

# **OASE 13000 FiltoClear Pump and Filter Instruction Manual**

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OASE 13000 Filto Clear Pump and Filter



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### Introduction

- WARNING Disconnect all electrical units in the water from the power supply before reaching into the water. Otherwise there is a risk of injuries or death by electrocution.
- This unit can be used by children aged 8 and above and by persons with reduced physical, sensory or mental
  capabilities or lack of experience and knowledge if they are supervised or have been instructed on how to use
  the unit in a safe way and they understand the hazards involved. Do not allow children to play with the unit.
  Only allow children to carry out cleaning and user maintenance under supervision.

### Safety information

### **Electrical connection**

- Special regulations apply to electrical installation in outdoor areas. Only allow a qualified electrician to perform the electrical installation.
- The qualified electrician has the required professional training, knowledge and skills to perform electrical
  installations in outdoor areas. The qualified electrician can detect potential risks and adheres to regional and

national standards, regulations and directives.

- For your own safety, please consult a qualified electrician.
- Only connect the unit if the electrical data of the unit and the power supply match.
- Only plug the unit into a correctly installed outlet. Ensure that the unit is fused for a rated fault current of max.
   30 mA by means of a fault current protection device.
- Extension cables and power distributors (e.g. outlet strips) must be suitable for outdoor use (splash-proof).
- Protect open plugs and sockets from moisture.

### Safe operation

- Do not use the unit, if electrical lines or the housing are damaged.
- · A damaged connection cable cannot be replaced. Dispose of the unit.
- Do not carry or pull the unit by its power cable.
- Never make technical modifications to the unit.
- Only carry out work on the unit that is described in this manual.
- Only use original spare parts and accessories.
- Route lines so that they are protected from damage and nobody can trip over them.
- Should problems occur, please contact the authorized customer service or OASE.

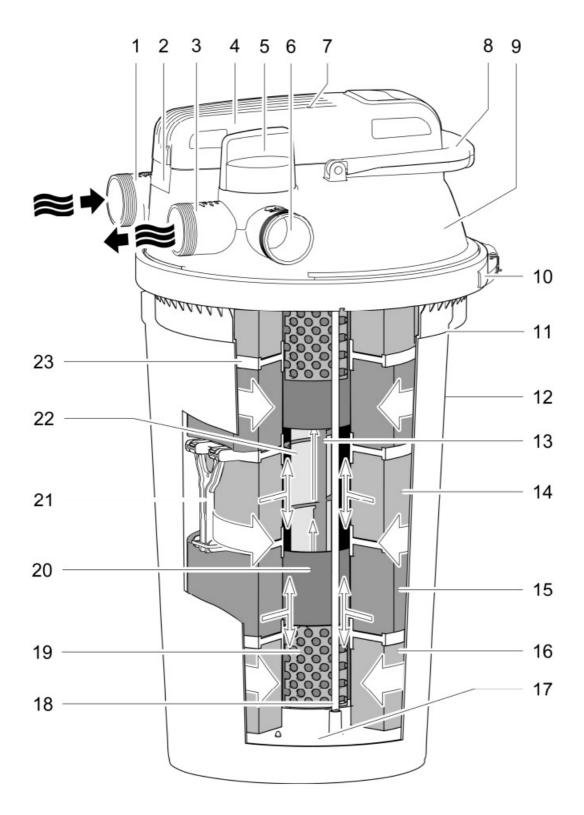
#### Intended use

Only use the product described in this manual as follows:

- · For mechanical and biological cleaning of garden ponds
- In compliance with the technical specifications. (→ Technical data)
   The following restrictions apply to the unit:
- This product is not suitable for general lighting, but is only intended for the purpose described here.
- Never operate the UVC lamp outside the casing or use it for any other purpose. The UVC radiation is harmful to the eyes and skin even in small doses.
- · Never use the unit with fluids other than water.
- Do not use in conjunction with chemicals, foodstuff, easily flammable or explosive substances.
- Never run the unit without water.
- Do not use for commercial or industrial purposes.

### **Product description**

#### **Overview**

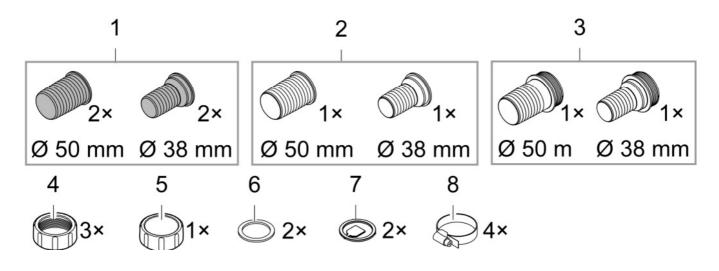


| 1 | • Connection G2   |
|---|---|
| 2 | Opening ring with locking screw for locking the UVC unit head  • It is necessary to open the opening ring in order to remove the UVC unit head. |

| 3  | Water outlet for the cleaned pond water · Connection G2  |
|----|--|
| 4  | UVC unit head with temperature monitor     The UVC clarifier shuts down when overheating and automatically turns on again after it has s cooled down |
| 5  | Turning valve for switching between water outlet and dirt water outlet  Water filtration and UVC radiation  Cleaning the foam filters                |
| 6  | Dirt water outlet for the dirt water when cleaning the foam filters  • Connection G2   |
| 7  | Indicator lamp for checking the function of the UVC clarifier  |
| 8  | Cleaning handle     Pull to compress the foam filters and flush out the dirt particles   |
| 9  | Filter cover   |
| 10 | Clamping ring for fastening the filter cover on the container  |
| 11 | Marking for max. burying depth   |
| 12 | Container  |
| 13 | Cleaning rotor, cleans the quartz glass during operation  Only for FiltoClear 19000, 31000   |
| 14 | Foam filter, blue (10 ppi)   |
| 15 | Foam filter, red (30 ppi)  |
| 16 | Foam filter, purple (20 ppi)   |
| 17 | Closing disc for foam filters, is connected with both cleaning rods  |
| 18 | Cleaning rod, connecting cleaning handle and closing disc  |
| 19 | Meshed tube, maintaining the distance between the foam filters and the UVC water housing   |
| 20 | UVC water housing, conveying water to the UVC lamp   |

| 21 | Spacers that connect the two spacer discs  • The spacers prevent the foam filters from being compressed by the weight of the foam filter s above them |
|----|---|
| 22 | Quartz glass with internal UVC lamp   |
| 23 | Spacer disc, placed between each pair of foam filters   |

# **Connection components for installation**



| 1 | Hose connector, transparent  • Use: Water outlet, dirt water outlet  |
|---|--|
| 2 | Hose connector, black  • Use: Water inlet  |
| 3 | Hose connector, black with G2 outer thread  • Use: Open end of the dirt water hose, the cover cap is screwed onto the outer thread |
| 4 | Union nuts G2, for installing the hose connectors  |
| 5 | Cover cap G2, for closing the dirt water outlet  |
| 6 | Flat seal for black hose connector and cover cap   |
| 7 | Flow lug for transparent hose connector  |
| 8 | Hose clip  |

# **Function description**

The filter pump pushes the water into the pressure-tight container where it passes through several cleaning stages before returning into the pond.

### Cleaning stage "Filtration"

The water flows through the foam filters. Mechanical soiling is retained by the foam filters. Suspended matter and bio sludge settle on the container bottom. Useful bacteria settle on the foam filters, cleaning the water biologically. Their effect starts at a water temperature of +10 °C.

| Foam filter     | Properties  |
|-----------------|---|
| Blue (10 ppi)   | High flow rate  |
| Purple (20 ppi) | Colonisation of bacteria for nitrification, which turns ammonia first in to nitrite, then into nitrate            |
| Red (30 ppi)    | Lower flow rate Colonisation of bacteria for nitrification and denitrification, which turns nitrate into nitrogen |

### Cleaning stage "UVC radiation"

Water is subjected to UV-C light from the UVC clarifier. Green algae die, pathogenic agents are killed.

### **Bypass**

The bypass ensures that only approx. 70 % of the water is subjected to UV-C light. This guarantees sufficient radiation even at high flow rates.

### **Biological cleaning effect**

The maximum biological cleaning effect is achieved when the foam filters are fully colonised by filter bacteria. On new foam filters, colonisation may take several weeks. Adding starter bacteria can significantly speed up colonisation.

### Cleaning the foam filters

You can use the soiled water from cleaning the foam filters to fertilise your garden.

### Recommended filter pump

|                     | FiltoClear |       |       |       |
|---------------------|------------|-------|-------|-------|
|                     | 5000       | 13000 | 19000 | 31000 |
| AquaMax Eco Premium | 4000       | 8000  | 12000 | 16000 |

### Symbols on the unit

| IP68 √ 0.1 m | The unit is dust-proof, fully protected against contact and protected from continuous i mmersion in water to a depth of 0.1 m. |
|--------------|--|
| <u>-</u>     | Dangerous UVC radiation  |
| 紫            | Protect the unit from direct sunlight  |
| ***          | Protect the unit from freezing temperatures  |
|              | Do not dispose of the unit with normal household waste   |
| <u> </u>     | Read the operating instructions  |

### Installation and connection

### **Installing the unit**

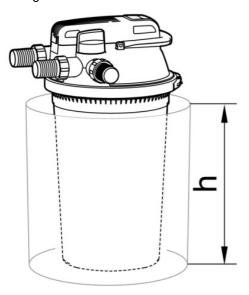
To be taken into consideration for planning:

- For operation at a swimming pond: Install the unit at a distance of at least 2 m from the water.
- For operation at a pond: You can set up the unit directly at the edge of the pond.
- Protect the pressure filter from direct sunlight.
- Route the return hose into the pond so that the water returns to the pond e.g. through a water course. This enriches the water with additional oxygen.
- Ensure that the inlet into the pond is max. 2 m above the filter cover.

### Burying the pressure filter

A buried container is barely visible. The stone grey FiltoCap (Art. No. 77831) cover available as an accessory for the filter cover fits seamlessly into the pond scape.

- Dig a hole close to the pond and place the container in the hole down to the maximum burying depth.
- The ground must be firm and horizontal.

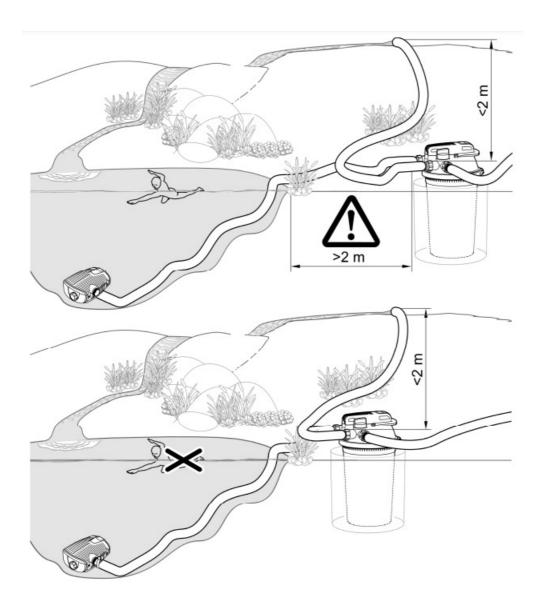


| FiltoClear | Burying depth h |
|------------|-----------------|
| 5000       | 0.12 m          |
| 13000      | 0.24 m          |
| 19000      | 0.36 m          |
| 31000      | 0.48 m          |

### Installing the pressure filter on level ground

If you choose not to bury the pressure filter, position it so that it is hidden from sight e.g. covered by bushes.

- Install the unit near the pond.
- The ground must be firm and horizontal.



# **Establishing the connections**

Hoses with a diameter of 38 mm or 50 mm can be connected to the pressure filter. The respective hose connectors are part of our scope of delivery.

Use hoses with a diameter of 50 mm to keep the pressure losses in the hoses as low as possible.

If you use a filter starter for start-up, fill the product into the container prior to carrying out the following installation steps.

• It is easier to remove the filter cover if you first remove all hoses from the filter cover.

### **Connecting the inlet**

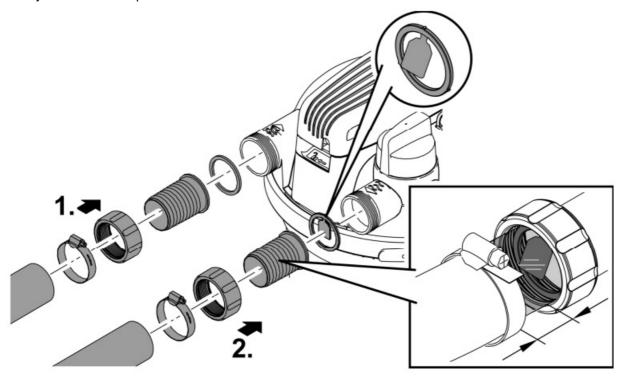
Only use pressure hoses approved for at least the maximum pump pressure to connect the outlet of the filter pump and the inlet of the pressure filter.

• Always use a hose clip to fasten the hose on a hose connector.

### Connecting the outlet

Use a transparent hose connector with a flow lug. The transparent hose connector will allow you to assess the water quality after filtration. The flow lug will show you the water flow.

- Push the hose onto the hose connector until only two segments on the hose connector remain uncovered.
- This will give you a sufficiently large view into the hose connector.
- Always use a hose clip to fasten the hose on a hose connector.



### **Connecting the dirt outlet**

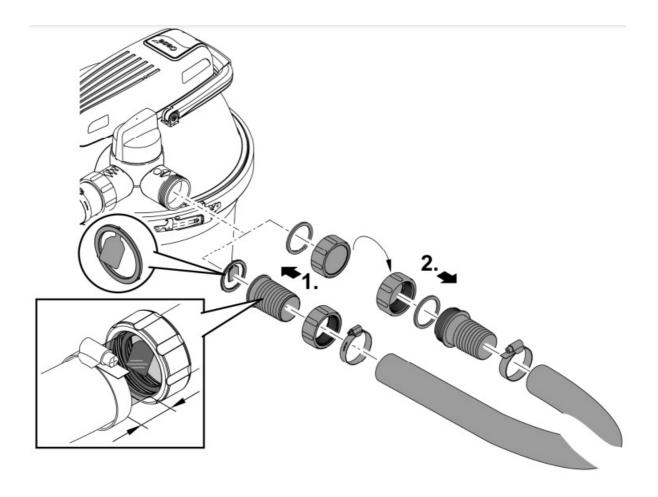
The soiled water resulting from cleaning can be used for fertilisation. Connect a hose and route it up to a suitable location (e.g. flower bed).

Use a transparent hose connector with a flow lug. The transparent hose connector will allow you to assess the degree of soiling of the water when cleaning the foam filters. The flow lug will show you the water flow.

- Push the hose onto the hose connector until only two segments on the hose connector remain uncovered.
- This will give you a sufficiently large view into the hose connector.
- Always use a hose clip to fasten the hose on a hose connector.
- Install the black hose connector with the G2 outer thread on the outlet of the hose. Close the hose connector with the cover cap and the flat seal.

#### **NOTE**

Close the dirt outlet or the outlet of the connected hose with the cover cap and the flat seal. This prevents unintended emptying of the pond. Only remove the cover cap to drain dirty water.



### Commissioning/start-up

#### NOTE

The unit will be destroyed if it is operated with a dimmer. It contains sensitive electrical components.

• Do not connect the unit to a dimmable power supply.

The purely biological starter bacteria Oase AquaActiv BioKick activate the filter biology and ensure maximum performance of your pond filter within only a few weeks. They immediately start removing nitrite, ammonium and ammonia from the water. We recommend filling the container with Oase AquaActiv BioKick

- · during initial start-up,
- after manual cleaning or replacing the foam filters,
- after long shut-down periods or during start-up after a long winter break.

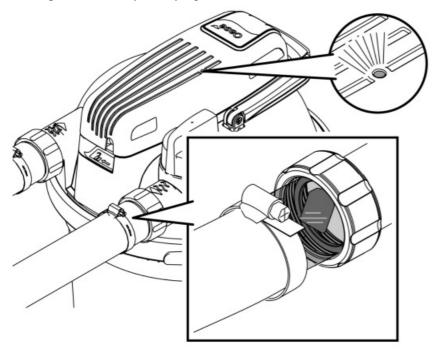
### Start-up sequence:

- 1. If required, fill the container with Oase AquaActiv BioKick. (→ Removing/positioning the filter cover)
- 2. Ensure that the hoses, cover cap for the dirt water outlet and the clamping ring with the safety latch are firmly connected.
- 3. Turn the turning valve to "Filter water".
- 4. Switch on the pond pump.
- 5. Only switch on the UVC clarifier when water emerges from the water outlet. (→ Switching the UVC clarifier on/off)

- Never run the UVC clarifier without water flowing through.
- If you are using Oase AquaActiv BioKick, leave the UVC clarifier turned off for 24 hours. This allows the starter bacteria to achieve optimum effectiveness.

### Switching the UVC clarifier on/off

- Switching on: Plug the power plug into the outlet.
- The unit switches on immediately.
- The indicator lamp lights up.
- The flow lug on the outlet will show you that water is flowing.
- Switching off: Pull the power plug from the outlet.



### Operation

The pressure filter can remain in operation for the full pond season (the filter pump and the UVC clarifier are switched on).

- The biological filter elements are no longer active at water temperature of less than 10 °C.
- Shut down the unit at water temperatures below 8 °C or at the latest when freezing temperature are to be expected. (→ Decommissioning/winter storage)
- The UVC lamp is a wear part. Replace the UVC lamp after a specific operating duration to ensure optimum filter performance. (→ Replacing the UVC lamp.

### Maintenance and cleaning

### NOTE

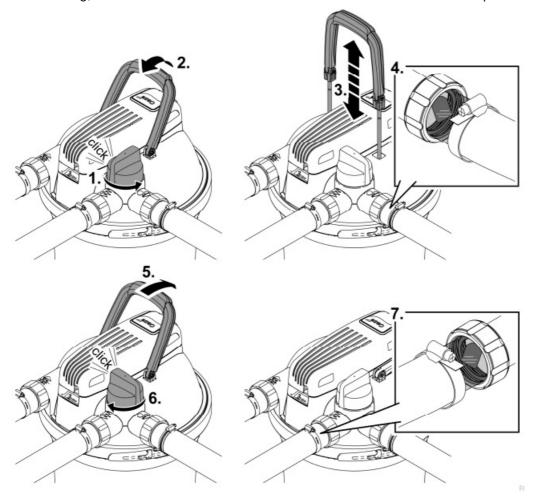
Do not use aggressive cleaning agents or chemical solutions. These agents can damage the housing, impair the function of the device and harm animals, plants and the environment.

• Only clean the unit from the outside with clear water and a soft brush.

### Cleaning the foam filters

The Easy Clean function is used to clean the foam filters. During cleaning, the filter pump is switched on so that the dirt water is transported out of the pressure filter.

- Turn the turning valve to guide the water in the container to the dirt water outlet. This prevents the dirt water from flowing back into the pond.
- Beforehand, remove the cover cap from the outlet hose for the dirt water.
- Pull the cleaning handle to compress the foam filters. The dirt particles are removed and flow with the water via the dirt water outlet, for instance to a flower bed.
- The transparent hose connectors allow you to check the water flow and assess the degree of soiling in the water during cleaning on the dirt water outlet. As soon as the water runs clear, turn the turning valve back to "Filtering".
- After cleaning, close the dirt water hose or the dirt water outlet with the cover cap and the flat seal.



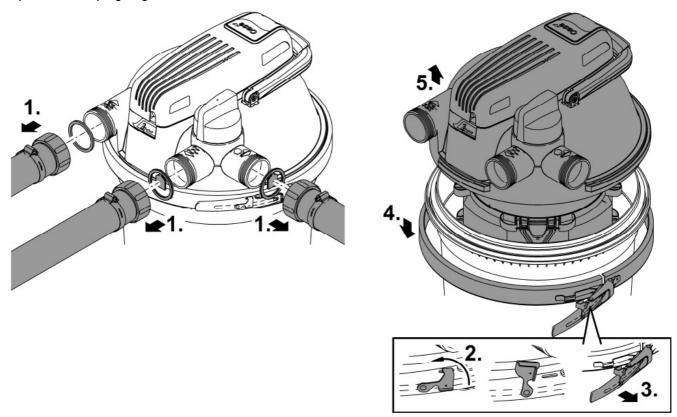
### Removing/positioning the filter cover

### Removing the filter cover

How to proceed:

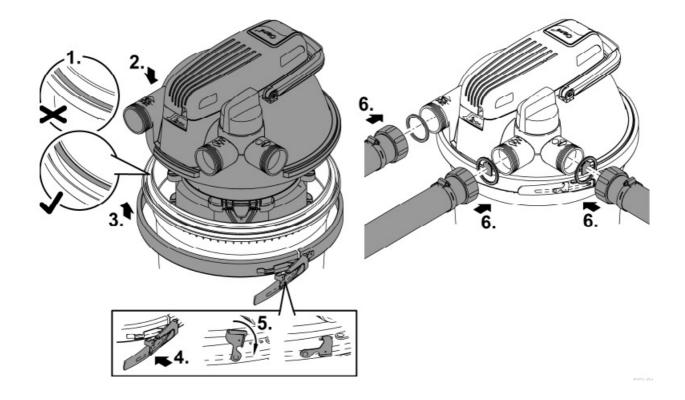
- Switch off the filter pump and pull the power plug of the UVC clarifier from the outlet.
- Remove all hoses from the filter cover (unscrew hose connectors).
- Undo the locking latch.

- Use flat nose pliers if the locking latch is hard to move.
- Open the clamping ring and remove the filter cover.



### Positioning the filter cover

- Ensure that the O-ring on the container is positioned correctly on the container rim.
- Moisten the seal with water or grease the seal, if necessary, so that the filter head is easier to push onto the container.
- Evenly and forcefully push the filter cover as far as possible onto the container.
- The filter ring must make full contact with the container, otherwise the clamping ring will not close.
- Fasten the filter cover with the clamping ring and close the locking latch.
- The locking latch prevents the clamping ring from coming loose accidentally, which would cause pond water to leak in an uncontrolled manner.
- Use flat nose pliers if the locking latch is hard to move.
- Attach all hoses (screw hose connectors in place).



# Cleaning the unit and washing or replacing the foam filters

Wear of the foam filters is caused by mechanical stress and normal ageing.

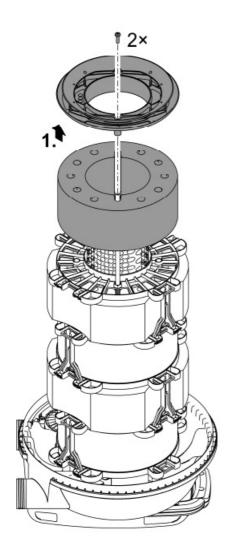


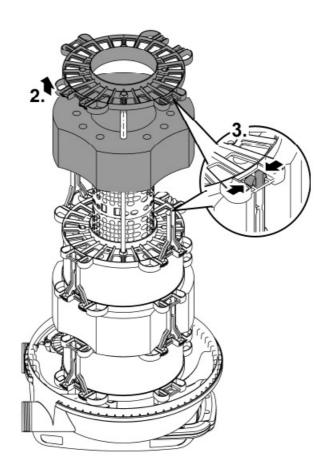
Insert new foam filters at the start of the season.

# Disassembling the foam filter package

# Prerequisite:

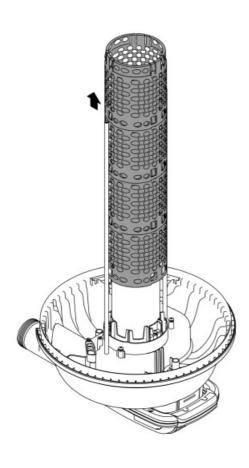
- The filter cover has been removed. (→ Removing the filter cover)
   Place the filter cover upside down on a soft clean surface so that the foam filter package is on top.
- Undo the two screws, remove the closing disc and remove the first foam filter.
- For every additional foam filter, undo the two spacers and remove the spacer disc and the foam filter.





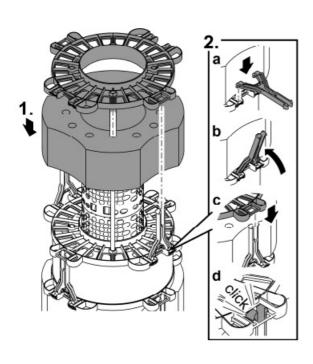
# Cleaning

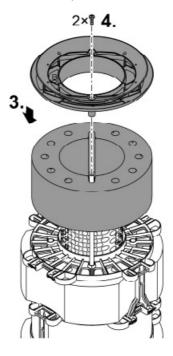
- Clean the container, the clamping ring, the filter cover, the UVC water housing and the meshed tube with a powerful water jet.
- Pull off the meshed tube by pulling and simultaneously turning it clockwise.
- Wash each of the foam filters by forcefully compressing it under running water.
- If necessary, replace the foam filters.



# Assembling the foam filter package

- Push the foam filters onto the meshed tube in the intended order. (→ Installation sequence of the foam filters)
- Place a spacer disc on each foam filter and fasten it with two spacers each.
- Insert the spacer into the spacer disc up to the stop and fold over the spacer with a slight rotary movement.
- Place the closing disc on the final foam filter (purple, 20 ppi). Fasten the closing disc to the two cleaning rods using the two screws.
- Position the filter cover on the container. (→ Positioning the filter cover)





|              | FiltoClear 5000 | FiltoClear 13000 | FiltoClear 19000 | FiltoClear 31000 |
|--------------|-----------------|------------------|------------------|------------------|
|              |                 |                  |                  |                  |
|              | 30 ррі          | 30 ppi           | 10 ppi           | 30 ppi           |
| S            | 20 ррі          | 10 ppi           | 30 ppi           | 10 ррі           |
| Foam filters |                 | 20 ppi           | 10 ppi           | 30 ppi           |
| Fоал         | •               |                  | 20 ppi           | 10 ррі           |
|              |                 |                  |                  | 20 ррі           |
|              |                 |                  |                  | 20 ррі           |

### Removing/installing the UVC unit head

# **A** CAUTION

The ultra-violet radiation of the UVC lamp can damage your eyes and skin.

- Never operate the UVC lamp outside out the casing or in a damaged casing.
- Disconnect the unit from the power grid before starting any maintenance work or before replacing the UVC lamp.

# **A** CAUTION

The quartz glass and UVC lamp could break and cause cuts.

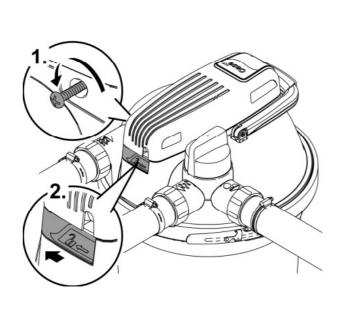
- Act with caution when performing work on the UVC clarifier in order to avoid cuts.
- Avoid shocks, impacts and abrupt movements to prevent the glass from breaking.

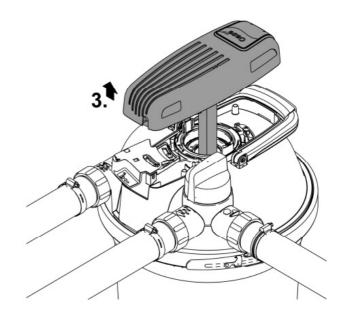
For safety reasons, the UVC lamp can only be turned on when the UVC clarifier is properly installed in the

### Removing the UVC unit head

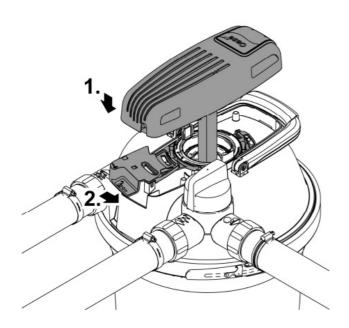
How to proceed:

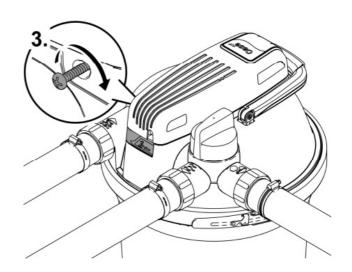
- First pull the power plug of the UVC clarifier before removing the UVC unit head.
- Remove the locking screw, undo the opening ring and remove the UVC unit head.
- If it is not possible to remove the UVC unit head, a vacuum has built up in the quartz glass as a result of the UVC lamp cooling down.
- Remedy: Switch on the UVC clarifier. The heat of the UVC lamp reduces the vacuum and the UVC unit head is pushed up with a plopping sound. Pull the plug of the UVC clarifier and remove the UVC unit head.





# **Installing the UVC unit head**





# Replacing the UVC lamp

The UVC lamp is a wear part. Replace the UVC lamp once the indicated number of operating hours has been reached. This ensures optimum filtering performance.

| FiltoClear | UVC lamp power         | Replace UVC lamp after   |
|------------|------------------------|--------------------------|
| 5000       | 18 W                   | 8000 h (one pond season) |
| 13000      | 24 W                   |                          |
| 19000      | 42 W (optionally 36 W) | 42 W / 60 W: 12000 h     |
| 31000      | 60 W (optionally 55 W) | 36 W / 55 W: 8000 h      |

### Prerequisite:

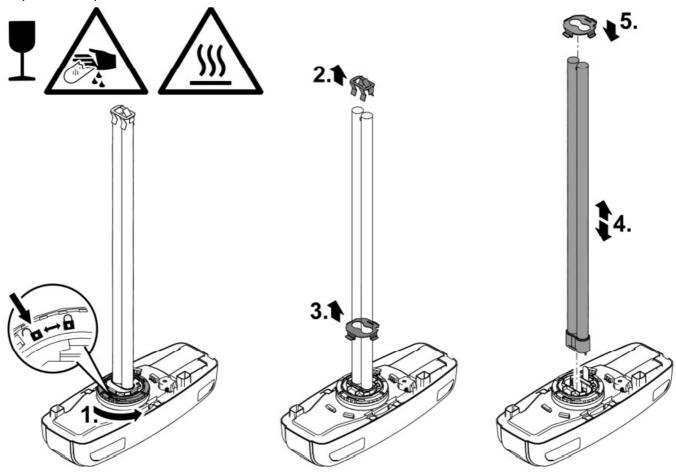
 $\bullet$  The UVC unit head has been removed. (  $\rightarrow$  Removing the UVC unit head)

 Only use UVC lamps, the identification and power data of which correspond to the information on the type plate. (→ Technical data)

### How to proceed:

- Removal: Turn the bayonet ring all the way to the "lock open" position to remove the holding plate and the UVC lamp.
- Installation: Turn the bayonet ring all the way to the "lock closed" position. Otherwise you cannot install the UVC unit head.
- On delivery, the bulb of the UVC lamp is protected by a transport guard. The lamp guard is not required for the lamp function and does not need to be reinstalled.
- If necessary remove a lamp guard stuck in the quartz glass as follows:
- Remove the quartz glass. (→ Cleaning/replacing the quartz glass)
- Carefully and steadily knock the rotor lid with the quartz glass against a firm surface. The lamp guard will slowly slide out of the quartz glass.

OSRAM UVC lamps can only be installed without the holding plate. OASE therefore recommends using Philips UVC lamps.



### Cleaning/replacing the quartz glass

The quartz glass is fastened in the filter head by a rotor cover so that no water can leak from the container interior.

 Replace the quartz glass if it is scratched or has become opaque. Otherwise the cleaning power of the UVC lamp is no longer sufficient.

# **A** CAUTION

The quartz glass and UVC lamp could break and cause cuts.

- Act with caution when performing work on the UVC clarifier in order to avoid cuts.
- Avoid shocks, impacts and abrupt movements to prevent the glass from breaking.

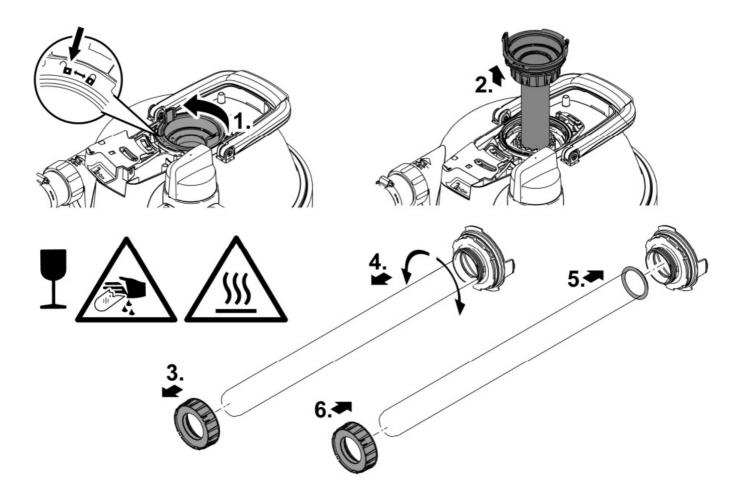
### Prerequisite:

The UVC unit head has been removed. (→ Removing the UVC unit head)

#### How to proceed:

- · Switch off the filter pump.
- Unlock the rotor cover (bayonet lock to "lock open").
- Remove the rotor cover with the guartz glass and, if applicable, the cleaning rotor.
- Turn the turning valve to the dirt water outlet to eliminate any vacuum that may have built up in the container.
- Clean the quartz glass. If you are replacing the quartz glass:
- Undo the clamping screw and carefully pull off the quartz glass with a slight tilting and twisting movement.
- Clean the O-ring, replace it if it is damaged.
- Grease the O-ring with OASE grease (order number 27872) and pull it over the rim of the quartz glass to avoid grease residue on the quartz glass.
- Position the quartz glass on the rotor cover and turn the clamping screw up to the stop, otherwise it is not
  possible to install the rotor cover.
- Check the profile wear on the cleaning rotor. (→ Replacing the cleaning rotor)
- When installing the quartz glass, turn the rotor cover up to the stop (bayonet lock to "lock closed"). Otherwise
  you cannot install the UVC unit head.

Condensate may form in the quartz glass. This condensate formation cannot be avoided, however, it does not impair function and safety.



# Replacing the cleaning rotor

On the FiltoClear 19000 und FiltoClear 31000, an additional cleaning rotor is positioned above the quartz glass to clean the quartz glass with the aid of the water flow.

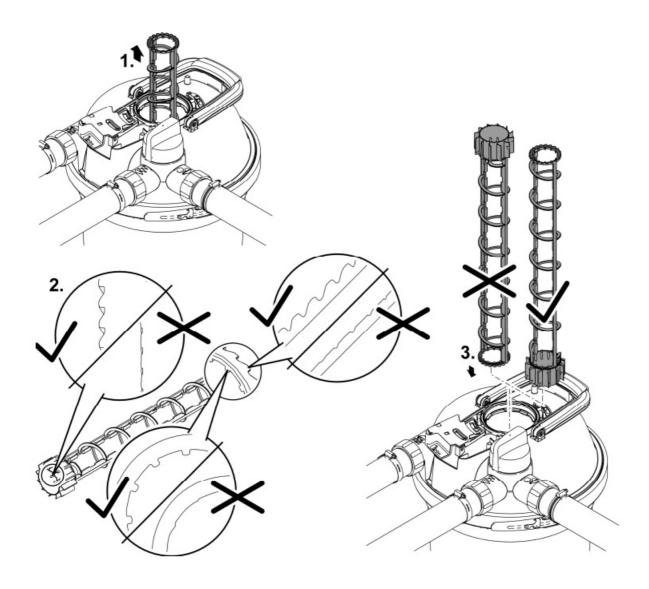
• Replace the cleaning rotor when it is worn.

### Prerequisite:

The quartz glass has been removed. (→ Cleaning/replacing the quartz glass)

### How to proceed:

- Check the profile wear at both ends and the inner surfaces of the cleaning rotor.
- If the profile is worn, the cleaning rotor will rotate sluggishly and has to be replaced.
- Insert the cleaning rotor in the UVC water housing.



### Wear parts

- Foam filters
- UVC lamp, quartz glass and O-ring for quartz glass
- Cleaning rotor
- · Replacement clamping screw
- Pipe connection FiltoClear 19000, 31000

### Decommissioning/winter storage

Shut down the unit at water temperatures below +8 °C or at the latest when freezing temperatures are expected.

- Remove as much water as possible from the containers, the hoses and connections.
- Thoroughly clean all components, check the unit for damage and replace damaged components.
- Store the filter cover, UVC clarifier and filter materials in a dry area protected against freezing.
- Ensure that the storage place is inaccessible to children.
- Cover the container to prevent rain water from entering it.
- Secure the buried container so that it does not pose any risk of accident for persons or animals.

### **Troubleshooting**

| Malfunction   | Possible cause  | Remedy   |
|---|---|--|
|   | The filter pump is not switched on                                  | Switch on the filter pump                                    |
| No water emerges from the water o utlet             | The supply lines are clogged  | Check the supply lines and clean th em, if necessary         |
|   | The turning valve is not set to "Filte r water"                     | Turn the turning valve to "Filter wat er"                    |
| The flow rate is too low                            | The foam filters are clogged  | Clean the foam filters                                       |
| The now rate is too low                             | The filter pump power is too low                                    | Use a stronger filter pump                                   |
|   | The power connection is faulty or t he power plug is not plugged in | Check the power connection (powe r plug, fuse)               |
| The indicator light on the UVC unit head is not lit | The temperature switch has turned off the UVC lamp                  | Allow the UVC lamp to cool down                              |
|   | The UVC lamp is defective   | Replace the UVC lamp   |
|   | The turning valve is not set to "Filte r water                      | Turn the turning valve to "Filter wat er"                    |
|   | The filter has only been used for a short time                      | Wait a few days/weeks  |
|   | The water or the pond is extremely soiled                           | Thoroughly clean the pond                                    |
|   | Too many fish and other pond anim als                               | Adhere to the reference value                                |
|   | The foam filters are soiled   | Clean the foam filters                                       |
|   | The quartz glass is soiled  | Clean the quartz glass and the cleaning rotor                |
|   | The cleaning rotor rotates with diffic ulty                         | Check the cleaning rotor for wear a nd replace, if necessary |

The filter capacity is not satisfactor y

| The cleaning rotor is not rotating due to soiling                              | <ul> <li>Clean the filter</li> <li>Clean the cleaning rotor</li> <li>Remove gravel from the UVC wa ter housing and the foam filters</li> <li>Place the filter pump at a higher level to prevent it from drawing in coarse dirt</li> <li>Use a pump protection bag (Art. No. 34876) for the filter pump to prevent intake of coarse dirt</li> <li>If the flow rate is too low, use a stronger filter pump</li> </ul> |
|--|---|
| The wear limit of the UVC lamp has been reached (insufficient radiation power) | Replace the UVC lamp  |

# **Technical data**

# **Unit data**

| FiltoClear    |   |      | 5000                  | 1300<br>0                  | 1900<br>0                          | 31000                           |
|---------------|---|------|-----------------------|----------------------------|------------------------------------|---------------------------------|
|               | Connection voltage  | V AC | 220–<br>240           | 220–<br>240                | 220–<br>240                        | 220–<br>240                     |
|               | Mains frequency   | Hz   | 50/60                 | 50/6<br>0                  | 50/60                              | 50/60                           |
|               | Power consumption   | W    | 18                    | 24                         | 42                                 | 60                              |
|               | UVC power   | W    | 18                    | 24                         | 42                                 | 60                              |
| UVC clarifier | UVC lamp  |      | 18 W<br>TC-L(<br>UV-C | 24 W<br>TC-L<br>(UV-<br>C) | 36 W<br>/42<br>W T<br>C-L(<br>UV-C | 55 W/<br>60 W<br>TC-L(<br>UV-C) |
|               | Protection ty   | IP68 | IP68                  | IP68                       | IP68                               |                                 |
|               | Max. permi<br>ssible imm<br>ersion dept<br>h in the wat<br>er | m    | 0.1                   | 0.1                        | 0.1                                | 0.1                             |

|   |               |                    | ength of p<br>wer cable | m       |            | 5          | 5          | 5          | 5         |
|---|---------------|--------------------|-------------------------|---------|------------|------------|------------|------------|-----------|
| Min. flow rate                                      |               | l/h                |                         | 2500    | 4500       | 6500       | 8500       |            |           |
| Max. flow rate                                      |               | l/h                |                         | 5000    | 9000       | 1300<br>0  | 17000      |            |           |
| Max. permissible pump pressure                      |               |                    |                         | b<br>ar | 0.6        | 0.6        | 0.6        | 0.6        |           |
| Мах. р  | ermissible    | operating pressure |                         |         | b<br>ar    | 0.2        | 0.2        | 0.2        | 0.2       |
| Connection  |               |                    |                         |         | G2         | G2         | G2         | G2         |           |
| Inlet Hose connector                                |               |                    | m<br>m                  |         | 38, 5<br>0 | 38, 5<br>0 | 38, 5<br>0 | 38,<br>50  |           |
| Outlet Connection                                   |               |                    |                         |         |            | G2         | G2         | G2         |           |
| Hose connector, transparmment                       |               |                    | armment                 |         | m<br>m     | 38, 5<br>0 | 38, 5      | 38, 5<br>0 | 38,<br>50 |
| Dirt outlet  Connection  Hose connector, transpar   |               | Connection         |                         |         |            | G2         | G2         | G2         | G2        |
|   |               | parmment m         |                         |         | 38, 5<br>0 | 38, 5<br>0 | 38, 5<br>0 | 38,<br>50  |           |
| Numbe   | er of red fo  | am filters         |                         |         |            | 1          | 1          | 1          | 2         |
| Numbe   | er of blue fo | oam filters        |                         |         |            | _          | 1          | 2          | 2         |
| Number of purple foam filters                       |               |                    |                         | 1       | 1          | 1          | 1          |            |           |
| Suitable for max. pond volume                       |               |                    |                         | I       | 5000       | 1300<br>0  | 1900<br>0  | 3100       |           |
| Suitable for max. pond volume with fish             |               |                    |                         | 1       | 2500       | 7000       | 1000       | 15000      |           |
| Suitable for max. pond volume with koi              |               |                    |                         | I       | _          | _          | 5000       | 7500       |           |
| Permissible ambient temperature during °C operation |               |                    |                         | °       | 0<br>+35   | 0<br>+35   | 0<br>+35   | 0 4<br>35  |           |
| Permissible water temperature                       |               |                    |                         | °C      | +4<br>+35  | +4<br>+35  | +4<br>+35  | +4<br>+35  |           |
|   | Length        |                    |                         |         | m<br>m     | 391        | 391        | 391        | 391       |
| Dime nsion Width                                    |               |                    |                         | m       | 382        | 382        | 382        | 382        |           |

|            | Height        | m<br>m | 370 | 490 | 611 | 732  |
|------------|---------------|--------|-----|-----|-----|------|
| Weig<br>ht | Without water | k<br>g | 8.0 | 8.8 | 9.6 | 10.3 |
|            | with water    | k<br>g | 26  | 36  | 47  | 57   |

### Permissible water values

| Fresh water, pond water |      |         |  |  |
|-------------------------|------|---------|--|--|
| pH value                |      | 6.0 9.0 |  |  |
| Hardness                | °dH  | 8 15    |  |  |
| Free chlorine           | mg/l | <0.5    |  |  |
| Salt content            | %    | <0.5    |  |  |
| Temperature             | °C   | +4 +35  |  |  |

### Spare parts

The use of original parts from OASE ensures continued safe and reliable operation of the unit. Please visit our website for spare parts drawings and spare parts.

www.oase.com/ersatzteile



### **Disposal**

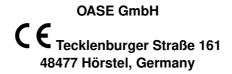
### NOTE



Do not dispose of this unit with household waste.

- Dispose of the UVC lamp and the unit by using the return system provided for this purpose.
- Render the unit unusable by cutting the cables.

### **Customer Support**







### **Documents / Resources**



OASE 13000 FiltoClear Pump and Filter [pdf] Instruction Manual 13000 FiltoClear Pump and Filter, 13000, FiltoClear Pump and Filter, and Filter, Filter

### References

• Teich & Garten: Wasserwelten realisieren - OASE

Manuals+,