

# DL SILENT





2400

+5500 +7000

INSTRUCTION MANUAL • EN



### SEAL AND SIGNATURE OF RESALE DEALER

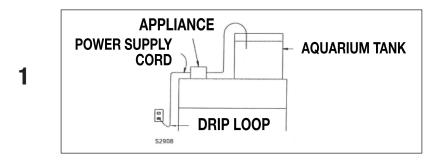
### DATE OF PURCHASE



Dear valued Customer, thank you for choosing **DL SILENT** pumps which are highly efficient products developed and manufactured in Italy to meet the highest quality and performance requirements. **DL SILENT** pumps are ideal to be used in marine and fresh water aquariums, decorative fountains, protein skimmers, and water-cooling systems. They can be used fully submersed or for inline (external) applications. Please, read carefully and save the following instructions for best practices and use of the **DL SILENT** water recirculation pumps.

### **SAFETY INSTRUCTIONS**

- DL SILENT pumps are made in conformity with the national and international security laws.
- 1) Always isolate the pump from the main electricity before installing or carrying out any maintenance.
- 2) The pump can work submerged or inline out of water.
- **3)** Before connecting the pump to the electricity supply, check there are any damages on cord or plug.
- 4) The pump has a type Z cable link. The cable and the plug cannot be substituted or repaired; in case of damage replace the entire pump.
- 5) ATTENTION: do not operate any appliance if it has a damaged cord or plug, if it is malfunctioning, or if it has been dropped or damaged in any way.
- 6) The pump must not work without water to avoid damages to the motor.
- 7) The pump can be used in liquids or in environment with a temperature not higher than 35° C / 95° F.
- 8) Do not use the pump for uses different to those for which it has been projected as, i.e. in bathroom or similar applications.
- 9) Avoid using the pump with corrosive and abrasive liquids.
- **10)** The pump cannot be used by people with handicaps or by children if they are not supervised by a person responsible for their safety.
- 11) To avoid that accidental drips wet the plug or the socket, make a loop with the cord under the socket level (Pic. 1).
- **12)** Avoid to take the pump by the cord during the installation or maintenance.
- **13)** The pump can be used only in the above mentioned applications and it is only for internal use (3 meters long cable).
- 14) If the pump or the filter is supplied with a cable 10 meters long, these appliances are intended for outdoor use as required by international standards.



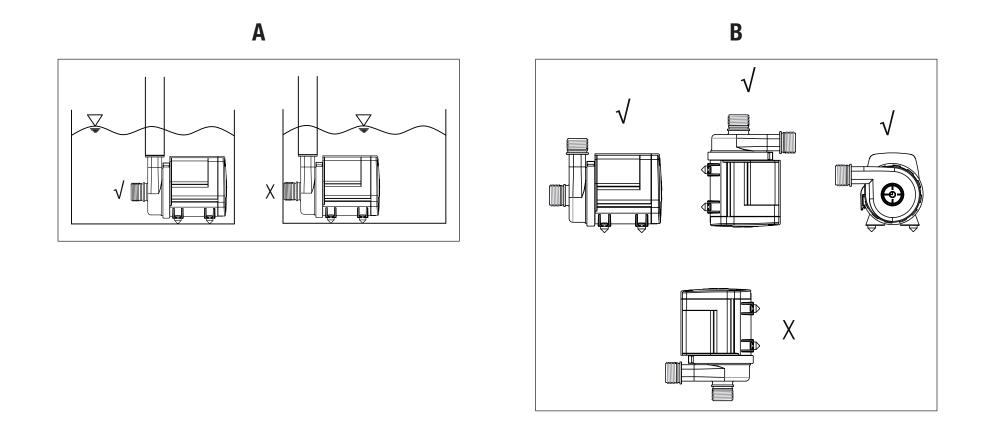
### PUMP INSTALLATION: USE AND REGULATION

Proceed as follows to install the pump:

1) Connect the hose fittings to the pump outtake to which you can connect the pipes with the appropriate diameter.

2) Place the pump in an area easily accessible for the maintenance operations.

3) If the pump is used submersed and not in line, it must be always fully submersed. (Pic. A-B)



## IN LINE APPLICATIONS

It is recommended to place the pump in spaces where there is a proper ventilation and the pump is not directly exposed to heat sources.

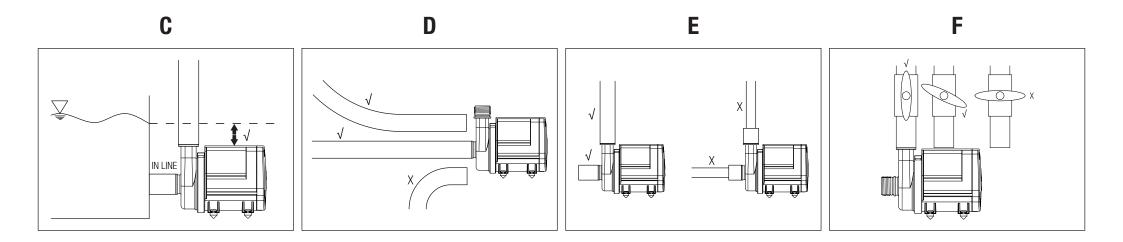
Place the pump so as to prevent too long idraulic pipings, which would reduce its performance.

Do not position the pump above the water level (Pic. C) because it is not self-priming and the risk of the pump to run dry.

The risk of invisible air bubbles creating a vacuum area is very high. Damages which are caused by the pump running dry are excluded from warranty. To maximize the pump's efficiency, choose a straight inlet tube without elbows (Pic. D).

We suggest an Inlet and outlet tubes with diameter equal or bigger than the diameter of the threaded pipe included (Pic. E).

Do not use the pump leaving the outlet totally closed. A minimum water flow is necessary to keep the inner motor cool without running dry (Pic. F).



# DL SILENT 2400

### MAINTENANCE

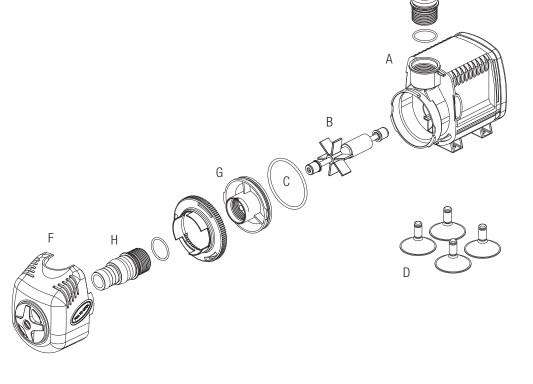
For the periodic maintenance of the pump, first of all unplug the plug from the electric socket and then take the pump.

### **COMPONENTS**

- A Motor body completely submersible and insulated by epoxy resin
- **B** Rotor kit with Impeller and bottom bearing
- **C** 0-rings
- ${\bm D}$  4 Suction cups
- **E** Water flow regulator from min. (-) to max. (+) assembled to pre-chamber **F** Pre-filter Intake grill
- **G** Threaded pre-chamber 1" Gas
- ${\boldsymbol{\mathsf{H}}}$  Hose Fittings

Proceed in the following way: take away the pre-filter (1), the ring nut (2) and then the threaded pre-chamber (3); take away the rotor (4) and rinse it under fresh water. Always check the condition of the o-rings (5). Any damage to the o-rings, even small, can seriously endanger the pump performances. In this case it is recommended to substitute them. Rinse each part with water, using a soft brush to remove the deposit. Then assemble everything in the inverse order.

DL SILENT		2400
Q max	220 - 240 V 50 Hz	2400 l/h
H max		2.4 m
Watt		40 W
Cable lenght		2.2 m



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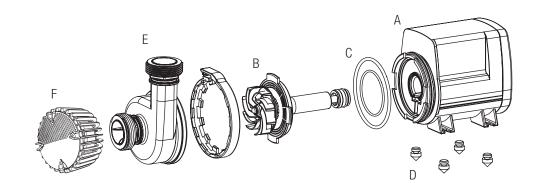
 $\boldsymbol{C} \text{ O-rings}$ 

- **D** Anti-vibration rubber feet
- **E** Turning pre-chamber
- ${\bf F}$  Pre-filter grid
- ${\bm G}~$  Hose fittings for rigid & flexible pipes

DL+ SILENT		+5500	+7000	
Q max		5500 l/h	7000 l/h	
H max	220 - 240 V 50 Hz	3.5 m	5.0 m	
Watt		40 W	55 W	
Cable lenght		3.0 m		



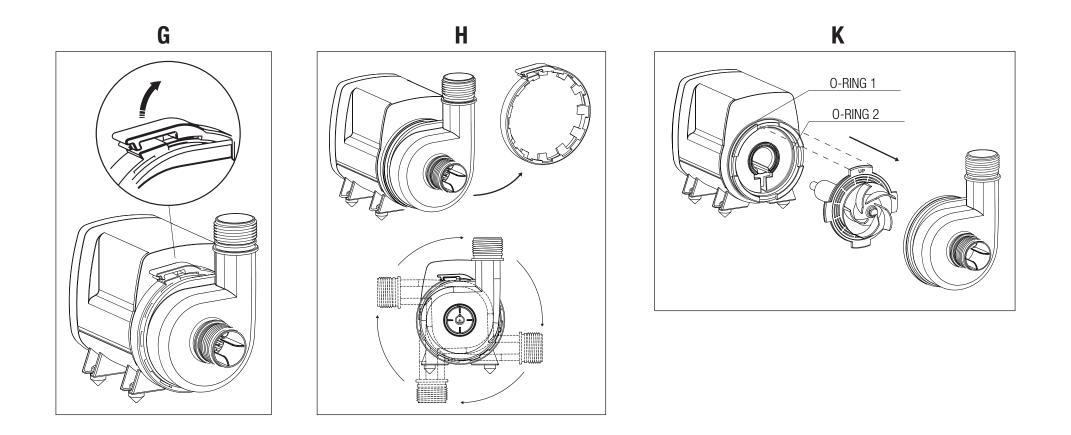
G



Lift the plastic ring of the pump's volute pulling the tab outwards. (G)

Remove the ring (H)

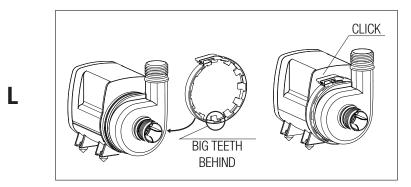
Remove the volute of the pump by turning and simultaneously pulling forward (in the case of fouling this may take more pressure). H Pull out the complete rotor set (Pic. K).



Rinse each part with water, using a soft brush to remove the deposit.

Then assemble everything in the inverse order

Put the ring in place with the biggest teeth facing the pump and close it by pressing on the tab until you hear a "click". (Pic. L). Any damage to the o-rings, even small, can seriously endanger the pump performance. In this case, it is best to replace them.



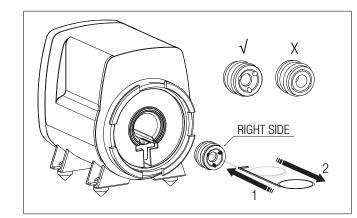
IMPORTANT: The build-in circuit board of the pump has been programmed to provide 3 levels of protection:

Μ

Protection against rotor's blockage: In case of malfunction which causes the lock of the rotor (due to excessive dirt or other) or of operating without water, the pump, after 20 attempts to start, followed by a short interval of time, and other 20 attempts will stop automatically. If this does not happen, the pump will automatically go on standby, the electronic board will remain powered but the engine will shut down. In this case to restart the pump you need to remove and re-insert the plug into the power outlet.

Dry running protection and thermal protection: motor's protection in case of functioning without water. The pump stops when it works without water, or if there is a locked rotor. When the pump is taken out from the water, the motor stops.

ATTENTION: do not underestimate the power of the magnet. If you slightly loose the grip and the axis hits the rear bearing, the risk to damage the bearing is very high. A damage axis and bearing causes high reparation costs. (Pic. M)



### **"INSTRUCTIONS FOR THE CORRECT DISCHARGE OF THE PRODUCT ACCORDING TO EU DIRECTIVE 2002/96/EC"**

When used or broken, the product does not have to be discharged with the other waste. It can be delivered to the specific electric waste collection centers or to dealers who give this service. Discharge separately an electric tool avoid negative consequences for the environment and for the health and allows to regenerate the materials so to have a great saving of energy and resources.

WARRANTY

This product is guaranteed against defects of materials and workmanship for a period of 3 years from the date of purchase, except the rotor kit. The warranty certificate must be filled in by the dealer and must accompany the pump if it is returned for repair, along with the cash register receipt or similar document. The warranty covers the replacement of the defective parts. In case of improper use, tampering or negligence by the buyer or user, the guarantee is void and expires immediately. The guarantee is also void in absence of the cash register receipt or similar document. The shipping cost to and from the factory, or the repair station, have to be paid by the buyer.

## **SPECIAL FEATURES**









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