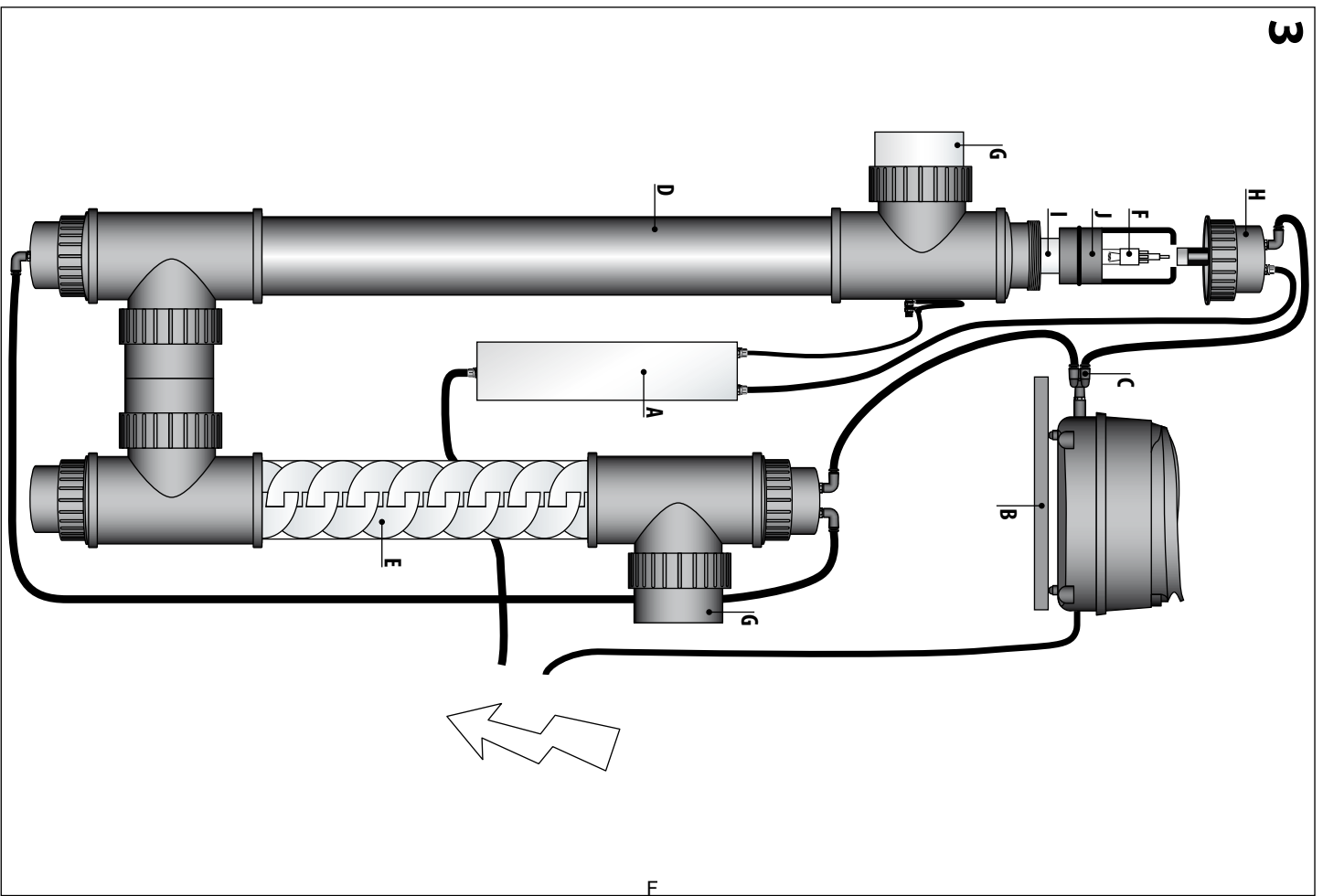
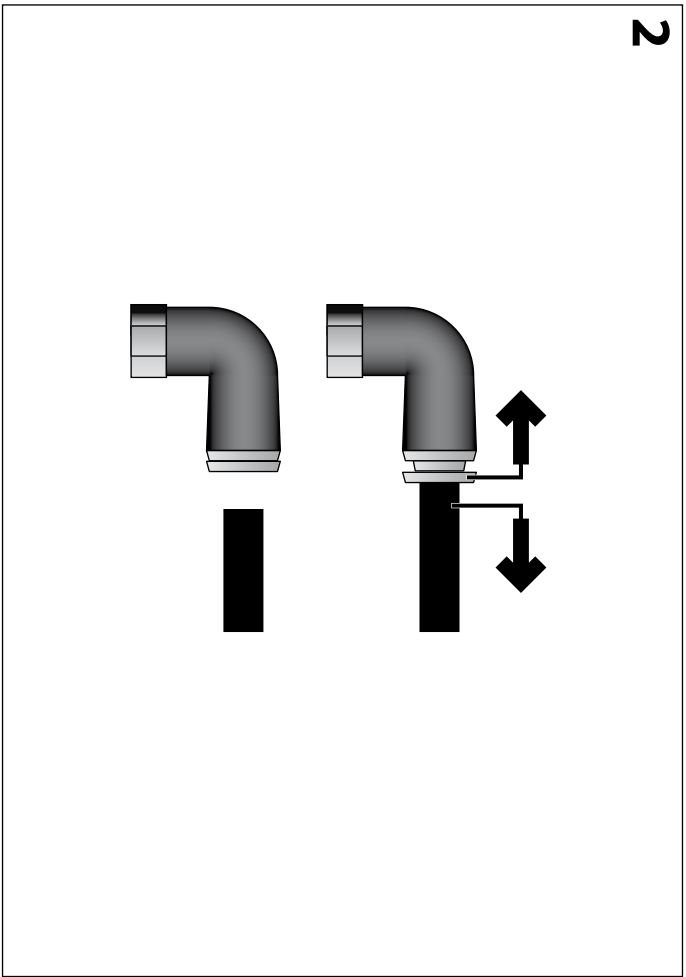
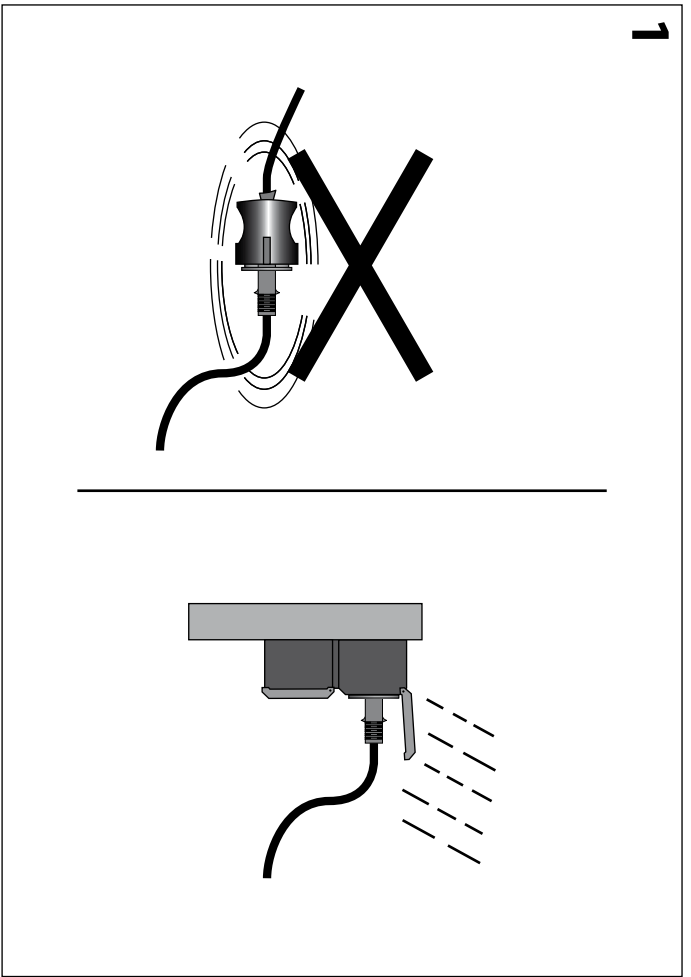


**AQUA<sup>®</sup>  
FORTE**

# OZONE REDOX UVC



**INSTRUCTION MANUAL**



**Before installing this equipment please read these instructions carefully. Take care: this equipment contains glass, handle with care! During maintenance or repairs always disconnect the plug from the socket!**

### **Operation**

Ozone has been used for decades for disinfecting drinking water and for purifying air. This substance has very strong oxidation and sterilisation properties on all organic substances and takes away unpleasant odours. This makes it one of the most effective means of sterilisation for water treatment. UV-C radiation and ozone together form the perfect combination for making pond water immaculately clean and rich in oxygen. Ozone and UV-C kill algae, viruses and bacteria. The use of ozone is a natural process which is artificially imitated by the AquaForte UV-C Redox. This equipment consists of an air pump, a UV-C / ozone combination lamp and a static mixer. The air pump carries air past the combination lamp which produces about 0.6 grams of ozone. The loaded air is mixed with water in the static mixer where an oxidation process takes place. Once disinfection has taken place then the water mixed with ozone is carried past the combination lamp again but this time there is a quartz glass housing as a partition. The water is exposed to UV-C radiation (25 Watts UV-C Output) so that nearly all algae, bacteria and viruses are killed. The UV-C radiation also completely breaks down any residual ozone. The equipment produces ozone which is 100% safe; there is no ozone left in the water flowing out.

The AquaForte UV-C Redox increases the capacity of the pond filter and enriches the pond water with oxygen thus creating a healthy environment for Koi carp and plants.

### **General**

Check the values for your water regularly. Large swings in the pH values are not good for the equipment. The recommended value is 7.2 – 7.4.

Regular checking of the Redox value of the water is recommended. The equipment must be switched off at a Redox value which is above 400 mV.

### **Safety**

- This device contains a UV-C lamp. This lamp produces harmful radiation. Direct contact can be harmful to eyes and skin. Check the operation of the UV lamp only through the transparent connecting piece. The UV lamp also generates ozone which smells strongly even in very small quantities. Higher concentrations of ozone can be harmful to the eyes, nose and skin. You should therefore always check the system for leaks. Proper installation and the correct positioning of the O-rings are of great importance.

- Turn the lamp off if no water is flowing in order to prevent overheating.

- If the system is not used during the winter months then remove the equipment because of the danger of it being frozen.

- Always put the power plugs for the equipment into a socket with a cover (photo 1.)

- In the event of a permanent connection to the electricity supply net there must be compliance with the instructions of the power company. In the event of any doubt about the connections, consult a certified electrician or the power company. Always work with a earth leakage circuit switch.

- The equipment should be turned off when water treatment or medications are being used.

### **Installation (photo 2 & 3)**

- Never submerge this equipment in water. Always install in a dry and well-ventilated area.

- Determine the desired input and output side of the device. Standard delivery is with the input on the right side. If you wish to change this then undo the unit including the pre-switching device (A) from the plate and remove the plate for the air pump (B). Turn the plate round and refasten all the parts again in the opposite direction.

- Take the air pump out of the packaging and turn the supplied double plug (C) in the air pump (the supplied parts in the bag are not used in the ozone application). Put the air pump on the plate and connect the 2 air hoses to the pump; one air hose goes to the UV-C device (D) and the other leads to the static mixer (E).

- Fasten the device vertically with a space of at least 30cm being available on the underside for any maintenance. There must be about 1.5m space at the top so that the lamp (F) can be replaced without problems without having to undo the whole unit from the plate.

- Fit the input and output connecting pieces (G) and connect the device to the input and output paths. The water will enter via the static mixer and leave the device again via the UV-C/ozone housing.
- Turn on the pump and check the system for flow and for leaks.
- Turn on the UV-C unit and the air pump.

### **Disassembly / Maintenance**

In the event of maintenance or disassembly of the equipment always disconnect the electrical power!!

- Switch off the power supply for the air pump, ozone device and the pond pump.
- The cover nut (H) must be undone at the top from the ozone device to replace the lamp (F). Then carefully lift the lamp (F) a little. Undo the lamp (F) from the lamp base and replace it if necessary. Refasten everything again carefully in the original position.
- The quartz glass (I) should be cleaned about once per year depending on the hardness of the water and the pollution. To do this pull the glass carefully out of the housing using the pulling piece (J). Clean the quartz glass using a suitable agent. Use a soft cloth to clean the glass and avoid scratches.
- Do not touch the lamp (F) with your hands; use a soft cloth to hold the lamp (F). If the lamp (F) is touched then it is advisable to clean it with a soft cloth and a little alcohol.
- Once all the parts have been put back in their original positions then the pond pump can be started. Check the system for flow and for leaks.
- Turn on the air pump and the UV-C unit.

### **Guarantee conditions**

The product is guaranteed against manufacturing faults for 2 years from the date of purchase. The lamp is subject to wear. It should always be replaced in the Spring. The lamp and the quartz glass are not guaranteed against breakage. Guarantee claims can only be handled if the product is returned post-paid and providing a valid proof of purchase is included. Guarantee claims which are caused by installation or operating faults will not be recognised. Defects arising from lack of maintenance do not fall under the guarantee. Guarantee repairs may only be carried out by the supplier. The supplier can not be held liable for consequential damage arising from failure, faulty maintenance or incorrect use of equipment. The guarantee will lapse if extra facilities are added to the product or if changes are made to the product which are not part of the standard equipment (for example the use of 'third-party' connectors, cutting off the plug or the drilling of extra holes).

### **Technical data**

UV-C (W)	: 25Watts
Ozone	: 0.6 gram
UV-C Ozone lamp	: 36 T5 HO VH 75W 4P-SE-BY1
Pond capacity	: 10 till 50 m <sup>3</sup>
Max pump	: 20,000 l/h
Max pressure	: 1 Bar

### **Parts**

Quartz glass  
 Air pump  
 Lamp  
 Static Mixer  
 Solvent socket 63mm  
 Air hose  
 Adaptor 63-50  
 Nut for 3-part coupling  
 Adaptor 50 x 1.5" screw thread  
 Non-return valve  
 Adaptor socket 1.5"x 40-32-25