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Oase

Aquarius Eco Premium

4500, 6500, 9500, 13500, 16500

Operating instructions

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Safety information

Electrical connection

- Special regulations apply for electrical installation in outdoor spaces. Only a qualified electrician may perform the electrical installation.
  - The qualified electrician has the necessary professional training, knowledge and experience to perform electrical installation in outdoor spaces. The electrician can detect potential dangers and knows how to adhere 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.
- The device is to be supplied through a residual current device (RCD) having a rated residual operating current not exceeding 30 mA.
- 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

- Disconnect all electrical devices in the water from the power supply before reaching into the water. Otherwise there is a risk of severe 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. Cleaning and user maintenance shall not be carried out by children unless they are aged from 8 years and above and supervised.
- Do not use the unit, if electrical lines or the housing are damaged.
- The supply cord cannot be replaced. If the cord is damaged, the appliance should be scrapped.
- The impeller unit in the pump contains a magnet with a strong magnetic field that may affect the operation of pacemakers or implantable cardioverter defibrillators (ICDs). Keep a distance of at least 0.2 m between the implant and the magnet.
- Never pull on electric cables. In particular, never carry units on their cables.
- Route lines in such a way that they are protected from damage and do not present a tripping hazard.
- Never carry out technical changes to the unit.
- Only carry out work on the unit that is described in this manual.
- Only use original spare parts and accessories.
- Should problems occur, please contact the authorised customer service or OASE.

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Intended use

Only use the product described in this manual as follows:

- For pumping water, e.g. for water features.
- While adhering to the technical specifications. (→ Technical data)
- Adherence to the permissible water quality. (→ Permissible water quality)

The following restrictions apply to the unit:

- Do not use in swimming ponds.
- Never use the unit with fluids other than water.
- Never run the unit without water.
- Do not use the unit together with chemicals, food, flammable, explosive substances or other liquids aside from water.
- Do not connect to the domestic water supply.
- Do not use for industrial purposes.

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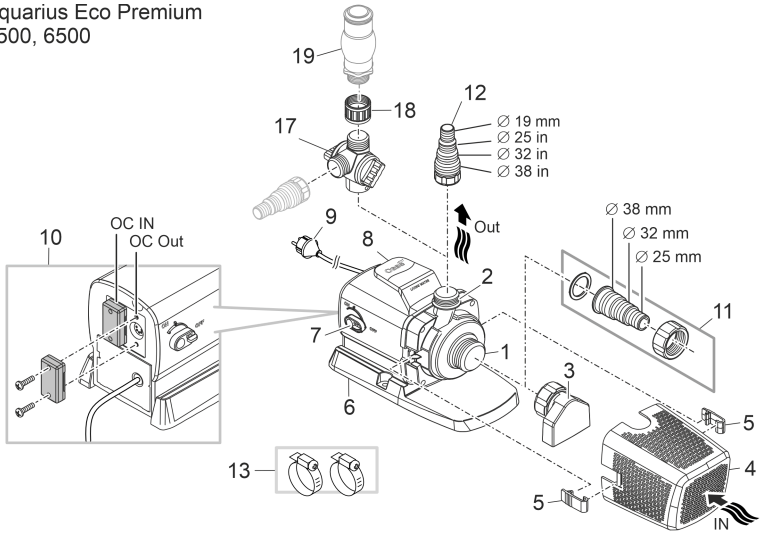
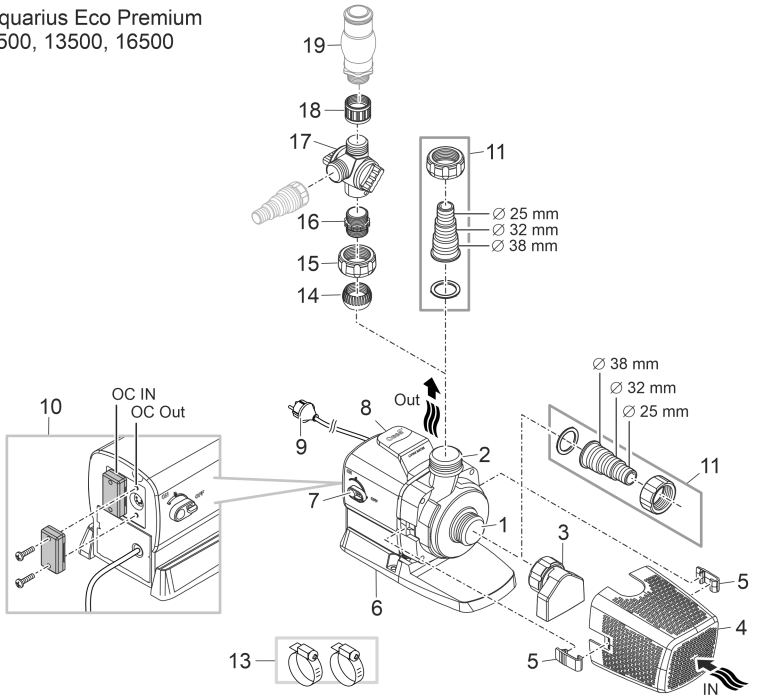
Product Description

Overview

Aquarius Eco Premium
4500, 6500



Aquarius Eco Premium
9500, 13500, 16500



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1	Inlet (suction side) • With intake socket (3) and filter cage (4) for submerged installation. • With hose sleeve for connecting a hose for dry installation.
2	Outlet (pressure side) • Water feature connection
3	Intake socket • The intake socket is included with the product and is not pre-assembled. • When the intake socket is installed, the pump can be used even with a low water level. However, the water level must be at least at the centre of the intake socket.
4	Filter cage
5	Filter cage clamp
6	Foot • With installation holes for firm installation on ground if required.
7	Switch for switching on/off the "Dynamic Function Control" (DFC) • If the dynamic function is activated, the pump flow rate changes continuously based on the programmed values. This creates a dynamic fountain pattern.
8	Transport handle
9	Power cable with power plug • Pump power supply
10	Control system connection (OASE Eco Control or OASE Control network) • The control system makes it possible to regulate the pump power. • Without the control system, the pump runs permanently at full power.
11	Hose sleeve G1½
12	Hose sleeve G1
13	Hose clips for fastening hoses on the hose sleeves.
14	Ball insert
15	Union nut G1½
16	Double nipple G1½/G1
17	2-way distributor with controller
18	Sleeve socket G1
19	Water feature (e.g. foam fountain, fountain attachment etc., not included)

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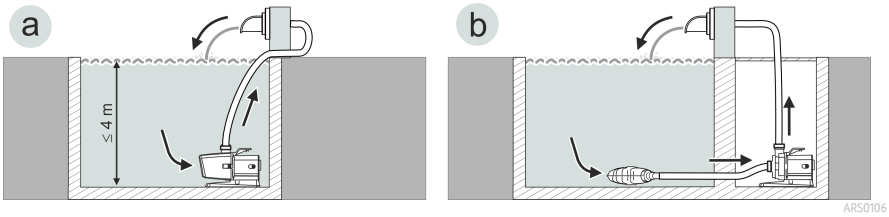
Symbols on the unit

IP68 4.0 m	The unit is dust-tight and water-tight down to 4 m.
	Possible danger for persons with pacemakers.
	Protect the unit from direct sunlight.
	Do not dispose of the unit with normal household waste.
	Read the operating instructions.

Installation variants



- Variant (a): Submerged pump installation
  - The pump is positioned in the pond or basin.
  - Water flow via the filter cage.
- Variant (b): Dry pump installation
  - The pump is installed without the filter cage outside of the pond or basin but lower than the water level.
  - Water flow via a satellite filter or skimmer.

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OASE Control network

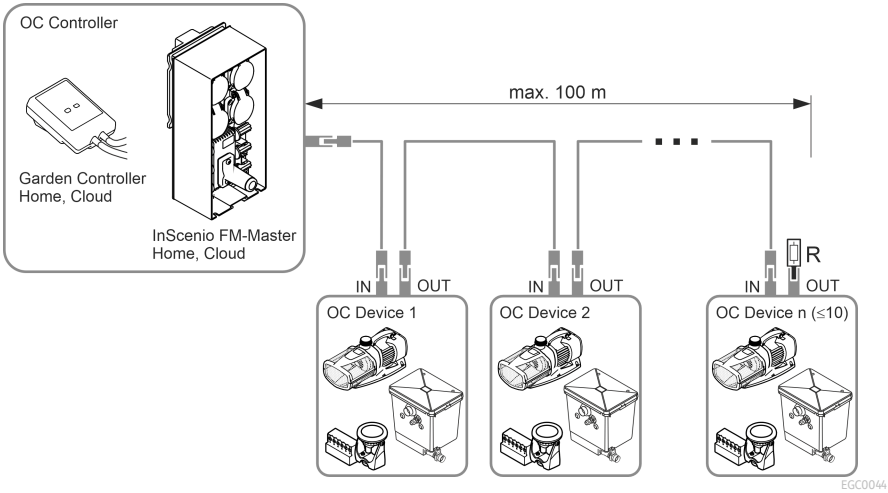
The pump can be integrated in an OASE Control network. This makes it possible to control all settings through the convenient OASE Control app and check the status data.

Prerequisites for an OASE Control (OC) network:

- The network consists of an OC control system and max. 10 OC units.
- It must end at the last unit with the OC terminal resistor (R). The terminal resistor is included with the OC control system.
- The network may be max. 100 m long.

OASE Control accessories:

- Connecting cable 2.5 m, article number 47038
- Connecting cable 10 m, article number 47040
- Connecting cable 30 m, article number 72713
- Cable connector, article number 47788



ⓘ More information on OASE Control is available at www.oase.com in the “Smart garden controls and lighting” section.

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Installation and connection

The pump can be installed submerged (in water) or dry (outside the water).

The use of the pump is only permitted with observance of the specified water quality.
(→ Permissible water quality)

⚠ WARNING

Severe injuries or death due to operation of this unit in a swimming pond. Defective electrical components will electrify the water with dangerous electrical voltage.

▶ Never operate the unit in a swimming pond.

⚠ CAUTION

Rotating components in the intake and pressure socket area. Risk of injury when reaching into the sockets.

In particular, observe the following: A unit that has stopped due to overload can start up unexpectedly!

▶ Do not reach into the opening of the intake socket or pressure socket while the power plug is plugged in.

▶ If the sockets are freely accessible during operation, e.g. if no hoses are connected, use a hand guard to secure the sockets. The hand guard is available as an accessory.

ⓘ Avoid exposing any unit components to direct sunlight for extended periods of time, as this can lead to damage. If necessary, use a protective cover.

Connecting the control system

The pump can be operated with or without the control system.

- The control system makes it possible to regulate the pump power.
- Without the control system, the pump runs permanently at full power.

Compatible control systems (accessories):

- Eco Control
  Intelligent control system for one pump.
- Incenio FM-Master Home/Cloud
  Garden Controller Home/Cloud
  Up to 10 OASE Control-compatible units (pumps, filters, lights) can be controlled using the "OASE Control" app.
  For information on this topic, visit www.oase.com and navigate to the section “Smart garden controls and lighting”.

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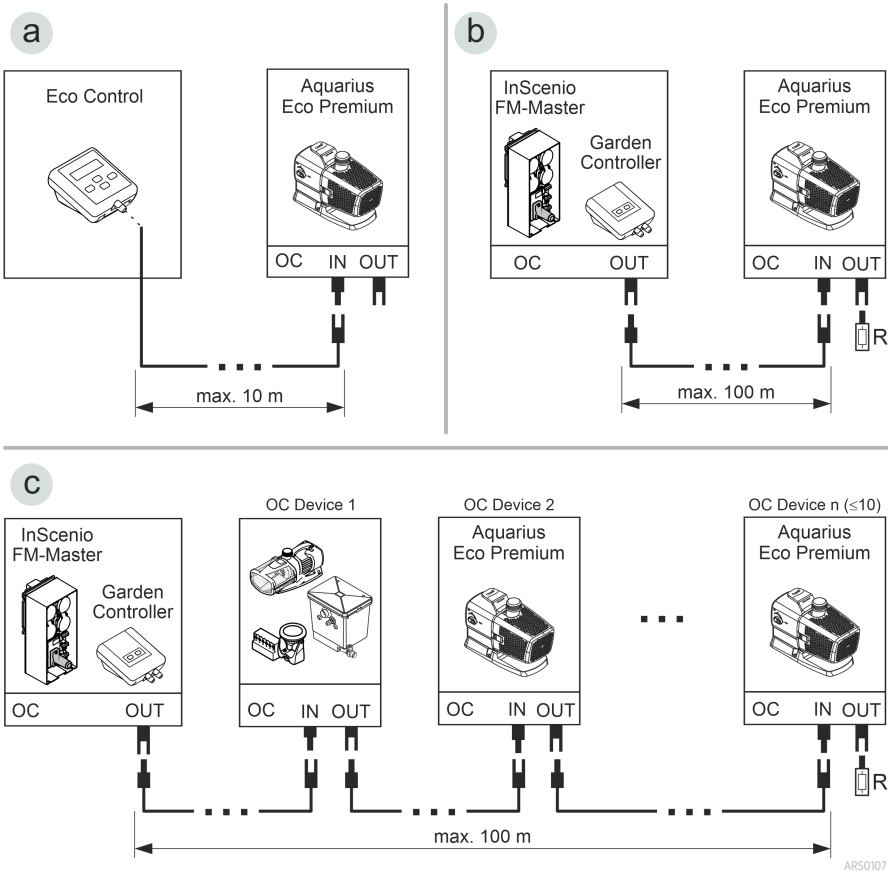

- An OASE Control network (variant B, C) must end with a terminal resistor R. The terminal resistor is included with the InScenio FM-Master or Garden Controller.

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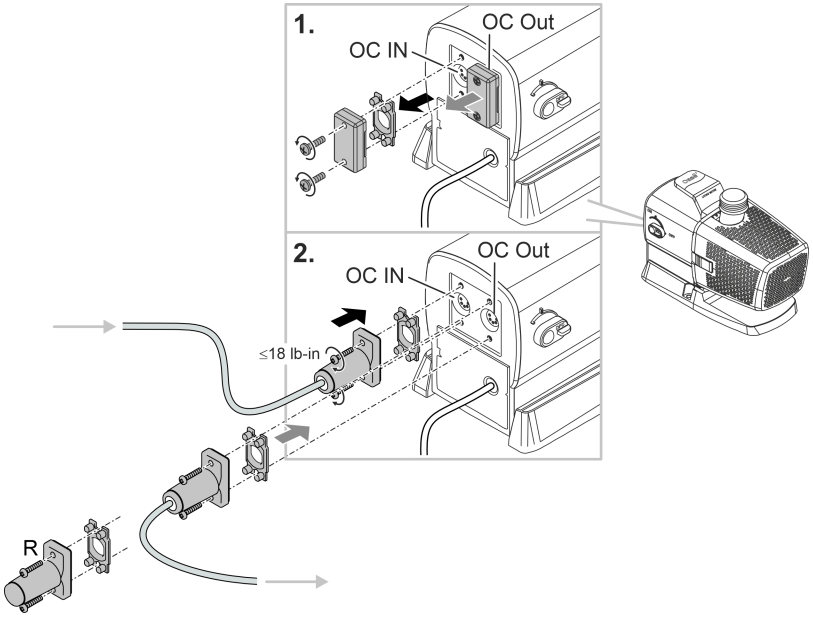

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NOTE

The unit will be damaged, if water enters the plug connector.

- ▶ Connect the plug connector or place the protective cap on it.
- ▶ Ensure that the rubber seal is clean and fits exactly.
- ▶ If the rubber seal is damaged, it must be replaced. When the plug connector is disconnected, the rubber seal must be replaced if it is older than 2 years.
- ▶ Always secure the plug connector or the protective cap with the two screws.

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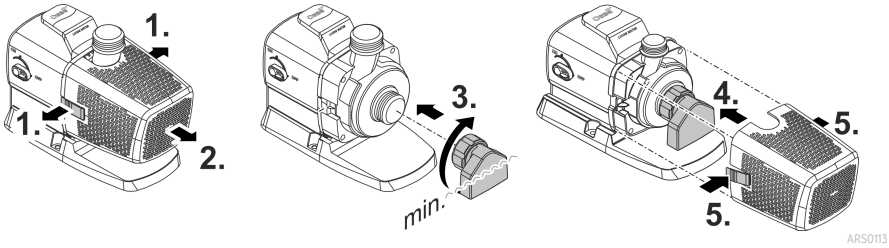
Submerged installation of the pump

Installing the intake socket (optional)

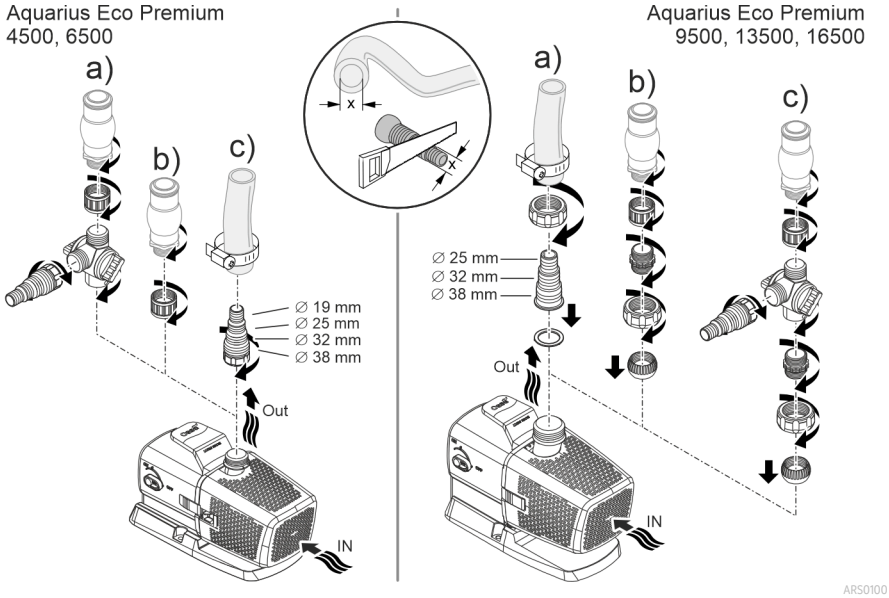
If you wish to use the pump with a low water level, we recommend installing the intake socket included with the pump.

ⓘ The water level must be at least at the centre of the intake socket, otherwise the pump cannot pump water.



Connecting

- The larger the line diameter, the smaller the friction losses in the lines and the better the flow rate.
- The line diameter must not be limited unnecessarily by a stepped hose adapter. If necessary, shorten the adapter based on the line diameter.



Do not plug the power plug into the socket yet!

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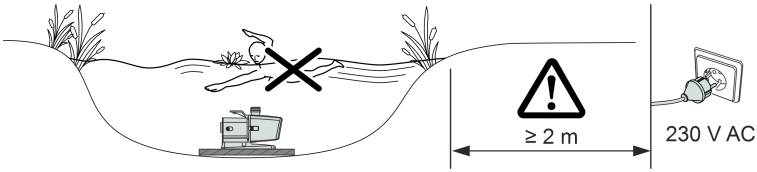
Installation

- Place the pump horizontally on a stable surface.
- Ensure secure and stable positioning of the pump.
- For muddy or soiled water, we recommend installing the pump or intake-side components (skimmer, satellite filter, base outlet, etc.) above ground level. This decreases intake of particles and increases the service life of the impeller unit.
- Only operate the pump when it is covered in at least 10 cm of water. Otherwise it may draw in air.



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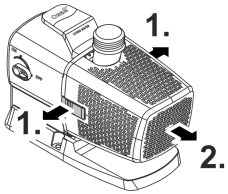
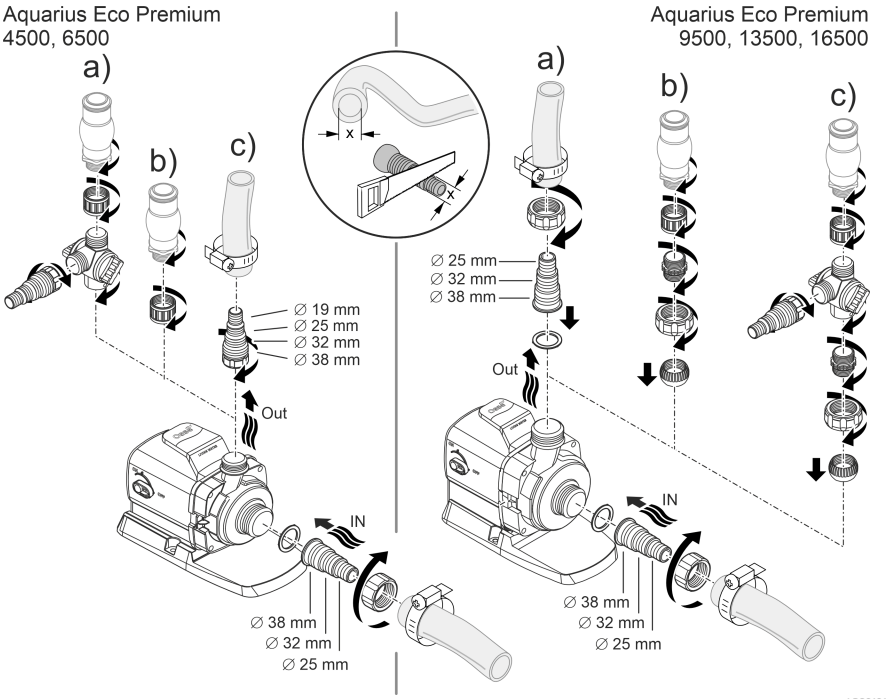
Install the unit at a dry place

Connecting

- Hoses or pipes can be connected to the inlet (IN) and outlet (OUT).
- Connections for hoses are part of the scope of delivery. Instructions for their installation can be found below.
- To optimise the pump capacity, ensure that the diameter of the intake side line (IN) is not smaller than the diameter of the pressure side line (OUT).
- The larger the line diameter, the smaller the friction losses in the lines and the better the flow rate.
- The line diameter must not be limited unnecessarily by a stepped hose adapter. If necessary, shorten the adapter based on the line diameter.





Do not plug the power plug into the socket yet!

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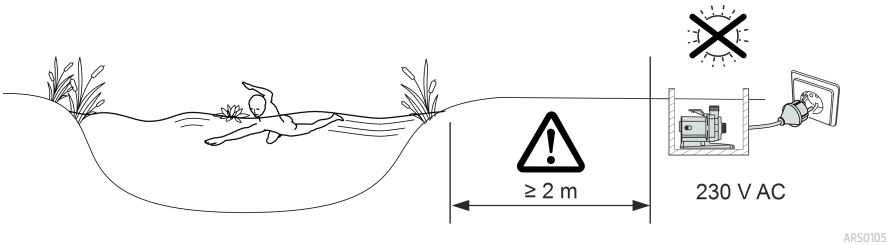
Installation

- Place the pump horizontally on a stable surface.
- Ensure secure and stable positioning of the pump.
- Do not expose the pump to direct sunlight.
- Ensure that the installation site is sufficiently ventilated to prevent overheating of the pump.



ⓘ It is possible to screw the unit to a suitable surface to ensure stability.

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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.

NOTE

Never allow the pump to run dry. Otherwise the pump may be destroyed.

▶ Only operate the pump when it is submerged or flooded.

Switching ON/OFF

- **Switching on:** Plug the power plug into the outlet.
  – The unit is switched on after a brief starting phase.
- **Switching off:** Pull the power plug from the outlet.

Environmental Function Control (EFC)

When started up and then every 20 ... 40 minutes the pump automatically performs a pre-programmed self-test (**Environmental Function Control (EFC)**). The pump detects if it is running dry / clogged or submerged. The pump shuts down automatically after 60 to 120 seconds if it runs dry/is blocked. In the event of a malfunction, disconnect the power supply and “flood the pump” or remove the obstacle. Afterwards, the unit can be restarted.

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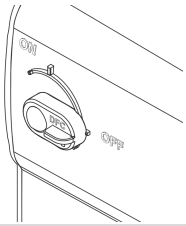
Dynamic Function Control (DFC)

If the dynamic function is activated, the pump flow rate changes continuously based on the programmed values. This creates a dynamic fountain pattern.

	Switching the dynamic function and off ON: DFC is switched on. OFF: DFC is switched off.

ⓘ You can also operate the dynamic function using the Eco Control control system or in a OASE Control network via the app “OASE Control”. In this case you can choose from 12 scenes featuring different dynamic fountain patterns. Without a control system / without a network, the first scene is always active when the dynamic function is activated.

NOTE

If the Dynamic Function is active, the EFC (Environmental Function Control) function is limited.

▶ The unit is not protected from running dry.

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Maintenance and cleaning

⚠ CAUTION

Risk of injury due to unexpected start-up. Internal monitoring functions may switch off the unit and automatically reactivate it.

▶ Disconnect the power plug before carrying out any work on the unit.

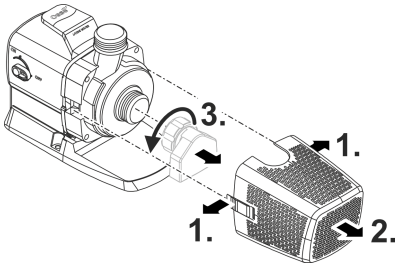
NOTE

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.

▶ If possible, clean the unit with clear water and a soft brush or a sponge; remove stubborn dirt with the aid of the recommended cleaning agents.

Dismantling the unit

- Pull the power plug and remove all connections.
- Dismantle the unit as shown in the figure.



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Cleaning the device

ⓘ Clean the unit as required but at least twiceper year.
  – When cleaning the pump, pay particular attention to the impeller unit and the pump housing.

- Recommended cleaning agent for removing stubborn limescale deposits:
  – Pump cleaning agent PumpClean from OASE.
  – Vinegar- and chlorine-free household cleaning agent.
- After cleaning, thoroughly rinse all parts in clean water.

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Cleaning/replacing the impeller unit

NOTE

The impeller unit is guided in the motor block by a bearing. This bearing is a wear part and should be changed at the same time as the impeller unit.

▶ Changing the bearing requires specialist knowledge and tools. Have the bearing changed by the OASE specialist dealer or send the pump to OASE.

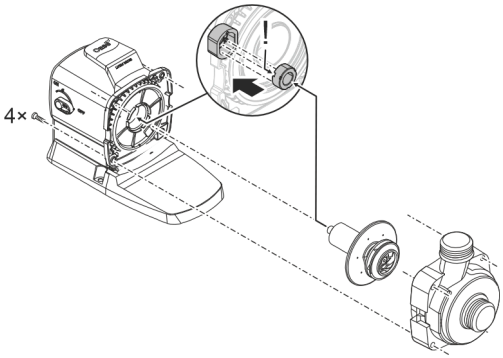
NOTE

The impeller unit contains strong magnets that attract magnetic particles (e.g. iron filings). Any remaining particles can cause irreparable damage to the impeller unit and motor block.

▶ Carefully remove any adhering particles from the impeller unit prior to installation.

- Dismantle the motor block as shown in the figure.
- Use a brush under clear water to clean the components.
- Check all components for damage. Replace damaged or worn components.
- Reassemble the motor block in reverse order.

ⓘ When the impeller is pulled out, the bearing in the motor block may come loose. During re-assembly, check that it is positioned correctly. If necessary, push the bearing into the motor block with the wide grooves first.



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Storage/winter protection

The unit is frost resistant to minus 20 °C. Should you store the unit outside of the pond, clean it thoroughly with a soft brush and water, check it for damage, then store immersed in water or filled with water. Do not immerse the power plug in water!

Malfunction remedy

Malfunction	Cause	Remedy
Pump does not start	No mains voltage	Check the mains voltage.
	No control voltage (only with optional external controls)	Check connection to OASE Eco Control or OASE Control network; if necessary switch on pump via these networks
	Supply lines kinked	Route the supply lines without kinks
	Supply lines blocked.	Check/clean the supply lines
	Impeller unit is blocked	Remove blockage, check impeller unit for ease of movement
Pump does not transport fluid Insufficient delivered quantity	Filter housing clogged	Clean strainer casings
	Excessive loss in the supply lines	Reduce hose length to the necessary minimum, remove unnecessary connection parts, use larger hose diameters
	Impeller unit is running sluggishly	Check impeller unit for ease of movement
Pump switches off after operating briefly	Water heavily soiled	Clean pump
	Impeller unit is blocked	Remove blockage, check impeller unit for ease of movement
	Pump has run dry	Check/clean supply lines, increase immersion depth (min. 10 cm under water surface)
	Water temperature too high	Adhere to the maximum permissible water temperature. (→ Technical data)

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Technical data

Unit data

Aquarius Eco Premium			**4500**	**6500**
Connection voltage		V AC	220 ... 240	220 ... 240
Mains frequency		Hz	50/60	50/60
Max. power consumption		W	35	55
Max. pump capacity		l/h	4500	6500
Max. pump head		m	3.5	5
Protection type			IP68	IP68
Max. immersion depth		m	4	4
Inlet port	Thread		G1½	G1½
	Connection, hose	mm	25, 32, 38	25, 32, 38
Outlet port	Thread		G1	G1
	Connection, hose	mm	19, 25, 32, 38	19, 25, 32, 38
Filter supply surface area		cm^2	440	440
Water temperature (submerged installation)	During operation	°C	+4 ... +35	+4 ... +35
	Out of operation	°C	-20 ... +35	-20 ... +35
Ambient temperature (dry installation)	During operation and convection	°C	+4 ... +30	+4 ... +30
	During operation and forced cooling	°C	+4 ... +40	+4 ... +40
Dimensions	Length	mm	290	290
	Width	mm	130	130
	Height	mm	175	175
Connection cable length		m	10	10
Weight		kg	5.2	5.2

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Aquarius Eco Premium			**9500**	**13500**	**16500**
Connection voltage		V AC	220 ... 240	220 ... 240	220 ... 240
Mains frequency		Hz	50/60	50/60	50/60
Max. power consumption		W	100	145	185
Max. pump capacity		l/h	9500	13500	16500
Max. pump head		m	6	7	8
Protection type			IP68	IP68	IP68
Max. immersion depth		m	4	4	4
Inlet port	Thread		G1½	G1½	G1½
	Connection, hose	mm	25, 32, 38	25, 32, 38	25, 32, 38
Outlet port	Thread		G1½	G1½	G1½
	Connection, hose	mm	25, 32, 38	25, 32, 38	25, 32, 38
Filter supply surface area		cm^2	535	535	535
Water temperature (submerged installation)	During operation	°C	+4 ... +35	+4 ... +35	+4 ... +35
	Out of operation	°C	-20 ... +35	-20 ... +35	-20 ... +35
Ambient temperature (dry installation)	During operation and convection	°C	+4 ... +30	+4 ... +30	+4 ... +30
	During operation and forced cooling	°C	+4 ... +40	+4 ... +40	+4 ... +40
Dimensions	Length	mm	310	310	310
	Width	mm	145	145	145
	Height	mm	210	210	210
Connection cable length		m	10	10	10
Weight		kg	6.1	6.1	6.1

Permissible water quality

Type		**Fresh water**	**Pool water**	**Salt water**
pH value		6.8 ... 8.5	7.2 ... 8.3	7.5 ... 8.5
Hardness	DH	8 ... 15	8 ... 15	20 ... 30
Free chlorine	mg/l	<0.3	<0.6	<0.3
Chloride content	mg/l	<250	<250	<22000
Salt content	%	<0.4	<0.4	<4
Overall dry residue	mg/l	<50	<50	<50
Temperature	°C	+4 ... +35	+4 ... +30	+4 ... +28

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Wear parts

- Impeller unit
- Bearing in the motor block

Spare parts

(→ Spare parts)

Disposal

NOTE

Do not dispose of this unit with household waste.

- ▶ Dispose of the unit by using the return system provided for this purpose.
- ▶ Should you have questions, please contact your local disposal company. They will give you information on how to correctly dispose of the unit.
- ▶ Render the unit unusable by cutting the cables.

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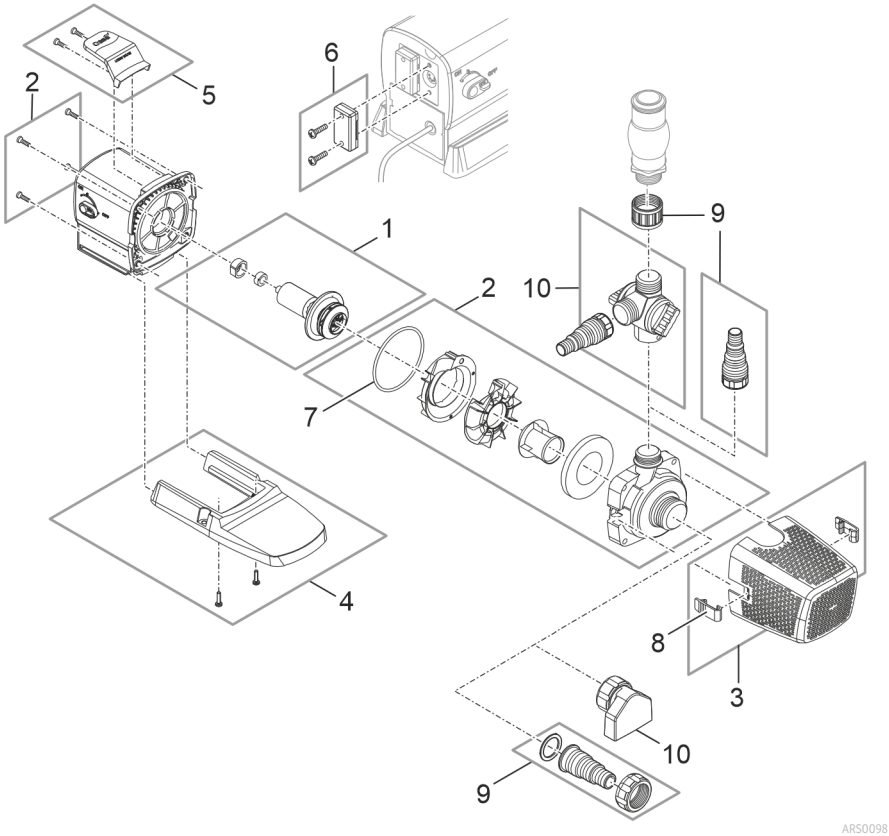

Aquarius Eco Premium

Pos.	4500	6500
1	97198	97198
2	97201	97201
3	97205	97205
4	97207	97207
5	97209	97209
6	97110	97110
7	3587	3587
8	30983	30983
9	35179	35179
10	97099	97099

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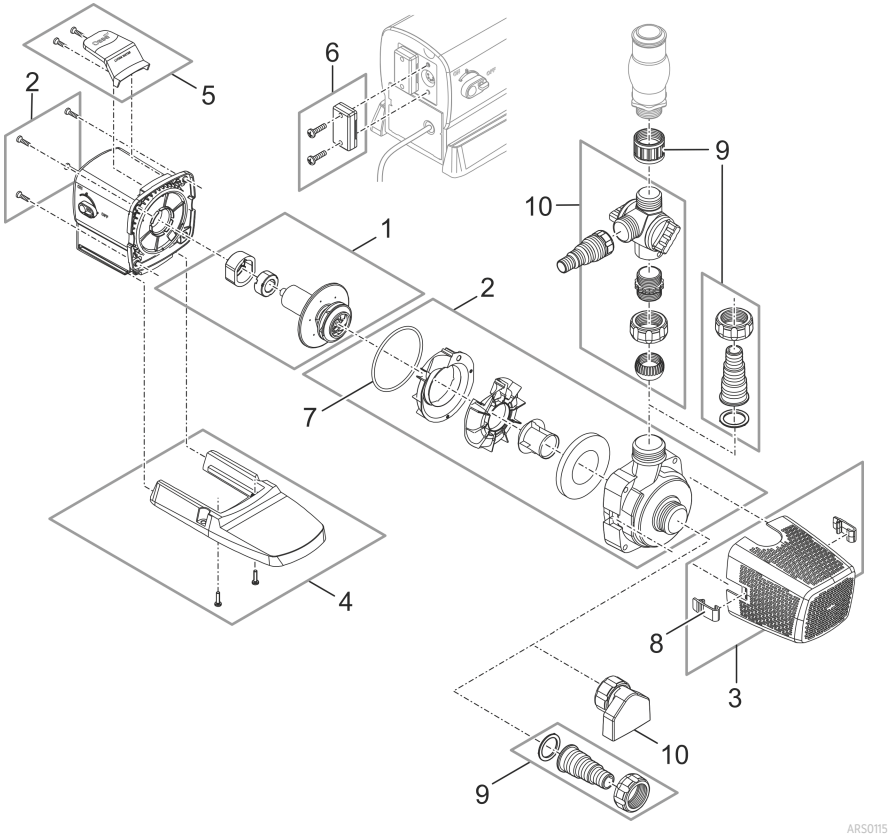

Aquarius Eco Premium

Pos.	9500	13500	16500
1	97199	97200	97200
2	97202	97203	97204
3	97206	97206	97206
4	97208	97208	97208
5	97209	97209	97209
6	97110	97110	97110
7	90949	90949	90949
8	30983	30983	30983
9	97752	97752	97752
10	97100	97100	97100

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