

DirtVec G1 1/4" - G2"



DirtVec DN50-DN250



DirtVec technical data G1 1/4" - G2"

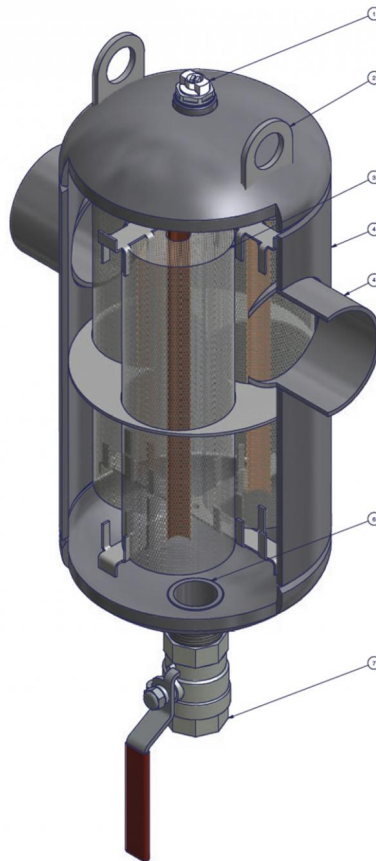
Connection size DN (internal thread)	1 1/4"	1 1/2"	2"
H, mm	240	240	300
h, mm	172	172	202
d (internal thread), G	1/2"	1/2"	1/2"
ØD, mm	69	69	100
L, mm	100	100	140
Lf, mm	-	-	-
Flow rate, l/s	1.0	1.4	1.8
Weight, kg	2.8	2.7	3.5

DirtVec 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	485	485	656	656	885	885	1120	1341
h, mm	332	332	446	446	592	592	726	861
H open, mm	456	456	611	611	800	800	971	1141
h open, mm	302	302	401	401	506	506	577	661
d (internal thread), G	1"	1"	1"	1"	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

Structure

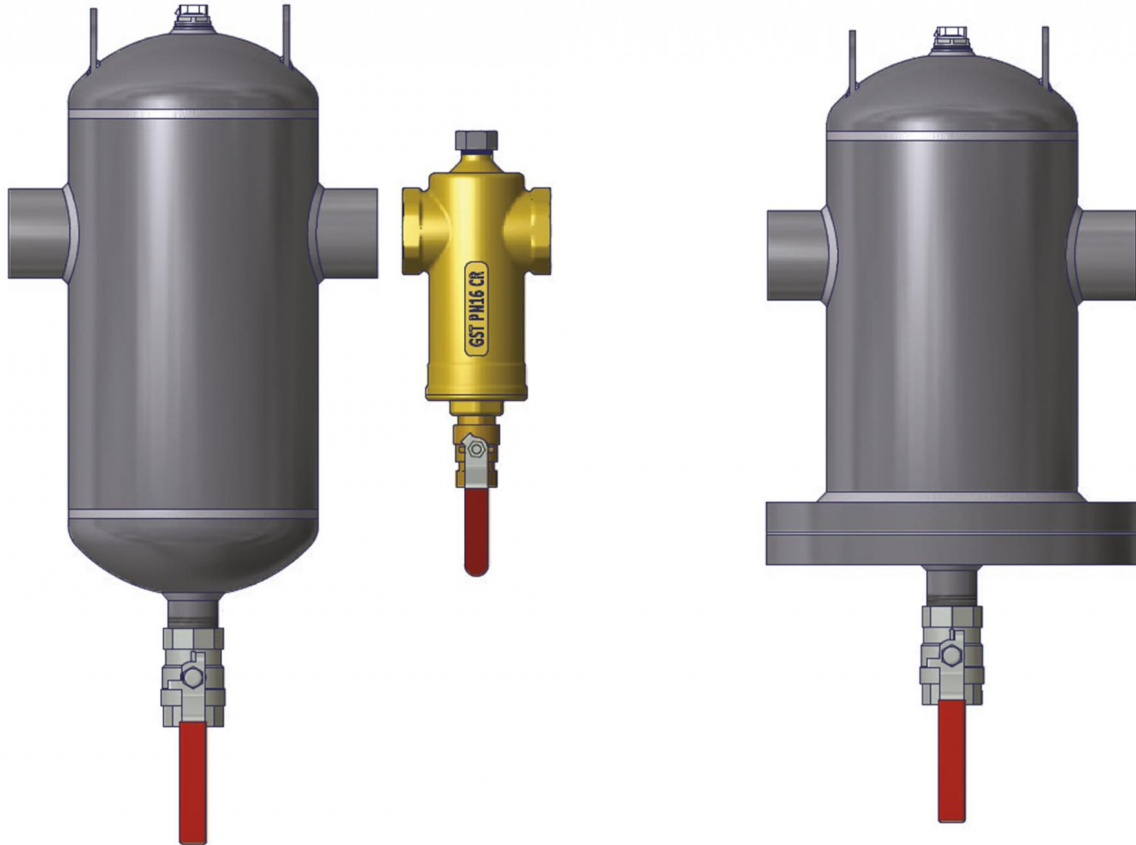
1. DirtVec units feature a manual bleeder screw, making bleeding easy.
2. Lifting lugs to facilitate lifting.
3. The DirtVec's unique FovisTube is designed to separate even the smallest dirt particles without excessively increasing flow resistance.
4. Frame:
 - P235GH (EN 10217-2),
 - External coating: RAL 7043, coating thickness > 40 µm
5. Our warehouse carries connection sizes all the way up to DN250 (273 mm)
Both welding and flange connectors
 - Welding: P235GH (EN 10217-2),
 - Flange: EN 1092-1
6. Long drain interval due to the large discharge chamber.
7. DirtVec units feature a flushing connection ($\frac{1}{2}$ " - 1"), which allows collected residue to be removed during use.



Equipment

Standard equipment:

- Manual deaerator
- Drain valve



DirtVec DN32 - DN250

For network dirt separation.

Sizes DN50 - DN250 available in steel with welded connections / flanges. Sizes DN32 - DN50 (G1 1/4" - G2") available in brass, threaded connections. Additional materials and sizes available on demand.

Max. operating temperature 120°C.

Max. operating pressure 10 bar.

AirVec deaerator is available for deaeration applications.

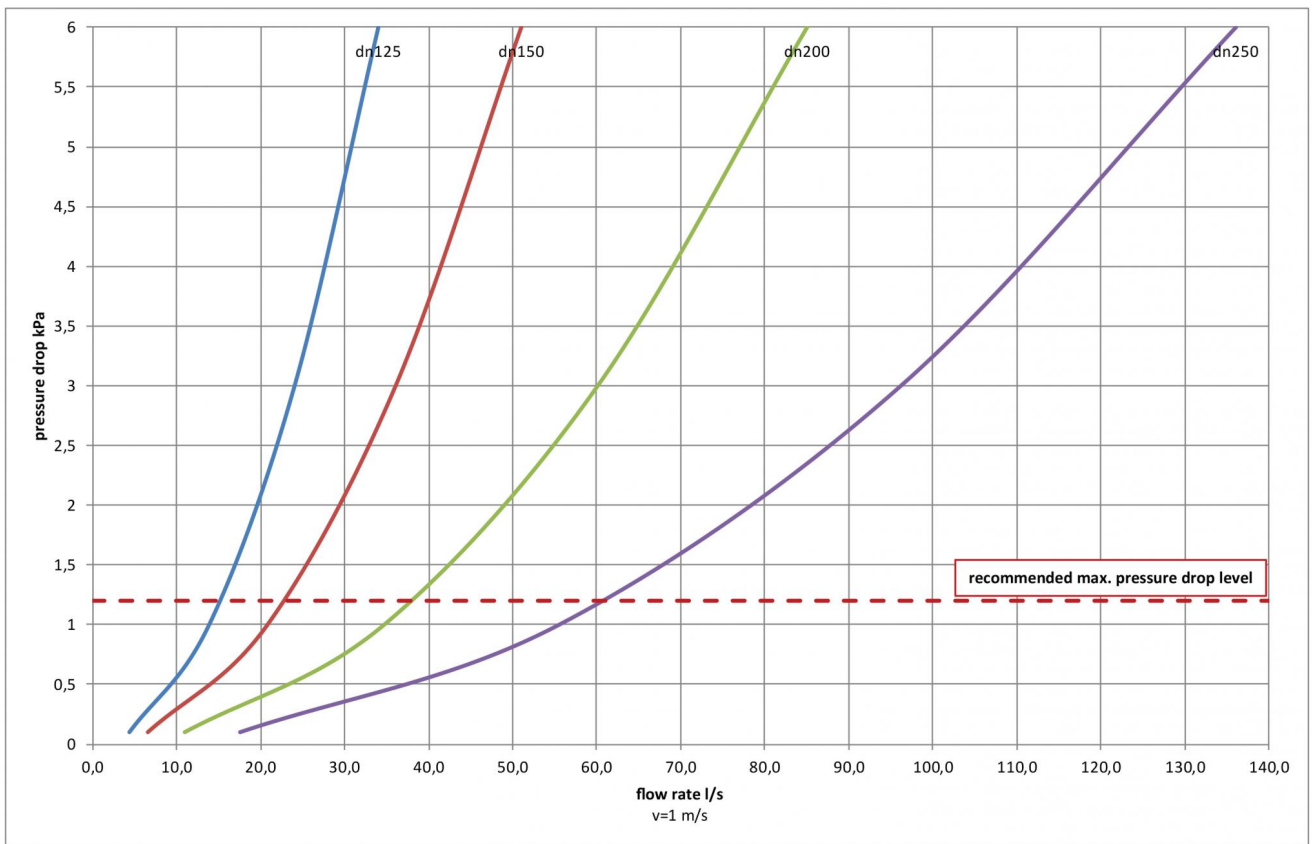
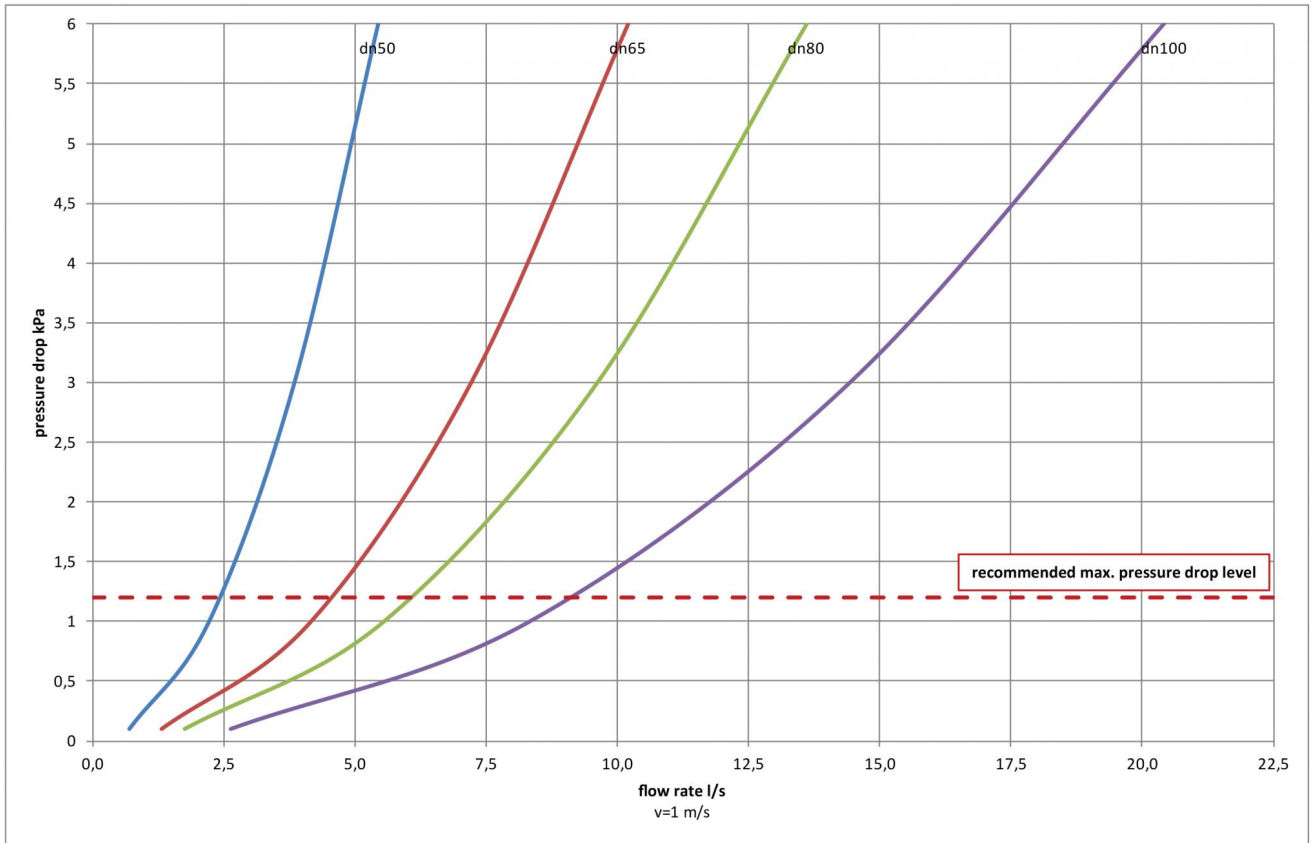
DirtVec open DN50 - DN250

For network dirt separation in locations with above average precipitation. Available in steel, welded connections / flanges. Also available in other materials. Additional materials and sizes available on demand.

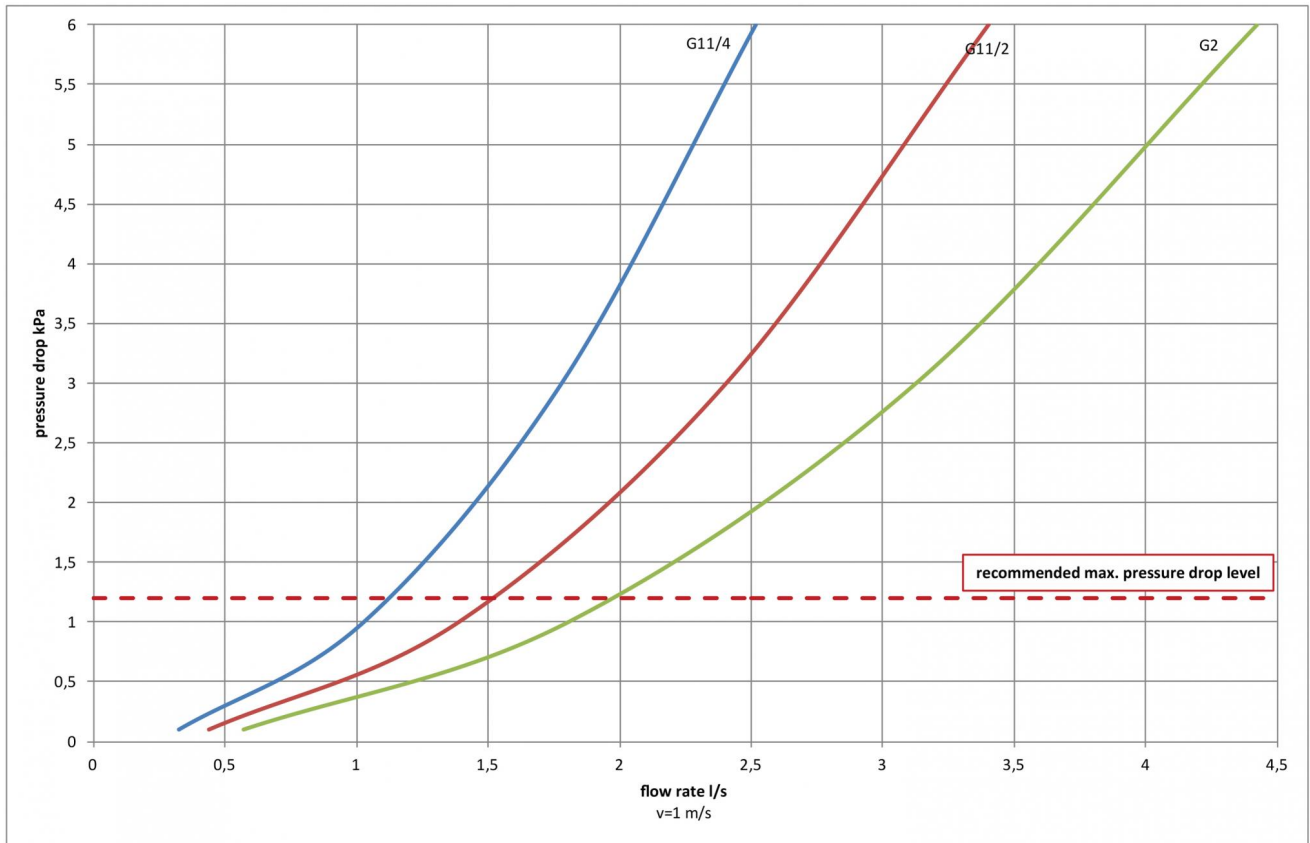
Max. operating temperature 120°C.

Max. operating pressure 10 bar.

Flow resistance



Flow resistance



Model indications

DirtVec 50-NCSW-10

DirtVec = 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

10 = Pressure Category, 10 = 10 bar

Warranty

Your Dirtvec has 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.

In addition to the competitive warranty, your DirtVec is delivered quickly. Ensuring fast delivery time is an integral part of our operations!

HögforsGST International heating system expertise

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.