

# Particle separator AT 8040F



# Product information

Particle separator in steel. Magnetic insert AT 8040MI as an option.



<b>Dimension range (DN)</b>	50 - 300
<b>PN</b>	10
<b>Temperature (°C)</b>	0 - 110
<b>Main material</b>	Steel

## Area of use

Exdirt D is an effective separator of magnetic and non-magnetic particles and sludge in heating and cooling systems where the fluid is water. It can also be installed in systems with mixtures of water/glycols, but with a maximum concentration of 50%. It is not suitable for systems with mixtures of water/salts.

By applying a particle separator in the system, sludge and particles with a size of up to 5 micrometers (>5micron) are separated, reducing the risk of flow disturbances and circulation problems. It contributes to increased operational reliability under difficult operating conditions and reduces the need for maintenance.

## Tender text

### PMB.222 Sludge separators

Particle separator AT 8040F... made of steel with magnetic insert, PN10, with particle separator and large collection chamber that can be easily drained through a ball valve. Alternatively, it can be equipped with a cleaning hatch for easy maintenance.

## Quality assurance

AFS 2023:5, PED 2014/68/EU

Should not be CE-marked.

**Product marking:** Marked with dimensions, maximum operating pressure, type number, and manufacturer's name.

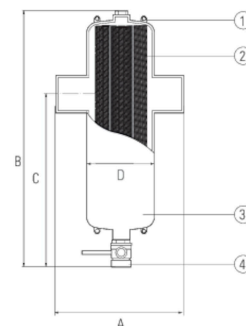
## Energy and environment declaration

**Product Bvb:** Avoided

**Product BVB ID:** 110737

**SundaHus:** A

Pos	Component	Material
1	Lifting loops to simplify installation.	Steel
2	The separator is designed to remove particles with a minimum size of 5 µm.	Other
3	Valve body	Steel
4	Ball valve	Other



## Measurements and weight

Dimension range (DN): 50 - 300

DN	A	B	C	D	Net weight (kg)
50	350	521	370	132	9
65	350	521	370	132	10
80	470	636	370	206	16
100	475	636	370	206	19
125	635	811	430	354	35
150	635	811	430	354	39
200	775	1021	430	409	65
250	890	1324	500	480	108
300	1005	1535	500	634	156

## Function and design

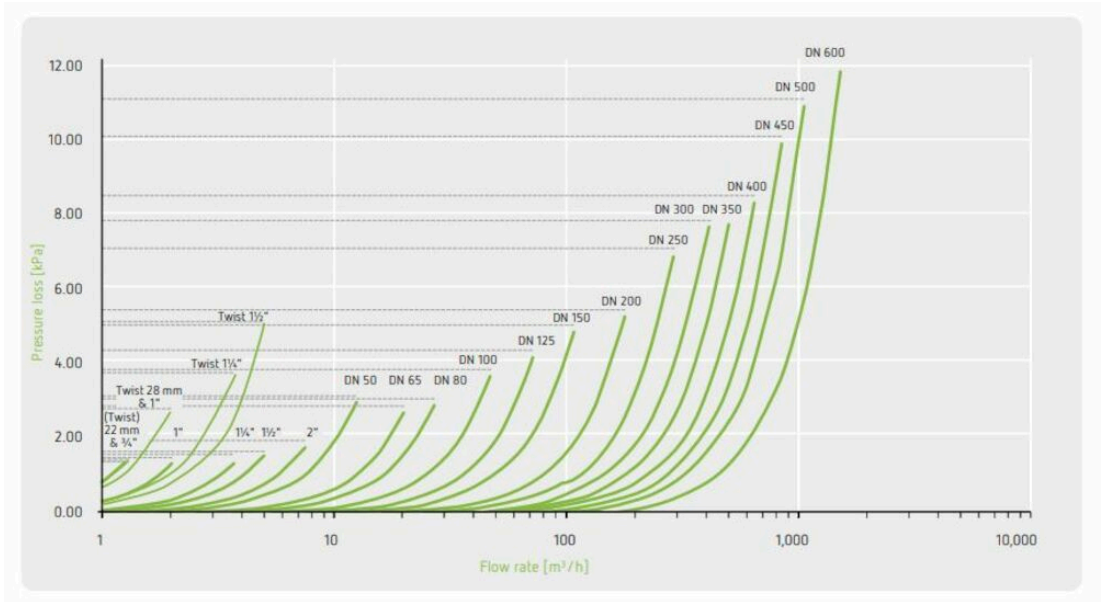
Particle separator Exdirt effectively removes sludge and particles in heating and cooling systems that are transported with the system fluid. To effectively separate these from the fluid, the separation housing is large in relation to the connection dimension. When the fluid passes through the separator's housing, the flow rate is reduced. This reduces the velocity through the separation housing, allowing dirt and particles to be optimally separated as they pass through a special wire mesh. This allows dirt and particles to be separated from the fluid, fall downwards, and collect at the bottom of the housing. With the help of the magnetic insert, even magnetic particles are "trapped" in the separator.

As an alternative, the separator can be chosen with a cleaning/inspection hatch. Where the large separation housing is equipped with a flanged cleaning hatch for easy maintenance and inspection. (8040R)

Exdirt separates sludge and particles with minimal pressure drop during continuous operation. Accumulated dirt is deposited on the bottom of the separator and easily emptied by opening the drain valve to release the particles into, for example, a collection bucket without disrupting the operation of the system. The sludge accumulation chamber has a large capacity, providing long intervals between flushes.

Technical data

**Main material:** Steel  
**Included materials:** Steel  
**Temperature (°C):** 0 - 110  
**PN:** 10  
**Connection:** Flanged EN1092  
**ETIM classification:** EC010260 - Air-/dirt separator for central heating/cooling system  
**Product colour:** RAL 7040 - Window grey



Item number	Max system flow (m3/h)	Execution	Connection 1	Connection 1 - spec.	Connection 2	Connection 2 - spec.
8040F50	12.5	Particle separation	Flanged EN1092	PN16	Flanged EN1092	PN16
8040F65	20	Particle separation	Flanged EN1092	PN16	Flanged EN1092	PN16
8040F80	27	Particle separation	Flanged EN1092	PN16	Flanged EN1092	PN16
8040F100	47	Particle separation	Flanged EN1092	PN16	Flanged EN1092	PN16
8040F125	72	Particle separation	Flanged EN1092	PN16	Flanged EN1092	PN16

Item number	Max system flow (m <sup>3</sup> /h)	Execution	Connection 1	Connection 1 - spec.	Connection 2	Connection 2 - spec.
8040F150	108	Particle separation	Flanged EN1092	PN16	Flanged EN1092	PN16
8040F200	180	Particle separation	Flanged EN1092	PN16	Flanged EN1092	PN16
8040F250	288	Particle separation	Flanged EN1092	PN16	Flanged EN1092	PN16
8040F300	405	Particle separation	Flanged EN1092	PN16	Flanged EN1092	PN16

## Installation and maintenance

**Possible mounting position:** Horizontal

A particle separator is installed on the return line in heating and cooling systems before important components such as exchangers, boilers, and cooling fins. It prevents sludge and particles from being transported with the liquid and settling in system parts. The particle separator should be regularly checked and cleaned as needed.

The company's management system  
is certified by DNV  
ISO 9001 • ISO 14001

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