

OPERATION MANUAL



Protein skimmer for sea water aquaria up to 200 l (50 gal)

The **AQUA MEDIC Miniflotor** has been designed especially for aquaristik use and is recommended by professional aquarists.

The **Miniflotor** removes efficiently, if applied correctly, organic metabolites and other waste products from your aquarium water before they are treated in the biological filter. The water quality is improved.

1. Working principle

The *Miniflotor* is a small inside protein skimmer for aquaria up to 200 l volume. It is characterised by the double reaction pipe, that makes him a real counter flow skimmer.

The air bubbles rise in the inner pipe. Like an air lift, they take a high volume of water with them. This water is forced to flow downwards in the outer pipe. The air bubbles follow the water stream downwards, until they reach the expansion cone. At this point the air bubbles turn and rise in the counter current upwards. This ensures a very high detention time of the bubbles in the water.

The *Miniflotor* is supplied with a strong holding plate, that allows a secure fastening of the skimmer at the wall of the tank. The holding system allows to move the skimmer up and down and to adjust the foam building zone correctly.

In addition, the holding plate leaves the space for a redox electrode, if ozone is used. The *Miniflotor* is delivered completely with an air stone. For starting you only need an additional air pump (app. 200 l/h).

2. Theory

Protein skimming is a physical method of water treatment. It uses a common and well known phenomenon: the adhesion of surface active substances to air – liquid layers. If you drop some oil on a water surface, it forms a thin film, only as thick as one molecule. Surface active substances e.g. proteins behave similar. In the *Miniflotor*, a huge water surface is created, where the waste substances attach. If the bubbles reach the surface, a stable foam is created, where the organic wastes are accumulated and removed from the water.

The work effective, the *Miniflotor* needs a contact column, where water and air can react. The air is injected into the water with an air pump and an air stone.

4. Dimensions:

Total length, including foam collection jar app 45 cm
Diameter of the reaction vessel 50 mm

5. Ozone

The effectiveness of the *Miniflotor* can be increased using ozone. Ozone oxidises lots of organic compounds, that can then be skimmed off or metabolised by bacteria in the biological filter.

The size of the ozoniser depends on the size of the aquarium. Ideal is a combination of Ozoniser and Redox Potential Controller. With this, the amount of ozone is controlled automatically.

6. Cleaning


The foam collecting jar is not fixed on the reaction pipe. For cleaning it can be removed easily. After removing the top, the jar can be cleaned under running water.

From time to time, depending on the waste concentration, the reaction pipe can be cleaned, too.

7. Failures

The *Miniflotor* is easy to maintain. Only The air stone has to be changed, if it is clogged due to deposits.

8. Warranty

 **AQUA MEDIC** GmbH guarantee 12 months from the date of purchase on production and material defects. Further claims and claims resulting from improper use are excluded.

Warranty only by proof of purchase by the original invoice.

- Technical changes reserved -

AB AQUA MEDIC GmbH -Gewerbepark 24 - 49143 Bissendorf