Grease separators







Grease disposal concepts

Grease separators

For full and partial disposal

For free-standing or ground installation

ACO. The future of drainage.



The ACO system chain provides drainage solutions to meet tomorrow's environmental challenges

The increase in extreme weather conditions requires more complex approaches to water drainage. ACO provides smart system solutions which work in both directions: they protect people from water – and vice versa. Each ACO product within the ACO system chain sends the water in the right direction, so that it can be recycled in a way that makes sense both ecologically and economically. Within the ACO group it is ACO Building Drainage which supports the overall system chain, and combines system solutions for drainage, separation and pumping in order to create total drainage solutions for buildings.

collect:
Collect and store

- Floor drainage systems
- Bathroom drainage
- Roof drainage
- Multi-storey parking deck drainage
- Balcony and terrace
- Drainage pipe systems

clean:
Pre-clean and treat

- Grease separators
- Starch separators
- Light oil separators
- Process technology

hold:
Keep away from and hold back

- Backflow systems

release:
Pump, drain and re-use

- Lifting plants
- Pumping stations

The ACO system chain in action

HygieneFirst – the benefits of separator technology

ACO offers a comprehensive range of step increases in nominal sizes for dimensioning grease separators, both those for free-standing installation and those for below ground installation. This means the perfect solution can be provided according to the level of waste water to be dealt with; there is no need to take the next highest nominal size for reasons of capacity, which saves money and space.

In order to reduce microbes, very hot water is used for rinsing in hospitals, catering facilities and homes for senior citizens in particular, with the separator logically being exposed to that same water. The same applies to the emptying of tilting frying pans and boilers.

Grease separators made of stainless steel are ideally suited to such tasks, in order to prevent deformations in the long run. Stainless steel belongs to building material class A1, so does not represent any fire load or fire hazard. A planner should aim to reduce the fire load in a building as far as possible and guarantee high safety standards.

Furthermore, irrespective of the material, a large selection of extension stages are available, each of which can increase operational and cleaning safety. This is achieved by additional components such as systems for inner cleaning, as well as filling devices and disposal pumps. Measuring devices are also able to monitor operating conditions and reliably forward them to corresponding monitoring devices.

Hygiene

- Plants available in stainless steel
- Effective inner cleaning to remove all residue in the separator
- Homogenising and cleaning in a single step
- Hydro-mechanic high-pressure inner cleaning (175 bar, 360°)
- Neutralisation of odours
- Cover can remain closed during inner cleaning

Safety

- Plan with certainty, thanks to a huge choice of materials
- Solutions for all types of construction
- No additional fire load introduced to the building thanks to the use of stainless steel (building material class A1)

Profitability

- Disposal to meet your requirements by measuring the grease layer
- Fast troubleshooting, thanks to GSM module
- One module for all ACO products
- Avoidance of the heavy polluter surcharge



High-pressure inner cleaning of a grease separator for disposal leaving no residue



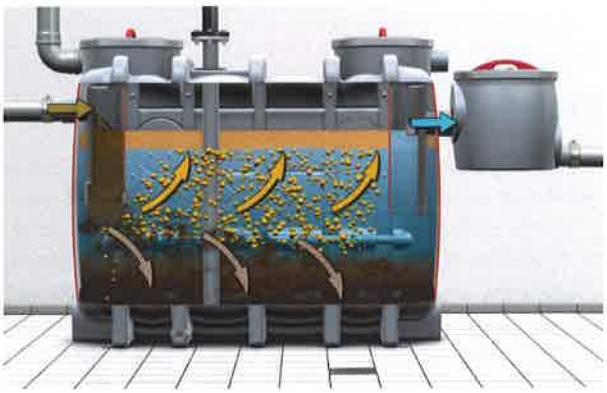
Odour neutraliser for a grease separator (basic model, extension stage 1)

Principles and function

A grease separator works purely physically, applying gravity (difference in density), i.e. heavy waste water contents sink to the bottom and light substances such as animal oils and fats rise to the top of the separator.
The grease layer can be broken down in a targeted manner using the high-pressure jet of up to 175 bar from the special rotating cleaning head and homogenised so it is ready to destroy. Depending on the location situation, the contents of the separator can be sucked out by the disposal vehicle via permanently installed local piping or conveyed too using an optional disposal pump.

Operating principle for full disposal/free-standing installation
With grease separators for full disposal, sludge and grease are collected in the separator container installed in the building and picked up by a disposal contractor at certain intervals or as required.

Video



Operating principle for full disposal/below ground installation
With grease separators for full disposal and below ground installation, sludge and grease are also collected in the separator container and picked up by a disposal contractor at certain intervals or as required. The grease separator takes up less space of the outdoor surface and can be emptied in a way that minimises odours via direct suction equipment installed in the soil.

Video



Operating principle for partial disposal
With grease separators for partial disposal, sludge and grease are collected in separate containers. This can be done manually or automatically via an additional control.

Video



Grease separators for partial disposal

Grease separators for partial disposal (Fresh grease separators)
Grease separators working on the partial disposal principle also operate purely physically on the basis of gravity (density differences), i.e. heavy waste water con-stituents sink to the floor of the separator, whilst light substances such as animal oils and fats rise to the top of the separator. The separated substances (grease and sludge) are collected in separate containers. The treated waste water is then discharged into the sewers via the drainage outlet pipe.





Draining the separated substances from the grease separator into the collecting drums is done by opening the relevant drainage valve on the separator (specifics depend on the type of operation).
This can be undertaken independently of normal operations. For example, it can be done without interrupting the work being carried out in a kitchen.
Because the collecting drums only take up grease and sludge, the grease separator does not have to be filled after disposal with expensive fresh water.

Partial disposal concept

ACO Building Services provides two types of grease separator for partial disposal: grease separators for manual, or automatic partial disposal. Both of these versions are only available for free-standing installation.
The grease separators for manual partial disposal (LIPATOR) have mechanical drainage valves. These must be opened several times a day as required by the operator (after heating up first). The transparent hoses reveal whether all of the substances collected at any given time have completely drained into the drums.
The grease separators with automatic partial disposal (LIPATOMAT) have electrically actuated ball valves. A programme control automatically activates the pre-heating and opens the valves. An optical and acoustic warning signal is activated when the collecting drums are full. Full drums are simply replaced and collected by a disposal company.



Lipator:
Grease separator for partial disposal, for manual grease/sludge extraction



Lipatomat:
Grease separator for partial disposal, for automated grease/sludge extraction

Grease separators for full disposal



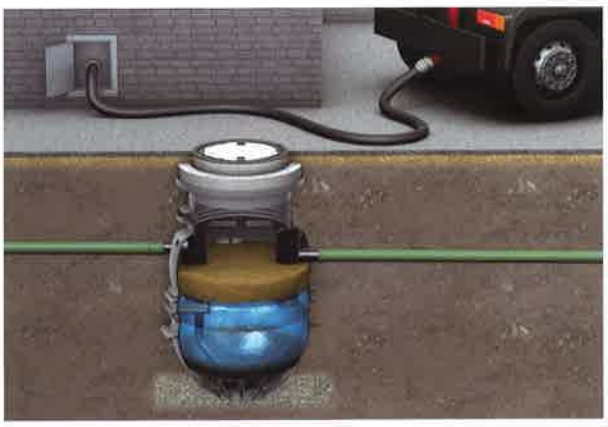
A grease separator for full disposal operates purely physically on the basis of gravity (density differences), i.e. heavy waste water constituents sink to the floor of the separator, light substances such as animal fats and oils, rise to the top of the grease separator. The treated waste water is discharged into the sewers via a drainage outlet pipe.
The sludge trap and the separator must be completely emptied and cleaned at least once a month pursuant to EN 1825. Emptying the sludge trap and the separator is carried out by a disposal company and it is recommended that this operation be carried out every two weeks. The separator then has to be refilled with water (e.g. drinking water or process water) in compliance with the local water regulations.

For free-standing installation



- Structural stability of the container with proof of stability for over 25 years
- Minimises disposal and maintenance costs thanks to economic step increases in nominal size
- Easy upgrade of simple separator variants with additional components for convenient operation and disposal
- Various shapes and materials

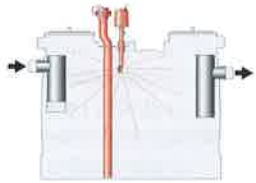
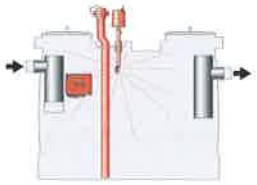
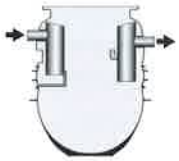
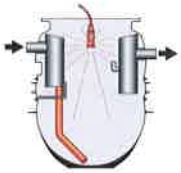
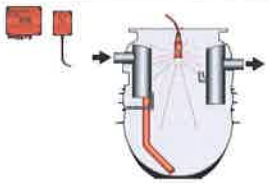
For below ground installation



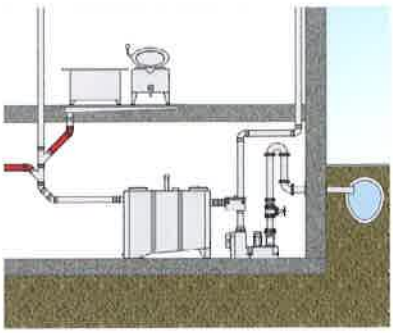
- Structural stability of the container with proof of stability for 50 years
- No need to cast the load distribution plate (ready to install)
- Available for load class A 15, B 125 or D 400
- For load class D 400, no need to concrete the container in, even with the highest possible ground water level

Product benefits: ACO extension stage system

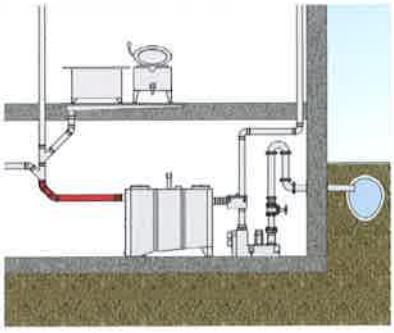
A grease separator must be emptied at regular intervals by a disposal vehicle. The extension stage system means that odour nuisance can be reduced during disposal and cleaning. The higher the extension stage, the easier to carry out the disposal and cleaning of the grease separator.
The available extension stages and the respective ease of disposal and cleaning they provide can be seen in the table below.

Basic model	Extension stage 1	Extension stage 2	Extension stage 3
For free-standing installation			
			
For below ground installation			
			
■ Disposal via inspection covers	■ With connection for direct suction	■ With connection for direct suction ■ With internal high pressure cleaning (manual operation) ■ With filling device (manual)	■ With connection for direct suction ■ With internal high pressure cleaning (automated operation) ■ With filling device (automated)
Occurrence of odour during disposal and cleaning	Disposal can be done without opening of the covers. Occurrence of odour is likely during cleaning of the tank.	No odour during disposal and cleaning. Filling device, high pressure spray head and disposal pump are manually operated.	No odour during disposal and cleaning. Filling device, high pressure spray head and disposal pump are operated automatically.

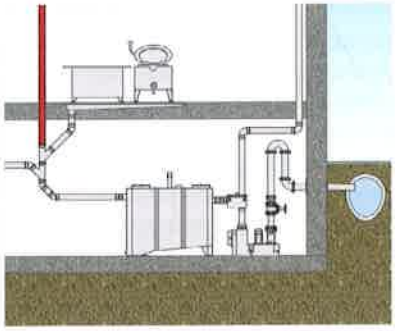
Planning notes: pipework, ventilation (EN 1825-2)



- When installing the inlet line through unheated or freely accessible spaces where there is a danger of frost, this section of the route must be designed with auxiliary pipe heating (e.g. self-regulating strip heaters and insulation).

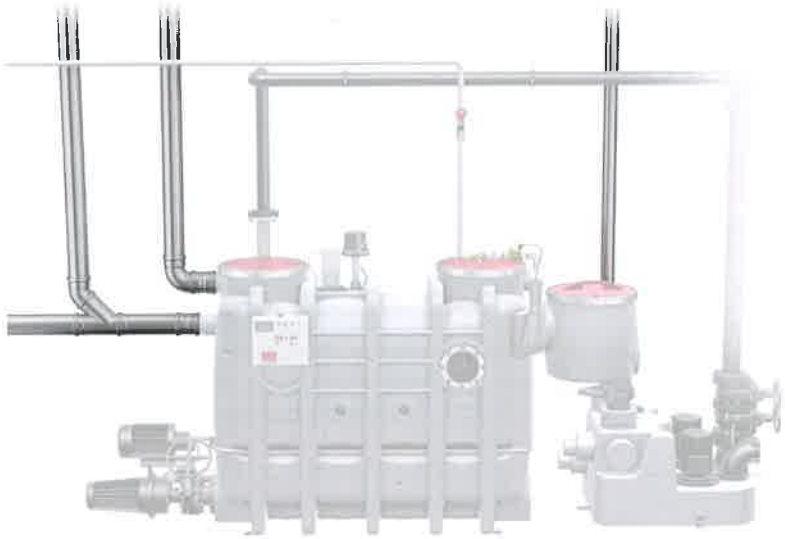


- Inlet lines must be designed and installed carefully, as even this can have a positive or negative influence on separator efficiency.
- Where vertical inlet lines meet the horizontal pipe, they must be designed as follows in order to prevent impermissible whirling of the waste water and its greasy contents:
  vertical downpipe, 45° bend, straight pipe section, horizontal pipeline of at least 250 mm, at least 10 x ND long at the grease separator inlet (example: ND 100 = 1000 mm, ND 150 = 1500 mm).



- The inlet and outlet lines on grease separator systems must be adequately ventilated. To this end, route the vent stack to above the roof (EN 1825-2).
- Other horizontal connecting lines longer than 5 m must be ventilated in addition. If the horizontal inlet line is longer than 10 m and there are no other additionally ventilated connecting lines, the inlet line must be fitted with an extra vent stack right by the separator inlet (EN 1825-2).

Planning notes: pipework with ACO Pipe pipe systems



Materials that are resistant to corrosion and fatty acids must be used for the inlet and ventilation lines of grease separator plants in particular. Stainless steel, material grade 316 is recommended here.
With ACO PIPE, ACO Building Drainage provides a pipe system that is ideally suited for this purpose.

Planning notes: high-pressure inner cleaning of ACO grease separators





High-pressure inner cleaning of a grease separator for disposal leaving no residue

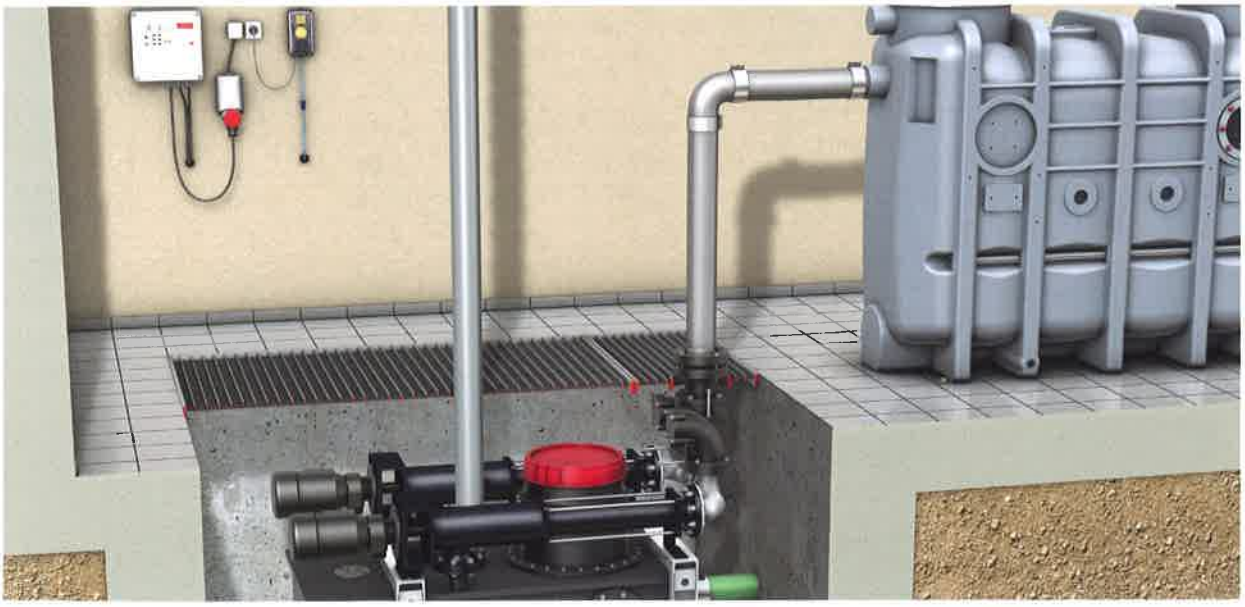
Unpleasant smells produced when disposing of the contents of grease separators are often equated with hygiene deficiencies. In order to prevent this, ACO grease separators are available with optional hydro-mechanic high-pressure inner cleaning. This enables the inside walls of the grease separator to be intensively cleaned, without having to open the covers.
The spread of smells throughout the premises where the grease separator is installed is therefore minimised during the cleaning process. A rotating cleaning head, which rotates not only horizontally, but also vertically, is used here.

The cleaning head performs two tasks:

- Breaks up the grease layer and homogenises it to facilitate suction emptying
- Cleans the inside walls of the container

Only a cold water connection is required for the associated high-pressure pump. The cleaning unit can be designed for either manual or fully automatic control. Cleaning progress can be checked through the inspection window provided.

Planning notes: upstream tank plants with eccentric screw pumps



Application: inlet connection upstream of grease separator plants too low

Low inlet heights always lead to problems if there is no gradient between the inlet line and the grease separator. If structural conditions mean the grease separator cannot be placed any lower in such cases, then the waste water must be pumped to it. However, due to the grease content of the waste water, this cannot be done using a traditional lifting plant. This would furthermore cause whirling to occur in the separator, which would impair the separation process.

ACO Passavant Lipumax P grease separator made of polyethylene for below ground installation



ACO product benefits

- Compact construction – polyethylene
- Buoyancy-proof shaft to top edge of manhole cover with no in-situ concreting required (for D 400)
- Structural stability of the container with proof of stability for 50 years
- Load class up to D 400

Product information

- Grease separator plant according to EN 1825
- With integrated sludge trap
- For below ground installation, for top sections with load class A15, B125 or D400 according to EN 124
- Inlets and outlets for connections to plastic pipes

Table of dimensions

NS	ND	Contents [l]			Dimensions [mm]				
		Sludge trap	Grease storage volume	Total	D	H	H1	H2	H3
2	100	245	270	720	110	1377	1015	945	1147
	100	460	270	930	110	1594	1235	1165	1364
4	100	460	270	930	110	1594	1235	1165	1364
	100	980	270	1465	110	2129	1745	1675	1899
5.5	150	570	230	1465	160	2129	1745	1675	1899
	150	1065	230	1960	160	2611	2226	2156	2381
7	150	730	285	1675	160	2346	1960	1890	2116
8.5	150	860	360	1900	160	2558	2172	2102	2328
10	150	1010	415	2170	160	2828	2443	2373	2598

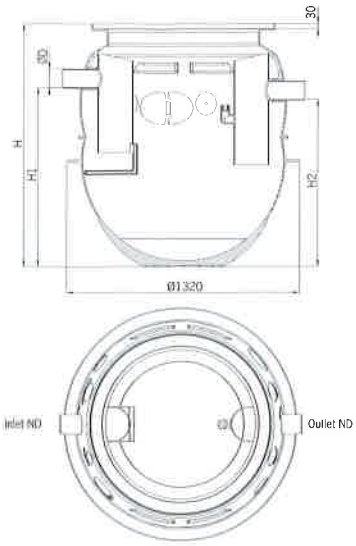
www.aco-haustechnik.de/katalog/Artikel-Nr.

All digital contents (data sheets (PDF)), dimensional drawings (DXF, IGS) and article descriptions (Datanorm, GAEB, TXT) relating to the grease separators and additional components represented here can be retrieved from the website stated above using the respective article number.

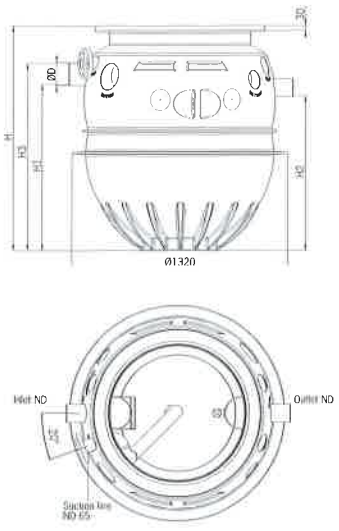
Dimensional drawings

Article No.

Lipumax P-B (Basic model)



Lipumax P-D (Extension stage 1)

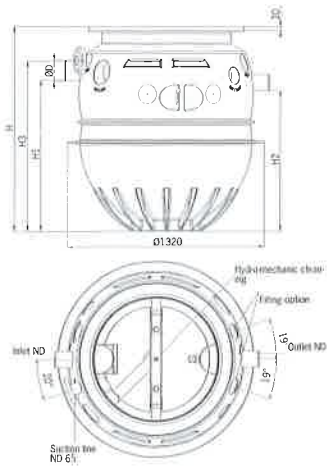




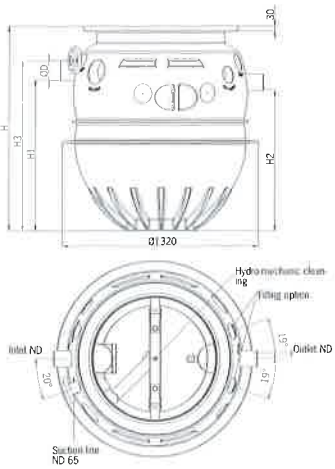


NS	Lipumax P-B Basic model	Lipumax P-D Extension stage 1
2	3202.80.00	3202.81.00
2	3202.80.10	3202.81.10
4	3204.80.00	3204.81.00
4	3204.80.10	3204.81.10
5.5	3205.80.00	3205.81.00
5.5	3205.80.10	3205.81.10
7	3207.80.00	3207.81.00
8.5	3208.80.00	3208.81.00
10	3210.80.00	3210.81.00

Lipumax P-DM (Extension stage 2)



Lipumax P-DA (Extension stage 3)



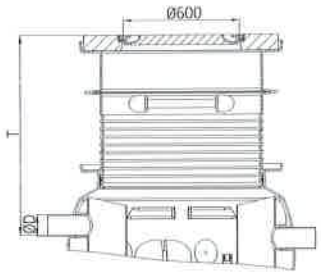




NS	Lipumax P-DM Extension stage 2	Lipumax P-DA Extension stage 3
2	3202.82.00	3202.83.00
2	3202.82.10	3202.83.10
4	3204.82.00	3204.83.00
4	3204.82.10	3204.83.10
5.5	3205.82.00	3205.83.00
5.5	3205.82.10	3205.83.10
7	3207.82.00	3207.83.00
8.5	3208.82.00	3208.83.00
10	3210.82.00	3210.83.00

Product overview

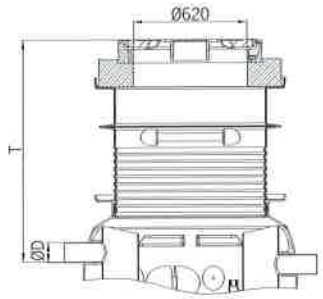
Top sections, load class A 15 – information for ordering



- Load class A 15 according to EN 124
- Concrete frame with cast iron cover
- Clear width Ø 600 mm
- Manhole cover odour-proof when closed
- Polyethylene top section (only included with article numbers 3300.14.01 and 3300.14.02)

	NS 2 SF 200	NS 2 SF 400	NS 4 SF 400	NS 4 SF 800	NS 5.5 SF 550	NS 5.5 SF 1100	NS 7 SF 700	NS 8.5 SF 850	NS 10 SF 1000	Weigth [kg]	Article no.
T [mm]	420	420	420	420	445	445	445	445	445	145	**3300.14.00**
	720–1020	720–1020	720–1020	720–1020	745–1045	745–1045	745–1045	745–1045	745–1045	170	**3300.14.01**
	720–1985	720–1985	720–1985	720–1830	745–1855	745–1370	745–1640	745–1430	745–1160	193	**3300.14.02**

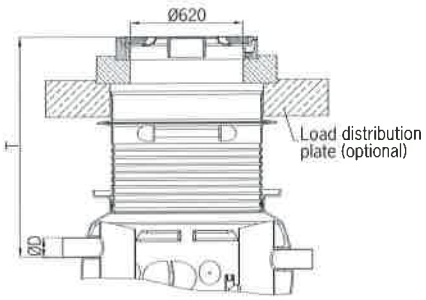
Top sections, load class B 125 – information for ordering



- Load class B 125 according to EN 124
- SAKU cover with concrete frame
- Clear width Ø 600 mm
- Manhole cover odour-proof when closed
- Concrete adapter plate Ø 1000 mm x 150 mm
- Polyethylene top section (only included with article numbers 3300.15.01 and 3300.15.02)

	NS 2 SF 200	NS 2 SF 400	NS 4 SF 400	NS 4 SF 800	NS 5.5 SF 550	NS 5.5 SF 1100	NS 7 SF 700	NS 8.5 SF 850	NS 10 SF 1000	Weight [kg]	Article no.
T [mm]	585	585	585	585	610	610	610	610	610	282	**3300.15.00**
	885–1195	885–1195	885–1195	885–1195	910–1220	910–1220	910–1220	910–1220	910–1220	307	**3300.15.01**
	885–1985	885–1985	885–1985	885–1830	910–1855	910–1370	910–1640	910–1430	910–1160	330	**3300.15.02**

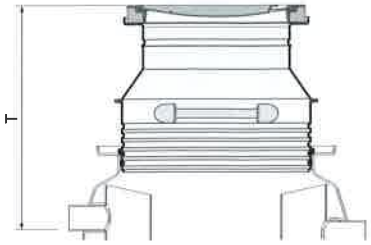
Top sections, load class D 400 – information for ordering



- Load class D 400 according to EN 124
- Concrete frame with cast iron cover
- Clear width Ø 600 mm
- Manhole cover odour-proof when closed
- Concrete adapter plate Ø 1000 mm x 150 mm
- Polyethylene top section
- Optionally with concrete load distribution plate Ø 1500 mm x 200 mm

	NS 2 SF 200	NS 2 SF 400	NS 4 SF 400	NS 4 SF 800	NS 5.5 SF 550	NS 5.5 SF 1100	NS 7 SF 700	NS 8.5 SF 850	NS 10 SF 1000	Weight [kg]	Article no.
T [mm] without load distribution plate	865–1985	865–1985	865–1985	865–1830	890–1855	890–1370	890–1640	890–1430	890–1160	330	**3300.17.00**
T [mm] with load distribution plate	865–1985	865–1985	865–1985	865–1830	890–1855	890–1370	890–1640	890–1430	890–1160	1030	**3300.16.00**

Top section type Nordic, load class A 15 – Order data

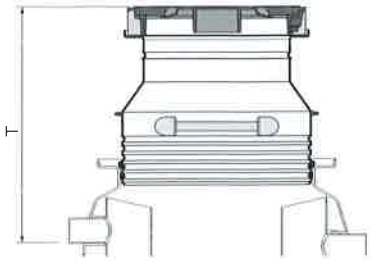


- load class A 15 according to EN 124
- frame from concrete, cover from cast iron
- clear opening Ø 600 mm
- cover odour proof sealed
- raising tube from polyethylene

*installation height can also be realized with item 3300.34.02

	NS 2 ST 200	NS 2 ST 400	NS 4 ST 400	NS 4 ST 800	NS 5.5 ST 550	NS 5.5 ST 1100	NS 7 ST 700	NS 8.5 ST 850	NS 10 ST 1000	Weight [kg]	Article No. [grey]
T [mm]	850–960	850–960	850–960	870–980	870–980	870–980	870–980	870–980	870–980	96	**3300.34.11**
	850–1410	850–1410	850–1410	870–1430	870–1430	870–1370	870–1430	870–1430	870–1150	104	**3300.34.12**
	850–1980	840–1760	840–1760	870–1850	870–1850	870–1370*	870–1640	870–1430*	870–1150*	115	**3300.34.13**

Top section type Nordic, load class B 125 – Order data

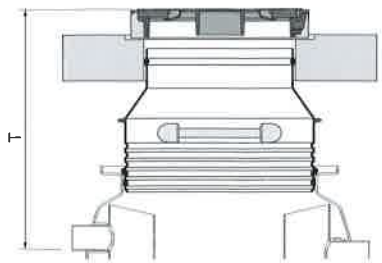


- load class B 125 according to EN 124
- frame from concrete, SAKU cover from polyethylene
- clear opening Ø 600 mm
- cover odour proof sealed
- raising tube from polyethylene

*installation height can also be realized with item 3300.35.02

	NS 2 ST 200	NS 2 ST 400	NS 4 ST 400	NS 4 ST 800	NS 5.5 ST 550	NS 5.5 ST 1100	NS 7 ST 700	NS 8.5 ST 850	NS 10 ST 1000	Weight [kg]	Article No. [grey]
T [mm]	900–1010	900–1010	900–1010	920–1040	920–1040	920–1040	920–1040	920–1040	920–1040	74	**3300.35.11**
	900–1460	900–1460	900–1460	920–1490	920–1490	920–1370	920–1490	920–1420	920–1150	82	**3300.35.12**
	900–1980	890–1760	890–1760	920–1850	920–1850	920–1370*	920–1640	920–1420*	920–1150*	93	**3300.35.13**

Top section type Nordic, load class D 400 – Order data

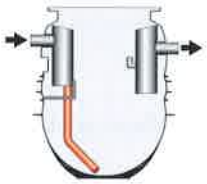
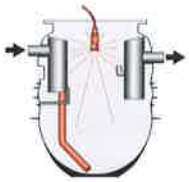
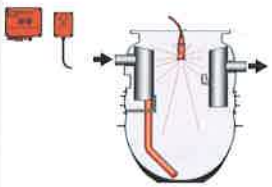


- load class D 400 according to EN 124
- frame from concrete, cover from cast iron
- clear opening Ø 600 mm
- cover odour proof sealed
- adapter plate from concrete Ø 1000 mm x 150 mm
- raising tube from polyethylene
- selectively with load distribution plate from concrete Ø 1500 mm x 200 mm

Load distribution plate	Raising tube length	NS 2 ST 200	NS 2 ST 400	NS 4 ST 400	NS 4 ST 800	NS 5.5 ST 550	NS 5.5 ST 1100	NS 7 ST 700	NS 8.5 ST 850	NS 10 ST 1000	Weight [kg]	Article No. [grey]
With	short	890–1010	890–1010	890–1010	920–1040	920–1040	920–1040	920–1040	920–1040	920–1040	846	**3300.36.08**
With	medium	890–1460	890–1460	890–1460	920–1490	920–1490	920–1490	920–1490	920–1420	920–1150	854	**3300.36.09**
With	long	890–1980	890–1760	890–1760	920–1850	920–1850	920–1370	920–1640	920–1420	920–1150	866	**3300.36.10**
Without	short	890–1010	890–1010	890–1010	920–1040	920–1040	920–1040	920–1040	920–1040	920–1040	85	**3300.37.08**
Without	medium	890–1460	890–1460	890–1460	920–1490	920–1490	920–1490	920–1490	920–1420	920–1150	93	**3300.37.09**
Without	long	890–1980	890–1760	890–1760	920–1850	920–1850	920–1370	920–1640	920–1420	920–1150	105	**3300.37.10**

Product overview

Extension stage system Lipumax P

Model	Disposal		Description
	No odour nuisance	Convenience	
Lipumax P-B (basic model) 	–	–	■ Disposal and cleaning by opening the cover (associated with the formation of noxious smells)
Lipumax P-D (extension stage 1) 	√	–	■ Odour-free disposal via a connector to direct suction ■ After-cleaning by opening the cover (associated with the slight formation of noxious smells) ■ Disposal connection ND 65, counter flange with fire hose quick coupling 75B and 2½" blank cap
Lipumax P-DM (extension stage 2) 	√	manual	■ Manual, odour-free disposal/cleaning via direct suction and hydro-mechanic high-pressure inner cleaning ■ Disposal connection ND 65, counter flange with fire hose quick coupling 75B and 2½" blank cap ■ Filling device with ball valve for re-filling with fresh water ■ Hydro-mechanic inner cleaning via high-pressure pump and spray head
Lipumax P-DA (extension stage 3) 	√	automatic	■ Programmed, odour-free disposal/cleaning via direct suction and hydro-mechanic high-pressure inner cleaning (175 bar) ■ Disposal connection ND 65, counter flange with fire hose quick coupling 75B and 2½" blank cap ■ Filling device with solenoid valve for re-filling with fresh water ■ Hydro-mechanic inner cleaning via high-pressure pump and spray head

Supplementary components: Page 34 ff.

Supplementary components

	Designation	To fit	Description	Article no.
	Measuring device for grease layer thickness	■ Lipumax P grease separators for below ground installation	■ For electronic measurement of grease layer ■ Suitable for liquid and/or congealing grease ■ Measuring device with connecting cable ready to plug in, length: 3 m ■ With two isolated change-over contacts to display full warning (100%) and advance warning of fill level (80%) ■ With visual display of fill level for advance warning and full warning ■ With heated probe rod to increase operating reliability ■ Operating voltage: 230 V/50 Hz ■ Max. consumption approx. 12 W Cable length: 10 metres Cable length: 20 metres Cable length: 30 metres	**3300.11.70** **3300.11.71** **3300.11.72**
	Signalling unit with GSM module	■ Grease separators extension stage 3 ■ Measuring equipment for grease layer thickness	■ Mains-independent ■ Visible and audible alarm signals ■ 6 digital & 2 analogue freely configurable inputs ■ 1 alarm output 12 V ■ Includes GSM antenna (2.5 m cable) ■ Relaying alarms to mobile phones by SMS ■ For mounting outside the ex area ■ Housing: 155 x 180 x 103 mm ■ Slot for standard SIM card ■ Protection type: IP 54 (with mounted antenna plug IP 44) ■ Operating voltage: 230 V/AC 50/60 Hz	**0150.46.94**
	Supporting ring	■ Lipumax-P grease separators for below ground installation □ Load class: B125/D400	■ Made from concrete ■ Diameter: 625 mm ■ Without sealing ■ Displacement-proof Heights: 60 mm excluding mortar joints 70 mm including mortar joints Weight: 50 kg Heights: 80 mm excluding mortar joints 90 mm including mortar joints Weight: 60 kg Heights: 100 mm excluding mortar joints 110 mm including mortar joints Weight: 70 kg	**8700.20.00** **8700.20.10** **8700.20.20**

Eco-Jet and Hydrojet – oval grease separators made of polyethylene for free-standing installation



ACO Product advantages

- Rugged construction with 25-year stability verification
- Disposal and maintenance cost minimisation thanks to staggered nominal sizes (e.g. NS 5.5 and 8.5)
- Extension stages 2 and 3 with multifunctional filling unit for high pressure internal cleaning and container filling

Product information

- Grease separator plant according to EN 1825
- With integrated sludge trap
- For free-standing installation in frost-proof premises
- Inlets and outlets for connections to plastic pipes

Table of dimensions

NS	ND	content [l]			Dimensions [mm]									Extension Dimensions [mm]				
		Sludge trap	Grease storage volume	Total	H1	H2	H3	H4	L1	L2	B1	B2	D	H5	L3	B3	L4	B4
1	100	106	100	320	830	760	1480	1300	1100	1300	700	770	110	1500	1400	800	1800	930
2	100	210	100	440	1055	985	1680	1500	1100	1300	700	770	110	1700	1400	800	1800	930
3	100	300	150	630	1055	985	1680	1500	1450	1650	700	770	110	1700	1750	800	2150	930
4	100	400	200	830	1055	985	1680	1500	1760	2000	700	770	110	1700	2060	800	2460	930
5.5	150	725	360	1430	1250	1180	1880	1700	1760	2000	950	1020	160	1900	2060	1050	2460	1180
7	150	800	400	1600	1250	1180	1880	1700	1960	2200	950	1020	160	1900	2260	1050	2660	1180
8.5	150	940	475	1900	1250	1180	1880	1700	2250	2485	950	1020	160	1900	2550	1050	2950	1180
10	150	1000	520	2000	1250	1180	1880	1700	2450	2690	950	1020	160	1900	2750	1050	3150	1180

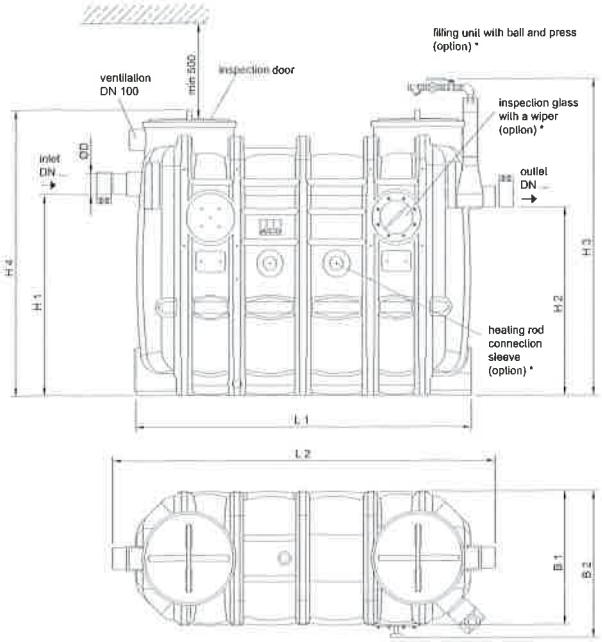
www.aco-haustechnik.de/catalogue/Article no.

All digital contents (data sheets (PDF)), dimensional drawings (DXF, IGS) and article descriptions (Datanorm, GAEB, TXT) relating to the grease separators and additional components represented here can be retrieved from the website stated above using the respective article number.

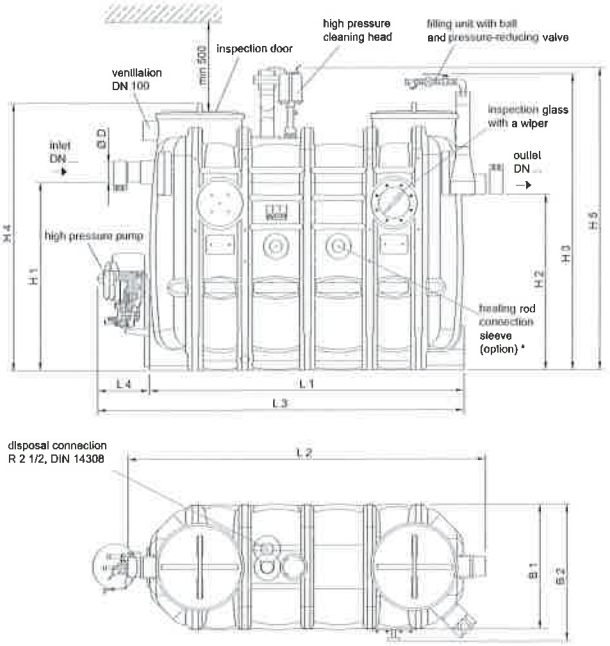
Product overview

Dimensional drawings

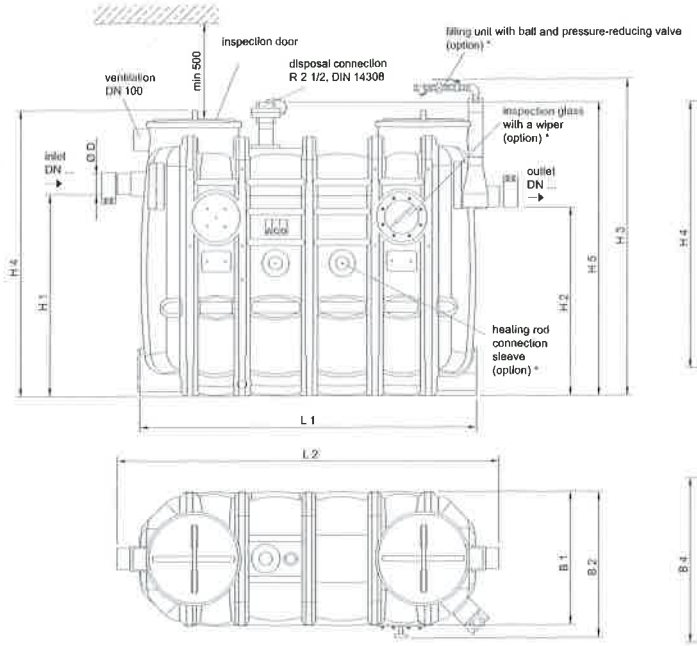
Eco-Jet-O (Basic model)



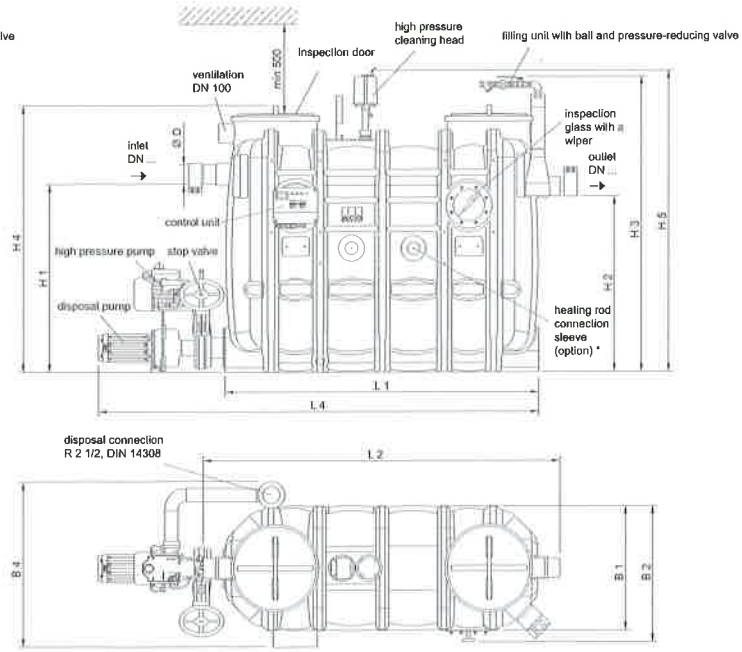
Hydrojet-OS (Extension stage 2)



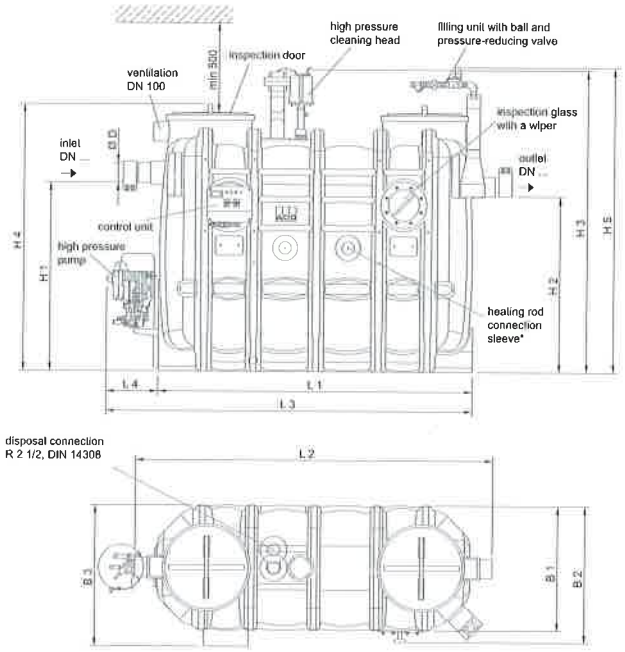
Eco-Jet-OD (Extension stage 1)



Hydrojet-OSE (Extension stage 2 with disposal pump)



Hydrojet-OA (Extension stage)



Hydrojet-OAE (Extension stage 3 with disposal pump)

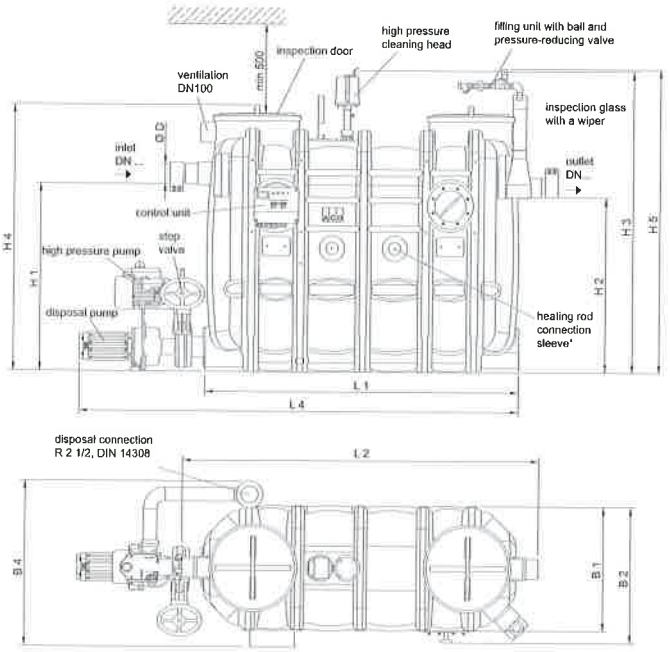


Table of dimensions: Page 37

Article numbers




NS	Eco-Jet-O basic model	Eco-Jet-OD Extension stage 1
1	3551.34.00	3551.64.00
2	3552.34.00	3552.64.00
3	3553.34.00	3553.64.00
4	3554.34.00	3554.64.00
5.5	3555.34.00	3555.64.00
7	3557.34.00	3557.64.00
8.5	3558.34.00	3558.64.00
10	3560.34.00	3560.64.00

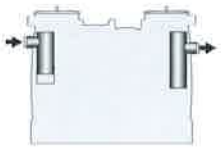
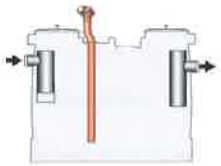
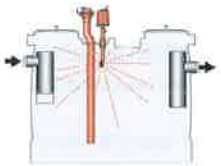
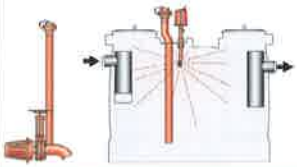
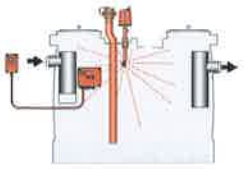
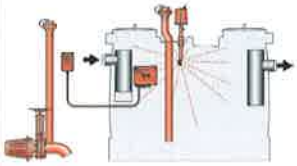



NS	Hydrojet-OS Extension stage 2		Hydrojet-OSE Extension stage 2 with disposal pump	
	Operational right	Operational left	Operational right	Operational left
1	3571.74.41	3571.74.31	3571.84.41	3571.84.31
2	3572.74.41	3572.74.31	3572.84.41	3572.84.31
3	3573.74.41	3573.74.31	3573.84.41	3573.84.31
4	3574.74.41	3574.74.31	3574.84.41	3574.84.31
5.5	3575.74.41	3575.74.31	3575.84.41	3575.84.31
7	3577.74.41	3577.74.31	3577.84.41	3577.84.31
8.5	3578.74.41	3578.74.31	3578.84.41	3578.84.31
10	3580.74.41	3580.74.31	3580.84.41	3580.84.31




NS	Hydrojet-OA Extension stage 3		Hydrojet-OAE Extension stage 3 with disposal pump	
	Operational right	Operational left	Operational right	Operational left
1	3551.74.42	3551.74.32	3551.84.42	3551.84.32
2	3552.74.42	3552.74.32	3552.84.42	3552.84.32
3	3553.74.42	3553.74.32	3553.84.42	3553.84.32
4	3554.74.42	3554.74.32	3554.84.42	3554.84.32
5.5	3555.74.42	3555.74.32	3555.84.42	3555.84.32
7	3557.74.42	3557.74.32	3557.84.42	3557.84.32
8.5	3558.74.42	3558.74.32	3558.84.42	3558.84.32
10	3560.74.42	3560.74.32	3560.84.42	3560.84.32

Eco-Jet and Hydrojet extension stage system

Model	Disposal		Description
	No odour nuisance	Convenience	
Eco-Jet-O (basic model) 	–	–	■ Disposal and cleaning by opening the covers (associated with the formation of noxious smells)
Eco-Jet-OD (extension stage 1) 	√	–	■ Odour-free disposal via a connector to direct suction ■ After-cleaning by opening the covers (associated with the slight formation of noxious smells) ■ Disposal connection ND 65, counter flange with fire hose quick coupling 75B and 2½" blank cap
Hydrojet-OS (extension stage 2) 	√	manual	■ Manual, odour-free disposal/cleaning via direct suction and hydro-mechanic high-pressure inner cleaning ■ Disposal connection ND 65, counter flange with fire hose quick coupling 75B and 2½" blank cap ■ Filling device with ball valve for re-filling with fresh water ■ Hydro-mechanic inner cleaning via high-pressure pump and spray head
Hydrojet-OSE (extension stage 2 with disposal pump) 	√	manual	■ Identical to Hydrojet-OS, but with additional disposal pump with free flow impeller (required for a total delivery head of over 6 metres)
Hydrojet-OA (extension stage 3) 	√	automatic	■ Programmed, odour-free disposal/cleaning via direct suction and hydro-mechanic high-pressure inner cleaning (175 bar) ■ Disposal connection ND 65, counter flange with fire hose quick coupling 75B and 2½" blank cap ■ Filling device with solenoid valve for re-filling with fresh water ■ Hydro-mechanic inner cleaning via high-pressure pump and spray head
Hydrojet-OAE (extension stage 3 with disposal pump) 	√	automatic	■ Identical to Hydrojet-OA, but with additional disposal pump with free flow impeller (required for a total delivery head of over 6 metres)

Supplementary components: Page 60 ff.

Hydrojet OAE oval grease separator made of polyethylene for free standing installation



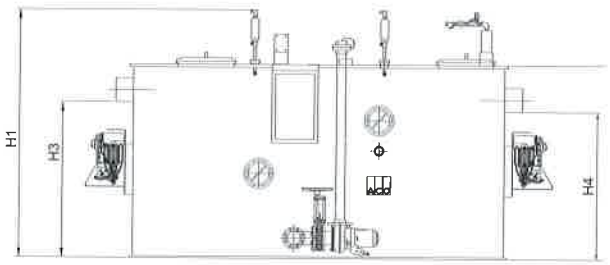
ACO Product advantages

- With two inspection windows for sludge and grease control
- With two high pressure spray heads for perfect inner body cleaning
- Disposal pump for maximum lift heights up to 18 meters with 10 m3/h disposal performance
- Control unit with presets and flexible adjustments (cleaning and filling times)

Product information

- Grease separator plant according to EN 1825 for free-standing installation in frost proof rooms
- Manufactured of welded polyethylene in oval shape
- Two odour proof maintenance openings OD 450 mm
- Inlet and outlet for plastic pipe connection
- Two inspection windows with wiper for grease and sludge control
- Automatically operated disposal pump 3,7 kW with shut-off valve, disposal connection OD 75 mm and coupling Storz B R 2 ½"
- Two automatically operated high pressure pumps 3,9 kW and high pressure spray heads with 150 bar for crushing and mixing of separator contents and cleaning of separator body
- Automatically operated filling device R ¾" (solenoid valve)
- Electric connection 400 V / 50 Hz / 16 A / 11,5 kW

Dimensional drawing



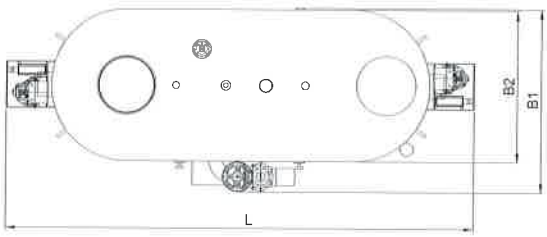


Table of dimensions

NS	Inlet/ outlet OD [mm]	Sludge trap [l]	Grease storage [l]	Total capacity [l]	Dimensions [mm] L	B1	B2	H1	H2	H3	H4	Article No. Operating side right	Article No. Operating side left
15	200	1580	630	2850	3210	1530	1340	2090	1640	1300	1230	**3815.85.42**	**3815.85.32**
20	200	2070	850	3760	3910	1530	1340	2090	1640	1300	1230	**3820.85.42**	**3820.85.32**
25	200	2550	1070	4660	4610	1530	1340	2190	1740	1300	1230	**3825.85.42**	**3825.85.32**
30	250	3020	1290	5550	5310	1530	1340	2190	1740	1300	1230	**3830.85.42**	**3830.85.32**

Hydrojet OAE oval grease separator made of polyethylene for free standing installation



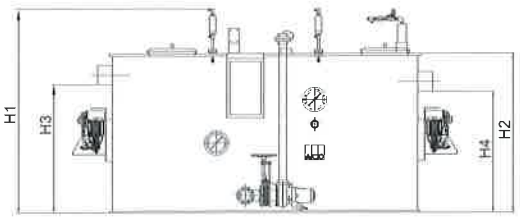
ACO Product advantages

- Each separator with two inspection windows for sludge and grease control
- Each separator with two high pressure spray heads for perfect inner body cleaning
- Each separator with disposal pump for maximum lift heights up to 18 meters with 10 m3/h disposal performance
- Each separator with control unit with presets and flexible adjustments (cleaning and filling times)

Product information

- Grease separator plant according to EN 1825 for free-standing installation in frost proof rooms
- In parallel installation, with distribution unit inlet OD 250 mm, piping and two manual valves between distribution unit and separators
- Manufactured of welded polyethylene in oval shape
- Two odour proof (each separator) maintenance openings OD 450 mm
- Inlet and outlet for plastic pipe connection
- Two inspection windows (each separator) with wiper for grease and sludge control
- Automatically operated disposal pump 3,7 kW with shut-off valve, disposal connection OD 75 mm and coupling Storz B R 2½" for each separator
- Two automatically operated high pressure pumps 3,9 kW and high pressure spray heads with 150 bar for crushing and mixing of separator contents and cleaning of separator body for each separator
- Automatically operated filling device R ¾" (solenoid valve) for each separator
- Electric connection 400 V / 50 Hz / 16 A / 11,5 kW for each separator

Dimensional drawing



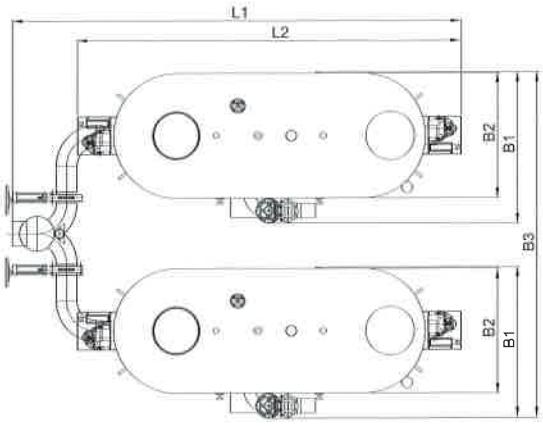


Table of dimensions

NS	Inlet/ outlet OD [mm]	Sludge trap [l]	Grease storage [l]	Total capacity [l]	Dimensions [mm] L	B1	B2	B3	H1	H2	H3	H4	Article No. Operating side right
40	200	4140	1700	7520	3910	1530	1340	3500	2090	1640	1300	1230	**3840.85.42**
50	200	5100	2140	9320	4610	1530	1340	3500	2190	1740	1300	1230	**3850.85.42**
60	250	6040	2580	11100	5310	1530	1340	3500	2190	1740	1300	1230	**3860.85.42**

Hydrojet OA oval grease separator made of polyethylene for free standing installation



ACO Product advantages

- With two inspection windows for sludge and grease control
- With two high pressure spray heads for perfect inner body cleaning
- Control unit with presets and flexible adjustments (cleaning and filling times)

Product information

- Grease separator plant according to EN 1825 for free-standing installation in frost proof rooms
- Manufactured of welded polyethylene in oval shape
- Two odour proof maintenance openings OD 450 mm
- Inlet and outlet for plastic pipe connection
- Two inspection windows with wiper for grease and sludge control
- Disposal connection OD 75 mm and coupling Storz B R 2½"
- Two automatically operated high pressure pumps 3,9 kW and high pressure spray heads with 150 bar for crushing and mixing of separator contents and cleaning of separator body
- Automatically operated filling device R ¾" (solenoid valve)
- Electric connection 400 V / 50 Hz / 16 A / 7,8 kW

Dimensional drawing

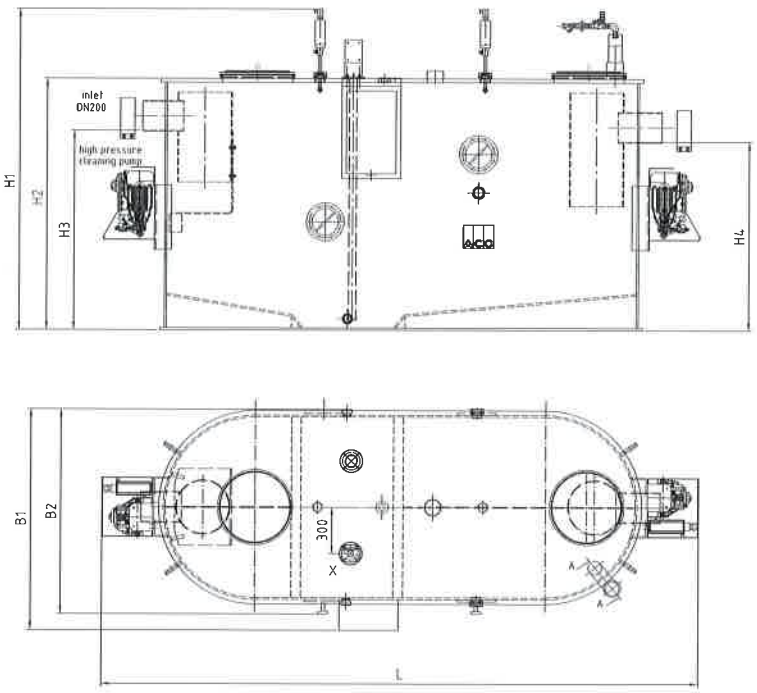


Table of dimensions

NS	Inlet/ outlet OD [mm]	Sludge trap [l]	Grease storage [l]	Total capacity [l]	Dimensions [mm] L	B1	B2	H1	H2	H3	H4	Article No. Operating side right	Article No. Operating side left
15	200	1580	630	2850	3210	1530	1340	2090	1640	1300	1230	**3815.75.42**	**3815.75.32**
20	200	2070	850	3760	3910	1530	1340	2090	1640	1300	1230	**3820.75.42**	**3820.75.32**
25	200	2550	1070	4660	4610	1530	1340	2190	1740	1300	1230	**3825.75.42**	**3825.75.32**
30	250	3020	1290	5550	5310	1530	1340	2190	1740	1300	1230	**3830.75.42**	**3830.75.32**

Parallel devices on request

Eco-Jet OD oval grease separator made of polyethylene for free standing installation



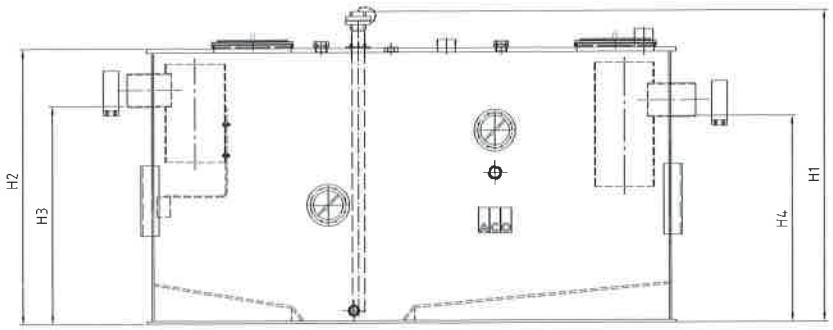
ACO Product advantages

- With two inspection windows for sludge and grease control
- Optionally with filling device
- Optionally with grease level sensor

Product information

- Grease separator plant according to EN 1825 for free-standing installation in frost proof rooms
- Manufactured of welded polyethylene in oval shape
- Two odour proof maintenance openings OD 450 mm
- Inlet and outlet for plastic pipe connection
- Two inspection windows with wiper for grease and sludge control
- Disposal connection OD 75 mm and coupling Storz B R 2 ½"

Dimensional drawing



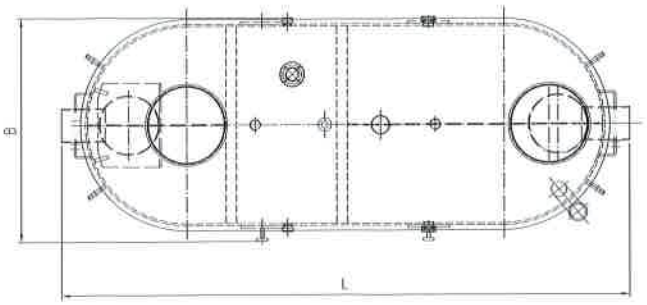


Table of dimensions

NS	Inlet/ outlet OD [mm]	Sludge trap [l]	Grease storage [l]	Total capacity [l]	Dimensions [mm] L	B	H1	H2	H3	H4	Article No. Operating side right	Article No. Operating side left
15	200	1580	630	2850	3210	1340	1850	1640	1300	1230	**3815.45.42**	**3815.45.32**
20	200	2070	850	3760	3910	1340	1850	1640	1300	1230	**3820.45.42**	**3820.45.32**
25	200	2550	1070	4660	4610	1340	1950	1740	1300	1230	**3825.45.42**	**3825.45.32**
30	250	3020	1290	5550	5310	1340	1950	1740	1300	1230	**3830.45.42**	**3830.45.32**

Parallel devices on request

Eco-Jet O oval grease separator made of polyethylene for free standing installation



ACO Product advantages

- With two inspection windows for sludge and grease control
- Optionally with filling device
- Optionally with grease level sensor

Product information

- Grease separator plant according to EN 1825 for free-standing installation in frost proof rooms
- Manufactured of welded polyethylene in oval shape
- Two odour proof maintenance openings OD 450 mm
- Inlet and outlet for plastic pipe connection
- Two inspection windows with wiper for grease and sludge control

Dimensional drawing

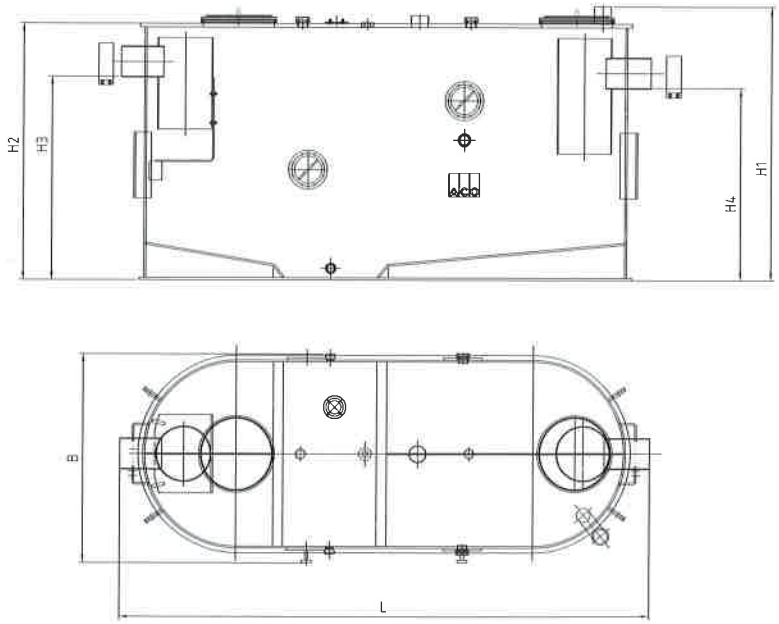


Table of dimensions

NS	Inlet/ outlet OD [mm]	Sludge trap [l]	Grease storage [l]	Total capacity [l]	Dimensions [mm] L	B	H1	H2	H3	H4	Article No. Operating side right	Article No. Operating side left
15	200	1580	630	2850	3210	1340	1750	1640	1300	1230	3815.35.42	3815.35.32
20	200	2070	850	3760	3910	1340	1750	1640	1300	1230	3820.35.42	3820.35.32
25	200	2550	1070	4660	4610	1340	1850	1740	1300	1230	3825.35.42	3825.35.32
30	250	3020	1290	5550	5310	1340	1850	1740	1300	1230	3830.35.42	3830.35.32

Parallel devices on request

ACO Lipator PE 2



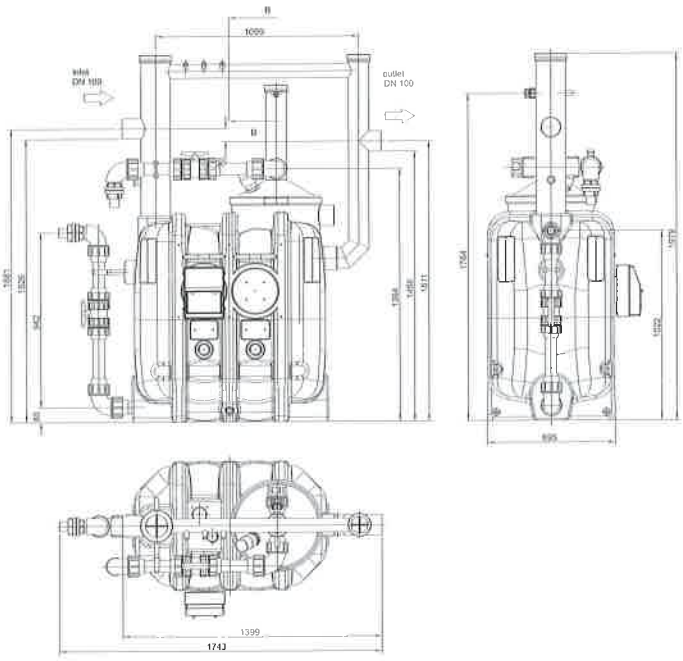
ACO Product advantages

- Compact footprint dimensions for small applications
- Easy handling and insertion
- Self-explaining and illuminated control box

Product information

- Grease separator according to EN 1825 for partial disposal of grease and sludge
- For installation in frost-free premises
- With integrated sludge trap
- Manufactured of polyethylene
- Inlet and outlet connections as per EN 877 with OD 110 mm
- With manual valves ND 50 for grease and sludge extraction
- Optionally with heating rod and control unit 1.5 kW, 230 V/50+60 Hz

Dimensions



Order information

NS	Heating rod and control	Flow rate [m³/h]	Total capacity [l]	Weight empty [kg]	Article No.
2	With	7.2	325	75	**3571.40.10**
2	Without	7.2	325	70	**3571.40.00**
Operating set consisting of four barrels and two connecting sets					**0170.30.35**
Retrofit set for pressure increase					**0170.29.87**

Lipator-PE grease separator for partial disposal made of polyethylene for free standing installation



ACO Product advantages

- Compact footprint dimensions for small applications
- Easy handling and insertion
- Self-explaining and illuminated control box
- Adjustable timer clock for flexible grease extraction

Product information

- Grease separator plant according to EN 1825 for free-standing installation in frost proof rooms
- Manufactured of welded polyethylene
- Inlet and outlet for plastic pipe connection
- With extraction valves DN 50 for grease and sludge extraction
- With heating rod and timer clock for homogenizing of grease
- Electric connection: 230 V, 50/60 Hz

Dimensional drawing

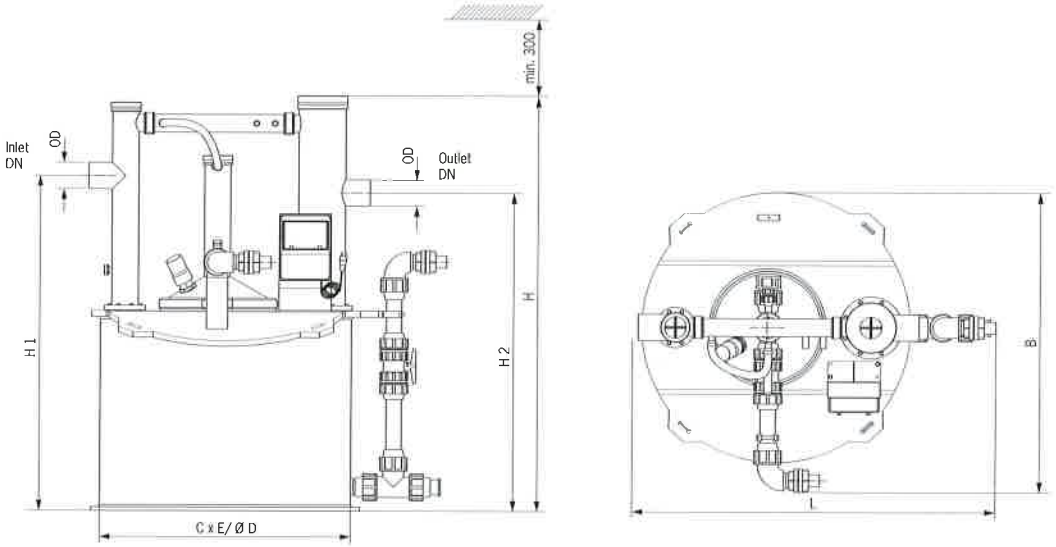


Table of dimensions

NS	Inlet/ outlet OD [mm]	Dimensions [mm]						Largest single component	Article No.
		L	B	Ø D	H	H1	H2	Ø D x H [mm]	
4	110	1500	1270	1055	1830	1400	1330	Ø 1270 x 860	**3574.40.10**
10	160	1990	1530	1525	2210	1800	1730	Ø 1660 x 660	**3580.40.10**
20	200	2240	1910	1775	2320	1900	1830	Ø 1920 x 700	**3590.40.10**
25	200	2240	1910	1775	2420	2000	1930	Ø 1920 x 700	**3595.40.10**

Lipator-VA grease separator for partial disposal made of stainless steel for free standing installation



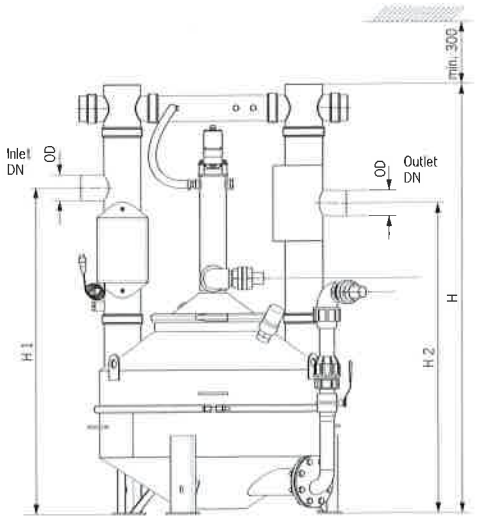
ACO Product advantages

- Compact footprint dimensions for small applications
- Easy handling and insertion
- Self-explaining and illuminated control box
- Adjustable timer clock for flexible grease extraction

Product information

- Grease separator plant according to EN 1825 for free-standing installation in frost proof rooms
- Manufactured of stainless steel, material grade 304
- Inlet and outlet for plastic pipe connection
- With extraction valves DN 50 for grease and sludge extraction
- With heating rod and timer clock for homogenizing of grease
- Electric connection:
  - 230 V, 50/60 Hz

Dimensional drawing



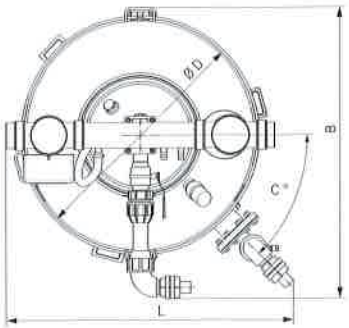


Table of dimensions

NS	Inlet/ outlet OD [mm]	Dimensions							Largest single component	Article No. with agitating device	Article No. without agitating device
		L [mm]	B [mm]	C [°]	Ø D [mm]	H [mm]	H1 [mm]	H2 [mm]	Ø D x H [mm]		
2	110	1170	970	115	640	1700	1300	1230	Ø 750 x 880	**7672.40.50**	**7672.40.10**
4	110	1240	1300	45	980	1850	1400	1330	Ø 980 x 450	**7674.40.50**	**7674.40.10**
10	160	1710	1670	45	1500	2200	1800	1730	Ø 1500 x 650	**7680.40.50**	**7680.40.10**
20	200	1950	1880	45	1750	2320	1900	1830	Ø 1750 x 780	**7690.45.50**	**7690.40.10**
25	200	1950	1880	45	1750	2420	2000	1930	Ø 1750 x 780	**7695.40.50**	**7695.40.10**

Product overview

Lipatomat-PE grease separator for partial disposal made of polyethylene for free standing installation



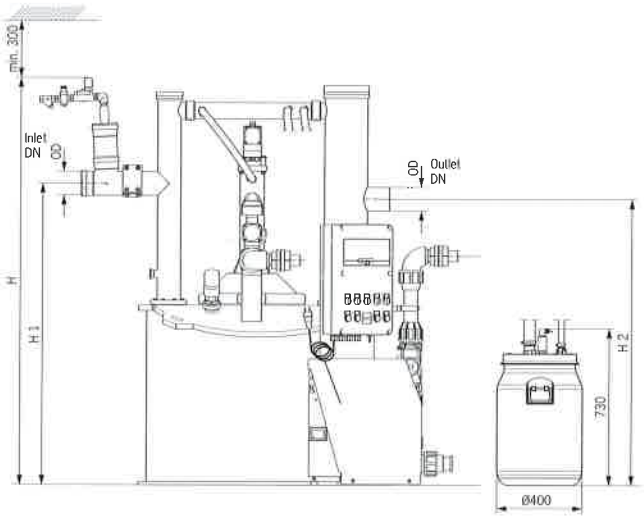
ACO Product advantages

- Compact footprint dimensions for small applications
- Easy handling and insertion
- Self-explaining and illuminated control box
- Adjustable timer clock for flexible grease extraction
- Automated grease and sludge extraction

Product Information

- Grease separator plant according to EN 1825 for free-standing installation in frost proof rooms
- Manufactured of welded polyethylene
- Inlet and outlet for plastic pipe connection
- With automated grease and sludge extraction
- With hoses and four tanks 60 liters for grease and sludge collection
- With agitating device and scraper
- With heating rod and timer clock for homogenizing of grease
- Electric connection: 230 V, 50/60 Hz

Dimensional drawing



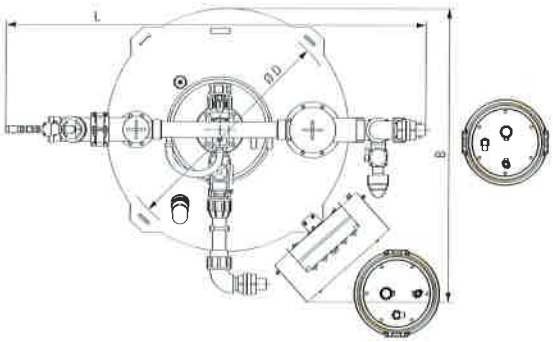


Table of dimensions

NS	Inlet/outlet OD	Dimensions [mm]						Largest single component	Article No.
	[mm]	L	B	Ø D	H	H1	H2	Ø D x H [mm]	
4	110	1950	1350	1060	1850	1400	1330	Ø 1270 x 860	**3574.70.10**
10	160	250	1850	1530	2320	1800	1730	Ø 1660 x 660	**3580.70.10**
20	200	2750	2050	1780	2560	1900	1830	Ø 1920 x 700	**3590.70.10**
25	200	2750	2050	1780	2660	2000	1930	Ø 1920 x 700	**3595.70.10**

Lipatomat-VA grease separator for partial disposal made of stainless steel for free standing installation



ACO Product advantages

- Compact footprint dimensions for small applications
- Easy handling and insertion
- Self-explaining and illuminated control box
- Adjustable timer clock for flexible grease extraction
- Automated grease and sludge extraction

Product information

- Grease separator plant according to EN 1825 for free-standing installation in frost proof rooms
- Manufactured of stainless steel, material grade 304
- Inlet and outlet for plastic pipe connection
- With automated grease and sludge extraction
- With hoses and four tanks 60 liters for grease and sludge collection
- With agitating device and scraper
- With heating rod and timer clock for homogenizing of grease
- Electric connection: 230 V, 50/60 Hz

Dimensional drawing

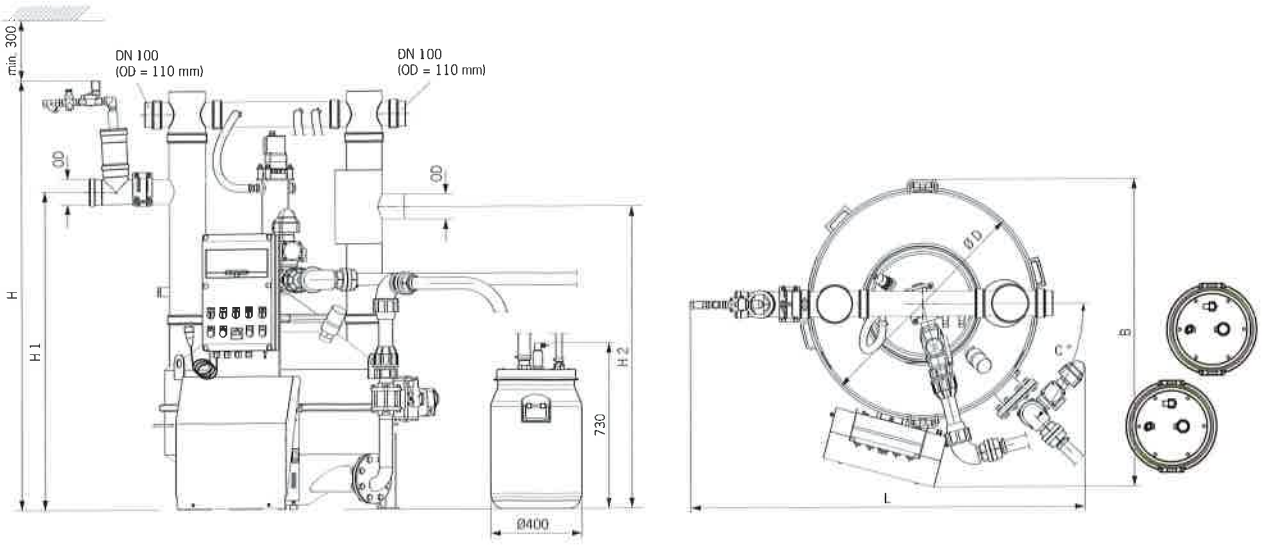


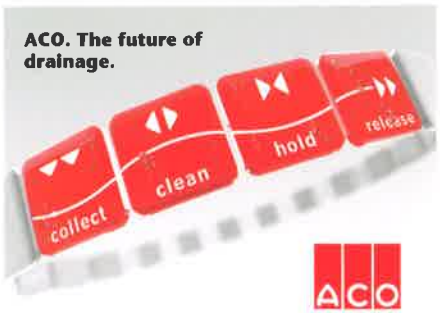
Table of dimensions

NS	Inlet/outlet OD	Dimensions							Largest single component	Article No.
	[mm]	L [mm]	B [mm]	C [°]	Ø D [mm]	H [mm]	H1 [mm]	H2 [mm]	Ø D x H [mm]	
2	110	1170	970	115	640	1700	1300	1230	Ø 750 x 880	**7672.70.10**
4	110	1240	1300	45	980	1850	1400	1330	Ø 980 x 450	**7674.70.10**
10	160	1710	1670	45	1500	2200	1800	1730	Ø 1500 x 650	**7680.70.10**
20	200	1950	1880	45	1750	2320	1900	1830	Ø 1750 x 780	**7690.70.10**
25	200	1950	1880	45	1750	2420	2000	1930	Ø 1750 x 780	**7695.70.10**

Supplementary components

	Designation	To fit	Description	Article no.
	Grease level sensor	■ Eco-Jet/Hydrojet	■ For electronic measurement of grease layer ■ Suitable for liquid and/or congealing grease ■ Measuring device with cable, length: 3 m ■ With two isolated change-over contacts to display full warning (80%) and advance warning of fill level (50%) ■ With visual display of fill level ■ With heated probe rod to increase operating reliability ■ Operating voltage: 230 VAC/5 VA ■ Max. consumption: 12 W	**3300.11.50**
	Signalling unit with GSM module	■ Grease separators extension stage 3 ■ Measuring equipment for grease layer thickness	■ Mains-independent ■ Visible and audible alarm signals ■ 6 digital & 2 analogue freely configurable inputs ■ 1 alarm output 12 V ■ Includes GSM antenna (2.5 m cable) ■ Relaying alarms to mobile phones by SMS ■ For mounting outside the ex area ■ Housing: 155 x 180 x 103 mm ■ Slot for standard SIM card ■ Protection type: IP 54 (with mounted antenna plug IP 44) ■ Operating voltage: 230 V/AC 50/60 Hz	**0150.46.94**
	Heating rod	■ Grease separators	■ To liquefy grease layer ■ Incl. control ■ Electrical connection □ 400 V/50 Hz/16 A/6.0 kW	**7300.01.00**
	Filling device	■ Eco-Jet-O, -OD, -R, -RD grease separators	■ Free outlet according to DIN 1988 Part 4 ■ For connection to drinking water supply ■ With ball valve R ¾ " ■ With pressure relief valve	**3300.11.22**
		■ Lipurex-O, -OD, -R, -RD grease separators	■ Free outlet according to DIN 1988 Part 4 ■ For connection to drinking water supply ■ With ball valve R ¾ " ■ With pressure relief valve	**7602.00.25**
		■ Eco-Jet G/GD	■ Free outlet according to DIN 1988 Part 4 ■ For connection to drinking water supply ■ With ball valve R ¾ " ■ With pressure relief valve	**0153.06.76**

	Designation	To fit	Description	Article no.
	Remote control	■ Lipurat/Hydrojet-OA/RA/OAE/RAE grease separators	■ For inside assembly or mounting in connection boxes ■ Control line without local protective conductor □ Up to 50 m: 7 x 1.0 mm² □ 50 – 200 m: 7 x 1.5 mm² ■ IP 54 protection type ■ Weight: 1 kg	**0150.59.89**
	Connection box	■ Grease separators ■ Starch separators	■ For disposal connection and remote control ■ Made of stainless steel, material grade 304 ■ Fixing: "on-wall" ■ Dimensions (width x height x depth): 500 x 500 x 160 mm	**7601.80.20**
	In-wall frame	■ Connection box □ 7601.80.22	■ Made of stainless steel, material grade 304 ■ Dimensions (width x height x depth): 421 x 381 x 25 mm	**7601.80.21**
	Inspection window	■ Eco-Jet-O, -OD, -R, -RD grease separators	■ Nominal width: ND 200 ■ With wiper ■ Weight: 5 kg	**3300.11.10**
	Inspection window	■ Lipurex-O, -OD, -R, -RD grease separators	■ Nominal width: ND 200 ■ With wiper ■ Weight: 5 kg	**7602.00.26**



Every product from ACO Haustechnik integrates into the ACO system chain

Drainage

- Floor drainage
- Bath drainage
- Backflow systems
- Roof drainage
- Parking deck drainage
- Balcony and terrace drainage
- Pipe systems

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- Grease separators
- Starch separators
- Light liquid separators
- Process technology

Pumping

- Lifting plants
- Pumping stations

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