



# MACRO ALGAE REACTOR

## Bioremediation for freshwater and saltwater aquariums

For the bioremediation of an ecosystem, live plants and macro algae can be excellent biological detoxifiers. Chaetomorpha "Spaghetti Algae" is cultured by many marine aquarists to eliminate nitrates and phosphates from the aquatic biotope. It is absolutely sufficient to harvest a handful of algae from time to time to maintain the biological balance in an aquarium – an economical and easy alternative to many chemicals or resins.

Naja Grass, *Najas guadalupensis*, can be grown to purify freshwater systems, such as cichlid biotopes.

TUNZE<sup>®</sup> MAR 3181 and 3182 can be placed in any filter basin or next to the aquarium without external filter technology. The water circulation in the reactor ensures the rotation of the algae culture and thus reduces the number of light sources accompanied by strong plant growth. However, additional light sources can be added to the device as needed.

## Functions of the TUNZE<sup>®</sup> algae reactors:

- Cultivation of algae in seawater and of plants in fresh water
- Biological detoxification by algae / plants
- Reduction of nitrate and phosphate content
- Filtration of the aquarium water
- Production of food supplement for fish
- Zooplankton refuge, serving as food for corals and fish
- Enrichment of the water with oxygen

## Scope of delivery:

- Reactor
- LED eco chic refugium 8831 9 W
- Circulation pump Comline<sup>®</sup> pump 2500 electronic
- Turbelle<sup>®</sup> controller basic 7090.200
- Silicone hoses

### Macro Algae Reactor 3181

For aquariums from 100 to 600 liters (25 - 160 USgal.).  
Flow rate: 1,000 - 2,400 l/h (264 - 634 USgal.)  
Energy consumption with pump and LED: approx. 19 - 40 W  
Measurements of the reactor (L x W x H):  
233 x 195 x 422 mm (9.2" x 7.7" x 16.6")

### Macro Algae Reactor 3182

For aquariums from 500 to 1,600 liters (132 - 423 USgal.).  
Flow rate: 1,000 - 2,400 l/h (264 - 634 USgal.)  
Energy consumption with pump and 2 LEDs: 28 - 50 W  
Measurements of the reactor (L x W x H):  
310 x 250 x 430 mm (12.2" x 9.8" x 16.9")