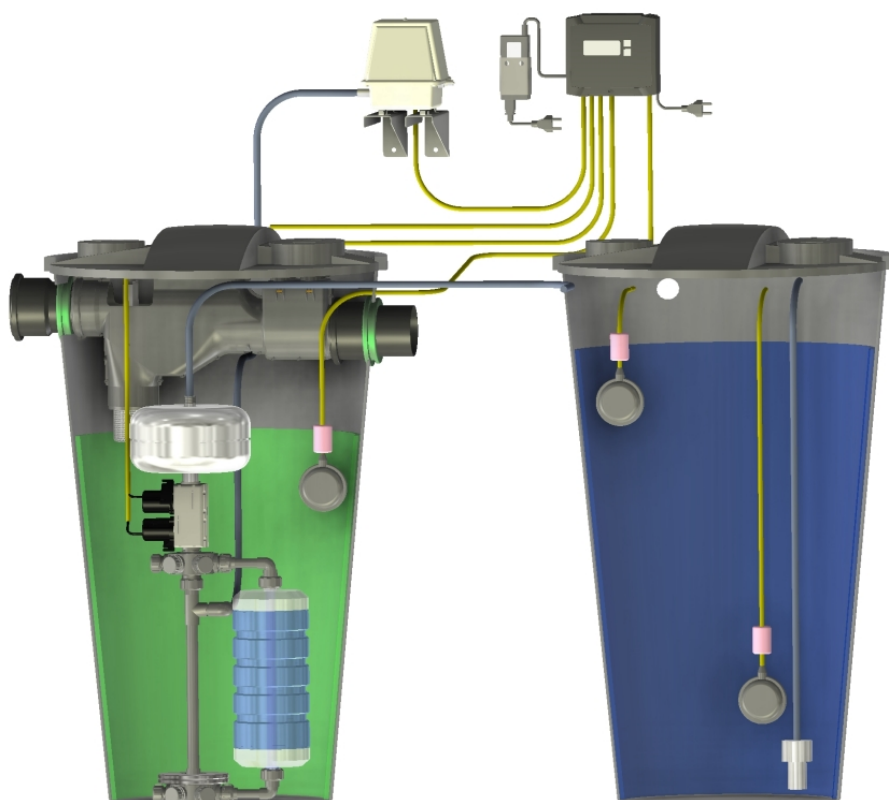


INTEΨA



AL-System 6 **AQUALOOP System 6** **Installation and operating instructions**

WATER IS OUR ELEMENT

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1. Introduction and general instructions

The AQUALOOP System 6 is specially designed for grey water utilization for single family dwellings. It can treat up to 300 litres of grey water per day.

All five AQUALOOP components make up the system and are installed by the client in the pre-configured bioreactor and clear water tanks.



Fig. 1: AQUALOOP components

The manual describes the installation of the pre-configured tank and system components in the tank.

Detailed information on each component is included in the respective components manual or latest updated information can be found at:

<http://www.intewa.de/1/wasser/wasseraufbereitung/>

2. Scope of delivery

1. AQUALOOP-MS, membrane station with control unit, switching power supplier, floating switch (2pcs.)
2. AQUALOOP-MEM, membrane
3. AQUALOOP-F100, prefilter
4. AQUALOOP-30L, blower
5. AQUALOOP-FK30I, growth media material
6. Bioreactor tank 350 Litres, pre-configured
7. Clear water tank 350 L, pre-configured
8. Installation material:
 - 2pcs. Pipe Ø110 mm x 250mm,
 - Installation lubricant
 - Siphon hose 1"
 - 5 pc cable ducts PG 11 with nut
 - ½" clear water hose, 2 m
 - 5 x cable glant
 - 1" external aerator hose, 2 m
 - 1" internal aerator hose, 0,6 m
 - ½" suction unit



Fig. 2: Scope of delivery

3. Technical Data

Bioreactor

Tank dimension (Ø x H):	Ø740 x 1275 mm
Inflow connection:	DN100 (Ø110mm), bush
Inflow height:	1045 mm
Emergency overflow connection :	DN100 (Ø110 mm), spigot
Emergency overflow height:	980 mm
Cable ducts:	PG 11(suction pump, back flush pump, float switch BR min)
Blower connection:	1 ¼" male, Ø 25mm hose tube
Weight incl. cover:	11.5 kg

Clear water tank

Tank dimension:	Ø740 x 1275 mm
Clear water intake:	hose, Ø21 x Ø14
Emergency overflow:	1" AG
Cable ducts	PG 11, (floating switch CL max, float switch feeding)
Clear water extraction:	¾" AG, hose tube Ø 14 mm
Weight incl. cover	11.5 kg

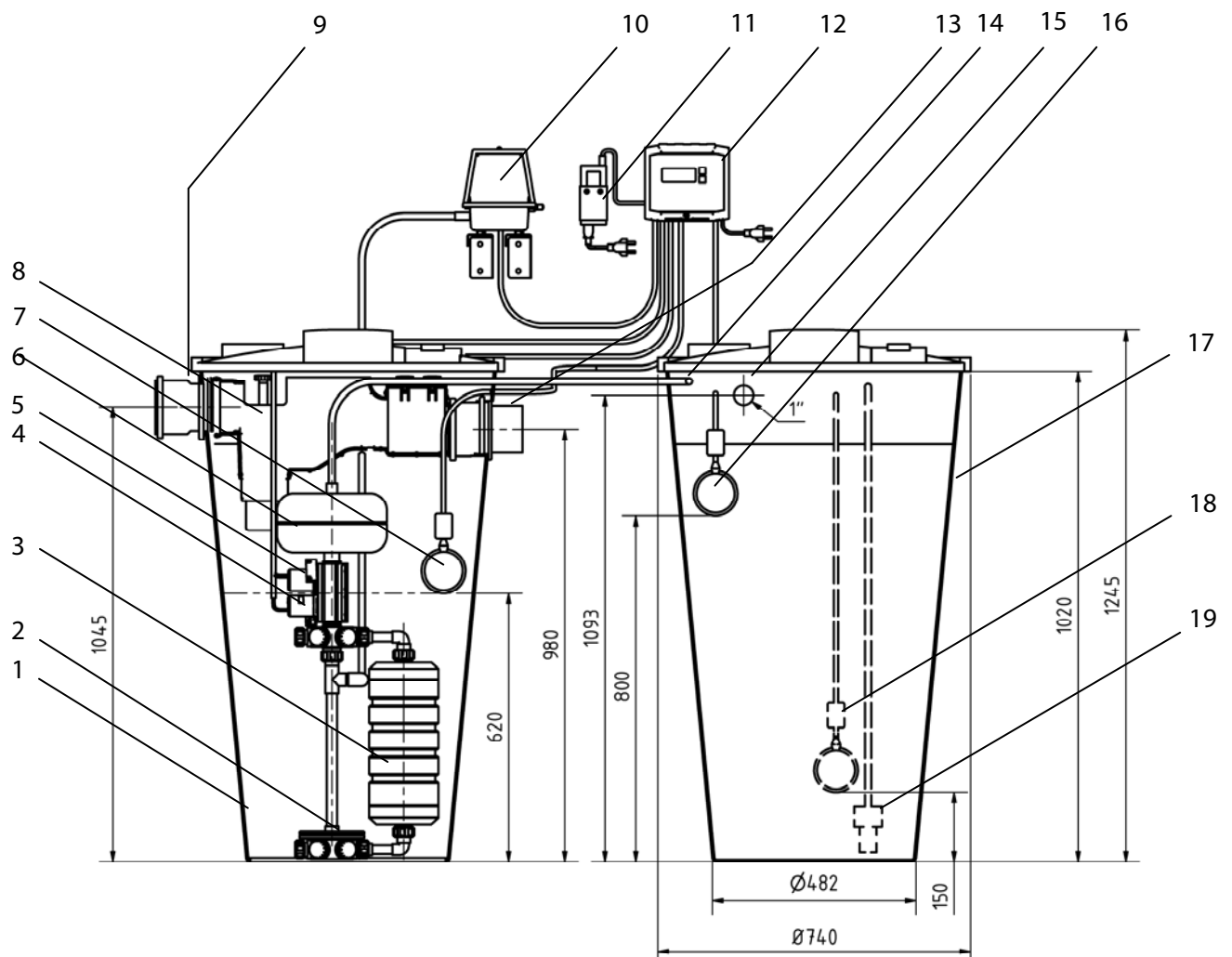


Fig. 3: Overview of small system AQUALOOP System 6

<div>1. Bioreactor</div> <div>2. Wheel weight</div> <div>3. Membrane</div> <div>4. Suction pump</div> <div>5. Back flush pump</div> <div>6. Float switch Bioreactor BR min</div> <div>7. Back flush tank</div> <div>8. Pre-filter</div> <div>9. Bioreactor inflow</div> <div>10. Blower</div>	<div>11. 24 Volt switching power supply</div> <div>12. Control unit</div> <div>13. Bioreactor emergency overflow</div> <div>14. Clear water inflow</div> <div>15. Clear water tank emergency overflow</div> <div>16. Float switch clear water CL max</div> <div>17. Clear water tank</div> <div>18. Float switch clear water min (e.g. RM Eco)</div> <div>19. Clear water suction</div>
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4 Installation instructions

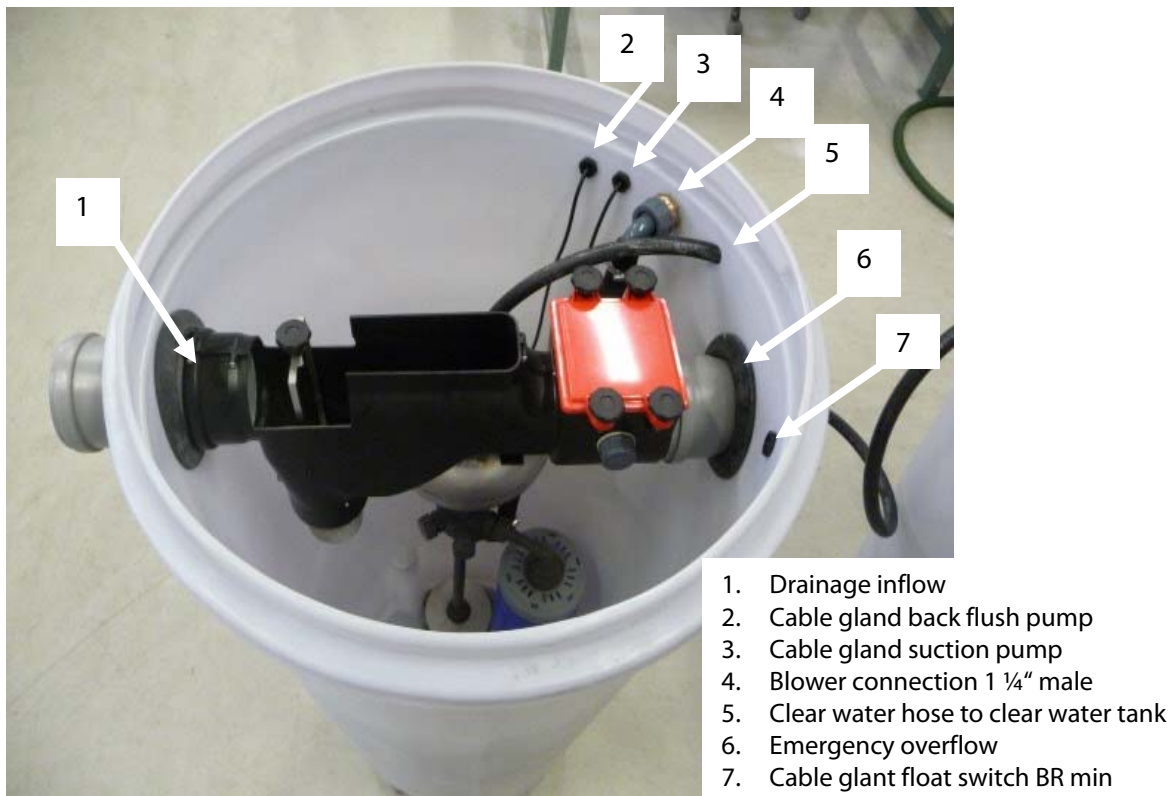


Fig. 4: Bio reactor

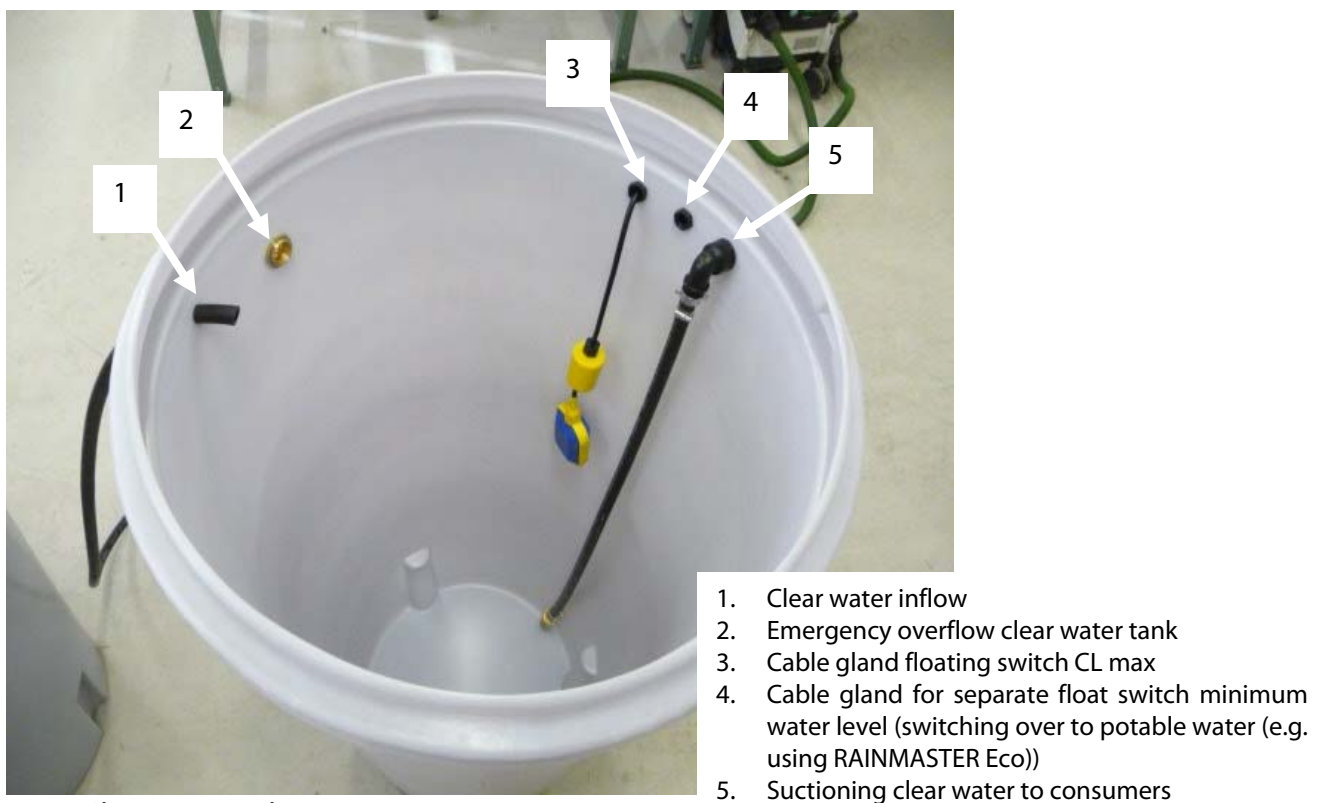


Fig. 5: Clear water tank

Installation sequence:

1.) Wall installation of control unit and switching power supply holder

- Installation instructions (drilled hole distance etc.) are to be taken from the installation and operating manual of the AQUALOOP-MS.



2.) Wall mounting of blower

- Mounting instructions (distance from drilled hole etc.) are to be taken from the instruction sheet of the AQUALOOP-BL30



3.) Installing pre-filter

- Suction overflow hose is connected to the pipe socket and secured with a hose clamp.
- Pipe is to be directed internally up to the overflow connection bush of the bioreactor. Note: first, rub the pipe with installation lubricant before sliding the pipe in.
- Fit the pre-filter into the overflow connection mounted pipe collar first.



- Then, holding the pre-filter inlet on the outside of the bioreactor, line up with the pre-filter inflow and slide into place. Note: first, rub the pipe and seal with installation lubricant before sliding the pipe in.



4.) Assembling the membrane station and insertion in the bioreactor

- The installation of membrane station should be done as shown in the installation and operating manual of the AQUALOOP-MS.
- The position of the blower hose connection for the membrane cartridge is to be positioned directly next to the diaphragm connection so that the pre-configured blower hose can be easily adjusted.



5.) Installation of float switch in the bioreactor and clear water tanks

- see manual AQUALOOP-MS



6.) Connecting all electrical components to the controller and the adjustment of the parameters

- see operating manual of AQUALOOP-MS,



7.) Leak test

- Fill the bioreactor with water, check for any leaks and then follow the start-up operation of the system (see. manual for AQUALOOP membrane station).

8.) Adding the growth media into the bioreactor

- Pour the plastic media into the bioreactor



9.) Start-up operation

- Begin the start-up operation of the system (see manual for AQUALOOP-MS)



5. Maintenance and cleaning

Instructions for maintenance and cleaning are referred to in the manuals of each component. The bioreactor is cleaned annually. For this purpose, the water is completely pumped out with a submersible pump (e.g. accessory AL-VIP) and the tank is washed out with clean water. The growth media are not removed but only roughly rinsed. Note: During the cleaning operation, the pump hose can be connected with a non-return valve to the overflow connection of the prefilter. Thus, the pumped water goes directly out to the sewer. The clear water tank is only cleaned as needed.

6. Warranty / contact

The warranty provisions are included in our sales conditions, and can be viewed at:

<http://www.intewa.de/1/cs/dialog/rechtliches/verkaufsbedingungen/>

For any queries, orders for spare parts or service enquiries, please get in touch with your local dealer or visit the service domain at the INTEWA website of your country.

Always keep your purchase invoice handy.

www.intewa.com

