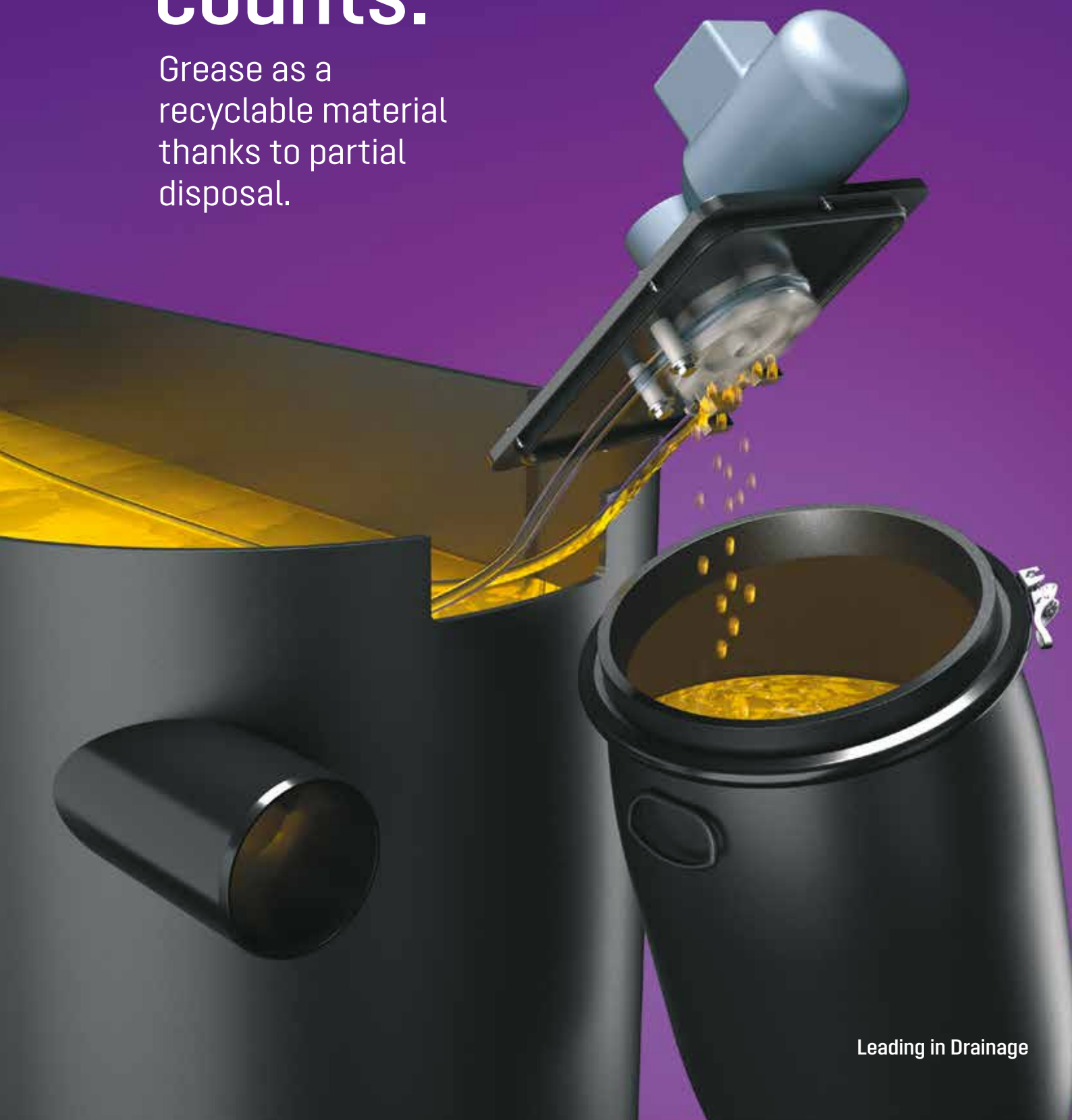


Grease separator  
*EasyClean* free SkimTech

 **KESSEL**

# Every drop counts.

Grease as a  
recyclable material  
thanks to partial  
disposal.



Leading in Drainage

# Convincing arguments

Why you need a grease separator.

- protect the environment
- prevent pipe blockages as well as corrosion and odour formation
- overloaded sewage treatment plant and odour formation
- Grease separators are required in accordance with EN 1825





## Convincing where others fail

The grease separator  
*EasyClean* free SkimTech.

With conventional grease separators, the separated grease has to be extracted regularly by disposal vehicles. This becomes a problem when the location is only difficult to access and/or you wish to sell the grease on to industry at a profit. In such cases, our *EasyClean* free SkimTech grease separator with partial disposal is the optimum solution. It collects the grease in a particularly pure form in practical tanks that can easily be stored temporarily and transported without disposal vehicle. This not only saves you the costs for disposal, you can generate additional profit with a recyclable material in best industrial quality.

### Your benefits with partial disposal:

- ✓ Less odour emission
- ✓ Additional profits by selling grease to industry
- ✓ No vacuum disposal vehicle required
- ✓ Collecting tanks easy to transport – ideal for cramped spaces
- ✓ Intermediate storage of grease with additional grease barrels possible

# What's behind it.

## Our partial disposer in detail.

The *EasyClean* free SkimTech grease separator is based on the interaction between three systems: a coarse filter, which clears inflowing wastewater from coarse waste by means of a sieve screw, the grease separator chamber and a so-called skimmer unit which transfers grease to the collecting tank. Find out more about the technical details of our partial disposer here.



## The SkimTech principle

The skimmer hose moves around in circles through the grease layer in the grease separator chamber. The grease sticks to the hose, is scraped off in the skimmer unit and runs from there into the collecting tank.



Polymer skimming hose floats on the grease layer

Skimmer unit with high-quality industrial ceramic components for a long service life

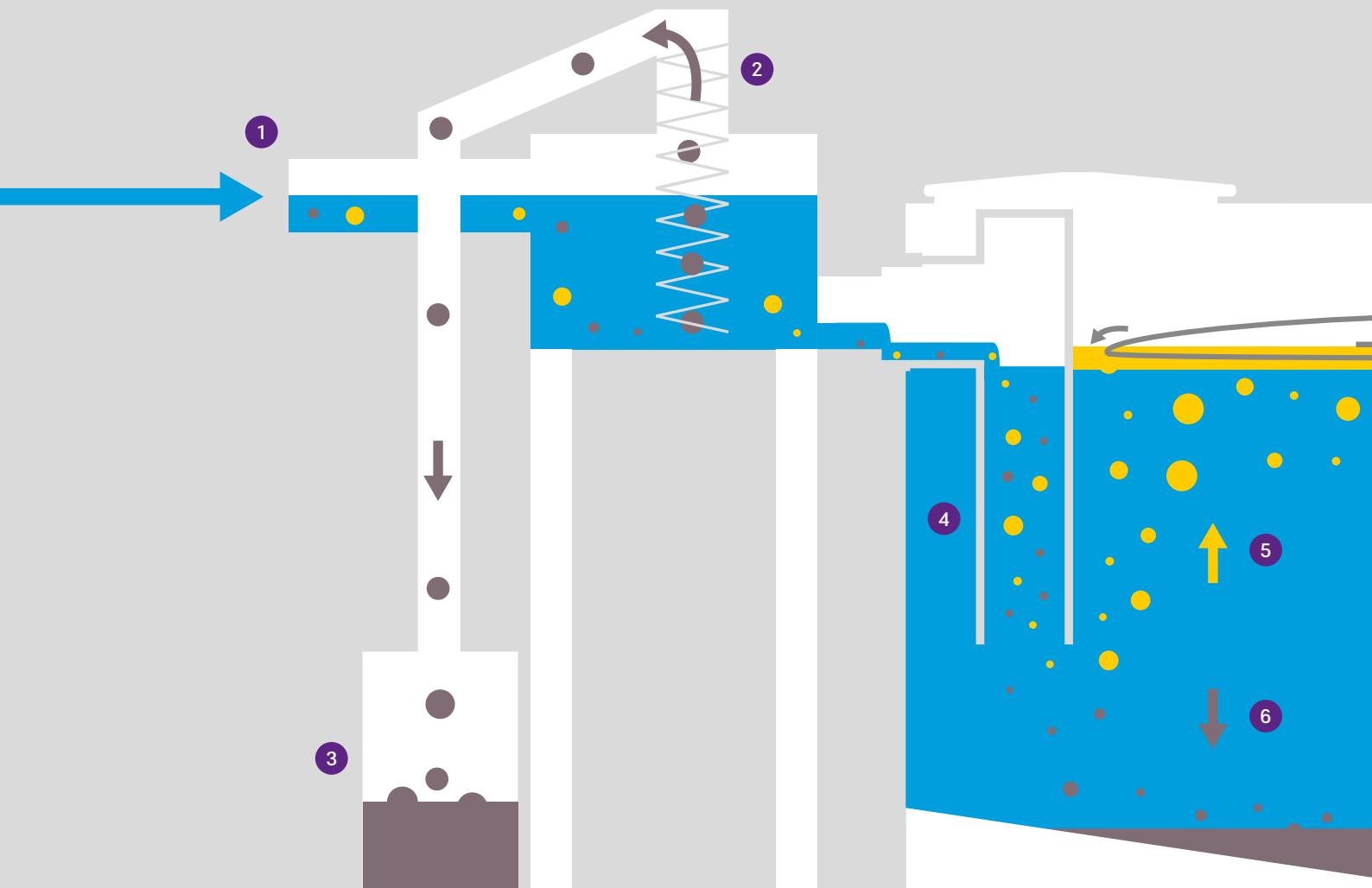
Skimmer unit with highly flexible, durable polymer skimming hose

Odour-proof collecting tank for grease (Premium version with fill level monitoring)

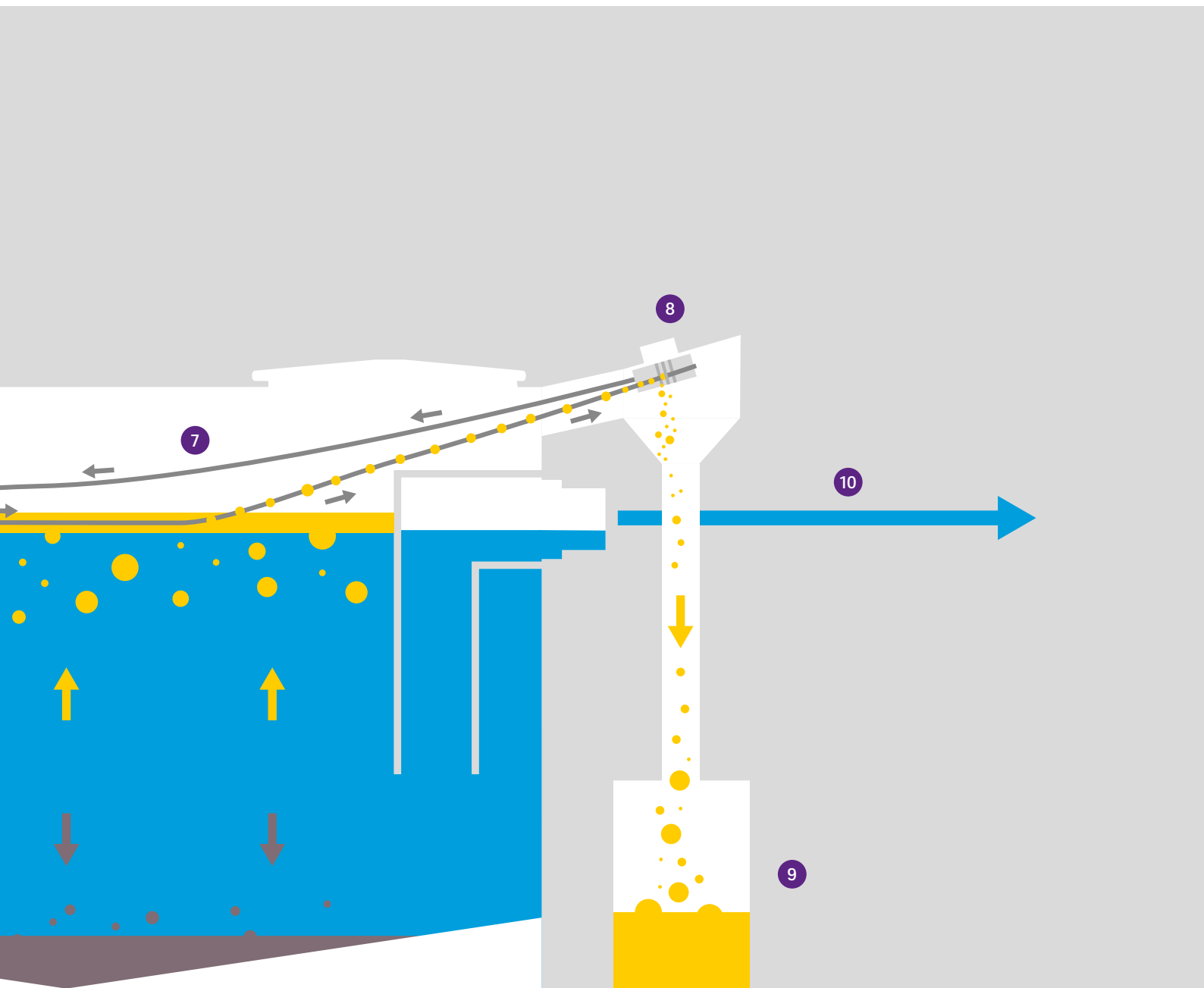
# What's in it.

## The *EasyClean* free SkimTech in action.

The wastewater is pre-cleaned in the coarse filter and then runs into the grease separator chamber where it is slowed down by a deflector plate. In the calmed tank, coarse materials settle on the bottom as a sludge layer. Greases and oils rise and are drawn off to the collecting tank for grease by the skimmer hose. The treated wastewater is discharged to the sewage system.



- 1 Inlet
- 2 Coarse filter with sieve screw
- 3 Collecting tank for coarse materials
- 4 Inlet slowdown
- 5 Grease layer formation
- 6 Sludge layer formation
- 7 Polymer skimming hose
- 8 Scraper
- 9 Collecting tank for grease
- 10 Outlet





## Grease separator *EasyClean* free SkimTech Basic NS 2 – 20

for free-standing installation



The grease separator made of PE-HD polymer for free-standing installation in frost-protected rooms is equipped with one disposal tank for sinking sludge and one for grease with replacement tank. Upstream from the grease separator is a coarse filter with sieve screw for separating sinking sludge materials. These are transported through the sieve screw into the designated disposal tank and thus do not get into the inside of the grease separator.

There is a motor-driven skimmer integrated in the grease separator for the constant disposal of the separated grease from the grease separator into the designated disposal tank.

The control units for the sieve screw and skimmer unit permit application-optimised and time-controlled operation of the complete separator.

**Operator side:** In the direction of flow right (optional: left side)

**Standard:** EN 1825

**Inlet and outlet:** DN ...

**Protection class overall system:** IP 54

**Inclusive:** Self-diagnosis system, logbook function, USB interface, GSM interface, potential-free contact, motor protection switch

**Connection type:** Direct connection

**Operating voltage:** 400 V

**Mains frequency:** 50 Hz

**Standby power:** 4 W

**Max. power:** 440 W

**Protection class control unit:** IP 54

**Fuse protection required (cable protection):** B 6 A

**Fuse protection required (RCD):** 30 mA

**Nominal current:** 0.4 - 0.63 A

**Application temperature:** 0 - 40 °C

**Electrical connections for the sieve screw motor:**

- Power (P2): 180 W
- Operating voltage: 400 V, 50 Hz
- Nominal current: 0.58 A
- Start-up circuit: Star

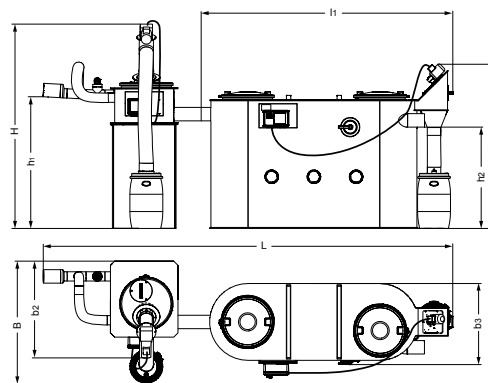
**Electrical connections for the skimmer motor:**

- Power (P2): 90 W
- Operating voltage: 400 V, 50 Hz
- Nominal current: 0.42 A
- Start-up circuit: Star



### Direction of flow right

Nominal sizes	Art. no.
NS 2	99 002.01 B
NS 4	99 004.01 B
NS 7	99 007.01 B
NS 10	99 010.01 B
NS 15	99 015.01 B
NS 20	99 020.01 B



NS	Length (L) in mm	Width (B) in mm	Height (H) in mm	Total volume in l	Weight in kg	Length (L1) in mm	Width (b3) in mm	Height (h3) in mm	Width (b2) in mm	Height (H) in mm	inlet height (h1) in mm	outlet height (h2) in mm
2	3850	1450	2420	1470	440	2300	960	1950	1150	2420	1545	1200
4	3850	1450	2420	1470	440	2300	960	1950	1150	2420	1545	1200
7	4570	1450	2420	1730	460	2745	960	1950	1150	2420	1560	1200
10	4840	1450	2420	1930	480	3015	960	1950	1150	2420	1560	1200
15	5460	1450	2420	2770	645	3550	1160	1950	1150	2420	1495	1130
20	6460	1450	2420	3610	750	4550	1160	1950	1150	2420	1495	1130



## Grease separator *EasyClean* free SkimTech Premium NS 2 – 20

for free-standing installation



In addition to Basic-Version: The sieve screw is monitored by pneumatic level measurement. The fill levels of both collecting and disposal tanks are also monitored by sensors and notify the operator of a pending disposal.

**Operator side:** In the direction of flow right (optional: left side)

**Standard:** EN 1825

**Inlet and outlet:** DN ...

**Protection class overall system:** IP 54

**Inclusive:** Self-diagnosis system, logbook function, USB interface, GSM interface, potential-free contact, motor protection switch

**Connection type:** Direct connection

**Operating voltage:** 400 V

**Mains frequency:** 50 Hz

**Standby power:** 4 W

**Max. power:** 440 W

**Protection class control unit:** IP 54

**Fuse protection required (cable protection):** B 6 A

**Fuse protection required (RCD):** 30 mA

**Nominal current:** 0.4 - 0.63 A

**Application temperature:** 0 - 40 °C

### Electrical connections for the sieve screw motor:

- Power (P2): 180 W
- Operating voltage: 400 V, 50 Hz
- Nominal current: 0.58 A
- Start-up circuit: Star

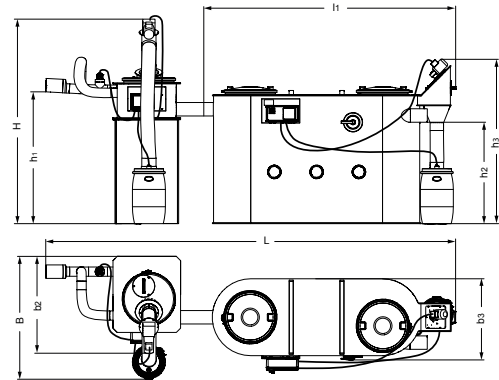
### Electrical connections for the skimmer motor:

- Power (P2): 90 W
- Operating voltage: 400 V, 50 Hz
- Nominal current: 0.42 A
- Start-up circuit: Star



### Direction of flow right

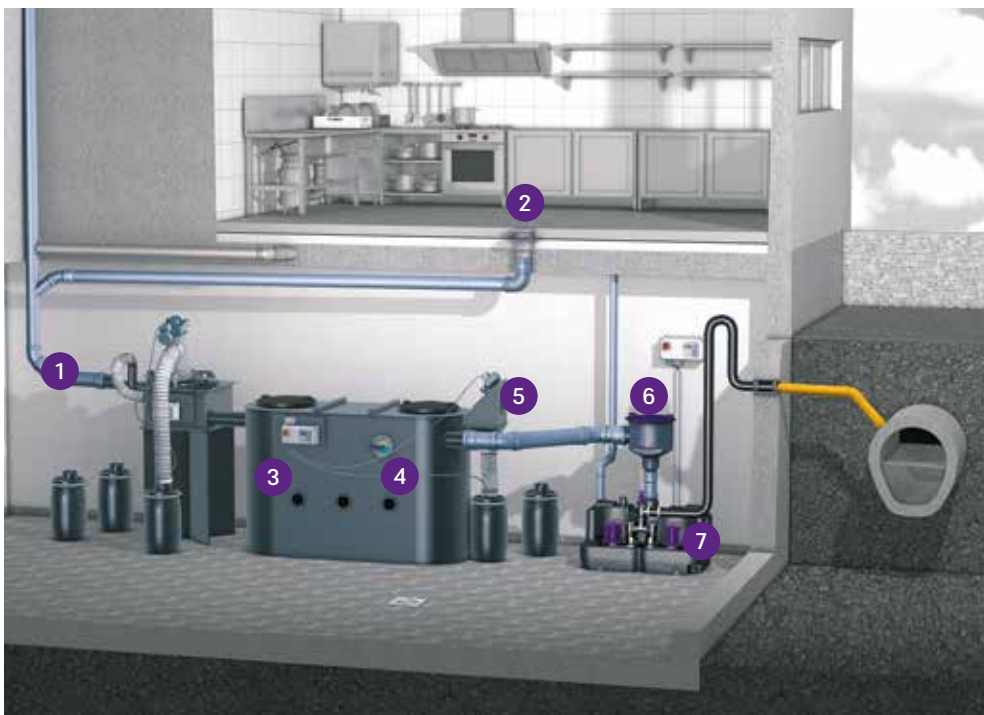
Nominal sizes	Art. no.
NS 2	99 002.01 P
NS 4	99 004.01 P
NS 7	99 007.01 P
NS 10	99 010.01 P
NS 15	99 015.01 P
NS 20	99 020.01 P



NS	Length (L) in mm	Width (B) in mm	Height (H) in mm	Total volume in l	Weight in kg	Length (L1) in mm	Width (b3) in mm	Height (h3) in mm	Width (b2) in mm	Height (H) in mm	inlet height (h1) in mm	outlet height (h2) in mm
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20	6460	1450	2420	3610	750	4550	1160	1950	1150	2420	1495	1130

# Free-standing set-up

The *EasyClean* free SkimTech grease separator is installed freely accessible in the building, typically in a cellar room. Quite often, the space available is not ideal for large objects. For this reason, the grease separator is particularly slim and can be set up compactly next to the wall. Once the *EasyClean* free SkimTech has been set up, the compact collecting tanks can simply be removed by hand. This makes the grease separator the ideal solution wherever disposal vehicles cannot reach the location.



## Grease separator for free-standing set-up inside the building

- 1 Inlet/ventilation pipe
- 2 *Ferrofix* stainless steel drains and channels
- 3 Grease separator *EasyClean* free SkimTech
- 4 Inspection window
- 5 Coarse filter with sieve screw
- 6 Sampling chamber
- 7 *Aqualift F XL* lifting station

## Accessories

Grease separators *EasyClean* free SkimTech

Article #

**Emptying connection** For emptying the separator



99000.EL

**Fine sludge disposal** For disposing of the settled sludge



99000.FS

**Backwater signal** Warning in the event of backwater in the separator



99000.AS

## Sieve Screw

also without separator applicable

**Coarse filter with sieve screw Basic** For separating sinking sludge materials.

DN

Article #

100

99100.B

150

99150.B

200

99200.B

**Coarse filter with sieve screw Premium** For separating sinking sludge materials.

100

99100.P

150

99150.P

200

99200.P



### Needs-based disposal with the Premium variant:

- ✓ Fill level monitoring for coarse filter collecting tank
- ✓ Fill level monitoring for grease collecting tank
- ✓ Acoustic warning signal when disposal is necessary

# Lifting stations

for combination with the  
*EasyClean* free SkimTech.



## Lifting station ***Aqualift F XL***

The *Aqualift F XL* is a powerful lifting station with one or two pumps that is ideal for use downstream of a separator. All components, such as tanks and pumps, are modular in design and can be used in any combination.

---

Ideal for grease separators.



## Lifting station ***Aqualift F Duo***

The *Aqualift F Duo* has two pumps that work alternately, switching on automatically at a certain water level in the tank. Duo systems are used where no interruptions in operation can occur due to the failure of a pump.

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Ideal for grease separators.

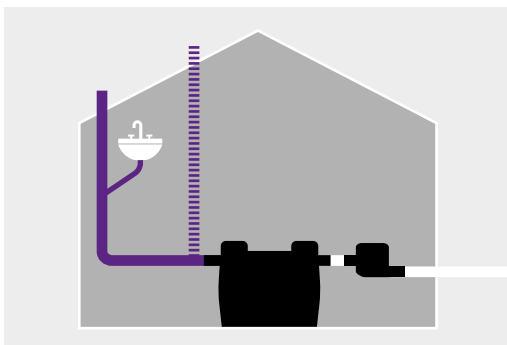
## Further information

can be found in the brochure  
“The complete range of pump technology”  
or at [www.kessel.com](http://www.kessel.com)

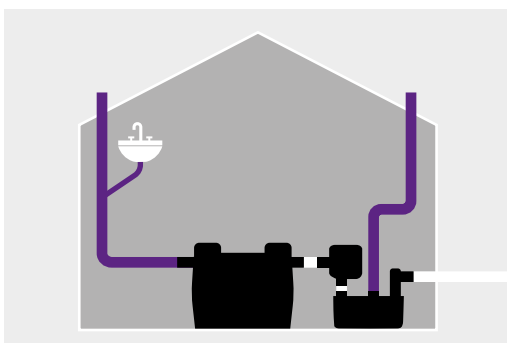
# Planning information:

Take note of the following!

## Ventilation



- Inlet and drain pipes at separator systems for greases must be ventilated adequately.
- Route the inlet pipe as a ventilation pipe via the roof.
- All connection pipes more than 5 m long must be ventilated separately.



- Ventilate sewage lifting stations via the roof in accordance with prEN 12050-1.
- Insert ventilation pipe in the main or secondary ventilation.
- Do not connect the ventilation of lifting stations with the inlet-side ventilation pipe of a grease separator.

## Installation point

- Install separator systems as close to where the wastewater is produced if possible, not in non-ventilated rooms or in storage rooms or rooms that are frequented.
- To avoid odour pollution, do not set up near recreation rooms and particularly in front of windows or ventilation openings.

## Connection to the drainage system

Unless any official requirements exist, connect grease separator systems to the sewer system as follows:

- Route the wastewater to the separator system for greases with a free slope.
- Drain separator systems for greases whose water level is below the backwater level (see EN 752-1) via a downstream lifting station.
- Position inlet pipes with a slope of at least 2% (1:50).
- If a slope of 2% is not possible for constructional or operational reasons and/or if longer pipes are necessary, take suitable measures to prevent grease blockages and deposits.
- Carry out the transition from downpipes to horizontal pipes using two 45° pipe elbows with a large radius.
- Provide a stilling section, the length of which corresponds to at least 10 times the separator inlet pipe's nominal width in millimetres.

## This is KESSEL.

Since 1963, KESSEL has stood like no other company for innovative and safe draining technology.

We have established ourselves as the impulse generator of the branch for decades and are now a premium international supplier.



**500+**  
employees



**103 million**  
**euros**  
annual turnover (2018)



**92,920 m<sup>2</sup>**  
factory space



**54**  
export markets

Alongside continuous quality assurance, environmental protection, energy efficiency as well as health and safety at work are especially important to us – both in production and during the operation of our product solutions at the customer's.

We also set great store by sustainability in our customer relations. For this reason, we offer a unique range of services from consultation and planning through installation and commissioning to regular maintenance.

One thing is certain: we remain with quality, innovation, safety and service at the top among the leaders in technology development to live up to our vision again and again:

KESSEL – Leading in drainage



**Made in Germany**



The KESSEL plant Lenting (Germany)

# Leading in drainage.

No matter whether the task involves discharging water, wastewater treatment or backwater protection: if the best solution is required, there is no option but KESSEL.

**Backwater protection**

**Pump technology**

**Separator technology**

**Drainage technology**



For further information  
visit

[www.kessel.com](http://www.kessel.com)





Subject to technical modifications.

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016-154 CK 02/20