



Installation instructions “premium eco 1.0”

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1 General remarks

1.1 Regarding these instructions

1.1.1 General advice regarding installation and operation

Thank you for choosing a GreenLife SBR small wastewater treatment plant.

On the following pages, you will find information and important advice which ensure successful installation and safe operation of your GreenLife small wastewater treatment plant. We have tried to provide you with instructions that leave none of your questions unanswered. To be able to continuously improve our services, we kindly ask you to inform us in the event that something seems to be missing or unclear in these installation instructions. Please write to: info@greenlife.info.

It is imperative to strictly adhere to the installation instructions, as well as to the operating and service instructions with regard to the installation and start-up of the plant. Only then will we be able to guarantee the trouble-free operation of your GreenLife small wastewater treatment plant. Please also observe that concluding a service contract is essential for the operating licence. With this service contract, the plant and its discharge values are continuously monitored.

Prior to installation and start-up, the operating instructions must be entirely read. For the installation and operation, the indications in these operating instructions must be strictly observed.

Please keep these instructions safe for future reference.

Installation and operation of the small wastewater treatment plant are carried out in accordance with the technical approval of your country!

1.1.2 Structure of the documentation and target persons

The operating instructions for the GreenLife "premium eco 1.0" small wastewater treatment system consist of two parts:

- The first part includes the installation instructions. These are geared towards specialists for the planning and installation of the GreenLife "premium eco 1.0" small wastewater treatment system.
- The second part consists of the operating and service instructions. These are geared towards specialists for the planning and installation and maintenance of the GreenLife "premium eco 1.0" small wastewater treatment system and towards the operator of the plant (owner).

In addition, operating instructions for the individual components are enclosed with the product (e.g. for the linear pump). The specifications in these instructions regarding the installation, operation and maintenance of the respective device need to be observed.

1.2 Warranty

The warranty includes deficiencies which can be attributed to the fabrication or the material. These deficiencies must have verifiably existed in spite of proper use and of the transport and installation having been carried out in accordance with the instructions.

On receipt of the delivery, the plant with all related components needs to be checked for its completeness and soundness. Any damage or missing parts shall be confirmed by the shipper. The detection of clearly visible deficiencies must be immediately communicated in writing, and deficiencies which are not immediately detectable as well as latent defects immediately when ascertained.

The warranty implies that the installation and operation of the plant take place in accordance with the operating instructions, that the plant is not treated improperly or modified without authorisation, that the required maintenance and repair measures are implemented according to good professional practice and that these are consistently documented in the operation log.



The compliance with the specifications in these operating instructions is a constituent part of the warranty provisions. Unauthorised modifications to the plant or improper use can lead to the invalidation of the warranty.

2 Safety during the installation

2.1 Symbols and their meaning

Within the scope of these operating instructions, special reference will be made to the remaining risks that cannot be avoided during the installation. These risks can exist for persons, the plant or the environment. Within the scope of these operating instructions, they will be clearly marked by means of safety advice and symbols:



This symbol points out that, above all, hazards for persons need to be taken into account (mortal danger, risk of injury)!



This symbol points out that, above all, hazards for the plant (devices, machines, material) and/or the environment need to be taken into account.



This symbol points to important advice.

2.2 Basic safety measures during installation

The following applies to the installation:

Installation must only be carried out by those companies which have the professional experience, suitable devices and equipment, as well as sufficiently trained personnel. To avoid risks for employees and third persons, the relevant accident prevention regulations need to be observed.



Installation and start-up, or removal from service, must correspond to the customary standards and should be carried out in accordance with the operating instructions. The works must only be carried out by qualified and skilled persons.

The start-up must only be effected when the installation has been entirely completed and when the plant is fully operational (⇒ Operating and service instructions).

2.3 Risks in the event of non-observance of the safety advice

Non-observance of the safety advice involves risks for persons, systems, machines or the environment. Non-observance of the safety advice can lead to the loss of any claims for damages.

3 Transport and storage

3.1 Transport



Caution

The transport and lifting of the septic tank is only allowed when the tank is empty!

During the transport, the tank needs to be secured against shifting, e.g. by cargo straps. The bracing needs to be carried out in such a manner that damage to the tank can be excluded. Do not use chains or wire ropes!

Transport and storage must always be shock-free!

Dragging or pushing the tank is prohibited!

3.2 Storage



Caution

Storage must be on even ground without sharp objects.

Secure the manhole against the penetration of rainwater, dirt or persons (in particular children).

Some parts of the plant (e.g. lip seals) are UV-resistant only to a limited extent.

4 Installation of the settling tank and of the equipment

4.1 Site selection and site conditions

4.1.1 General structural requirements

When choosing the place of installation, it must be ensured that the small wastewater treatment plant is always accessible and that sludge can be removed at any time. The space between the plant and existing and planned water recovery plants must be large enough to exclude impairments. In water protection areas, the respective regional regulations need to be observed. Any leaching facility which is connected downstream must be operational. The installation and operation of small wastewater treatment plants require an approval or a licence issued under water law by the responsible authority.



Caution

The plant must have sufficient roof ventilation!

The long-term operational availability of the plant must be ensured by continuous voltage supply!

The treated water must always be allowed to run off without backup!

4.1.2 Traffic zones



Caution

The small wastewater treatment plant must only be installed outside of traffic zones!

The place of installation must be secured against unintentional run-over by undertaking suitable measures. The small wastewater treatment plants are suitable for a Class A load acceptance in accordance with EN 124 (pedestrians, cyclists) without further technical measures. A distance of 1 m must be kept to traffic zones with higher loads.

4.1.3 Ground conditions

The ground must be sufficiently able to take a load and the surrounding soil provide proper drainage (for the determination of the soil-physical conditions, a geological survey should be requested from the local building authority). Specific characteristics regarding groundwater/layer water: see below.

4.1.4 Installation in groundwater/layer water or in cohesive soils

Installation of the tanks in areas with permanently or temporarily-occurring groundwater, layer water or backwater is only possible and permissible when the requirements listed below are met. For the instal-

lation in the aforementioned areas, a max. permissible immersion depth is specified for both tank types (⇒ Table 1). The immersion depth is defined as the measure between the water level at the tank and the bottom of the tank (outside).



It must be permanently ensured that even short-term exceeding of the specified immersion depth is excluded!

The measures required for this (e.g. drainage or dewatering) need to be carried out in accordance with good professional practice and supervised (as far as applicable). Any drainage pumps which are installed for dewatering purposes need to be checked at regular intervals with regard to their functional performance. When the tank is installed in areas with a cohesive soil, it must be ensured, for example through a circumferential drainage system, that the formation of a basin (water accumulation in the bedding) is excluded.



The installation of the tanks in areas where the maximum immersion depths of the tanks may temporarily be exceeded is not allowed!

Table 1: Max. permissible immersion depths

Maximum immersion depth *	
"premium eco 1.0" 4 / 10 PE (3700 l tank)	"premium eco 1.0" 8 / 10 / 12 / 16 / 18 PE (6500 l tank)
Max. 800 mm	Max. 500 mm

* The immersion depth is the water level at the tank, measured from the bottom edge of the containers



When installing the tanks in areas with permanently or temporarily-occurring groundwater, layer water or backwater, the tanks need to be secured against buoyancy!

Up to the maximum immersion depths listed in Table 1, the soil cover of the tanks will normally suffice to prevent floating of the tanks. The soil cover required as an anti-buoyancy measure is generally reached when the tank is covered with soil up to the upper edge of the dome (density > 1800 kg / m³).

4.1.5 Position with a view to buildings

The tanks should not be overbuilt and cannot bear loads from buildings or foundations. The distance to buildings must be sufficient. The civil engineering company in charge of the installation of the tank will decide on the minimum distance.

4.1.6 Locations on a slope / special installation situations

For locations on a slope, a support wall is necessary to absorb the lateral soil pressure. This wall should be built at a distance of 5 m to the tank. Trees, existing ducts, groundwater flows etc. need to be taken into account in such a manner that impairments and hazards are excluded.

4.2 Installation instructions

4.2.1 Building pit

The required space is calculated on the basis of the length and width of the tanks, plus working-space width (0.5 m) at the bottom of the pit, plus widening due to the slope angle (45°- 80°). The depth results from the tank size, the position of the ports/the supply pipe, and the bedding height of 0.2 m. The maximum installation depths are indicated in (⇒ Table 2).



Groundwork requires specialised knowledge! Slope angles need to be implemented in accordance with the relevant directives and the respective accident prevention regulations must be adhered to!



The indicated maximum installation depths of the tanks must not be exceeded!
Ensure prim execution of the lower bedding and of the lateral backfill, as well as the compliance with the working-space width of 500 mm!

Table 2: Max. permissible installation depths

Max. installation depth *	
"premium eco 1.0" 4 / 10 PE (3700 l tank)	"premium eco 1.0" 8 / 10 / 12 / 16 / 18 PE (6500 l tank)
Max. 2800 mm	Max. 3100 mm

* measured between the bottom of the tank (outside) and the top ground surface

4.2.2 Filling material

The filling material shall be shear-resistant, well compactable, permeable, frost-proof, free from sharp-pointed components, and may have only a very low proportion of clays and silts. These requirements are met, for example, by gravel sand or gravel with the grit sizes 1/4 to 2/16 made of round gravel without a shearing zone. In many cases, excavated soil or "backing sand" do not meet these requirements.

4.2.3 Time schedule of the installation

(1) Preparation

The tank and its internal parts must be checked for soundness and the positions of the inlet and outlet measured. For the insertion of the tank into the building pit, the bedding of filling material is prepared at the bottom of the pit:

Single layers with a height of 0.1 m are placed and strongly compacted (plate vibrator or three worksteps with a 15 kg hand tamper for each layer). The surface area must be exactly horizontally plane.

(2) Insertion of the tank

Ensure shock-free insertion of the tank into the pit and placement on the bedding.



The tanks have two lifting lugs in the zone of the dome.
Use approved and sound load take-ups only!
The tanks must only be lifted when empty!

Stopping under suspended loads (tank) can be mortally dangerous!

To immobilise the tank, half fill it with water.

(3) Filling and compaction of the lower part of the pit

The filling material is placed in the pit in layers of 0.1 m over a width of at least 0.3 m around the tank, and compacted using a 15 kg hand tamper (no machine employment) with one workstep per layer.

The remaining area per layer can be filled with excavated soil and needs to be compacted in the same manner as the filling material.



Flushing/washing-in of the filling material is not allowed!

(4) Installation of the inlet and outlet lines

Subsequent to filling/compaction of the lower part of the pit, installation of the inlet line with a slope (min. 1%) towards the tank, of the outlet line with a slope (min. 1%) from the tank, and of the ductwork for cables takes place (⇒ 4.2.5).

(5) Installation of the aeration

Sufficient aeration must be planned. This can be ensured by:

- Roof ventilation or additional pipe connections to the outside (e.g. from the inlet or outlet pipe). Leaching facilities must have ventilation or, where introduction into surface waters takes place, ventilation of the plant must be possible.
- Apertures and/or aeration pipes in the shaft cover (consider the possible introduction of contaminants/sound insulation/odour emission).

(6) Filling and compaction of the upper part of the pit

Prior to filling/compaction, the shaft cover is placed and adjusted.

The cover must be secured against unauthorised opening.

The filling/compaction up to approximately 0.2 m below the top ground surface takes place in the same manner as in the lower part of the pit. It must be ensured that the connections are tension-free and securely mounted. For residual filling, top soil or excavated material can be used.

4.2.4 Installation drawings and fitting dimensions

The design of the building pit is shown in Illustration 1 and Illustration 2, using the "premium eco 1.0" 4 PE plant type as an example. The fitting dimensions are indicated in Table 3.

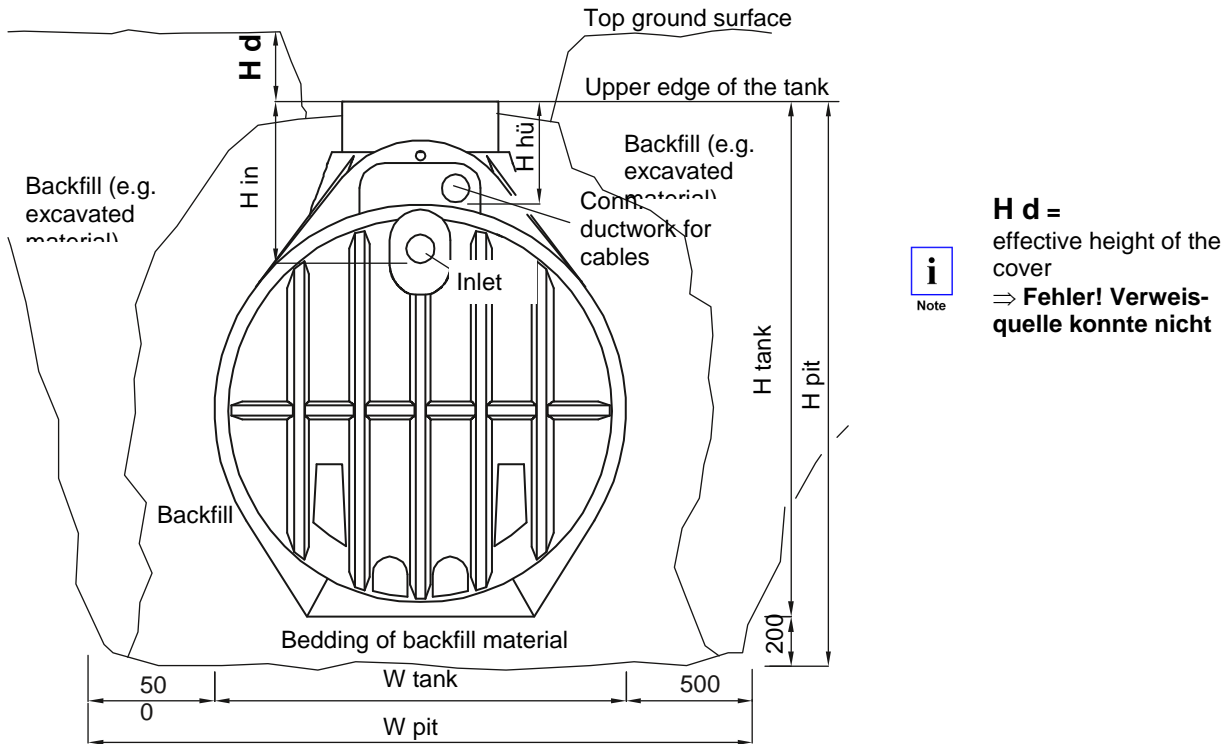


Illustration 1: Design of the building pit using the "premium eco 1.0" 4 PE plant type as an example (front side of the tank)

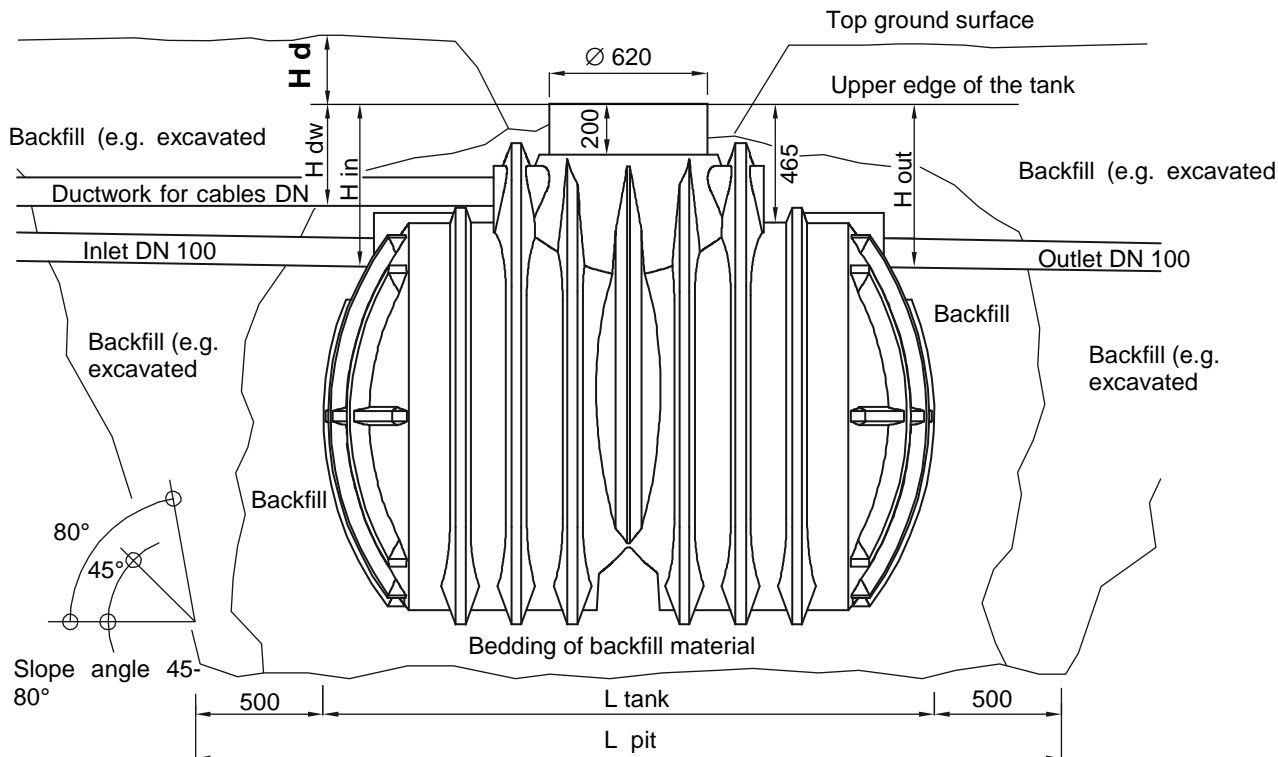
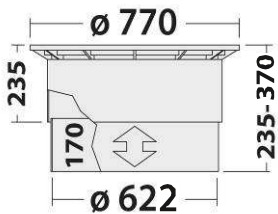
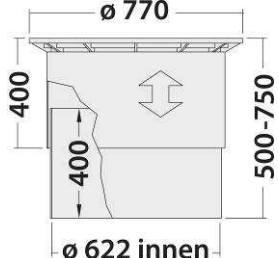


Illustration 2: Design of the building pit using the "premium eco 1.0" 4 PE plant type as an example (lateral view of the tank)

Table 3: Fitting dimensions

Main dimensions and building pit dimensions			
Dimension	Designation	"premium eco 1.0" 4 PE	"premium eco 1.0" 8 PE
L tank	Length of the tank	2400	2930
L pit	Length of the building pit bottom	3400	3930
W tank	Width of the tank	1630	1980
W pit	Width of the building pit bottom	2630	2980
H tank	Height of the tank (without cover)	2040	2350
H pit	Depth of the building pit bottom (without cover)	2240	2550
H d	Effective height of the cover	see ⇒ Fehler! Verweisquelle konnte nicht gefunden werden.	
Connections			
Dimension	Designation	"premium eco 1.0" 4 PE	"premium eco 1.0" 8 PE
H in	Depth of inlet pipe from lower edge of pipe to upper edge of tank without cover	590	620
H dw	Depth of the connection of the ductwork for cables from lower edge of pipe to upper edge of tank without cover	390	385
H out	Outflow depth from lower edge of pipe to upper edge of tank without cover	690	720

Table 4: Covers

H d max = 320 mm Cast iron cover [man-accessible incl. child safety features] PE d min = 185 mm	H d max = 700 mm PE cover [man-accessible incl. child safety features] H d min = 450 mm
<p>Through continuously-variable height adjustment (vertical pushing of both segments), the effective height can be varied between 185 and 320 mm (min. overlap with the tank dome 50 mm!). Further reduction of the effective height is possible by enhancing the overlap at the tank or by shortening the shaft segments!</p> <p>The effective height of the cast iron cover is 50 mm.</p> <p>To fix it, the tubing should be embedded in lean-mixed concrete.</p>	<p>Through continuously-variable height adjustment (vertical pushing of both segments), the effective height can be varied between 450 and 700 mm (min. overlap with the tank dome 50 mm!). Further reduction of the effective height is possible by enhancing the overlap at the tank or by shortening the shaft segments.</p> <p>The effective height of the PE cover is 100 mm.</p>
<p>PE telescopic segment [man-accessible incl. child safety features]</p> 	<p>PE telescopic dome [man-accessible incl. child safety features]</p> 

4.2.5 Installation of the ductwork for cables and connection of the air hoses

A cable conduit (suggested inner diameter 100 mm) is installed between the tank and the place of installation of the wastewater treatment plant control (⇒ Chapter 5). In this conduit, the supplied set of hoses is installed.



Caution

The hoses must be installed without kinks.

The length of the hoses should not exceed 10 m. Longer hoses should only be used after consulting the specialist retailer or the manufacturer.

The cable conduit needs to be sealed on both sides (e.g. using PU foam).



Note

As a ductwork for cables, a flexible cable conduit made of PVC-U for underground laying can be used, for example.

Alternatively, a commercial basic sewer pipe DN 100 can be used. Pipe elbows should be forgone here, if possible (max. 15°).

The three control hoses (inner diameter 13 mm) are connected to the clip according to the colour code. The hose for the aeration (inner diameter 19 mm) is connected at the top of the aerator bar. Fixing of the hoses is effected with the supplied hose clamps.



Note

It is advisable to size the hoses to a length allowing the removal of the clip from the tank without unfastening the hoses.

4.3 Test of the water tightness subsequent to installation

Outer walls and bottoms of the plant components as well as pipe connections must be tight. To verify this, the plant must be completely filled with water subsequent to installation. Any loss of water is unacceptable.

5 Installation of the wastewater treatment plant control

5.1 General advice regarding the installation of the control cabinets

Have electrical installation works carried out by qualified and skilled electricians only!

Prior to the start of installation works, de-energise the system and make sure it cannot be re-energised!

Power supply to the entire small wastewater treatment plant is centrally effected via a protective contact socket which is provided by the customer and mounted in the control cabinet.



The power supply needs to be provided as follows:

- 1~ 230 V / 50 Hz
- Separately fused via line protection B 16 A
- Earth leakage circuit breaker 30 mA (25 A)

The power plug must not be modified. The protective contact socket must be well accessible at all times for the maintenance service to allow disconnection from the network, if required. Lightning protection measures may possibly need to be undertaken.

The distance between the control and the tank should be such that the length of the SBR set of hoses of 10 m included in the delivery suffices!



The control must be well accessible for the regular operator checks and for maintenance measures. The control is mounted in such a manner that possible optical and acoustical alarm messages are detected by the operator. If there is the risk that trouble indications cannot be detected, an additional external alarm lamp can be connected to the control (⇒ see 5.4).

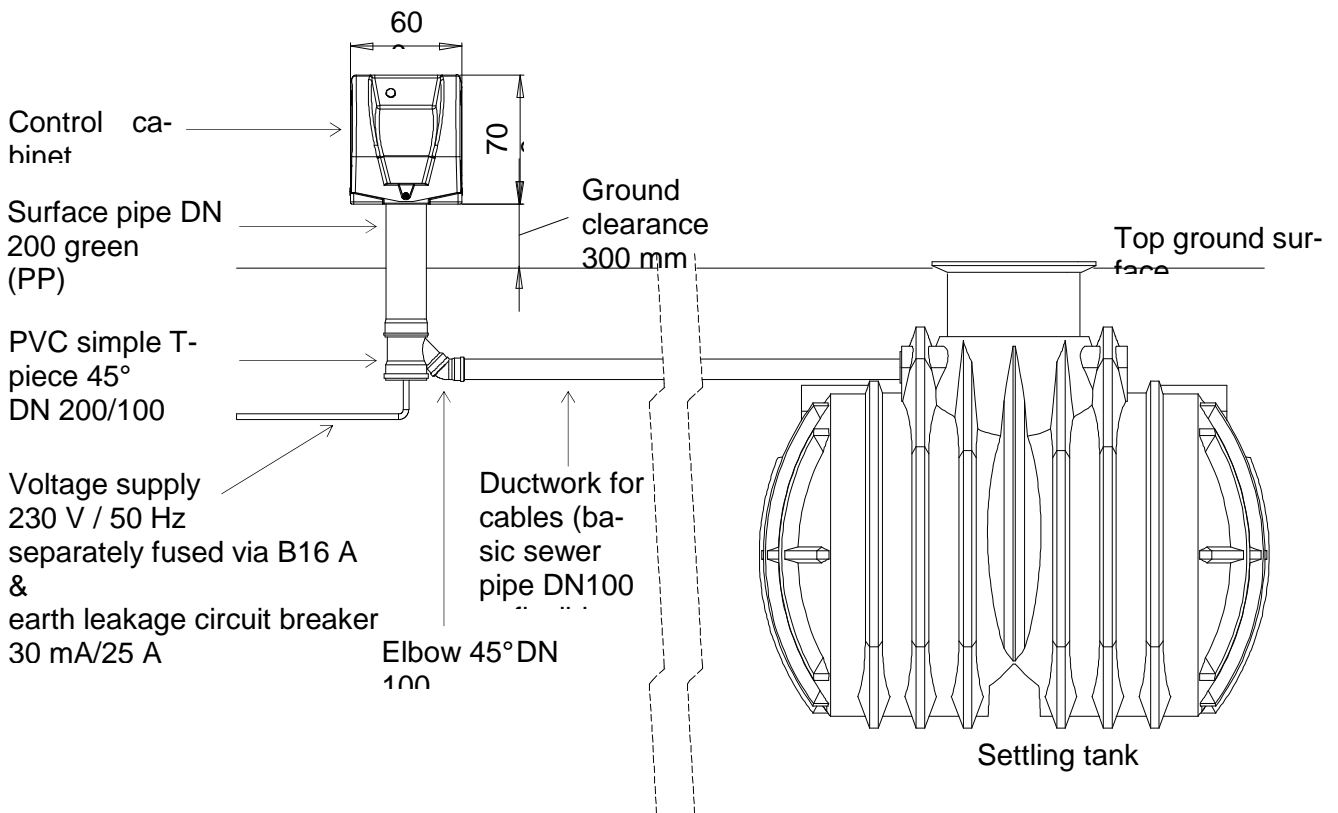
Unauthorised persons must not have access to the control. The control cabinet must always be kept closed and may only be opened by means of a special tool/ control cabinet key. The place of installation of the control must be well ventilated. The ventilating slots must always be unobstructed!

5.2 Installation of the control cabinet made of steel plate

The control cabinet made of steel plate is very well suited for wall mounting in a protected area (roof overhang, garage, carport, shelter, basement etc.). In the door of the cabinet, an alarm lamp is installed, so that malfunction can also be detected when the door is closed (⇒ see Illustration 3). Mounting eyes for simple wall mounting are included in the delivery.



Illustration 3: Control cabinet made of steel plate
Left: Exterior view with the main dimensions
Right: Interior view with linear pump (installation example)



For wall mounting, the control cabinet made of steel plate is recommended!

5.3 Connection of the aggregates

The air hoses installed in the ductwork for cables are led into the equipment cabinet, connected to the solenoid valve block according to the colour codes and fixed by means of the supplied worm drive hose clips.

The linear pump is placed below the circuit board control and connected to the angled hose nozzle of the solenoid valve block by means of the supplied accessories (19 mm hose connector, DN 19 transparent PVC hose) (⇒ see **Fehler! Verweisquelle konnte nicht gefunden werden.** and Illustration 3).



The connector plug of the linear pump is plugged into the protective contact socket installed on the bottom side of the circuit board control!

Under no circumstances must the linear pump be connected to another/permanent voltage supply! This may result in damage to the linear pump and in disturbance of the purification process.

Subsequent to the termination of all installation works, the power plug of the circuit board control is plugged into the protective contact socket provided by the customer.

The control has no separate power switch and starts automatic operation as soon as it is connected to the network!

Devices may suddenly start operation or may suddenly be switched on!

Prior to the start-up of the plant by plugging-in the power plug of the circuit board control, it must be ensured that:



- The start-up is effected by a competent person who is familiar with the mode of operation of the entire plant and with the provisions of the operating instructions
- All requirements regarding the start-up specified in the operating and service instructions are met
- No danger emanates from the plant!

5.4 Connection of external alarm devices (optional)

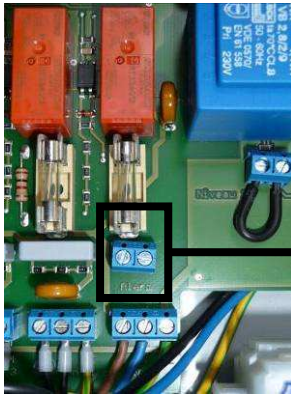
If necessary, the customer can connect a 230 V signal unit (alarm lamp or horn) at output no. 6 (= alarm output) of the control. The output is switched on intermittently (switching impulses on/off approx. 1 sec. each) as long as an alarm message exists which has not been acknowledged.

Have electrical installation works carried out by qualified and skilled electricians only!

Prior to the start of installation works (e.g. prior to opening the control), de-energise the system and make sure it cannot be re-energised!



At the terminals of the alarm output (output 6), supply voltage is applied in the case of an alarm situation (230 V). The alarm output can be loaded with max. 8 A. The fine-wire fuse of the output must be adapted to the alarm device. The connector cable of the alarm device is led through the threaded cable connections mounted on the side of the housing. The threaded cable connection should allow the maintenance of the protection class of the device!



Print terminal for the connection of an external alarm device at output 6

Illustration 4: External alarm output

6 Operation of the system with a submersible pump for the clear-water removal (optional)

6.1 Field of application

Clear-water removal can be effected using a submersible pump (= clear-water pump) if the introduction of the treated water into the receiving water or the leaching facility in a free incline is impossible as a result of the height difference or if this difference cannot be overcome by means of an air-lift pump. The submersible pump is provided by the customer and should boast the following performance data (recommended):

Type:	Sewage pump for solids-free wastewater, version with a float switch
Permissible size of the solids:	≥ 30 mm
Max. pump head:	approx. 5 – 7 m
Max. output:	approx. 6 – 9 m ³ /h
Voltage supply:	1~ 230 V / 50 Hz via safety plug
Cable length:	≥ 10 m



Caution

The pump is directly connected to the small wastewater treatment plant control and is, in automatic operation, time-dependently triggered by the control. For this purpose, the control is prepared in the factory for the connection of the pump (please specify when ordering).

For the release of a high water message in the event of a failure of the clear-water pump, the additional use of an alarm float switch is suggested (provided by the customer). This alarm float switch is independent of the float switch of the pump and is directly clamped to the control of the wastewater treatment plant. The alarm float switch must show the "Filling" contact function:

- In the lower position of the float, the electrical contact is closed
- In the upper position (=float is floating), the electrical contact is open

In the event of a failure of the pump, the water level in the tank rises to a dangerous extent. The alarm float switch floats and the thus opening contact of the switch releases an alarm message at the control.

6.2 Installation of the pump and of the optional alarm float switch

The clear-water pump is placed in the SBR reactor for example using a chain made of non-corroding steel. The pump should be positioned in such a manner that the water level in the reactor lies by dimension P_{\min} below the partition panel when the operation of the pump is interrupted by the pump-internal float switch (lower switching point / float switch in the lower position). Dimension P_{\min} (= position of the minimum water level) is indicated in Table 4 for the different plant types.

Table 4: Dimension P_{min} for the different plants

Used plant type	Position of the minimum water level based on the upper edge of the partition panel	
Quick 4 PE	$P_{min}=0.43$ m	P_{min} : measured between the upper edge of the partition panel and the minimum water level (= height at which the pump stops)
Quick 8 PE	$P_{min}=0.43$ m	

It should be observed that the free cable length of the pump-internal float switch is not too long.



Note

When the SBR reactor is charged again from the buffer container at the beginning of a new purification cycle, the pump-internal float switch should re-reach its upper switching position as quickly as possible. This ensures that the pump is able to start operation at the end of the purification cycle during the clear-water removal to empty the reactor until the minimum water level has been reached.



Caution

The pump must be positioned in such a manner that the pump-internal float switch reliably switches without being impaired in its function by other internal parts or tank walls. Otherwise, surcharging of the entire plant may occur. Positioning of the pump needs to be effected in accordance with Table 4!

Between the pump and the final drainage point, the possibility of drawing samples is planned. For this purpose, an additional shaft for sampling can be planned between the pit and the final drainage point (e.g. shaft with an inner diameter of 400 mm). Alternatively, the distributor shaft of the leaching facility can be used. The connection between pump and outlet/sampling point can be implemented with a pipe or hose (ensure secure fixing!).

The optional alarm float switch can be fixed to the clip using cable ties, for example. The control releases an alarm message when the alarm float floats and when its contact has opened (or when there is a cable break). The water level at which the alarm is triggered should be on the level of the maximum water level in the reactor. The early alarm message ensures that there is still a certain period of time left for remedial actions before a backup into the supply pipe to the pit takes place.



Note

The free cable length of the alarm float switch should be as short as possible to allow fast acknowledgement of the alarm message as soon as the water level drops again. The float switch must be able to reliably switch without being impaired in its function by other internal parts or shaft walls.

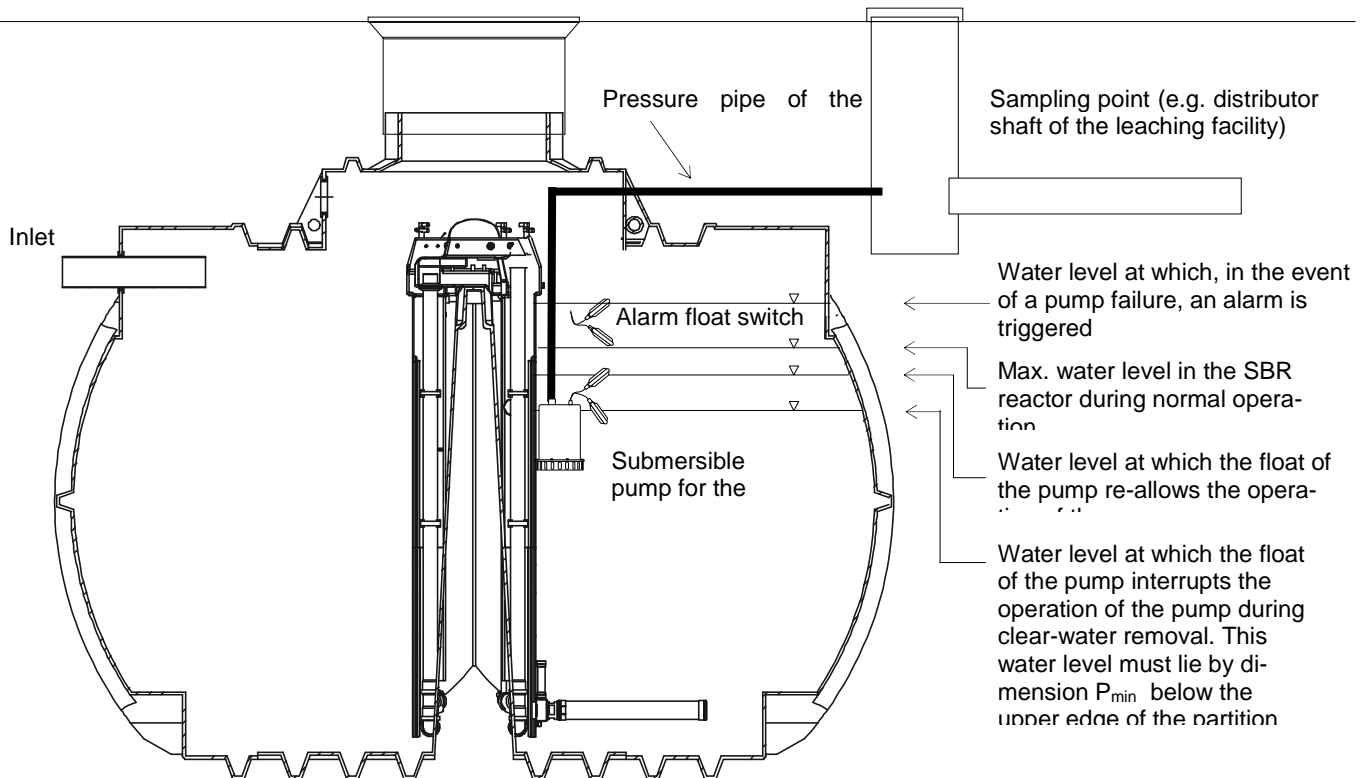


Illustration 5: Installation of a submersible pump for the clear-water removal (= clear-water pump)
Exemplary representation
Dimension P_{min} : \Rightarrow see Table 4



If the removal of clear water is effected by means of a submersible pump, the clear-water lifter is not used. In the ductwork for cables between the control and the plant, the supply pipe (blue compressed-air hose DN 13) for the clear-water lifter is not used!

6.3 Connection of the pump and of the optional alarm float switch to the control



Have electrical installation works carried out by qualified and skilled electricians only!
Prior to the start of installation works (e.g. prior to opening the control), de-energise the system and make sure it cannot be re-energised!

The feeder of the submersible pump and the sensor cable of the optional alarm float switch are led through the ductwork for cables to the control, together with the air hoses.

The clear-water pump is directly connected with the control of the wastewater treatment plant via an earthed coupling. This earthed coupling is mounted ex factory for the connection of the pump (please specify when ordering!). The coupling is installed directly at output 4 (clear-water removal). In the standard version of the control, solenoid valve no. 3 for the triggering of the clear-water lifter is connected

here. As no clear-water lifter is employed in the application described here, solenoid valve no. 3 is not connected. The control only activates the clear-water pump via output 4 during the clear-water removal phase. This takes place over a period of 10 minutes (in 4 PE plants). During this phase, the clear-water removal pump runs until its operation is interrupted by the pump-internal float switch.

The clear-water pump must only be connected to the earthed coupling installed at output 4 of the control!

The pump must not be mounted on the protective contact socket installed on the bottom side of the control! This socket serves for the connection of the linear pump!



Caution

Under no circumstances must the pump be connected to an external/permanent voltage supply. This would inevitably lead to a service failure of the small wastewater treatment plant!

Output 4 for the connection of the clear-water pump is internally fused with a 2.5 A fine-wire fuse. When using a pump with higher power consumption, this fine-wire fuse must be replaced with a correspondingly-dimensioned fine-wire fuse (observe the technical data of the circuit board control)!

Operation of the clear-water pump is possible with the standard software. For this, merely the following setting must be adjusted:



Caution

Under point **4.13 Clear-water pump** in the system menu (⇒ see operating and service instructions), select the option "**Submersible pump**"

Please check, prior to the start-up, whether the setting under 4.13 of the system menu is correct.

In the event that the setting is not correct, a trouble indication is inevitable!

The additional alarm float switch (if applicable) is connected to the input terminal "Niv 1" (= "Level 1") at the control. The terminal is in the lower right area of the circuit board and is accessible after the dismantling of the front cover of the circuit board control.



Caution

The sensor cable of the optional alarm float switch is led into the housing through one of the lateral threaded cable connections. The threaded cable connection should be designed in such a manner that the protection class of the device is maintained!



Note

The use of the optional alarm float switch requires no specific settings at the control!

As soon as the control detects an open contact at input terminal "Niv 1" (= "Level 1"), the alarm message "High water" is released.

7 Check list at the end of the installation works

	OK
Roof ventilation checked and function ensured or, if required, additional ventilation of the tank ensured	
Hoses installed without kinks in the ductwork for cables / hoses not longer than 10 m	
Ductwork for cables sealed on both sides	
Hoses connected to the clip according to the colour code	
Purified water can flow off at all times from the sampling container without backup	
Leak test of the tank effected in accordance with DIN 1610 - passed	
Air hoses in the control cabinet connected to the solenoid valve block according to the colour code	
Linear pump connected to the solenoid valve block on the pressure side and the plug of the device plugged into the bottom side of the control	
Voltage supply to the plant via protective contact socket (230 V / 50 Hz; separately fused with B 16 A and earth leakage circuit breaker)	

8 Declaration of conformity