



5.1 Grease separators

Removal of fats, oils and grease
from kitchen wastewater





Everything specialists need to know

Why you need a grease separator



Areas of application

- Kitchen operations and large-scale catering establishments, e.g. restaurants, hotels, canteens, motorway service stations
- Butchers
- Slaughterhouses / Abattoirs
- Soap and stearin factories
- Cooking oil refineries
- Canning factories
- ... and many more

Statutory provision

Grease separators are required by law for fat, oil and grease contaminated wastewater streams from commercial kitchens.

Pipe blockages, corrosion and odour formation

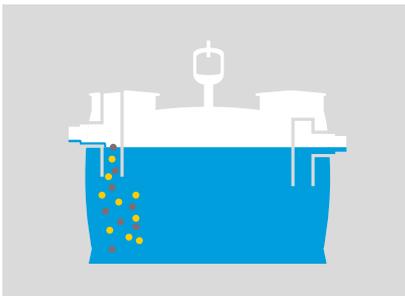
Fat, oil, grease and food residue entering the building's wastewater drainage pipe system results in build-up, blockage and odour issues which are difficult to handle. This results in corrosion or complete failure of the drainage pipe system.

Environmental protection

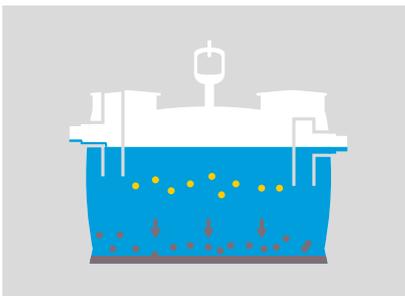
Grease separators prevent the environment from being contaminated by greasy wastewater and contribute to the trouble-free operation of sewage treatment plants.

Operation of a grease separator

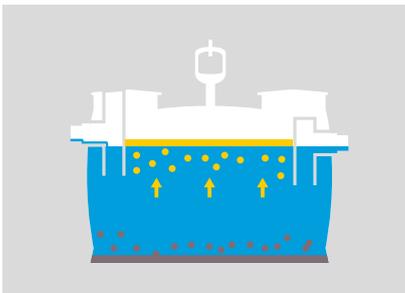
The operation of grease separators is based on the gravity principle. Lighter than water oil and grease float to the surface of the separator, heavier than water flood sludge settle to the bottom of the separator and the clean treated water leaves the separator via a protected outlet.



The contaminated wastewater is routed into the grease separator where it is slowed down by a deflector plate.



Substances that are heavier than water sink to the bottom and settle in the sludge trap.



Grease and oil rise to the top and form a grease layer that is retained between the inlet and outlet.

Polymer grease separators

Polymer grease separator systems are an advantageous alternative to stainless steel solutions as they 100 % corrosion free.

The polyethylene material used is resistant to aggressive fatty acids – and therefore particularly durable. In addition to the statutory provision, we provide a 20-year warranty with regard to the leak tightness and structural safety of tanks and upper sections.



Grease separator disposal - the right choice

Grease separators must be completely emptied on a regular basis to dispose of the retained waste materials. The options range from a basic system with manual disposal to a fully automatic disposal system.

Direct disposal

Enables the extraction of the grease separator contents through a permanently installed disposal pipe without opening the tank.

Shredder-Mix-System

Fully mixes the contents of the grease separator into a slurry to aide in the disposal process.

Control unit

Enables the convenient setting and control of the grease separator functions using a control unit mounted on the wall.

Disposal pump

Handles the disposal of the grease separator in the case of longer distances between the separator and the disposal truck.

Fully automatic

Controls the disposal and rinsing processes fully automatically.

Disposal options	EasyClean free (Basic)		EasyClean free			
	Standard	Direct	Mix	Auto Mix	Mix & Pump	Auto Mix & Pump
Connection for direct disposal		✓	✓	✓	✓	✓
Shredder-Mix-System			✓	✓	✓	✓
Control unit				✓	✓	✓
Disposal pump					✓	✓
Fully automatic						✓

Connection to the drainage system

with a lifting station or a hybrid lifting station.

Separator outlet below sewer level – lifting station required



- 1 Properly sized lifting station
- 2 Two 45° curved fittings
- 3 Wastewater calming section
- 4 Connected drainage fixtures

Separator outlet above sewer level- hybrid lifting station required



- 1 Properly sized hybrid lifting station
- 2 Two 45° curved fittings
- 3 Wastewater calming section
- 4 Connected drainage fixtures

The wastewater must flow into the grease separator system with gravity. Grease separator systems whose water level is below the backwater level (see EN 752-1) or sewer level should be connected to a properly sized lifting station (shown as 1 in the illustration).

The wastewater pipes to the separator systems must have a gradient of at least 2 % (1:50) to prevent grease blockage. If this is not possible for constructional or operational reasons, and/or if longer pipes are necessary, suitable measures must be taken to prevent grease blockages and deposits. The transition from downpipes to horizontal pipes must be handled with two 45° curved fittings with a large radius. A wastewater calming section, the length of which corresponds to at least the 10-fold of the inlet pipe's nominal width in millimetres, must then be provided immediately before the inlet of the separator.

Discharge points, such as floor drains, must be equipped with odour traps and, if necessary, with sludge buckets that can be removed for cleaning.

Grease separators *EasyClean free*

The versatile solution for free-standing installation

The KESSEL grease separator *EasyClean free* combines ease of installation, cleaning performance and energy efficiency. The narrow tank shape offers two advantages: 1) the complete technology can be integrated on the base area of the separator. 2) easier to transport the grease separator through narrow entranceways and set it up directly against the wall, saving a great deal of space.



Improved access thanks to the curved shape

Also ideal for retrofitting and renovation work in rooms with very narrow access.

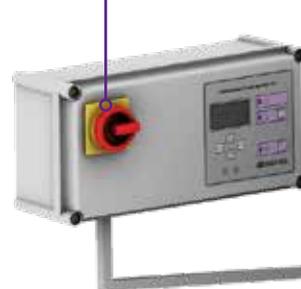
Remote control

located at the disposal truck connection.



Control unit

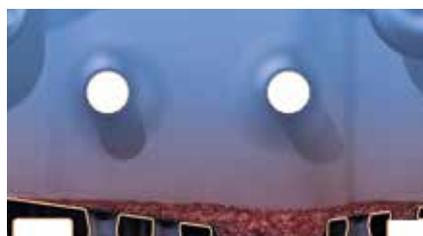
with multilingual (EN, DE, FR, IT, PL, NL) digital display for operating state and servicing instructions as well as connection option for building management system.



Improved cleaning results

Integrated sloped base for extraction at the lowest point (only 3 litres residual sludge volume).

For nominal sizes NS 2 - NS 10.



Grease separators 60 Hz/400 V

Now also available in 60 Hz. For more information contact us at info@kessel.com

Refill unit

Hot water for cleaning and cold water for refilling the separator after disposal.

Resistant to aggressive grease

The polyethylene material used is 100% resistant to aggressive grease. This guarantees a long service life since there is no damage to the material due to corrosion.

SonicControl

for the measurement, display and control of the grease layer thickness in a grease separator.



Planning made easy!

Direction of flow can be changed on site by swapping inlet and outlet.

**Polyethylene
Warranty
20 Years**

Shredder-Mix-System

serves to mix and clean the tank contents without odor emission during disposal. 13-steps fully automated disposal (adjustable steps to meet site requirements)

Warranty

KESSEL offers a factory extended warranty of 20 years on the polyethylene grease separator tanks.

Grease separator *EasyClean* free Auto Mix & Pump NS 2 – 10 for free-standing installation



EN 1825

Tank

Manufactured from virgin, non-recycled polyethylene, for free standing installation in frost protected areas, with integrated sludge trap, sloped interior base improves cleaning and reduces disposal time, inlet flow calming system and outlet flow regulation device, inlet and outlet interchangeable, slanted twin access covers with quick release odour tight snap closures, inspection window with interior cleaning arm, 75 mm OD PN 10 pressure disposal pipe, with integrated fork lift grips at base of separator, low weight - compact design, 100 % corrosion free polyethylene body construction (20 year warranty).

Disposal System

Auto Mix & Pump version fully automated odour free disposal, cleaning and refilling system at touch of button, maintenance free macerating pump (stainless steel blades) for separator cleaning and disposal, includes closure valve for easy pump removal, pump floor mount included with installation hardware and anti-vibration matt, actuator valve for automated transfer from cleaning to disposal mode, pumping capacity 3.0 kW (stronger pumps available on re-quest), 5 m cable length, top mounted water jet(s) for grease layer breakup and water spray nozzles for interior wall cleaning during disposal, twin 1 inch solenoid valves for connection of cold and hot water pipes to separator, 1 inch interior threaded refill inlet with air gap.

Control Unit with LCD display control settable in English, German, French, Italian, Dutch or Polish language and mains power safety on / off switch, with BMS connections.

Delivery: System completely assembled.

➤ **Accessories:** Sampling chamber, remote control, *TeleControl* pages 341 – 343, lifting stations see chapter "3"

➤ **Technical note:** page 340

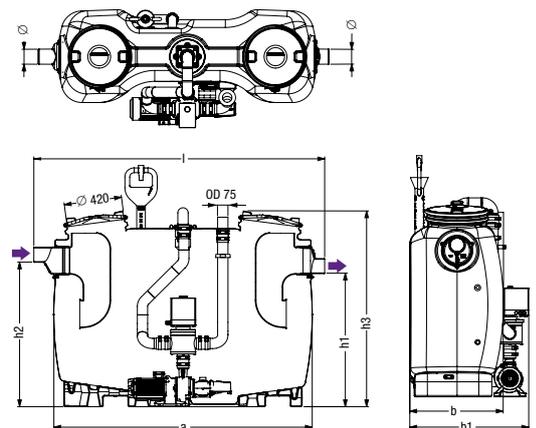
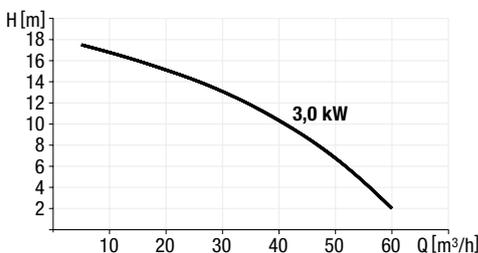
➤ **Note:** Also available in 60 Hz / 400 V



without SonicControl *with SonicControl*

NS	Art. no.	Art. no.
NS 2	93 002.01/PVS	93 002.02/PVS
NS 3	93 003.01/PVS	93 003.02/PVS
NS 4	93 004.01/PVS	93 004.02/PVS
NS 7	93 007.01/PVS	93 007.02/PVS
NS 10	93 010.01/PVS	93 010.02/PVS

Pumping capacity



NS	Ø (mm)	a (mm)	Installation dimension				Weight (kg)	Sludge trap (l)	Water and grease (l)	Grease storage (l)	Total (l)	
			l × b (mm)	b1 (mm)	h1 (mm)	h2 (mm)						h3 (mm)
2	110	1500	1735 × 680	860	985	1055	1435	160	200	400	100	600
3	110	1500	1735 × 680	860	985	1055	1435	165	300	300	120	600
4	110	1880	2115 × 680	860	985	1055	1435	178	400	400	160	800
7	160	1910	2145 × 940	1130	1185	1255	1655	226	700	650	280	1350
10	160	2590	2820 × 940	1130	1185	1255	1655	272	1000	900	400	1900

Ø = Outer diameter b1 = Set-up dimensions

Grease separator *EasyClean* free Auto Mix & Pump NS 15 – 50

for free-standing installation



EN 1825

Tank

Manufactured from virgin, non-recycled polyethylene, for free-standing installation in frost-protected areas, with integrated sludge trap and sloped base for fast and clean disposal, with two domed covers made of polymer, with quick-release closures, sealed odour-tight, with suction device installed for the joint disposal of contents of sludge trap and grease separator chamber, intake pipe 75 mm OD PN 10 in accordance with DIN 2501, Storz-B coupling R 2 1/2 for connection to the disposal vehicle. Inspection window with wiper. Inlet and outlet \varnothing 200 / 250 mm for the connection to PE-HD pipes according to DIN 19537, HT pipes according to DIN 19560, PP or AS.

Disposal System

Auto Mix & Pump with program-controlled disposal and rinsing device and Shredder-Mix-System, KESSEL disposal system Auto Mix & Pump with switching distribution and actuator valve, mixing and rinsing device via jet and conic nozzles, external pump(s) 3.0 kW (IP55, 400 V, 50 Hz; stronger pumps available on request) with integrated chopping mechanism and closure valve, 5 m cable length, 2 solenoid valves 1", with refill inlet in accordance with DIN 1988.

Control Unit for actuating the pump(s) with potential-free contact.

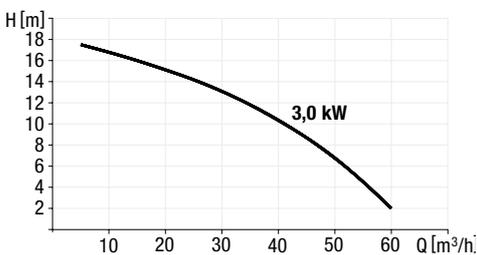
Delivery: System completely assembled.

➤ **Accessories:** Sampling chamber, remote control, *TeleControl*, *SonicControl* level sensing system pages 341 – 343, lifting stations see chapter "3"

➤ **Technical note:** page 340

➤ **Note:** Also available in 60 Hz / 400 V

Pumping capacity



without *SonicControl*

NS	Art. no.
NS 15	93 015.01/PVS
NS 20	93 020.01/PVS
NS 25	93 025.01/PVS
NS 30	93 030.01/PVS
NS 35	93 035.01/PVS
NS 40	93 040.01/PVS
NS 50	93 050.01/PVS

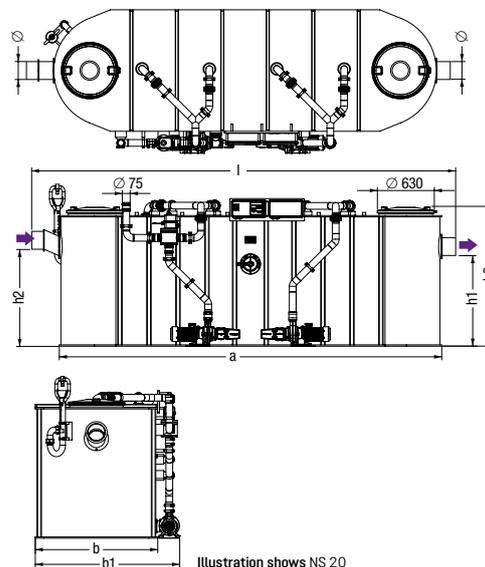


Illustration shows NS 20

NS	\varnothing (mm)	a (mm)	Installation dimension l × b (mm)	b1 (mm)	h1 (mm)	h2 (mm)	h3 (mm)	Sludge trap (l)	Water and grease (l)	Grease storage (l)	Total (l)
15	200	3300	3560 × 1350	1620	1130	1200	1625	1500	2300	600	3800
20	200	4250	4510 × 1350	1620	1030	1100	1525	2000	3050	800	5050
25	200	4500	4760 × 1350	1620	1030	1100	1525	2500	2830	1000	5330
30	250	4600	4860 × 1350	1620	1170	1240	1655	3000	2650	1200	5650
35	250	6000	6480 × 1500	1770	1130	1200	1662	3500	4500	1400	8000
40	250	6200	6680 × 1600	1870	1130	1200	1662	4000	5000	1600	9000
50	250	6200	6680 × 1800	2070	1350	1420	1882	5000	6200	2240	11200

\varnothing = Outer diameter b1 = Set-up dimensions

Grease separator *EasyClean* free Mix & Pump NS 2 – 10

for free-standing installation



EN 1825

Tank

Manufactured from virgin, non-recycled polyethylene, for free standing installation in frost protected areas, with integrated sludge trap, sloped interior base improves cleaning and reduces disposal time, inlet flow calming system and outlet flow regulation device, inlet and outlet interchangeable, slanted twin access covers with quick release odour tight snap closures, inspection window with interior cleaning arm, 75 mm OD PN 10 pressure disposal pipe, with integrated fork lift grips at base of separator, low weight - compact design, 100 % corrosion free polyethylene body construction (20 year warranty).

Disposal System

Mix & Pump version manually controlled odour free disposal, cleaning and refilling system at touch of button, maintenance free macerating pump (stainless steel blades) for separator cleaning and disposal, includes closure valve for easy pump removal, pump floor mount included with installation hardware and anti-vibration matt, manual hand valve for transfer from cleaning to disposal mode, pumping capacity 3.0 kW (stronger pumps available on request), 5 m cable length, top mounted water jet(s) for grease layer breakup and water spray nozzles for interior wall cleaning during disposal, 1 inch manual hand valve for water refill, 1 inch interior threaded refill inlet with air gap.

Control Unit with LCD display control settable in English, German, French, Italian, Dutch or Polish language and mains power safety on/off switch, with BMS connections.

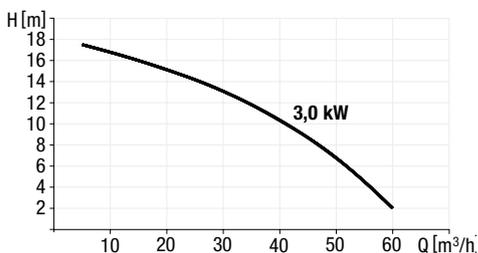
Delivery: System completely assembled.

➤ **Accessories:** Sampling chamber pages 341 – 343, lifting stations see chapter "3"

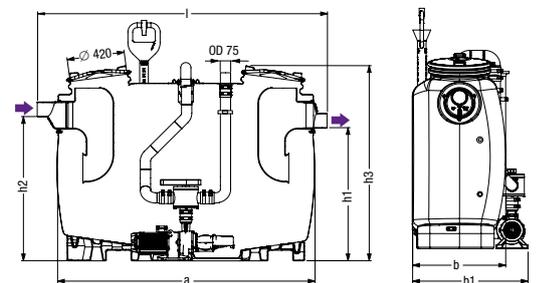
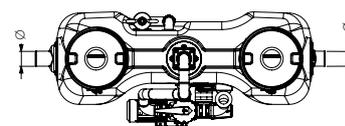
➤ **Technical note:** page 340

➤ **Note:** Also available in 60 Hz / 400 V

Pumping capacity



NS	without <i>SonicControl</i>	with <i>SonicControl</i>
	Art. no.	Art. no.
NS 2	93 002.01/MS	93 002.02/MS
NS 3	93 003.01/MS	93 003.02/MS
NS 4	93 004.01/MS	93 004.02/MS
NS 7	93 007.01/MS	93 007.02/MS
NS 10	93 010.01/MS	93 010.02/MS



NS	Ø (mm)	a (mm)	Installation dimension				Weight (kg)	Sludge trap (l)	Water and grease (l)	Grease storage (l)	Total (l)	
			l × b (mm)	b1 (mm)	h1 (mm)	h2 (mm)						
2	110	1500	1735 × 680	860	985	1055	1435	155	200	400	100	600
3	110	1500	1735 × 680	860	985	1055	1435	160	300	300	120	600
4	110	1880	2115 × 680	860	985	1055	1435	173	400	400	160	800
7	160	1910	2145 × 940	1130	1185	1255	1655	221	700	650	280	1350
10	160	2590	2820 × 940	1130	1185	1255	1655	267	1000	900	400	1900

Ø = Outer diameter b1 = Set-up dimensions

Grease separator *EasyClean* free Mix & Pump NS 15 – 50

for free-standing installation



EN 1825

Tank

Manufactured from virgin, non-recycled polyethylene, for free-standing installation in frost-protected areas, with integrated sludge trap and sloped base for fast and clean disposal, with two domed covers made of polymer, with quick-release closures, sealed odour-tight, with suction device installed for the joint disposal of contents of sludge trap and grease separator chamber, intake pipe 75 mm OD PN 10 in accordance with DIN 2501, Storz-B coupling R 2 1/2 for connection to the disposal vehicle. Inspection window with wiper. Inlet and outlet \varnothing 200 / 250 mm for the connection to PE-HD pipes according to DIN 19537, HT pipes according to DIN 19560, PP or AS.

Disposal System

Mix & Pump with manual disposal and rinsing device and Shredder-Mix-System, KESSEL disposal system Mix & Pump with switching distribution, mixing and rinsing device via jet and conic nozzles, external pump(s), with integrated chopping mechanism and closure valve, pumping capacity 3.0 kW (stronger pumps available on request), 5 m cable length, refill inlet in accordance with DIN 1988.

Control Unit for actuating the pump(s).

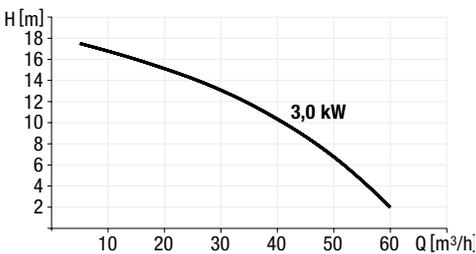
Delivery: System completely assembled.

➤ **Accessories:** Sampling chamber, *SonicControl* level sensing system pages 341 – 343, lifting stations see chapter "3"

➤ **Technical note:** page 340

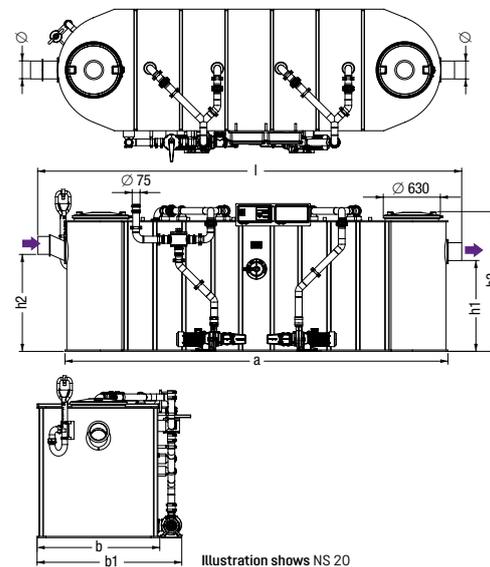
➤ **Note:** Also available in 60 Hz / 400 V

Pumping capacity



without *SonicControl*

NS	Art. no.
NS 15	93 015.01/MS
NS 20	93 020.01/MS
NS 25	93 025.01/MS
NS 30	93 030.01/MS
NS 35	93 035.01/MS
NS 40	93 040.01/MS
NS 50	93 050.01/MS



NS	\varnothing (mm)	a (mm)	Installation dimension l × b (mm)	b1 (mm)	h1 (mm)	h2 (mm)	h3 (mm)	Sludge trap (l)	Water and grease (l)	Grease storage (l)	Total (l)
15	200	3300	3560 × 1350	1620	1130	1200	1625	1500	2300	600	3800
20	200	4250	4510 × 1350	1620	1030	1100	1525	2000	3050	800	5050
25	200	4500	4760 × 1350	1620	1030	1100	1525	2500	2830	1000	5330
30	250	4600	4860 × 1350	1620	1170	1240	1655	3000	2650	1200	5650
35	250	6000	6480 × 1500	1770	1130	1200	1662	3500	4500	1400	8000
40	250	6200	6680 × 1600	1870	1130	1200	1662	4000	5000	1600	9000
50	250	6200	6680 × 1800	2070	1350	1420	1882	5000	6200	2240	11200

\varnothing = Outer diameter b1 = Set-up dimensions

Grease separators *EasyClean* free Auto Mix NS 2 – 10 for free-standing installation



EN 1825

Tank

Manufactured from virgin, non-recycled polyethylene, for free standing installation in frost protected areas, with integrated sludge trap, sloped interior base improves cleaning and reduces disposal time, inlet flow calming system and outlet flow regulation device, inlet and outlet interchangeable, slanted twin access covers with quick release odour tight snap closures, inspection window with interior cleaning arm, 75 mm OD PN 10 pressure disposal pipe, with integrated fork lift grips at base of separator, low weight - compact design, 100% corrosion free polyethylene body construction (20 year warranty).

Disposal System

Auto Mix version with simultaneous mixing and cleaning of separator interior - requires disposal truck with vacuum system for separator disposal, disposal is completely odour free, maintenance free macerating pump (stainless steel blades) includes closure valve for easy pump removal, pump floor mount included with installation hardware and anti-vibration matt, top mounted water jet(s) for grease layer breakup and water spray nozzles for interior wall cleaning during disposal, 1 inch interior thread refill inlet with air gap, pumping capacity 3.0 kW (stronger pumps available on request), 5 m cable length, twin 1 inch solenoid valves for connection of cold and hot water pipes to separator, with remote control offering full separator disposal control from remote location (from disposal truck location).

Control Unit with LCD display control settable in English, German or French language and mains power safety on/off switch, with BMS connections.

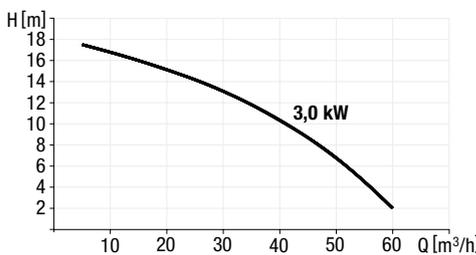
Delivery: System completely assembled.

➤ **Accessories:** Sampling chamber, remote control, *TeleControl* pages 341 – 343, lifting stations see chapter "3"

➤ **Technical note:** page 340

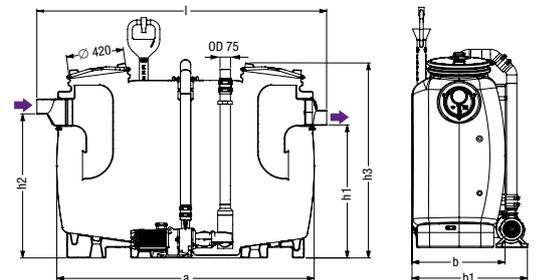
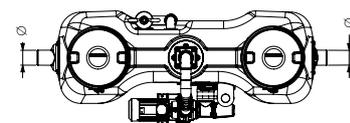
➤ **Note:** Also available in 60 Hz / 400 V

Pumping capacity



without SonicControl *with SonicControl*

NS	Art. no.	Art. no.
NS 2	93 002.01/DSP	93 002.02/DSP
NS 3	93 003.01/DSP	93 003.02/DSP
NS 4	93 004.01/DSP	93 004.02/DSP
NS 7	93 007.01/DSP	93 007.02/DSP
NS 10	93 010.01/DSP	93 010.02/DSP



NS	Ø (mm)	a (mm)	Installation dimension				Weight (kg)	Sludge trap (l)	Water and grease (l)	Grease storage (l)	Total (l)	
			l × b (mm)	b1 (mm)	h1 (mm)	h2 (mm)						h3 (mm)
2	110	1500	1735 × 680	860	985	1055	1435	150	200	400	100	600
3	110	1500	1735 × 680	860	985	1055	1435	155	300	300	120	600
4	110	1880	2115 × 680	860	985	1055	1435	168	400	400	160	800
7	160	1910	2145 × 940	1130	1185	1255	1655	216	700	650	280	1350
10	160	2590	2820 × 940	1130	1185	1255	1655	262	1000	900	400	1900

Ø = Outer diameter b1 = Set-up dimensions

Grease separator *EasyClean* free Auto Mix NS 15 – 50

for free-standing installation



EN 1825

Tank

Manufactured from virgin, non-recycled polyethylene, for free-standing installation in frost-protected areas, with integrated sludge trap and sloped base for fast and clean disposal, with two domed covers made of polymer, with quick-release closures, sealed odour-tight, with suction device installed for the joint disposal of contents of sludge trap and grease separator chamber, intake pipe 75 mm OD PN 10 in accordance with DIN 2501, Storz-B coupling R 2 1/2 for connection to the disposal vehicle.

2 solenoid valves 1", inspection window with wiper, viewing window with wiper. Inlet and outlet \varnothing 200 / 250 mm for the connection to PE-HD pipes according to DIN 19537, HT pipes according to DIN 19560, PP or AS.

Disposal System

Auto Mix with direct disposal and Shredder-Mix-System, KESSEL Shredder-Mix-System with mixing and rinsing via jet and conic nozzles, external pump(s), with integrated chopping mechanism and closure valve, pumping capacity 3.0 kW (stronger pumps available on request), 5 m cable length, refill inlet in accordance with DIN 1988, R 1 connection.

Control Unit for actuating the pump(s) and the solenoid valves.

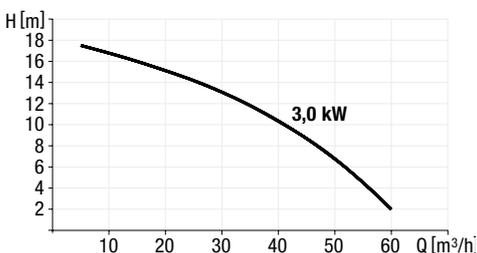
Delivery: System completely assembled.

➤ **Accessories:** Sampling chamber, remote control, *TeleControl*, *SonicControl* level sensing system page s341 – 343, lifting stations see chapter "3"

➤ **Technical note:** page 340

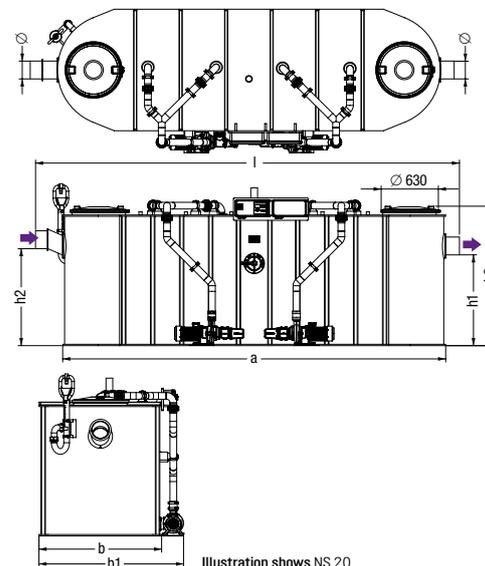
➤ **Note:** Also available in 60 Hz / 400 V

Pumping capacity



without *SonicControl*

NS	Art. no.
NS 15	93 015.01/DSP
NS 20	93 020.01/DSP
NS 25	93 025.01/DSP
NS 30	93 030.01/DSP
NS 35	93 035.01/DSP
NS 40	93 040.01/DSP
NS 50	93 050.01/DSP



NS	\varnothing (mm)	a (mm)	Installation dimension l × b (mm)	b1 (mm)	h1 (mm)	h2 (mm)	h3 (mm)	Sludge trap (l)	Water and grease (l)	Grease storage (l)	Total (l)
15	200	3300	3560 × 1350	1620	1130	1200	1625	1500	2300	600	3800
20	200	4250	4510 × 1350	1620	1030	1100	1525	2000	3050	800	5050
25	200	4500	4760 × 1350	1620	1030	1100	1525	2500	2830	1000	5330
30	250	4600	4860 × 1350	1620	1170	1240	1655	3000	2650	1200	5650
35	250	6000	6480 × 1500	1770	1130	1200	1662	3500	4500	1400	8000
40	250	6200	6680 × 1600	1870	1130	1200	1662	4000	5000	1600	9000
50	250	6200	6680 × 1800	2070	1350	1420	1882	5000	6200	2240	11200

\varnothing = Outer diameter b1 = Set-up dimensions

Grease separators *EasyClean* free Mix NS 2 – 10 for free-standing installation



EN 1825

Tank

Manufactured from virgin, non-recycled polyethylene, for free standing installation in frost protected areas, with integrated sludge trap, sloped interior base improves cleaning and reduces disposal time, inlet flow calming system and outlet flow regulation device, inlet and outlet interchangeable, slanted twin access covers with quick release odour tight snap closures, inspection window with interior cleaning arm, 75 mm OD PN 10 pressure disposal pipe, with integrated fork lift grips at base of separator, low weight - compact design, 100 % corrosion free polyethylene body construction (20 year warranty).

Disposal System

Mix version with simultaneous mixing and cleaning of separator interior - requires disposal truck with vacuum system for separator disposal, disposal is completely odour free, maintenance free macerating pump (stainless steel blades) includes closure valve for easy pump removal, pump floor mount included with installation hardware and anti-vibration matt, pumping capacity 3.0 kW (stronger pumps available on request), 5 m cable length, top mounted water jet(s) for grease layer breakup and water spray nozzles for interior wall cleaning during disposal, 1 inch interior thread refill inlet with air gap, 1 inch manual hand valve for water refill, with hand held operation controller.

Delivery: System completely assembled.

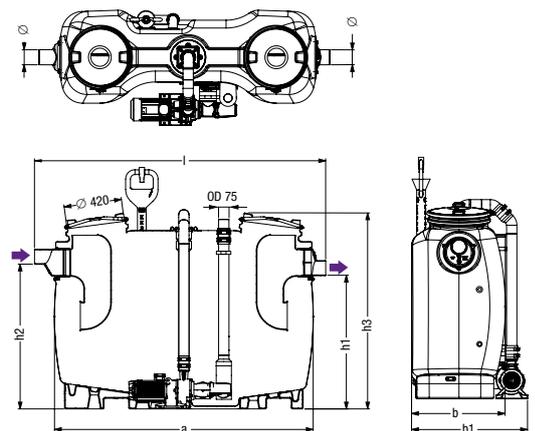
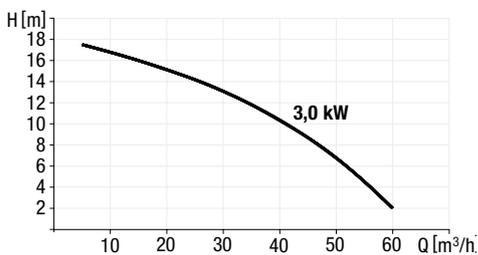
- **Accessories:** Sampling chamber, inspection window pages 341 – 343, lifting stations see chapter "3"
- **Technical note:** page 340
- **Note:** Also available in 60 Hz / 400 V



without SonicControl *with SonicControl*

NS	Art. no.	Art. no.
<i>Without inspection window</i>		
NS 2	93 002.01/DS	93 002.02/DS
NS 3	93 003.01/DS	93 003.02/DS
NS 4	93 004.01/DS	93 004.02/DS
NS 7	93 007.01/DS	93 007.02/DS
NS 10	93 010.01/DS	93 010.02/DS
<i>With inspection window</i>		
NS 2	93 002.31/DS	93 002.32/DS
NS 3	93 003.31/DS	93 003.32/DS
NS 4	93 004.31/DS	93 004.32/DS
NS 7	93 007.31/DS	93 007.32/DS
NS 10	93 010.31/DS	93 010.32/DS

Pumping capacity



NS	Ø (mm)	a (mm)	Installation dimension				Weight (kg)	Sludge trap (l)	Water and grease (l)	Grease storage (l)	Total (l)	
			l × b (mm)	b1 (mm)	h1 (mm)	h2 (mm)						h3 (mm)
2	110	1500	1735 × 680	860	985	1055	1435	145	200	400	100	600
3	110	1500	1735 × 680	860	985	1055	1435	150	300	300	120	600
4	110	1880	2115 × 680	860	985	1055	1435	163	400	400	160	800
7	160	1910	2145 × 940	1130	1185	1255	1655	211	700	650	280	1350
10	160	2590	2820 × 940	1130	1185	1255	1655	257	1000	900	400	1900

Ø = Outer diameter b1 = Set-up dimensions

Grease separator *EasyClean* free Mix NS 15 – 50

for free-standing installation



EN 1825

Tank

Manufactured from virgin, non-recycled polyethylene, for free-standing installation in frost-protected areas, with integrated sludge trap and sloped base for fast and clean disposal, with two domed covers made of polymer, with quick-release closures, sealed odour-tight, with suction device installed for the joint disposal of contents of sludge trap and grease separator chamber, intake pipe 75 mm OD PN 10 in accordance with DIN 2501, Storz-B coupling R 2 1/2 for connection to the disposal vehicle.

Inlet and outlet \varnothing 200 / 250 mm for the connection to PE-HD pipes according to DIN 19537, HT pipes according to DIN 19560, PP or AS.

Disposal System

Mix with direct disposal and Shredder-Mix-System, KESSEL Shredder-Mix-System with mixing and rinsing via jet and conic nozzles, external pump(s), with integrated chopping mechanism and closure valve, pumping capacity 3.0 kW (stronger pumps available on request), 5 m cable length, refill inlet in accordance with DIN 1988, R 1 connection.

Switch Unit for actuating the pump.

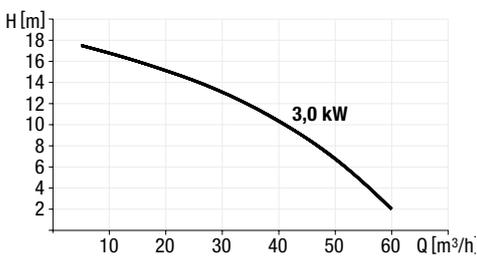
Delivery: System completely assembled.

➤ **Accessories:** Sampling chamber, inspection window, *SonicControl* level sensing system pages 341 – 343; lifting stations see chapter "3"

➤ **Technical note:** page 340

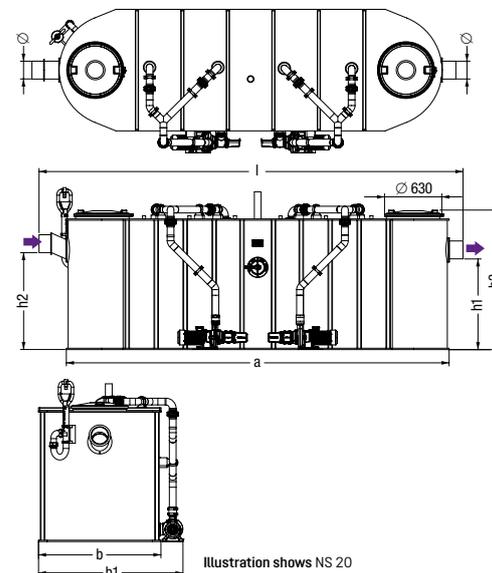
➤ **Note:** Also available in 60 Hz / 400 V

Pumping capacity



without *SonicControl*

NS	Art. no.
NS 15	93 015.01/DS
NS 20	93 020.01/DS
NS 25	93 025.01/DS
NS 30	93 030.01/DS
NS 35	93 035.01/DS
NS 40	93 040.01/DS
NS 50	93 050.01/DS



NS	\varnothing (mm)	a (mm)	Installation dimension l × b (mm)	b1 (mm)	h1 (mm)	h2 (mm)	h3 (mm)	Sludge trap (l)	Water and grease (l)	Grease storage (l)	Total (l)
15	200	3300	3560 × 1350	1620	1130	1200	1625	1500	2300	600	3800
20	200	4250	4510 × 1350	1620	1030	1100	1525	2000	3050	800	5050
25	200	4500	4760 × 1350	1620	1030	1100	1525	2500	2830	1000	5330
30	250	4600	4860 × 1350	1620	1170	1240	1655	3000	2650	1200	5650
35	250	6000	6480 × 1500	1770	1130	1200	1662	3500	4500	1400	8000
40	250	6200	6680 × 1600	1870	1130	1200	1662	4000	5000	1600	9000
50	250	6200	6680 × 1800	2070	1350	1420	1882	5000	6200	2240	11200

\varnothing = Outer diameter b1 = Set-up dimensions

Grease separators *EasyClean* free Direct NS 2 – 10

for free-standing installation



EN 1825

Tank

Manufactured from virgin, non-recycled polyethylene, for free standing installation in frost protected areas, with integrated sludge trap, sloped interior base improves cleaning and reduces disposal time, inlet flow calming system and outlet flow regulation device, inlet and outlet interchangeable, slanted twin access covers with quick release odour tight snap closures, 75 mm OD PN 10 pressure disposal pipe, with integrated fork lift grips at base of separator, low weight - compact design, 100% corrosion free polyethylene body construction (20 year warranty).

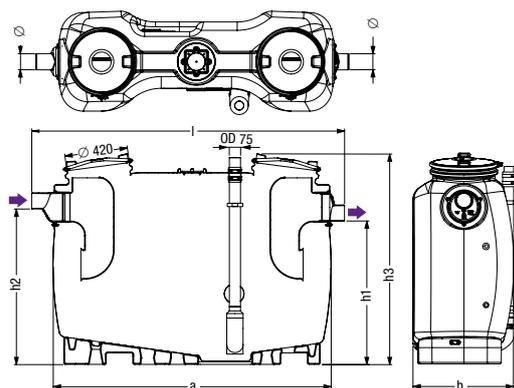
Disposal System

Direct version with factory installed pressure pipe suction outlet - requires disposal truck with vacuum system for separator disposal, disposal is completely odour free.

Delivery: System completely assembled.

➤ **Accessories:** Sampling chamber, inspection window, refill inlet; lifting stations see chapter "3", pages 341 – 342

➤ **Technical note:** page 340



without *SonicControl* **with *SonicControl***

NS	Art. no.	Art. no.
<i>Without accessories</i>		
NS 2	93 002.01/D	93 002.02/D
NS 3	93 003.01/D	93 003.02/D
NS 4	93 004.01/D	93 004.02/D
NS 7	93 007.01/D	93 007.02/D
NS 10	93 010.01/D	93 010.02/D
<i>With inspection window</i>		
NS 2	93 002.21/D	93 002.22/D
NS 3	93 003.21/D	93 003.22/D
NS 4	93 004.21/D	93 004.22/D
NS 7	93 007.21/D	93 007.22/D
NS 10	93 010.21/D	93 010.22/D
<i>With refill inlet</i>		
NS 2	93 002.11/D	93 002.12/D
NS 3	93 003.11/D	93 003.12/D
NS 4	93 004.11/D	93 004.12/D
NS 7	93 007.11/D	93 007.12/D
NS 10	93 010.11/D	93 010.12/D
<i>With inspection window and refill inlet</i>		
NS 2	93 002.31/D	93 002.32/D
NS 3	93 003.31/D	93 003.32/D
NS 4	93 004.31/D	93 004.32/D
NS 7	93 007.31/D	93 007.32/D
NS 10	93 010.31/D	93 010.32/D

NS	Ø (mm)	a (mm)	Installation dimension				Weight (kg)	Sludge trap (l)	Water and grease (l)	Grease storage (l)	Total (l)	
			l × b (mm)	b1 (mm)	h1 (mm)	h2 (mm)						h3 (mm)
2	110	1500	1735 × 680	860	985	1055	1435	69	200	400	100	600
3	110	1500	1735 × 680	860	985	1055	1435	74	300	300	120	600
4	110	1880	2115 × 680	860	985	1055	1435	87	400	400	160	800
7	160	1910	2145 × 940	1130	1185	1255	1655	135	700	650	280	1350
10	160	2590	2820 × 940	1130	1185	1255	1655	181	1000	900	400	1900

Ø = Outer diameter b1 = Set-up dimensions

Grease separator *EasyClean* free Direct NS 15 – 50

for free-standing installation



EN 1825

Tank

Manufactured from virgin, non-recycled polyethylene, for free-standing installation in frost-protected areas, with integrated sludge trap and sloped base for fast and clean disposal, with two domed covers made of polymer, with quick-release closures, sealed odour-tight, with suction device installed for the joint disposal of contents of sludge trap and grease separator chamber, intake pipe 75 mm OD PN 10 in accordance with DIN 2501, Storz-B coupling R 2 1/2 for connection to the disposal vehicle.

Inlet and outlet \varnothing 200 / 250 mm for the connection to PE-HD pipes according to DIN 19537, HT pipes according to DIN 19560, PP or AS.

Disposal System

Direct version with factory installed pressure pipe suction outlet - requires disposal truck with vacuum system for separator disposal, disposal is completely odour free.

Delivery: System completely assembled.

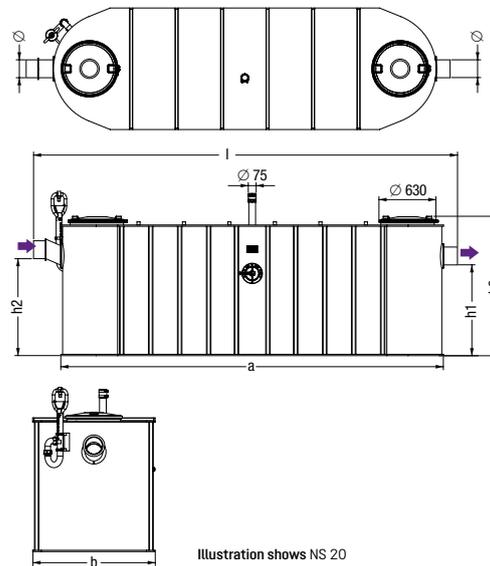
➤ **Accessories:** Inspection window and refill inlet, sampling chamber; lifting stations see chapter "3", pages 341 – 342

➤ **Technical note:** page 340



without *SonicControl*

NS	Art. no.
Without accessories	
NS 15	93 015.01/D
NS 20	93 020.01/D
NS 25	93 025.01/D
NS 30	93 030.01/D
NS 35	93 035.01/D
NS 40	93 040.01/D
NS 50	93 050.01/D



NS	\varnothing (mm)	a (mm)	Installation dimension l × b (mm)	h1 (mm)	h2 (mm)	h3 (mm)	Sludge trap (l)	Water and grease (l)	Grease storage (l)	Total (l)
15	200	3300	3560 × 1350	1130	1200	1625	1500	2300	600	3800
20	200	4250	4510 × 1350	1030	1100	1525	2000	3050	800	5050
25	200	4500	4760 × 1350	1030	1100	1525	2500	2830	1000	5330
30	250	4600	4860 × 1350	1170	1240	1655	3000	2650	1200	5650
35	250	6000	6480 × 1500	1130	1200	1662	3500	4500	1400	8000
40	250	6200	6680 × 1600	1130	1200	1662	4000	5000	1600	9000
50	250	6200	6680 × 1800	1350	1420	1882	5000	6200	2240	11200

\varnothing = Outer diameter

Grease separators *EasyClean* free Standard NS 2 – 10

for free-standing installation



EN 1825

Tank

Manufactured from virgin, non-recycled polyethylene, for free standing installation in frost protected areas, with integrated sludge trap, sloped interior base improves cleaning and reduces disposal time, inlet flow calming system and outlet flow regulation device, inlet and outlet interchangeable, slanted twin access covers with quick release odour tight snap closures, integrated fork lift grips at base of separator, 100% corrosion free polyethylene body construction (20 year warranty).

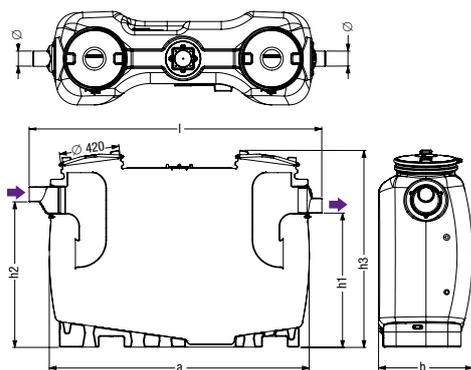
Disposal System

Standard version requires disposal truck with vacuum system for separator disposal.

Delivery: System completely assembled.

➤ **Accessories:** Sampling chamber, inspection window, refill inlet; lifting stations see chapter "3", pages 341 – 342

➤ **Technical note:** page 340



without SonicControl *with SonicControl*

NS	Art. no.	Art. no.
<i>Without accessories</i>		
NS 2	93 002.01	93 002.02
NS 3	93 003.01	93 003.02
NS 4	93 004.01	93 004.02
NS 7	93 007.01	93 007.02
NS 10	93 010.01	93 010.02
<i>With inspection window</i>		
NS 2	93 002.21	93 002.22
NS 3	93 003.21	93 003.22
NS 4	93 004.21	93 004.22
NS 7	93 007.21	93 007.22
NS 10	93 010.21	93 010.22
<i>With refill inlet</i>		
NS 2	93 002.11	93 002.12
NS 3	93 003.11	93 003.12
NS 4	93 004.11	93 004.12
NS 7	93 007.11	93 007.12
NS 10	93 010.11	93 010.12
<i>With inspection window and refill inlet</i>		
NS 2	93 002.31	93 002.32
NS 3	93 003.31	93 003.32
NS 4	93 004.31	93 004.32
NS 7	93 007.31	93 007.32
NS 10	93 010.31	93 010.32

NS	Ø (mm)	a (mm)	Installation dimension				Weight (kg)	Sludge trap (l)	Water and grease (l)	Grease storage (l)	Total (l)	
			l × b (mm)	b1 (mm)	h1 (mm)	h2 (mm)						h3 (mm)
2	110	1500	1735 × 680	860	985	1055	1435	69	200	400	100	600
3	110	1500	1735 × 680	860	985	1055	1435	74	300	300	120	600
4	110	1880	2115 × 680	860	985	1055	1435	87	400	400	160	800
7	160	1910	2145 × 940	1130	1185	1255	1655	135	700	650	280	1350
10	160	2590	2820 × 940	1130	1185	1255	1655	181	1000	900	400	1900

Ø = Outer diameter

b1 = Set-up dimensions

Grease separator *EasyClean* free Standard NS 15 – 50

for free-standing installation



EN 1825

Tank

Manufactured from virgin, non-recycled polyethylene, for free-standing installation in frost-protected areas, with integrated sludge trap, two domed covers made of polymer, with quick-release closure, sealed odour-tight. Inlet and outlet \varnothing 200 / 250 mm for the connection to PE-HD pipes according to DIN 19537, HT pipes according to DIN 19560, PP or AS.

Disposal System

Standard version requires disposal truck with vacuum system for separator disposal.

Delivery: System completely assembled.

➤ **Accessories:** Inspection window and refill inlet, sampling chamber; lifting stations see chapter "3", pages 341 – 342

➤ **Technical note:** page 340



without *SonicControl*

NS	Art. no.
Without accessories	
NS 15	93 015.01
NS 20	93 020.01
NS 25	93 025.01
NS 30	93 030.01
NS 35	93 035.01
NS 40	93 040.01
NS 50	93 050.01

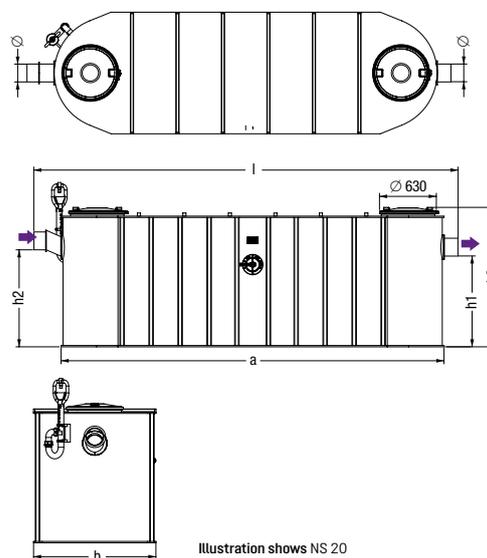


Illustration shows NS 20

NS	\varnothing (mm)	a (mm)	Installation dimension l × b (mm)	h1 (mm)	h2 (mm)	h3 (mm)	Sludge trap (l)	Water and grease (l)	Grease storage (l)	Total (l)
15	200	3300	3560 × 1350	1130	1200	1625	1500	2300	600	3800
20	200	4250	4510 × 1350	1030	1100	1525	2000	3050	800	5050
25	200	4500	4760 × 1350	1030	1100	1525	2500	2830	1000	5330
30	250	4600	4860 × 1350	1170	1240	1655	3000	2650	1200	5650
35	250	6000	6480 × 1500	1130	1200	1662	3500	4500	1400	8000
40	250	6200	6680 × 1600	1130	1200	1662	4000	5000	1600	9000
50	250	6200	6680 × 1800	1350	1420	1882	5000	6200	2240	11200

\varnothing = Outer diameter

Grease separator *EasyClean* round free Auto Mix & Pump NS 10 – 20 for free-standing installation



New

EN 1825

Tank

Manufactured from virgin, non-recycled polyethylene, for free-standing installation in frost-protected areas, with integrated sludge trap, with integrated sloped base directing wastewater into mixing / disposal pump, twin access covers with quick-release odour tight covers, with suction device installed for the joint disposal of contents of sludge trap and grease separator chamber, intake pipe 75 mm OD PN 10 in accordance with DIN 2501, Storz-B coupling R 2 1/2 for connection to the disposal vehicle. Inspection window with wiper. Inlet and outlet \varnothing 160 / 200 mm for the connection to PE-HD pipes according to DIN 19537, HT pipes according to DIN 19560, PP or AS.

Disposal System

Auto Mix & Pump with program-controlled disposal and rinsing device and Shredder-Mix-System, KESSEL disposal system Auto Mix & Pump with switching distribution and actuator valve, mixing and rinsing device via jet and conic nozzles, external pump(s) 3.0 kW (IP55, 400 V, 50 Hz; stronger pumps available on request) with integrated chopping mechanism and closure valve, 5 m cable length, 2 solenoid valves 1", with refill inlet in accordance with DIN 1988.

Control Unit for actuating the pump(s) with potential-free contact.

Delivery: System completely assembled.

➤ **Accessories:** Sampling chamber, remote control, *TeleControl*, *SonicControl* level sensing system page 341 – 343, lifting stations see chapter "3"

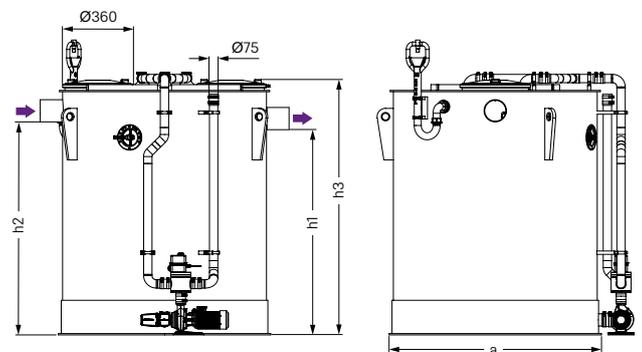
➤ **Technical note:** page 340

➤ **Note:** Also available in 60 Hz / 400 V



without *SonicControl*

NS	Art. no.
NS 10	93 010.05/PVS
NS 15	93 015.05/PVS
NS 20	93 020.05/PVS



Pumping capacity

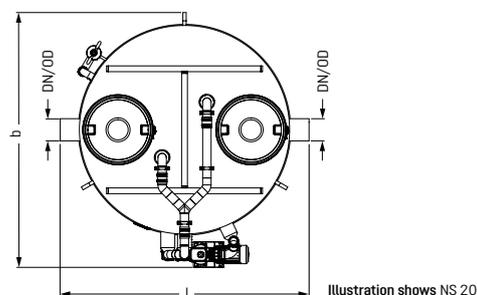
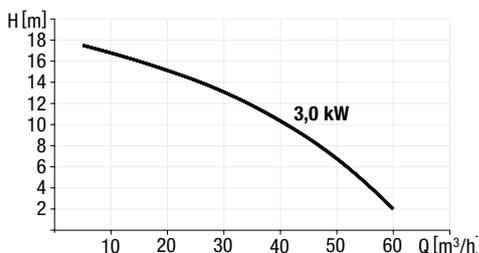


Illustration shows NS 20

NS	\varnothing (mm)	a (mm)	Installation dimension l × b (mm)	h1 (mm)	h2 (mm)	h3 (mm)	Sludge trap (l)	Water and grease (l)	Grease storage (l)	Total (l)
10	160	1570	1900 × 1915	1500	1570	1910	1000	1500	400	2500
15	200	1880	2230 × 2300	1550	1620	2020	1500	2300	600	3800
20	200	1880	2230 × 2300	1850	1920	2300	2000	2650	800	4650

\varnothing = Outer diameter

Grease separator *EasyClean* round free Mix & Pump NS 10– 20

for free-standing installation



EN 1825

Tank

Manufactured from virgin, non-recycled polyethylene, for free-standing installation in frost-protected areas, with integrated sludge trap, with integrated sloped base directing wastewater into mixing / disposal pump, twin access covers with quick-release odour tight covers, with suction device installed for the joint disposal of contents of sludge trap and grease separator chamber, intake pipe 75 mm OD PN 10 in accordance with DIN 2501, Storz-B coupling R 2 1/2 for connection to the disposal vehicle. Inspection window with wiper. Inlet and outlet Ø 160 / 200 mm for the connection to PE-HD pipes according to DIN 19537, HT pipes according to DIN 19560, PP or AS.



Disposal System

Mix & Pump with manual disposal and rinsing device and Shredder-Mix-System, KESSEL disposal system Mix & Pump with switching distribution, mixing and rinsing device via jet and conic nozzles, external pump(s), with integrated chopping mechanism and closure valve, pumping capacity 3.0 kW (stronger pumps available on request), 5 m cable length, refill inlet in accordance with DIN 1988.

Control Unit for actuating the pump(s).

Delivery: System completely assembled.

- **Accessories:** Sampling chamber, *SonicControl* level sensing system page 341 – 343, lifting stations see chapter "3"
- **Technical note:** page 340
- **Note:** Also available in 60 Hz / 400 V

without *SonicControl*

NS	Art. no.
NS 10	93 010.05/MS
NS 15	93 015.05/MS
NS 20	93 020.05/MS

Pumping capacity

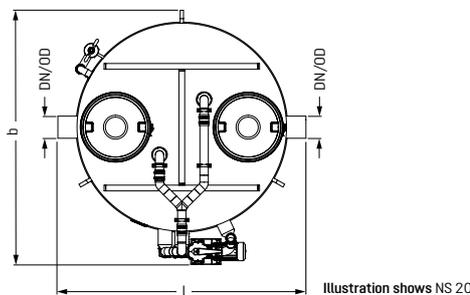
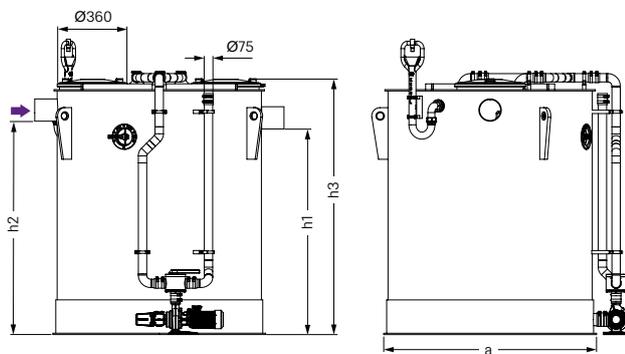
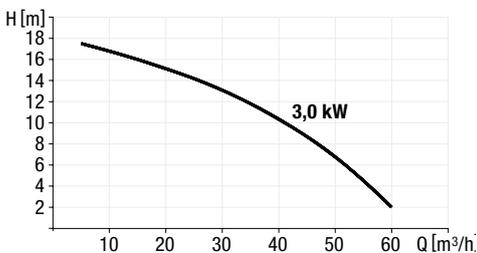


Illustration shows NS 20

NS	Ø (mm)	a (mm)	Installation dimension l × b (mm)	h1 (mm)	h2 (mm)	h3 (mm)	Sludge trap (l)	Water and grease (l)	Grease storage (l)	Total (l)
10	160	1570	1900 × 1915	1500	1570	1910	1000	1500	400	2500
15	200	1880	2230 × 2300	1550	1620	2020	1500	2300	600	3800
20	200	1880	2230 × 2300	1850	1920	2300	2000	2650	800	4650

Ø = Outer diameter

Grease separator *EasyClean* round free Auto Mix NS 10 – 20 for free-standing installation



EN 1825

Tank

Manufactured from virgin, non-recycled polyethylene, for free-standing installation in frost-protected areas, with integrated sludge trap, with integrated sloped base directing wastewater into mixing / disposal pump, twin access covers with quick-release odour tight covers, with suction device installed for the joint disposal of contents of sludge trap and grease separator chamber, intake pipe 75 mm OD PN 10 in accordance with DIN 2501, Storz-B coupling R 2 1/2 for connection to the disposal vehicle. 2 solenoid valves 1", viewing window with wiper, inspection window with wiper. Inlet and outlet \varnothing 160 / 200 mm for the connection to PE-HD pipes according to DIN 19537, HT pipes according to DIN 19560, PP or AS.

Disposal System

Auto Mix with direct disposal and Shredder-Mix-System, KESSEL Shredder-Mix-System with mixing and rinsing via jet and conic nozzles, external pump(s), with integrated chopping mechanism and closure valve, pumping capacity 3.0 kW (stronger pumps available on request), 5 m cable length, refill inlet in accordance with DIN 1988, R 1 connection.

Control Unit for actuating the pump(s) and the solenoid valves.

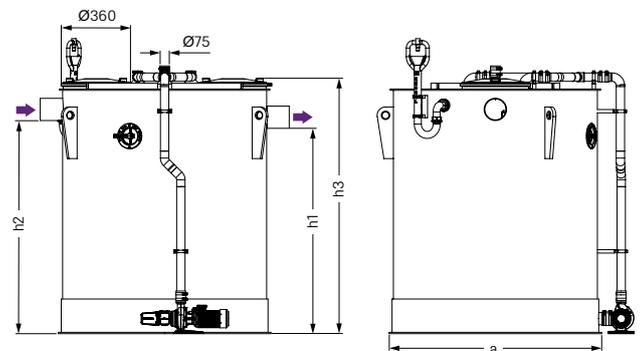
Delivery: System completely assembled.

- **Accessories:** Sampling chamber, remote control, *TeleControl*, *SonicControl* level sensing system page 341 – 343, lifting stations see chapter "3"
- **Technical note:** page 340
- **Note:** Also available in 60 Hz / 400 V

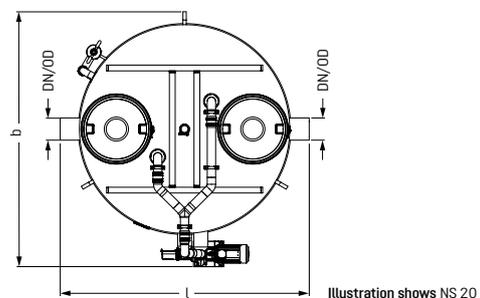
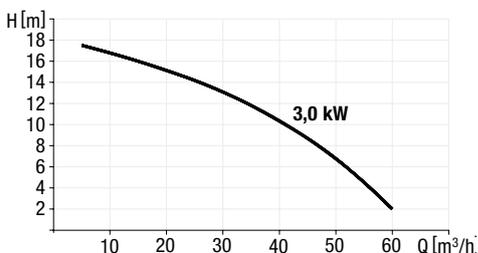


without *SonicControl*

NS	Art. no.
NS 10	93 010.05/DSP
NS 15	93 015.05/DSP
NS 20	93 020.05/DSP



Pumping capacity



NS	\varnothing (mm)	a (mm)	Installation dimension l × b (mm)	h1 (mm)	h2 (mm)	h3 (mm)	Sludge trap (l)	Water and grease (l)	Grease storage (l)	Total (l)
10	160	1570	1900 × 1915	1500	1570	1910	1000	1500	400	2500
15	200	1880	2230 × 2300	1550	1620	2020	1500	2300	600	3800
20	200	1880	2230 × 2300	1850	1920	2300	2000	2650	800	4650

\varnothing = Outer diameter

Grease separator *EasyClean* round free Mix NS 10 – 20

for free-standing installation



EN 1825

Tank

Manufactured from virgin, non-recycled polyethylene, for free-standing installation in frost-protected areas, with integrated sludge trap, with integrated sloped base directing wastewater into mixing / disposal pump, twin access covers with quick-release odour tight covers, with suction device installed for the joint disposal of contents of sludge trap and grease separator chamber, intake pipe 75 mm OD PN 10 in accordance with DIN 2501, Storz-B coupling R 2 1/2 for connection to the disposal vehicle. Inlet and outlet Ø 160 / 200 mm for the connection to PE-HD pipes according to DIN 19537, HT pipes according to DIN 19560, PP or AS.



without *SonicControl*

Disposal System

Mix with direct disposal and Shredder-Mix-System, KESSEL Shredder-Mix-System with mixing and rinsing via jet and conic nozzles, external pump(s), with integrated chopping mechanism and closure valve, pumping capacity 3.0 kW (stronger pumps available on request), 5 m cable length, refill inlet in accordance with DIN 1988, R 1 connection.

NS	Art. no.
NS 10	93 010.05/DS
NS 15	93 015.05/DS
NS 20	93 020.05/DS

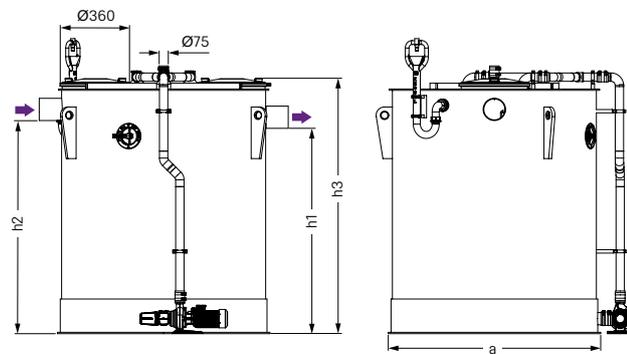
Control Unit for actuating the pump.

Delivery: System completely assembled.

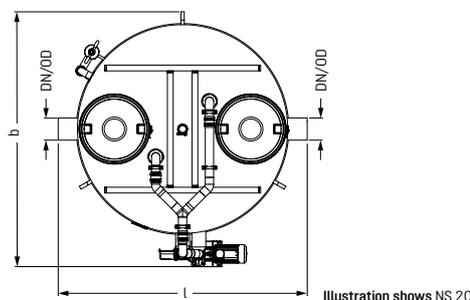
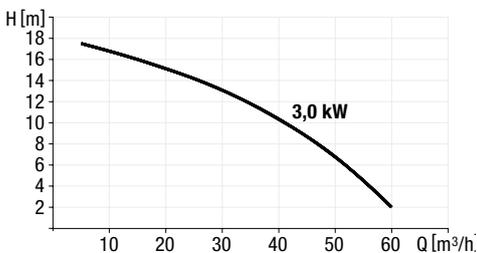
➤ **Accessories:** Sampling chamber, inspection window, *SonicControl* level sensing system page 341 – 343, lifting stations see chapter "3"

➤ **Technical note:** page 340

➤ **Note:** Also available in 60 Hz / 400 V



Pumping capacity



NS	Ø (mm)	a (mm)	Installation dimension l × b (mm)	h1 (mm)	h2 (mm)	h3 (mm)	Sludge trap (l)	Water and grease (l)	Grease storage (l)	Total (l)
10	160	1570	1900 × 1915	1500	1570	1910	1000	1500	400	2500
15	200	1880	2230 × 2300	1550	1620	2020	1500	2300	600	3800
20	200	1880	2230 × 2300	1850	1920	2300	2000	2650	800	4650

Ø = Outer diameter

Grease separator *EasyClean* round free Direct NS 10 – 20

for free-standing installation



EN 1825

Tank

Manufactured from virgin, non-recycled polyethylene, for free-standing installation in frost-protected areas, with integrated sludge trap, with integrated sloped base directing wastewater into mixing / disposal pump, twin access covers with quick-release odour tight covers, with suction device installed for the joint disposal of contents of sludge trap and grease separator chamber, intake pipe 75 mm OD PN 10 in accordance with DIN 2501, Storz-B coupling R 2 1/2 for connection to the disposal vehicle. Inlet and outlet \varnothing 160 / 200 mm for the connection to PE-HD pipes according to DIN 19537, HT pipes according to DIN 19560, PP or AS.



Disposal System

Direct version with factory installed pressure pipe suction outlet - requires disposal truck with vacuum system for separator disposal, disposal is completely odour free.

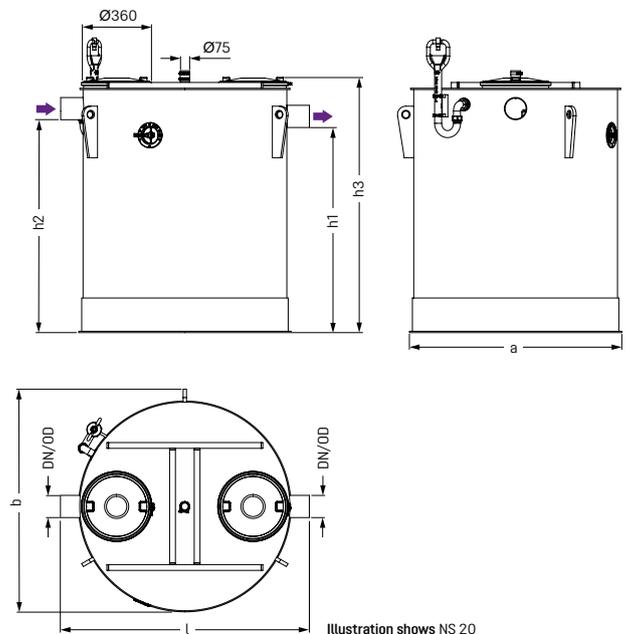
Delivery: System completely assembled.

➤ **Accessories:** Inspection window and refill inlet, sampling chamber; lifting stations see chapter "3", pages 341 – 342

➤ **Technical note:** page 340

without *SonicControl*

NS	Art. no.
Without accessories	
NS 10	93 010.05/D
NS 15	93 015.05/D
NS 20	93 020.05/D



NS	\varnothing (mm)	a (mm)	Installation dimension l × b (mm)	h1 (mm)	h2 (mm)	h3 (mm)	Sludge trap (l)	Water and grease (l)	Grease storage (l)	Total (l)
10	160	1570	1900 × 1690	1500	1570	1910	1000	1500	400	2500
15	200	1880	2230 × 1922	1550	1620	2020	1500	2300	600	3800
20	200	1880	2230 × 1922	1850	1920	2300	2000	2650	800	4650

\varnothing = Outer diameter

Grease separator *EasyClean* round free Standard NS 10 – 20

for free-standing installation



EN 1825

Tank

Manufactured from virgin, non-recycled polyethylene, for free-standing installation in frost-protected areas, with integrated sludge trap, two domed covers made of polymer, with quick-release closure, sealed odour-tight. Inlet and outlet \varnothing 160 / 200 mm for the connection to PE-HD pipes according to DIN 19537, HT pipes according to DIN 19560, PP or AS.

Disposal System

Standard version requires disposal truck with vacuum system for separator disposal.

Delivery: System completely assembled.

➤ **Accessories:** Inspection window and refill inlet, sampling chamber; lifting stations see chapter "3", pages 341 – 342

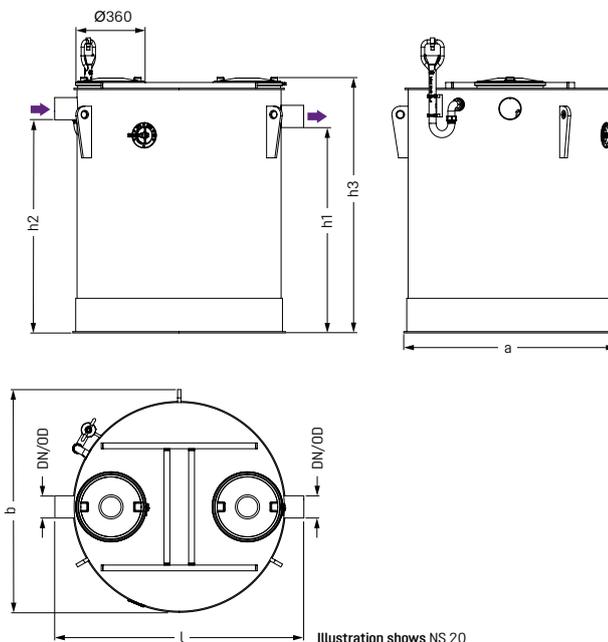
➤ **Technical note:** page 340



New

without *SonicControl*

NS	Art. no.
Without accessories	
NS 10	93 010.05
NS 15	93 015.05
NS 20	93 020.05



NS	\varnothing (mm)	a (mm)	Installation dimension l × b (mm)	h1 (mm)	h2 (mm)	h3 (mm)	Sludge trap (l)	Water and grease (l)	Grease storage (l)	Total (l)
10	160	1570	1900 × 1690	1500	1570	1910	1000	1500	400	2500
15	200	1880	2230 × 1922	1550	1620	2020	1500	2300	600	3800
20	200	1880	2230 × 1922	1850	1920	2300	2000	2650	800	4650

\varnothing = Outer diameter

Grease separator *EasyClean* free Basic

The economic solution for wastewater treatment in kitchens

The *EasyClean* free Basic grease separator is the latest model in our quality separator series. It has been developed to satisfy all of the requirements of modern wastewater technology at a market entry price level.

The result is a separator made of durable polyethylene, which is still working reliably even decades after its installation. It is available with two disposal options. In addition to the standard version, there is a Direct version, which has a convenient direct disposal connection. With the help of this, the disposal of the separator content can be done completely odourless over a permanently installed disposal line. Both versions can be ordered with practical accessories, such as a inspection window or a refill inlet, and thus adapt perfectly to the requirements on site.

The *EasyClean* free Basic is the new standard and **economic solution** for wastewater treatment in kitchens and food processing facilities.

Made in Germany! Made by KESSEL!



Direct disposal

Enables the extraction of the grease separator contents through a permanently installed odour free disposal pipe without opening the tank covers (Direct version).

Quick release access covers

Slanted twin access covers with quick release odour tight snap closures for quick and easy maintenance and cleaning.

100 % corrosion free polyethylene body

The polyethylene material used is resistant to aggressive fatty acids – and therefore particularly durable. In addition to the statutory provision, we provide a 20-year warranty with regard to the leak tightness and structural safety of tanks and upper sections.

Perfect cleaning results

Integrated sloped base allows wastewater to flow with gravity directly to the suction intake – saving time and disposal costs.



Grease separators *EasyClean* free Basic Direct NS 2 – 10 for free-standing installation



EN 1825

- Service side ... (left/right)
- Inspection window (with/without)
- Refill inlet (with/without)

The separator for grease contaminated wastewater is suitable for free-standing installation in frost protected areas and contains no metal parts in the chamber. The separator chamber made of resistant polymer (PE) includes an integrated sludge trap. Two odour-tight covers with quick-release closures allow easy access for cleaning and maintenance tasks. For odour-reducing manual disposal, with factory installed pressure pipe suction outlet. After disposal, only approx. 3 L of residual sludge volume remains in the tank.

Warranty for polyethylene material: 20 years

Standard: EN 1825

Connection of inlet/outlet fittings: PE-HD pipes according to DIN 19537, HT pipes according to DIN 19560 (PP or AS piping)

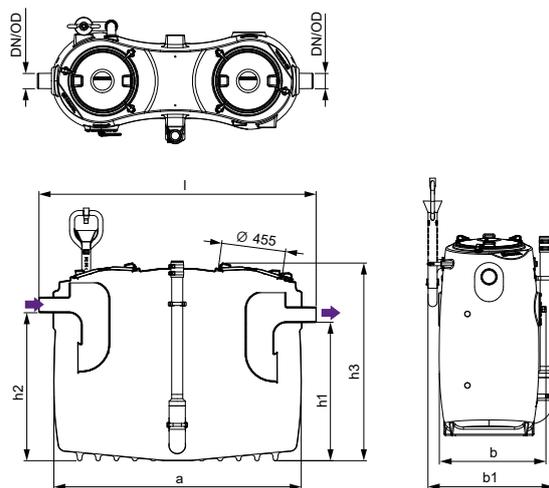
Disposal connection DN(OD): 65 (75 mm) PN10

Delivery: System completely assembled.

- **Accessories:** Sampling chamber page 341
- **Technical note:** page 340



Illustration shows Art. no. 94 004.32DR



Direction of flow "left"		Direction of flow "right"	
NS	Art. no.	NS	Art. no.
<i>Without accessories</i>			
NS 2	94 002.10DL	NS 2	94 002.10DR
NS 4	94 004.10DL	NS 4	94 004.10DR
NS 7	94 007.10DL	NS 7	94 007.10DR
NS 10	94 010.10DL	NS 10	94 010.10DR
<i>With inspection window</i>			
NS 2	94 002.21DL	NS 2	94 002.21DR
NS 4	94 004.21DL	NS 4	94 004.21DR
NS 7	94 007.21DL	NS 7	94 007.21DR
NS 10	94 010.21DL	NS 10	94 010.21DR
<i>With refill inlet</i>			
NS 2	94 002.12DL	NS 2	94 002.12DR
NS 4	94 004.12DL	NS 4	94 004.12DR
NS 7	94 007.12DL	NS 7	94 007.12DR
NS 10	94 010.12DL	NS 10	94 010.12DR
<i>With inspection window and refill inlet</i>			
NS 2	94 002.32DL	NS 2	94 002.32DR
NS 4	94 004.32DL	NS 4	94 004.32DR
NS 7	94 007.32DL	NS 7	94 007.32DR
NS 10	94 010.32DL	NS 10	94 010.32DR

NS	Outer diameter Ø (mm)	Installation dimension l × b (mm)	b1 (mm)	h1 (mm)	h2 (mm)	h3 (mm)	Weight (kg)	Sludge trap (l)	Water and grease (l)	Grease storage (l)	Total (l)
2	110	1560 × 700	920	985	1055	1420	85	200	460	80	660
4	110	1960 × 700	905	985	1055	1420	105	400	420	160	820
7	160	1960 × 920	1140	1185	1255	1670	155	700	670	280	1370
10	160	2610 × 920	1120	1185	1255	1670	175	1000	880	400	1880

Ø = Outer diameter b1 = Set-up dimensions

Grease separators *EasyClean* free Basic Standard NS 2 – 10

for free-standing installation



EN 1825

- Service side ... (left/right)
- Inspection window (with/without)
- Refill inlet (with/without)

The separator for grease contaminated wastewater is suitable for free-standing installation in frost protected areas and contains no metal parts in the chamber. The separator chamber made of resistant polymer (PE) includes an integrated sludge trap. Two odour-tight covers with quick-release closures allow easy access for cleaning and maintenance tasks. Requires disposal truck with vacuum system. The tank cover is opened during manual disposal.

Warranty for polyethylene material: 20 years

Standard: EN 1825

Connection of inlet/outlet fittings: PE-HD pipes according to DIN 19537, HT pipe according to DIN 19560 (PP or AS piping)

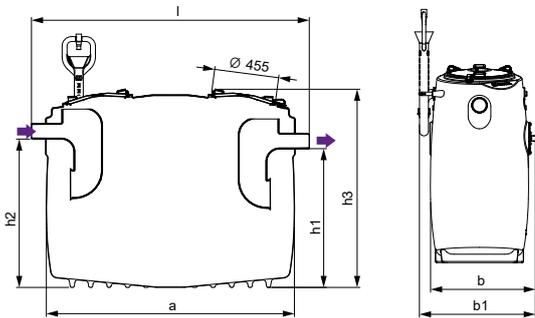
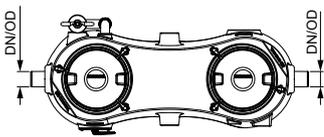
Delivery: System completely assembled.

- **Accessories:** Sampling chamber page 341
- **Technical note:** page 340



Illustration shows Art. no. 94 004.32R

	Direction of flow "left"	Direction of flow "right"
NS	Art. no.	Art. no.
<i>Without accessories</i>		
NS 2	94 002.10	94 002.10
NS 4	94 004.10	94 004.10
NS 7	94 007.10	94 007.10
NS 10	94 010.10	94 010.10
<i>With inspection window</i>		
NS 2	94 002.21L	94 002.21R
NS 4	94 004.21L	94 004.21R
NS 7	94 007.21L	94 007.21R
NS 10	94 010.21L	94 010.21R
<i>With refill inlet</i>		
NS 2	94 002.12L	94 002.12R
NS 4	94 004.12L	94 004.12R
NS 7	94 007.12L	94 007.12R
NS 10	94 010.12L	94 010.12R
<i>With inspection window and refill inlet</i>		
NS 2	94 002.32L	94 002.32R
NS 4	94 004.32L	94 004.32R
NS 7	94 007.32L	94 007.32R
NS 10	94 010.32L	94 010.32R



NS	Outer diameter Ø (mm)	Installation dimension l × b (mm)	b1 (mm)	h1 (mm)	h2 (mm)	h3 (mm)	Weight (kg)	Sludge trap (l)	Water and grease (l)	Grease storage (l)	Total (l)
2	110	1560 × 700	850	985	1055	1420	80	200	460	80	660
4	110	1960 × 700	850	985	1055	1420	100	400	420	160	820
7	160	1960 × 920	1080	1185	1255	1670	150	700	670	280	1370
10	160	2610 × 920	1080	1185	1255	1670	170	1000	880	400	1880

Ø = Outer diameter b1 = Set-up dimensions

Grease separators

EasyClean Modular

The flexible solution for limited access / narrow entry.

The *EasyClean* Modular combines the advantages of the *EasyClean* free with maximum transportability. It is the ideal grease separator for extremely narrow entranceways that can make it difficult to transport a standard grease separator to the set-up location. This grease separator can be disassembled into small individual components and assembled at the set-up location.

Always the right choice:
kessel.com/smartselect

Different disposal options

Standard

[↗ Page 339](#)

Direct

[↗ Page 339](#)



1 Separator component 2 Assembled grease separator 3 Direct disposal connection

Grease separator *EasyClean Modular Standard and Direct NS 0.25 – 4*

for free-standing installation, two component version

NS 0.25 / NS 0.5 / NS 1: KESSEL-Norm NS 2 / NS 3 / NS 4: EN 1825

Made of polyethylene PE-HD

Installation: In frost-protected rooms

Version: Can be disassembled

Delivery: System completely assembled (only NS 0.25 / NS 0.5 / NS 1)

Note for NS 0.25 / NS 0.5 / NS 1: The separated grease must be skimmed off daily in the case of weekly emptying and cleaning.

Custom made product: Delivery time on request

➤ **Accessories for NS 2 / NS 3 / NS 4:** Sampling chamber, refill inlet, inspection window, *SonicControl* from page 341 – 343, lifting stations see chapter "3"



Illustration shows Art. no. 93 025

Illustration shows Art. no. 93 050

Illustration shows Art. no. 93 001



Illustration shows Art. no. 93 002-R

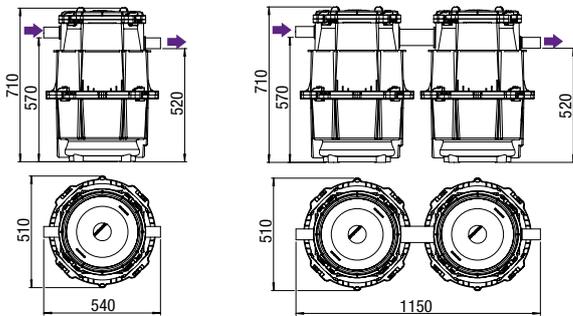


Illustration shows NS 0.25

Illustration shows NS 0.5

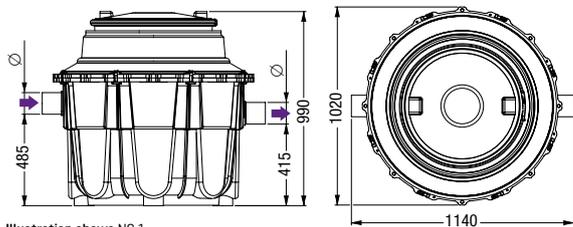


Illustration shows NS 1

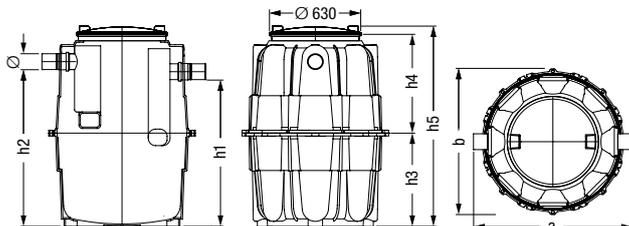


Illustration shows NS 2

EasyClean Modular Standard

NS	Art. no.
NS 0.25	93 025
NS 0.5	93 050
NS 1	93 001
NS 2	93 002-R
NS 3	93 003-R
NS 4	93 004-R

EasyClean Modular Direct with direct disposal

NS	Art. no.
NS 2	93 002.00/D1-R
NS 3	93 003.00/D1-R
NS 4	93 004.00/D1-R

NS	Ø (mm)	a (mm)	b (mm)	h1 (mm)	h2 (mm)	h3 (mm)	h4 (mm)	h5 (mm)	Weight (kg)	Sludge trap (l)	Water and grease (l)	Grease storage (l)	Total (l)
0.25	50	-	-	-	-	-	-	-	20	25	28	15	53
0.5	50	-	-	-	-	-	-	-	45	50	42	30	92
1	110	-	-	-	-	-	-	-	65	100	100	40	200
2	110	1100	1020	1020	1090	650	690	1395	60	200	400	100	600
3	110	1100	1020	1020	1090	650	690	1395	60	300	300	120	600
4	110	1400	1300	1090	1160	765	790	1620	110	400	560	160	960

Ø = Outer diameter h4 × b = access opening

Grease separator *EasyClean Modular* Standard and Direct NS 1 – 4



for free-standing installation, three component version

Following approval no. Z-54.1-473

Made of polyethylene PE-HD

Installation: In frost-protected rooms

Version: Standard or with direct disposal
(only *EasyClean Modular Direct*)

Consisting of: Integrated sludge trap, polyethylene quick release odour tight covers

Delivery: System completely assembled. Screw connection can be undone to minimum installation dimensions.

Installation:

Ideal where access is extremely narrow. Separator can be disassembled into 3 parts for installation opening of max. 58 cm.

Further nominal sizes, models with disposal device and on-site welding on request: info@kessel.com

Custom made product: Delivery time on request

- **Accessories:** Sampling chamber, *SonicControl*, refill inlet, from page 341 – 343, lifting stations see chapter "3"



EasyClean Modular Standard

NS	Art. no.
NS 1	93 001-R2
NS 2	93 002-R2
NS 3	93 003-R2
NS 4	93 004-R2

EasyClean Modular Direct with direct disposal

NS	Art. no.
NS 1	93 001.00/D1-R2
NS 2	93 002.00/D1-R2
NS 3	93 003.00/D1-R2
NS 4	93 004.00/D1-R2

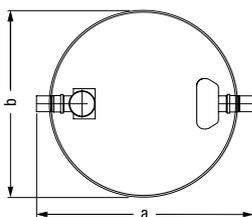
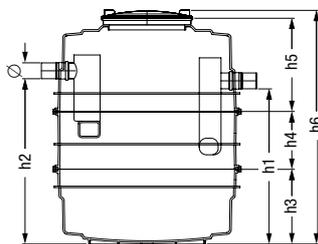


Illustration shows Standard version

Technical note for pages 316 – 340

Production and weather related influences can lead to deviations from our specifications in the case of free-standing separators. For this reason, please check the height specifications in particular for their actual size before installation. Please adapt the pipework to the actual inlet and outlet dimensions before installing the grease separator. Thermal and mechanical influences must be taken into consideration.

NS	Ø (mm)	a (mm)	b (mm)	h1 (mm)	h2 (mm)	h3 (mm)	h4 (mm)	h5 (mm)	h6 (mm)	Weight (kg)	Sludge trap (l)	Water and grease (l)	Grease storage (l)	Total (l)
1	110	1120	1020	780	850	375	250	500	1236	80	100	230	80	330
2	110	1120	1020	1020	1090	485	300	550	1386	80	200	270	100	470
3	110	1120	1020	1020	1090	485	300	550	1386	130	300	300	120	600
4	110	1500	1300	1080	1150	520	390	580	1550	130	400	560	160	960

Ø = Outer diameter h5 × b = access opening

Accessories

Grease separators for free-standing installation

Sampling chamber Ø 400		Outer diameter Ø (mm)	Length in mm	Art. no.	
Outlet lateral	<p>Compatibility: For connection to outlet pipe of separator, no ponding (allows accurate samples). Inlet and outlet Ø ... available options for synthetic material pipes in: PE-HD (according to EN 1519-1); PVC-HT, PP or AS; for grease separators for free-standing installation</p> <p>Inclusive: Cover sealed odour-tight with snap closure</p> <p>Drop height: 120 mm</p>		Ø 110/Ø 160	750	915 871
			Ø 200	780	915 883
			Ø 250	860	915 884

Outlet vertical	<p>Compatibility: For connection to outlet pipe of separator, no ponding (allows accurate samples). Inlet and outlet Ø ... available options for synthetic material pipes in: PE-HD (according to EN 1519-1); PVC-HT, PP or AS; for grease separators for free-standing installation</p> <p>Inclusive: Cover sealed odour-tight with snap closure</p> <p>Drop height: 120 mm</p>		Ø 110/Ø 160	915 870
------------------------	---	--	-------------	---------

Sampling chamber Ø 450		Outer diameter Ø (mm)	Art. no.	
Outlet lateral	<p>Compatibility: For connection to outlet pipe of separator. Inlet and outlet Ø 200 mm available options for synthetic material pipes in: PE-HD (according to EN 1519-1); PVC-HT, PP or AS; for grease separators for free-standing installation</p> <p>Inclusive: Cover sealed odour-tight with snap closure</p> <p>Drop height: 160 mm</p>		Ø 200	915 863-IS

Distribution box		Outer diameter Ø (mm)	Art. no.	
Distribution box	<p>Compatibility: For twin (parallel) separator systems; for grease separators for free-standing installation</p> <p>Inclusive: With inlet and outlet connection for polymer pipes made of: PE-HD (according to DIN 19537); PVC-HT, PP or AS.</p>		Ø 110 Ø 160 Ø 200	915 700-100 915 700-150 915 700-200

Automated water refill <i>EasyFill</i>		Art. no.
Automated water refill <i>EasyFill</i>	<p>Compatibility: For grease separator <i>EasyClean</i> Standard, Direct, Mix, Mix & Pump according to EN 1825</p>	919 010



Accessories

Grease separators for free-standing installation

SonicControl level sensing system

Art. no.

level sensing system

Compatibility: For grease separators for free-standing installation according to EN 1825

Inclusive: Ultra sonic sensor for electronic measurement, display and control of the grease layer thickness and the water temperature; power connection, battery back up, connection for remote speaker; installation set with easy assembly and maintenance; control unit with optical and audible alarm with potential free contact; electronic log book with 12 month capacity. Data transfer by telemetry.

Voltage: 230 V ~ 50 Hz

Protection type: IP 54

Plug: Schuko 1,5 m

Cable length: 10 m (extendable on-site to 60 meters)



917 821

Cable access conduit

Art. no.

Cable access conduit

Compatibility: For grease separators according to EN 1825 and DIN 4040; for watertight connection of *SonicControl* cable into separator chamber

Inclusive: Gasket, cable connection

Note: Conduit pipe with chase wire should be planned; requires 50 mm OD conduit pipe (PE-HD) -sourced on-site. Max. distance between separator and control unit 30 m



917 823

Cable extension set for *SonicControl FA*

Art. no.

10 m extension

917 871

20 m extension

917 872

30 m extension

extendable on-site to 60 meters

917 873



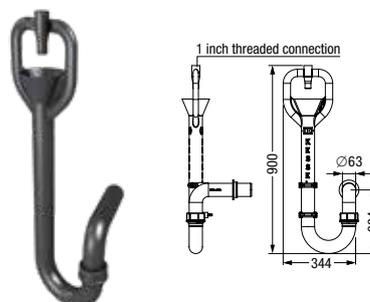
Refill inlet

Art. no.

Refill inlet

Compatibility: According to DIN 1988, for connection to filling and rinsing connection of the separation systems for free-standing installation according to EN 1825

Inclusive: Two pipe clamps, element with pipe sealing gasket Ø 63



915 800

Inspection window

Art. no.

Inspection window

Compatibility: For visual inspection of the thickness of the grease layer; for grease separators for free-standing installation according to EN 1825

Inclusive: High-gloss polished inspection glass, cleaning device, centimetre scale

Note: Only for installation by KESSEL certified workers



913 109

Accessories

Grease separators for free-standing installation

Remote control

Art. no.

Remote control

Compatibility: Fits KESSEL separation systems for free standing installation according to EN 1825, for connection to an isolated ground socket
Version: Model Auto Mix & Pump and Auto Mix in accordance with EN 1825
Cable length: 15 m



916 601

Access panel

Width×Height×Depth
in mm

Art. no.

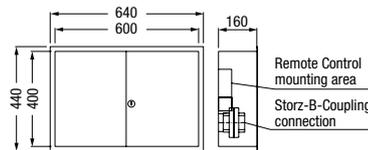
Recessed wall installation

Compatibility: For Storz-B disposal pipe hook up connection and remote control connection for use with fully automated grease separators. Remote control not included
Material: Stainless steel
Inclusive: 2 doors, lockable



640×440×160

917 414



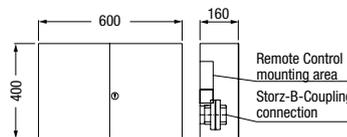
Wall installation

Compatibility: For Storz-B disposal pipe hook up connection and remote control connection for use with fully automated grease separators. Remote control not included
Material: Stainless steel
Inclusive: 2 doors, lockable



600×400×160

917 413



Progressive cavity pump

for greasy wastewater



Material: Polyethylene PE-HD

Version: upstream from the grease separator

Custom made product: e-Mail: info@kessel.com

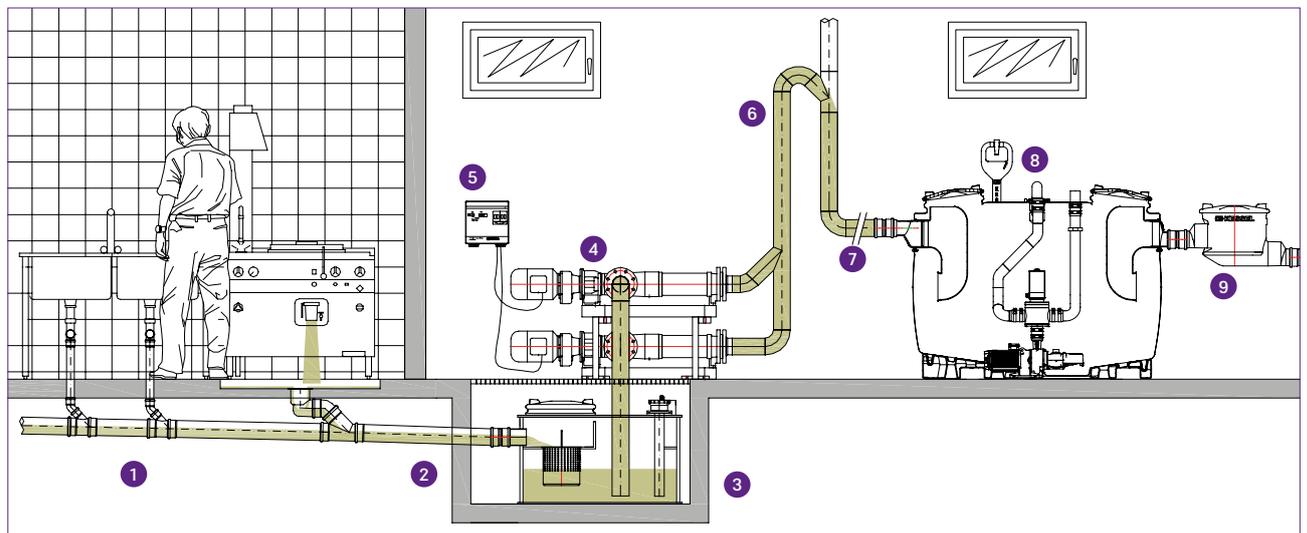
Application: In the case where the grease separator is located higher than the collected wastewater from the kitchen, the EN 1825 norm requires the use of special lifting stations. Standard lifting stations with vortex or macerating pumps mix the wastewater as it is pumped. This causes the food waste and grease from the kitchen to fully mix with the wastewater which can negatively effect the efficiency of an EN 1825 grease separator. A progressive cavity pump 'pushes' the wastewater into the grease separator, without any mixing taking place, allowing for proper grease separator operation.

For additional information concerning Kessel positive displacement pumps, please contact KESSEL directly.



Illustration shows screw pump double system

- 1 Drains in the kitchen
- 2 Inlet pipe
- 3 Collecting tank
- 4 Progressive cavity pump twin system
- 5 Control unit
- 6 Pressure pipe
- 7 Calmed inlet (min. 1000 mm)
- 8 Grease separator
- 9 Sampling chamber



	Art. no.	Flow rate	Pump capacity	Connection	Suitable up to NS
Duo-Progressive cavity pump	Sonder-Hebe 65 S2	6 m ³ /h	1.1 kW	DN65/DN80	NS 4
Duo-Progressive cavity pump	Sonder-Hebe 65 S3	12 m ³ /h	2.2 kW	DN80/DN100	NS 7
Duo-Progressive cavity pump	Sonder-Hebe 65S	20 m ³ /h	3.0 kW	DN80/DN100	NS 15
Duo-Progressive pump	Sonder-Hebe 65 S4	44 m ³ /h	7.5 kW	DN 125	NS 30

Accessories

Gate valve DN 65-DN 100	28 041	-	-	-	-
Non-return flap DN 65-DN 100	(included)	-	-	-	-
Mono-pump system	on request	-	-	-	-

Grease separators

EasyClean ground

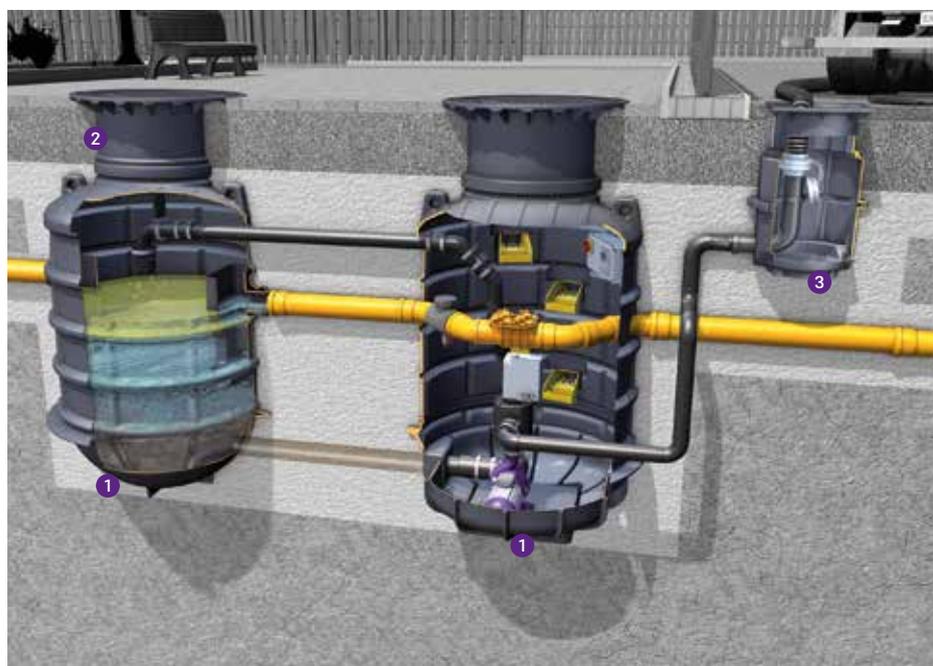
The space-saving solution
for underground installation.

Underground installation outside the building is a space saving alternative to indoor installed separators. Here, we offer a wide range of grease separators with the *EasyClean* ground that combines the advantages of the *EasyClean* free with more usable operating space.

Always the right choice:
kessel.com/smartselect

Different disposal options

Auto Mix & Pump	↗ Page 347
Auto Mix	↗ Page 348
Direct	↗ Page 349
Standard	↗ Page 350



① Grease separator ② Height adjustable upper section ③ Disposal chamber

Grease separator *EasyClean* ground Auto Mix & Pump NS 1 – 10

for underground installation



EN 1825 DIN 4040-100

Made of polyethylene

Installation

In combination with engineering system chamber

- Grease Separator NS 1 – 4: Resistant when installed in the groundwater up to 500 mm
- Grease Separator NS 7, 10: Resistant when installed in the groundwater up to 500 mm
- A load distribution plate must be planned for class D

Consisting of: With program-controlled disposal system and Shredder-Mix system, upper section made of polymer material, continuous height and level adjustment, with cover, class A / B, D according to EN 124 made of cast iron (can be driven over by cars and trucks), sealed odour-tight, incl. removal mechanism, integrated sampling chamber *Type NBG*, control unit and remote control, mains water supply rinse function, refill inlet, pump

Pumping capacity: 3.0 kW

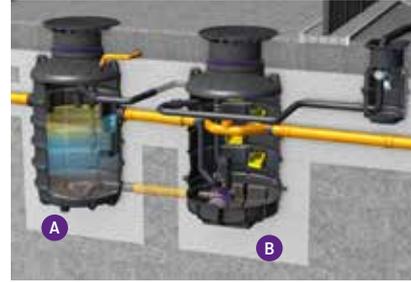
Cable length: 5 m

Delivery: System completely assembled

Note: Further nominal sizes on request

➤ **Accessories:** Jointing / connection set, disposal chamber Ø 400, sampling chamber, intermediate section, *SonicControl* page 353 – 356, pumping stations see chapter "3"

➤ **Technical note:** page 352



Underground installation frost-free depth 800 mm

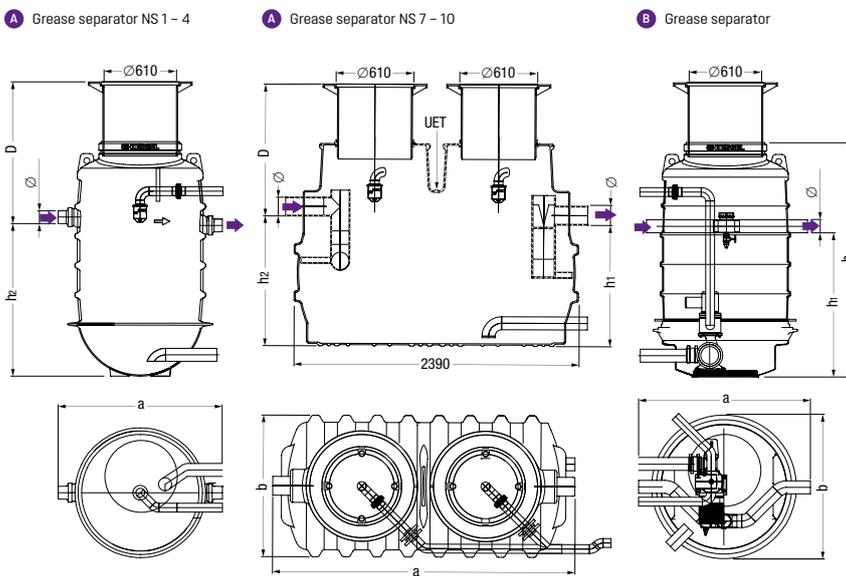
NS	Installation depth D in mm	Art. no.
Cover class A/B		
NS 1	550 – 950	93 001/80B-K-P1
NS 2	550 – 950	93 002/80B-K-P1
NS 4	550 – 950	93 004/80B-K-P1

Cover class D		
NS	Installation depth D in mm	Art. no.
NS 1	810 – 950	93 001/80D-K-P1
NS 2	810 – 950	93 002/80D-K-P1
NS 4	810 – 950	93 004/80D-K-P1

Underground installation frost-free depth 1200 mm

NS	Installation depth D in mm	Art. no.
Cover class A/B		
NS 1	800 – 1200	93 001/120B-K-P1
NS 2	800 – 1200	93 002/120B-K-P1
NS 4	800 – 1200	93 004/120B-K-P1
NS 7	715 – 1165	93 007/120B-K-P1
NS 10	715 – 1165	93 010/120B-K-P1

Cover class D		
NS	Installation depth D in mm	Art. no.
NS 1	1060 – 1200	93 001/120D-K-P1
NS 2	1060 – 1200	93 002/120D-K-P1
NS 4	1060 – 1200	93 004/120D-K-P1
NS 7	975 – 1165	93 007/120D-K-P1
NS 10	975 – 1165	93 010/120D-K-P1



NS	Ø (mm)	a (mm)	b (mm)	h (mm)	h1 (mm)	h2 (mm)	Weight (kg)	Sludge trap (l)	Water and grease (l)	Grease storage (l)	Total (l)
1	110	1380	1220	1500	690	795	270	140	230	70	370
2	110	1380	1220	1750	940	1045	300	200	370	120	570
4	110	1380	1220	2000	1210	1295	325	400	370	160	770
7	160	2539	1200	1715	1030	1100	525	700	1100	280	1800
10	160	3062	1200	1715	1030	1100	550	1000	1600	400	2600

Ø = Outer diameter D = Installation depth

Grease separator *EasyClean* ground Auto Mix NS 1 – 10 for underground installation



EN 1825 DIN 4040-100

Made of polyethylene

Installation

In combination with engineering system chamber

- Grease Separator NS 1 – 4: Resistant when installed in the groundwater up to 500 mm
- Grease Separator NS 7, 10: Resistant when installed in the groundwater up to 500 mm
- A load distribution plate must be planned for class D

Consisting of: With program-controlled Shredder-Mix system, upper section made of polymer material, continuous height and level adjustment, with cover, class A / B, D according to EN 124 made of cast iron (can be driven over by cars and trucks), sealed odour-tight, incl. removal mechanism, integrated sampling chamber *Type NBG*, control unit and remote control, mains water supply rinse function, refill inlet, pump

Pumping capacity: 3.0 kW

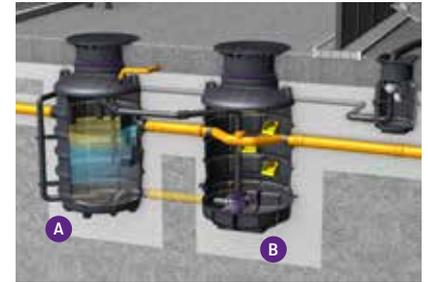
Cable length: 5 m

Delivery: System completely assembled

Note: Further nominal sizes on request

- **Accessories:** Jointing / connection set, disposal chamber Ø 400, sampling chamber, intermediate section, *SonicControl* page 353 – 356, pumping stations see chapter "3"

- **Technical note:** page 352

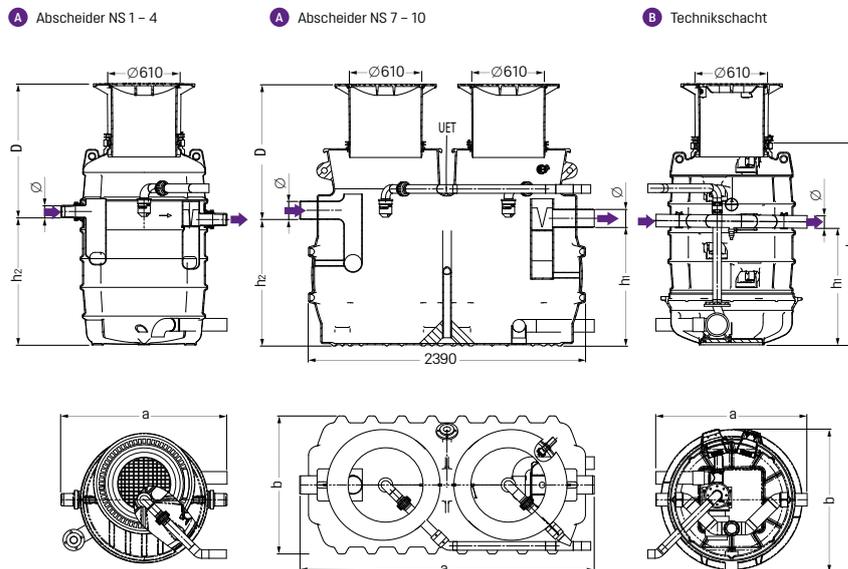


Underground installation frost-free depth 800 mm

NS	Installation depth D in mm	Art. no.
Cover class A / B		
NS 1	550 – 950	93 001/80B-K-DS-P1
NS 2	550 – 950	93 002/80B-K-DS-P1
NS 4	550 – 950	93 004/80B-K-DS-P1
Cover class D		
NS 1	810 – 950	93 001/80D-K-DS-P1
NS 2	810 – 950	93 002/80D-K-DS-P1
NS 4	810 – 950	93 004/80D-K-DS-P1

Underground installation frost-free depth 1200 mm

NS	Installation depth D in mm	Art. no.
Cover class A / B		
NS 1	800 – 1200	93 001/120B-K-DS-P1
NS 2	800 – 1200	93 002/120B-K-DS-P1
NS 4	800 – 1200	93 004/120B-K-DS-P1
NS 7	715 – 1165	93 007/120B-K-DS-P1
NS 10	715 – 1165	93 010/120B-K-DS-P1
Cover class D		
NS 1	1060 – 1200	93 001/120D-K-DS-P1
NS 2	1060 – 1200	93 002/120D-K-DS-P1
NS 4	1060 – 1200	93 004/120D-K-DS-P1
NS 7	975 – 1165	93 007/120D-K-DS-P1
NS 10	975 – 1165	93 010/120D-K-DS-P1



NS	Ø (mm)	a (mm)	b (mm)	h (mm)	h1 (mm)	h2 (mm)	Weight (kg)	Sludge trap (l)	Water and grease (l)	Grease storage (l)	Total (l)
1	110	1380	1220	1500	690	795	270	140	230	70	370
2	110	1380	1220	1750	940	1045	300	200	370	120	570
4	110	1380	1220	2000	1210	1295	325	400	370	160	770
7	160	2539	1200	1715	1030	1100	525	700	1100	280	1800
10	160	3062	1200	1715	1030	1100	550	1000	1600	400	2600

Ø = Outer diameter D = Installation depth

Grease separator *EasyClean* ground Direct NS 2 – 4 for underground installation



EN 1825 DIN 4040-100

Made of polyethylene

Installation

in frost-free depth

- Resistant when installed in the groundwater up to 500 mm
- A load distribution plate must be provided for class D

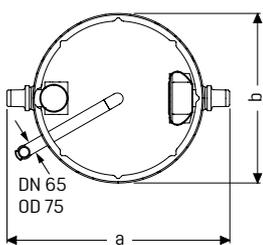
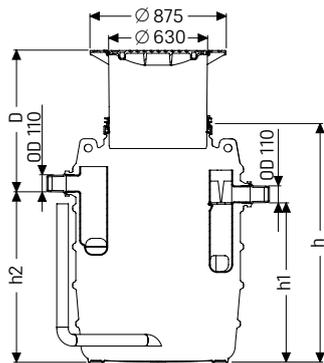
Consisting of:

Upper section made of polymer, continuous height and level adjustment, with cover class A / B, D in accordance with EN 124 made of cast iron, sealed odour-tight, incl. lift-out key

Delivery: System completely assembled

➤ **Accessories:** Sampling chamber, extension section, *SonicControl* (NS 2 and NS 4) page 353 – 356, pumping stations see chapter "3"

➤ **Technical note:** page 352



NS	Ø (mm)	a (mm)	b (mm)	h ¹⁾ (mm)	h1 (mm)	h2 (mm)	Weight (kg)	Sludge trap (l)	Water and grease (l)	Grease storage (l)	Total (l)
2	110	1380	1106	1300	790	860	120 kg	200 l	370 l	120 l	570
4	110	1380	1106	1550	1040	1110	130 kg	400 l	370 l	160 l	770

¹⁾ Valued for Type 80 separators. For Type 120 h* = h + 250 mm.

Ø = Outer diameter D = Installation depth

Underground installation frost-free depth 800 mm

NS	Installation depth D in mm	Art. no.
Cover class A / B, direction of flow left		
NS 2	550 – 950	93002.80B-DL
NS 4	550 – 950	93004.80B-DL
Cover class A / B, direction of flow right		
NS 2	550 – 950	93002.80B-DR
NS 4	550 – 950	93004.80B-DR
Cover class D, direction of flow left		
NS 2	550 – 950	93002.80D-DL
NS 4	550 – 950	93004.80D-DL
Cover class D, direction of flow right		
NS 2	550 – 950	93002.80D-DR
NS 4	550 – 950	93004.80D-DR

Underground installation frost-free depth 1200 mm

NS	Installation depth D in mm	Art. no.
Cover class A / B, direction of flow left		
NS 2	800 – 1200	93002.120B-DL
NS 4	800 – 1200	93004.120B-DL
Cover class A / B, direction of flow right		
NS 2	800 – 1200	93002.120B-DR
NS 4	800 – 1200	93004.120B-DR
Cover class D, direction of flow left		
NS 2	800 – 1200	93002.120D-DL
NS 4	800 – 1200	93004.120D-DL
Cover class D, direction of flow right		
NS 2	800 – 1200	93002.120D-DR
NS 4	800 – 1200	93004.120D-DR

Grease separator *EasyClean* ground Standard NS 1 – 4 for underground installation



EN 1825 DIN 4040-100

Made of polyethylene

Installation

- Resistant when installed in the groundwater up to 500 mm
- A load distribution plate must be provided for class D

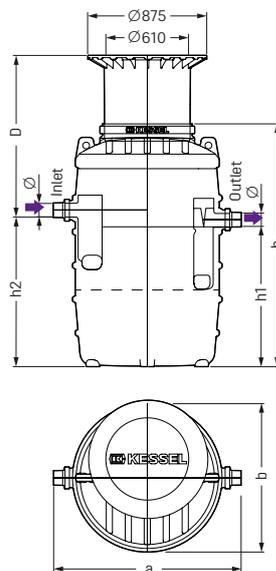
Consisting of:

Upper section made of polymer, infinite height and level adjustment, with cover class A / B, D in accordance with EN 124 made of cast iron, sealed odour-tight, incl. lift-out key

Delivery: System completely assembled

Note: Further nominal sizes on request

- **Accessories:** Sampling chamber, extension section, direct disposal, *SonicControl* (NS 2 and NS 4) page 353 – 356, pumping stations see chapter "3"
- **Technical note:** page 352



Underground installation frost-free depth 800 mm

NS	Installation depth D in mm	Art. no.
Cover class A / B		
NS 1	550 - 950	93 001/80B
NS 2	550 - 950	93 002/80B
NS 4	550 - 950	93 004/80B
Cover class D		
NS 1	550 - 950	93 001/80D
NS 2	550 - 950	93 002/80D
NS 4	550 - 950	93 004/80D

Underground installation frost-free depth 1200 mm

NS	Installation depth D in mm	Art. no.
Cover class A / B		
NS 1	800 - 1200	93 001/120B
NS 2	800 - 1200	93 002/120B
NS 4	800 - 1200	93 004/120B
Cover class D		
NS 1	800 - 1200	93 001/120D
NS 2	800 - 1200	93 002/120D
NS 4	800 - 1200	93 004/120D

NS	Ø (mm)	a (mm)	b (mm)	h ¹⁾ (mm)	h1 (mm)	h2 (mm)	Weight (kg)	Sludge trap (l)	Water and grease (l)	Grease storage (l)	Total (l)
1	110	1380	1106	1050	540	610	111	140	230	70	370
2	110	1380	1106	1300	790	860	120	200	370	120	570
4	110	1380	1106	1550	1040	1110	130	400	370	160	770

¹⁾ Specifications apply for type 80. For type 120, h* = h + 250 mm.

Ø = Outer diameter D = Installation depth

Grease separator *EasyClean* ground Standard NS 7 – 35

for underground installation



EN 1825 DIN 4040-100

Made of polyethylene

Installation

in frost-free depth

- Installation is possible with groundwater up to the upper edge of the tank (UET)
- A load distribution plate must be provided for class D
- Class D = 700 mm ≤ DEC ≤ 1500 mm
Class A/ B = 700 mm ≤ DEC ≤ 1800 mm
- Minimum installation depth achieved by sawing the upper section as required

Consisting of:

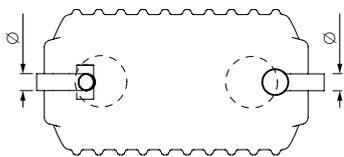
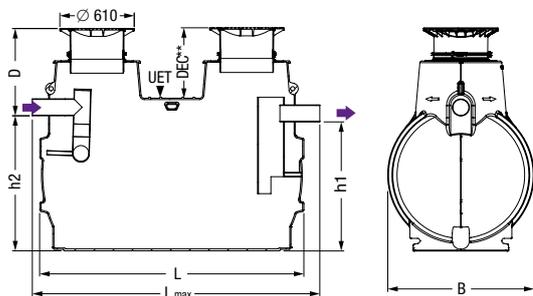
Upper section made of polymer, height and level adjustment, with cover class A/B, D in accordance with EN 124, made of cast iron (can be driven over by cars and trucks), sealed odour-tight, incl. lift-out key

Delivery: System completely assembled

Note: Further nominal sizes on request

➤ **Accessories:** Sampling chamber, extension section, direct disposal, *SonicControl* page 353 – 356, pumping stations see chapter "3"

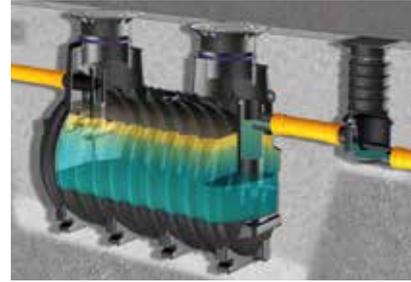
➤ **Technical note:** page 352



**DEC = Depth of earth coverage

NS	Ø (mm)	L (mm)	B (mm)	h1 (mm)	h2 (mm)	Sludge trap (l)	Water and grease (l)	Grease storage (l)	Total (l)	D-DEC	Lmax
7	160	2390	1200	1030	1100	700	1100	280	1800	220	2540
10	160	2910	1200	1030	1100	1000	1600	400	2600	220	3060
15	200	2590	1760	1550	1620	1500	2800	600	4300	185	2780
20	200	3110	1760	1550	1620	2000	3800	800	5800	185	3300
25	200	3470	2010	1550	1650	2500	5300	2000	7800	480	3760
30	250	3470	2010	1550	1650	3000	4800	2000	7800	480	3760
35	250	3470	2010	1700	1800	3500	4800	2000	8300	330	3760

Ø = Outer diameter D = Installation depth



NS	Installation depth D in mm	Weight in kg	Art. no.
Cover class A / B			
NS 7	715 – 1165	315	93 007/120B
NS 10	715 – 1165	340	93 010/120B
NS 15	765 – 1200	435	93 015/120B
NS 20	765 – 1200	490	93 020/120B
NS 25	800 – 1235	665	93 925/120B
NS 30	800 – 1235	665	93 930/120B
NS 35	650 – 1085	665	93 935/120B

Cover class D			
NS 7	715 – 1165	450	93 007/120D
NS 10	715 – 1165	480	93 010/120D
NS 15	765 – 1200	630	93 015/120D
NS 20	765 – 1200	670	93 020/120D
NS 25	800 – 1235	765	93 925/120D
NS 30	800 – 1235	765	93 930/120D
NS 35	650 – 1085	765	93 935/120D

Extended version for deeper installation with extension section Ø 800 mm

NS	Installation depth D in mm	Weight in kg	Art. no.
Cover class A / B			
NS 7	1120 – 1740	345	93 007/170B
NS 10	1120 – 1740	370	93 010/170B
NS 15	1130 – 1755	465	93 015/170B
NS 20	1130 – 1755	520	93 020/170B
NS 25	1155 – 1775	695	93 925/170B
NS 30	1155 – 1775	695	93 930/170B
NS 35	1005 – 1625	695	93 935/170B

Cover class D			
NS 7	1120 – 1740	480	93 007/170D
NS 10	1120 – 1740	510	93 010/170D
NS 15	1130 – 1755	660	93 015/170D
NS 20	1130 – 1755	700	93 020/170D
NS 25	1155 – 1775	795	93 925/170D
NS 30	1155 – 1775	795	93 930/170D
NS 35	1005 – 1625	795	93 935/170D

Grease separator *EasyClean Modular Standard NS 1 – 4*

for underground installation in frost-free depth, with separate sludge trap



DIN 4040-100

Made of polyethylene

Installation

in frost-free depth

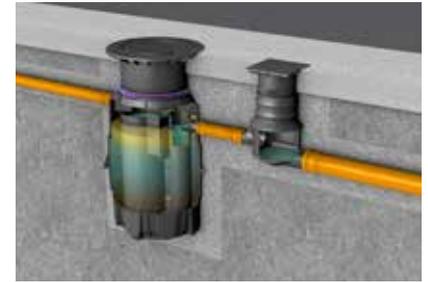
- Resistant when installed in the groundwater up to 500 mm
- A load distribution plate must be provided for class D

Consisting of:

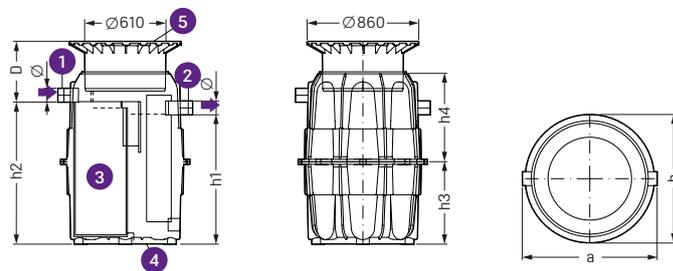
Upper section made of polymer, height and level adjustment, with cover class A / B, D in accordance with EN 124, made of cast iron (can be driven over by cars and trucks), sealed odour-tight, incl. lift-out key

Delivery: System completely assembled

- **Accessories:** Sampling chamber, extension section, direct disposal, *SonicControl* (NS 2 and NS 4) page 353 – 356, lifting stations see chapter "3"



NS	Installation depth D in mm	Art. no.
Cover class A / B		
NS 1	330 – 480	98 201/00B
NS 2	330 – 480	98 202/00B
NS 4	330 – 480	98 204/00B
Cover class D		
NS 1	330 – 480	98 201/00D
NS 2	330 – 480	98 202/00D
NS 4	330 – 480	98 204/00D



- 1 Inlet
- 2 Outlet
- 3 Sludge trap
- 4 Separation chamber
- 5 Upper section with cover class A / B, D

Technical note
for pages 347 – 352

Weather-related influences or cooling of the tanks during the installation phase (caused by filling with cold water) can lead to deviations in dimensions from the catalogue specifications in the case of cisterns and separators installed in the ground.

NS	Ø (mm)	a (mm)	b (mm)	h1 (mm)	h2 (mm)	h3 (mm)	h4 (mm)	Weight (kg)	Sludge trap (l)	Water and grease (l)	Grease storage (l)	Total (l)
1	110	1055	1020	1020	1120	650	720	140	105	415	40	420
2	110	1355	1300	1136	1236	750	750	190	200	945	80	1145
4*	110	2635	1300	1136	1236	750	750	330	600	1150	160	1750

*NS 4 separator consist of two chambers

Ø = Outer diameter D = Installation depth

Accessories

Grease separators for underground installation

Direct disposal, without disposal chamber

Disposal connection right or left

Compatibility: Installed in the ground with direct disposal connection; for grease separators for underground installation according to EN 1825
Inclusive: Flange connection Ø 65, PN 10 (welded collar and loose flange) for the suction pipe on site, with Storz-B coupling R 2 1/2" for disposal vehicle, for nominal sizes NS 1 – NS 35
Delivery: Installed suction device for the joint disposal from sludge trap and separating chamber, tank and direct connection completely assembled, disposal pipe and Storz-B connection on site.
Note: Further installation depths, sizes and connections on request



Disposal connection	Art. no.
right	917 419.00
left	917 419.50

Disposal chamber Ø 400

Disposal chamber

Compatibility: For separator systems Auto Mix & Pump, Auto Mix and Mix for installation in the ground
Material: Polyethylene, watertight
Installation depth: 630 – 980 mm
Inclusive: With telescopic, height-adjustable upper section made of polymer with clamping ring, cover class A/B, D in accordance with EN 124 made of cast iron, sealed odour-tight, incl. lift-out key, with Storz-B coupling R 2 1/2" for disposal vehicle. Pressure pipe connection between separator and disposal chamber provided on-site.



Cover	Art. no.
Class A/B	917 422B
Class D	917 422D

Joint and connection set

Joint and connection set

Material: Polyethylene
Compatibility: For connection of the grease separator (NS 1 – NS 4) to the technical chamber for the versions grease separators Auto Mix & Pump, Auto Mix and Mix in ground installation
Inclusive: Storz-B coupling, pipe clamps

Art. no.
917 421

Direct disposal, including disposal chamber Ø 400

Disposal connection right or left

Compatibility: Installed in the ground with direct disposal connection for nominal sizes NS 1 – NS 35; for grease separators for underground installation according to EN 1825
Installation depth: 630 – 980 mm
Inclusive: Flange connection Ø 65, PN 10 (welded collar and loose flange) for the suction pipe on site, with Storz-B coupling R 2 1/2" for disposal vehicle, with chamber system Ø = 400 mm, incl. cover class A/B/D, sealed
Delivery: Installed suction device for the joint disposal from sludge trap and separating chamber, tank and direct connection completely assembled, disposal pipe on site.
Note: Further installation depths, sizes and connections on request



Direct disposal

Disposal chamber Ø 400

Disposal connection	Art. no.
right	917 420.00
left	917 420.50

Accessories

Grease separators for underground installation

SonicControl level sensing system

Art. no.

Level sensing system

Compatibility: For grease separators for underground installation

Inclusive: Ultra sonic sensor for electronic measurement, display and control of the grease layer thickness and the water temperature; power connection, battery back up, connection for remote speaker; installation set with easy assembly and maintenance; control unit with optical and audible alarm with potential free contact; electronic log book with 12 month capacity. Data transfer by telemetry.

Voltage: 230 V ~ 50 Hz

Protection type: IP 54

Plug: Schuko 1,5 m

Cable length: 10 m (extendable on-site to 60 meters)

917 821



Cable access conduit

Art. no.

Cable access conduit

Compatibility: For grease separators for underground installation according to EN 1825 and DIN 4040; for watertight connection of *SonicControl* cable into separator chamber

Inclusive: Gasket, cable connection

Note: Conduit pipe with chase wire should be planned; requires 50 mm OD conduit pipe (PE-HD) -sourced on-site. Max. distance between separator and control unit 30 m

917 823



Cable extension set for *SonicControl FA*

Art. no.

10 m extension

917 871

20 m extension

917 872

30 m extension

917 873

extendable on-site to 60 meters



Accessories

Grease separators for underground installation

Sampling chamber Ø 1000

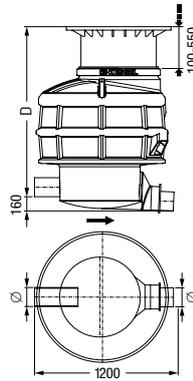
Cover class A/B

Compatibility: For separation systems NS 1 – NS 20 and special models; for underground installation
Installation depth (D): 1180 – 1630 mm
 (Other installation depths available on request)

Drop height: 160 mm

Cover class D

Inclusive: Inlet and outlet Ø ... for synthetic material pipes in: PE-HD (according to EN 12666-1); PVC-KG (according to EN 1401-1); PP or AS.
 With integrated access steps, with vertically height-adjustable upper section made of polymer, with cover class A / B, D according to EN 124 in cast iron sealed odour-tight, incl. removal mechanism.



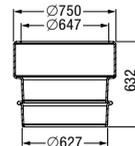
Outer diameter Ø (mm)	Suitable for separator	Art. no.
Ø 110	NS 1, NS 2, NS 4	915 10 10B
Ø 160	NS 7, NS 10	915 10 15B
Ø 200	NS 15, NS 20*	915 10 20B
Ø 110	NS 1, NS 2, NS 4	915 10 10D
Ø 160	NS 7, NS 10	915 10 15D
Ø 200	NS 15, NS 20*	915 10 20D

*Suitable for individual solutions

Extension section

Extension section

Compatibility: For underground grease separators with 600 mm access cover
Height increase: 500 mm



Art. no.
917 460

Sampling chamber Ø 400

Cover class A

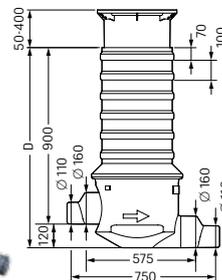
Compatibility: For connection to outlet pipe of separator for underground installation

Cover class B

Installation depth (D): 400 – 1300 mm
 (minimum installation depth can be achieved by cutting off)

Cover class D

Drop height: 120 mm (160 mm on request)
Inclusive: Telescopic upper section with clamping ring, cover class A / B / D, sealed odour-tight
Extension: 600 mm
 with extension section Art. no. 915 402



In-/Outlet	Art. no.
Ø 110/160	915 880A
Ø 110/160	915 880B
Ø 110/160	915 880D

Accessories

Grease separators for underground installation

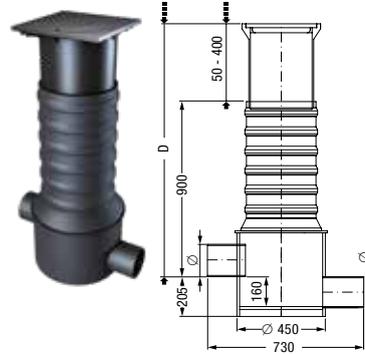
Sampling chamber Ø 450

Cover class A

Compatibility: For connection to outlet pipe of separators for underground installation
Installation depth (D): 950 - 1300 mm
Drop height: 160 mm
Inclusive: Telescopic upper section with clamping ring, cover class A/B/D, sealed odour-tight
Extension: 600 mm with extension section Art. no. 915 402

Cover class B

Cover class D

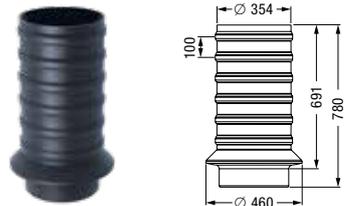


In-/Outlet	Art. no.
Ø 110	915 881A
Ø 160	915 882A
Ø 200	915 883A
Ø 260	915 884A
Ø 110	915 881B
Ø 160	915 882B
Ø 200	915 883B
Ø 260	915 884B
Ø 110	915 881D
Ø 160	915 882D
Ø 200	915 883D
Ø 260	915 884D

Extension section

Extension section

Compatibility: For sampling chamber Ø 400 and Ø 450
Extension height: max. 600 mm (can be shortened on-site)
Check maintenance accessibility!

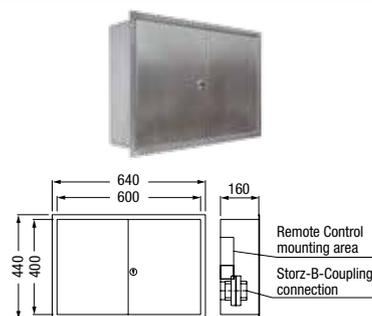


Art. no.
915 402

Access panel

Recessed wall installation

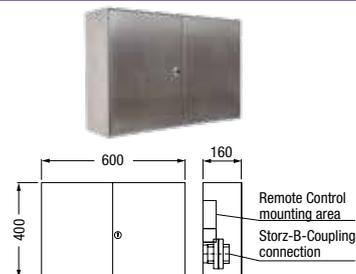
Material: Stainless steel
Compatibility: For Storz-B disposal pipe hook up connection and remote control connection for use with fully automated grease separators. Remote control not included
Inclusive: 2 doors, lockable



Width × Height × Depth in mm
640 × 440 × 160
Art. no.
917 414

Wall installation

Material: Stainless steel
Compatibility: For Storz-B disposal pipe hook up connection and remote control connection for use with fully automated grease separators. Remote control not included
Inclusive: 2 doors, lockable



600 × 400 × 160
Art. no.
917 413

