TUNZE®

Aquatic Eco Engineering

An iconic history.
An inspiring future.

English

The striving for a perfect biotope reproduction

Progress has had a name for aquarists for 60 years: TUNZE®. It stands for a successful, third-generation family company whose philosophy of the researched biotope aquarium has produced long-lasting, environmentally friendly and energy-saving products that enjoy worldwide trust. With TUNZE®know-how, dreams are fulfilled, reliable safety is guaranteed in terms of quality and service, and the most modern production processes are developed.

Visions of the future have always driven TUNZE®, then as now. Only with a vision can the philosophy and ambitious goals of a company be expressed. This is exactly how modern products of excellent quality and authentic design emerged from the earlier Turbelle® pumps. Today, TUNZE® products are well-engineered, recognised, practical and easy to service. They are ideal building blocks of modern biotechnology that reliably ensure a species-appropriate ecological climate in the aquarium and thus maintain undiminished enjoyment of a fascinating hobby. This creates trust, with specialist trade partners as well as with the end customer, the aquarist.

Today's challenges for TUNZE® are quality and environmental friendliness, since energy costs money and pollutes the environment. TUNZE® pumps are constantly being further developed in order to keep setting new records in the area of performance and power consumption.

Accessories to order separately

Everywhere this symbol is displayed, you can order accessories for the products separately.

Turbelle®

PROPELLER TECHNOLOGY

Unequalled Excellence and Performance

What is it that makes the Turbelle® propeller pump so special?

Very silent operation
Special synthetic or magnetic bearings and the Silence holder included as standard enable very silent operation.

Flexible 3D adjustment
Unlike other pumps, the Turbelle® provides important flexibility regarding positioning and direction of the water jet. The water jet can be directed in such a way that a long distance in the aquarium is covered, producing an efficient current at low power consumption.

Large intake surface
The big intake strainer prevents early soiling and protects the animals against being sucked in.

Eco-energetic
High-performance motors with eco-energetic concept offer very high efficiency at very low maintenance requirements and power consumption.

Controllable performance
The safety extra low voltage, electronic speed-control Turbelle® is ideal for use in any aquarium with wave or high/low tide simulation. Its intelligent microprocessor-controlled motor together with SmartController 7000 make an invincible team.

With Magnet holder as a standard
The Turbelle®, as a standard accessory, features a magnet holder for easy fixing anywhere on the aquarium pane.

Power failure – no problem
The electronic speed control Turbelle® can be operated by any 10 V to 24 V DC supply (battery, solar cells) using the Safety Connector. The Safety Connector enables normal operation using the TUNZE® power supply and will switch to a battery or DC supply automatically in the case of a power failure.

In addition to the lighting conditions, the current flow is the most important parameter within the aquarium, especially for saltwater biotopes. The following examples explain which flow situations can be found in different reef zones, and how they can be reproduced with Turbelle® flow systems.
The recommended combinations are suitable for aquariums from approx. 200 to 2,000 liters (from 52 to 528 USgal.).

Further recommendations, specific examples, or recommendations for freshwater biotopes can be requested by email (www.tunze.com).

Beach zone / algal zone

Medium-strong and gentle oscillating current. This sandy zone is frequently inhabited by algae and anemones.
TUNZE® current: Wavebox or Turbelle® nanostream® / stream in wave mode with circular current of the filter pump.

Cross-over zone / micro atolls

Average current with small waves; high tide and low tide slightly noticeable. This zone contains the first coral formations.
TUNZE® current: Wavebox or Turbelle® nanostream® / stream in wave mode with SmartController 7000 or 2 Turbelle® nanostream® / stream with SmartController 7000.

Inner reef edge

Stronger current influenced by tidal action, but low lapping of waves. Illumination is very important in this zone and produces magnificent growth of corals.
TUNZE® current: Wavebox or Turbelle® nanostream® / stream in wave mode plus Turbelle® nanostream® / stream with SmartController 7000 or only 2 Turbelle® nanostream® / stream with SmartController 7000.

Reef top

Strong current influenced by tidal action and breaking of waves. The growth of coral is very dense in this zone.
TUNZE® current: Wavebox with operation in night mode plus two Turbelle® nanostream®/ stream / masterstream with SmartController 7000 or two Turbelle® masterstream with SmartController 7000.

Outer reef edge

Zone of the reef with the strongest current - wave motion and illumination are very intensive. Acropora coral polyps, favia corals, porites hard corals thrive especially well in this zone.
TUNZE® current: Wavebox or Turbelle® nanostream® / stream in wave mode plus 2 Tur belle® stream with SmartController 7000 or 2 Turbelle® masterstream with SmartController 7000.

Outer reef slope

Strong current with slight waves and high illumination. The variety of species and the number of hard corals is very high.
TUNZE® current: Turbelle® nanostream® / stream / masterstream with SmartController 7000.

Forereef slope

Deeper zone of the reef with parallel current lines. Plankton eating species mainly inhabit this zone.
TUNZE® current: Turbelle® nanostream® / stream in permanent operation, without waves, reduced to lower output.

Turbelle® NANOSTREAM®

5 YEARS WARRANTY TUNZE Aquatic Eco Engineering

Propeller Technology

Low motor heat

3D adjustment

Includes Magnet Holder

Includes Silence clamp (except 6020)

Integrated protective thermostat

nanostream® Design – stream discrete

In 2006, TUNZE® developed the "nanostream®" concept. The Turbelle® nanostream® is a compact propeller pump for nano and medium-sized aquariums, and able to convince through its design, as well as a 3D current flow which is adjustable in every direction without additional accessories. The pump contains a very large intake strainer for the sucked in water, which helps prevent a premature pollution.
This innovative circulation pump set a new record when it was launched onto the market: with a diameter of only 70 mm (2.7") it enables a water flow of 4,500 l/h (1,189 USgal./h) with an energy consumption of only 5 W (18 W and 5,500 l/h (1,452 USgal./h) for the electronic version). As the first pump of its kind on the market it was also supplied with a magnet holder, which enables an easy attachment at any position on the aquarium glass pane. A real classic!

Discrete integration in every habitat
Quality production "made in Germany"
Mounted by a Magnet Holder
Silence holder reduces vibrations
Efficient, 3D controllable flow
Gentle circulation
Starts smoothly
Sturdy
Operates very silently
Streamlined design
Wide Flow (6020)
Energy saving motors
Low power consumption
Maintenance-free thanks to its self-cleaning-system

Turbelle® nanostream® 6020
For aquariums from 40 to 250 liters (10 to 66 USgal.).
Flow rate: approx. 2,500 l/h (660 USgal./h)
Energy consumption: 4 W
Voltage / frequency: 230V/50Hz (115V/60Hz)
Cable length: 2 m (78.7")
Dimensions without flow deflector: 65 x 60 x 72 mm (2.6" x 2.4" x 2.8")
Outlet: ø40 mm (1.6")
Silence Magnet Holder up to a glass thickness of 12 mm (½").

6020.000

Turbelle® nanostream® 6015
For aquariums from 40 to 200 liters (10 to 55 USgal.).
Flow rate: approx. 1,800 l/h (475 USgal./h)
Energy consumption: 3.5 W
Voltage / frequency: 230V/50Hz (115V/60Hz)
Cable length: 2 m (78.7")
Dimensions: ø70 mm (2.7")
Outlet: ø40/15 mm (1.5"/2/3")
Magnet Holder with Silence clamp up to a glass thickness of 12 mm (½").

6015.000

Turbelle® nanostream® 6025
For aquariums from 40 to 200 liters (10 to 55 USgal.).
Flow rate: approx. 2,800 l/h (740 USgal./h)
Energy consumption: 5 W
Voltage / frequency: 230V/50Hz (115V/60Hz)
Cable length: 2 m (78.7")
Dimensions: ø70 mm (2.7")
Outlet: ø40/15 mm (1.5"/2/3")
Magnet Holder with Silence clamp up to a glass thickness of 12 mm (½").

6025.000

Turbelle® nanostream® 6045
For aquariums from 40 to 500 liters (10 to 135 USgal.).
Flow rate: 1,500 to about 4,500 l/h (400 to 1,175 USgal./h)
Energy consumption: 5 to 7 W
Voltage / frequency: 230V/50Hz (115V/60Hz)
Cable length: 2 m (78.7")
Dimensions: ø70 mm (2.7")
Outlet: ø40/15 mm (1.5"/⅔")
Magnet Holder with Silence clamp up to a glass thickness of 15 mm (⅔").

6045.000

Turbelle®
NANOSTREAM® ELECTRONIC

5 YEARS WARRANTY TUNZE Aquatic Eco Engineering

TUNZE 12 V 24 V ELECTRONIC PM-MOTOR

Propeller Technology

TUNZE PROPELLER TECHNOLOGY

Low motor heat

3D adjustment

Includes Magnet Holder

Includes Silence clamp (except 6040)

Turbelle® Controller

The Turbelle® Controller is a device that is used to set the variable pump performance. It can provide a wave simulation, oscillation flow, an automatic search for the resonance frequency when the oscillation flow is used, and it is also equipped with a food timer. It can be directly connected to a SmartController 7000. The pump is therefore able to operate together with other pumps, for example, in the high/low tide mode. If the Moonlight 7097.050 (not included in the scope of delivery) is attached to the Turbelle® Controller, the night-mode operation will be activated automatically. If this controller is connected to a second controller with the 7092.300 cable, a further pump can be connected and controlled, for example, to provide a wave pounding simulation or an oscillating current. A third controller can be added using the Y adapter cable 7090.300.

Best efficiency at the lowest possible consumption of energy
Pump load adapted automatic speed-control
Protected against blockage and dry running
Microprocessor-controlled motor
Safety extra-low voltage
Fish Care Function

Turbelle® nanostream® 6040
For aquariums from 20 to 500 liters (5.3 to 132 USgal.).
Flow rate: approx. 200 to 4,500 l/h (53 to 1,190 USgal./h) with Turbelle® Controller
Energy consumption: 1.5 - 13 W
Power supply unit: 100-240V / 50-60Hz
Cable length: 3 m (118")
Dimensions without flow deflector and Magnet Holder: 60 x 43 x 68 mm (2.36 x 1.69 x 2.68 in.)
Outlet: ø40 mm (1.57")
Silence Magnet Holder up to a glass thickness of 15 mm (⅔").

6040.000

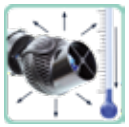
Turbelle® nanostream® 6055
For aquariums from 40 to 500 liters (10.6 to 132 USgal.).
Flow rate: 1,000 to about 5,500 l/h (250 to about 1,450 USgal./h) with Turbelle® Controller
Energy consumption: 4 - 18 W
Power supply unit: 100-240V / 50-60Hz
Cable length: 3 m (118"), Dimensions: ø70 mm (2.7")
Output: ø40/15 mm (1.5"/⅔")
Magnet Holder with Silence clamp up to a glass thickness of 15 mm (⅔").

6055.000

Turbelle® nanostream® 6095 WIDE FLOW
For aquariums from 100 to 1,000 liters (25 to 265 USgal.).
Flow rate: 2,000 to about 9,500 l/h (550 to about 2,500 USgal./h) with Turbelle® Controller
Energy consumption: 5 - 21 W
Power supply unit: 100-240V / 50-60Hz
Cable length: 3 m (118")
Dimensions: ø70 mm (2.7")
Output: ø50/10 mm (2/.4")
Magnet Holder with Silence clamp up to a glass thickness of 15 mm (⅔").

6095.000

Propeller Technology



Low motor heat

3D adjustment

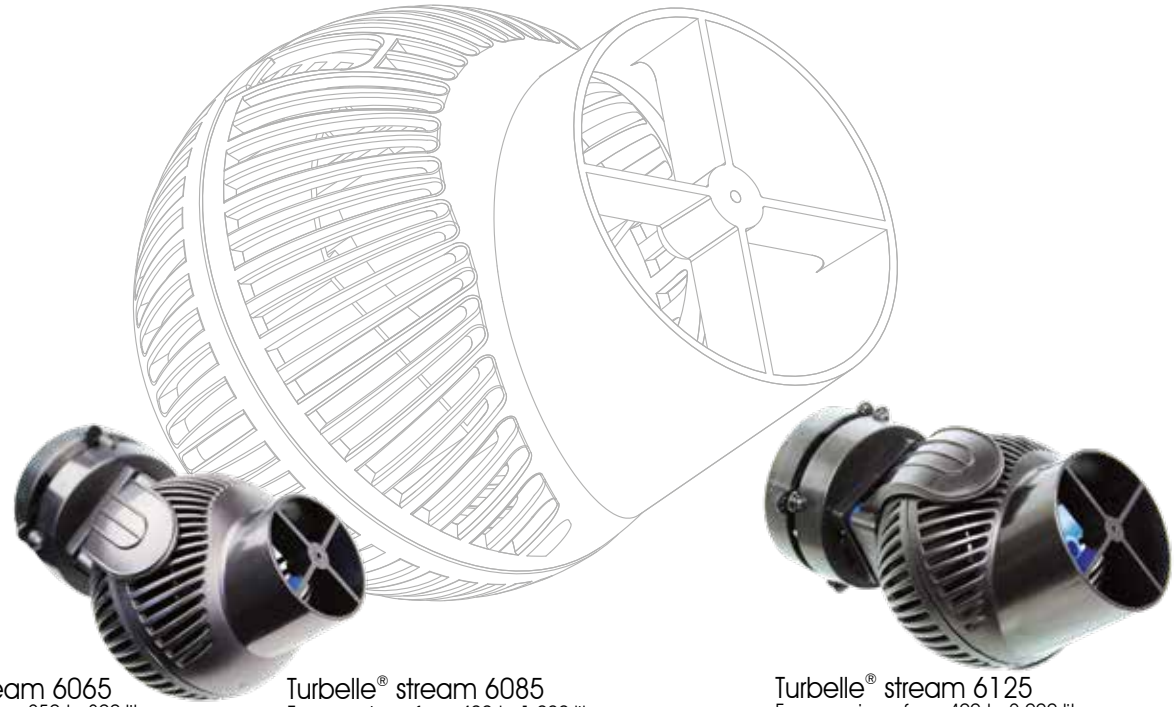
Includes Magnet Holder

Includes Silence clamp

Turbelle® STREAM

5 YEARS WARRANTY TUNZE Aquatic Eco Engineering

Turbelle® stream is a powerful propeller pump with the special 90 mm (3.5") ball design for water circulation in aquariums or tanks. 3D adjustable and compact despite its strong power; it contains innovative technical solutions and adapts to the aquarium without affecting the existing biotope.



Turbelle® stream 6065

For aquariums from 250 to 800 liters
(65 to 210 USgal.).
Flow rate: approx. 6,500 l/h (1,700 USgal./h)
Energy consumption: 12 W
Voltage / frequency: 230V/50Hz (115V/60Hz)
Cable length: 2 m (78")
Dimensions: ø90 mm (3.5")
Output: ø50 mm (2")
Magnet Holder with Silence clamp up to a glass thickness of 15 mm (⅔").

6065.000

Turbelle® stream 6085

For aquariums from 400 to 1,000 liters
(105 to 265 USgal.).
Flow rate: approx. 8,000 l/h (2,100 USgal./h)
Energy consumption: 14 W
Voltage / frequency: 230V/50Hz (115V/60Hz)
Cable length: 2 m (78")
Dimensions: ø90 mm (3.5")
Output: ø50 mm (1.96")
Magnet Holder with Silence clamp up to a glass thickness of 15 mm (⅔").

6085.000

Turbelle® stream 6125

For aquariums from 400 to 2,000 liters
(105 to 525 USgal.).
Flow rate: approx. 12,000 l/h (3,150 USgal./h)
Energy consumption: 22 W
Voltage / frequency: 230V/50Hz (115V/60Hz)
Cable length: 2 m (78")
Dimensions: ø90 mm (3.5")
Output: ø63 mm (2.5")
Magnet Holder with Silence clamp up to a glass thickness of 15 mm (⅔").

6125.000

Turbelle®

STREAM ELECTRONIC

5 YEARS WARRANTY TUNZE Aquatic Eco Engineering

TUNZE 12 V 24 V ELECTRONIC PM-MOTOR

Propeller Technology

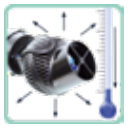
TUNZE PROPELLER TECHNOLOGY

Turbelle® Controller

The Turbelle® Controller is a device that is used to set the variable pump performance. It can provide a wave simulation, oscillation flow, an automatic search for the resonance frequency when the oscillation flow is used, and it is also equipped with a food timer. It can be directly connected to a SmartController 7000. The pump is therefore able to operate together with other pumps, for example, in the high/low tide mode. If the Moonlight 7097.050 (not included in the scope of delivery) is attached to the Turbelle® Controller, the night-mode operation will be activated automatically. If this controller is connected to a second controller with the 7092.300 cable, a further pump can be connected and controlled, for example, to provide a wave pounding simulation or an oscillating current. A third controller can be added using the Y adapter cable 7090.300.

Best efficiency at the lowest possible consumption of energy
Pump load adapted automatic speed-control
Protected against blockage and dry running
Microprocessor-controlled motor
Safety extra-low voltage
Fish Care Function

Low motor heat



3D adjustment

Includes Magnet Holder

Includes Silence clamp

Turbelle® stream 6105

For aquariums from 200 to 2,000 liters
(53 to 528 USgal.).
Flow rate: 3,000 up to approx. 13,000 l/h
(792 - 3,434 USgal./h) with Turbelle® Controller
Energy consumption: max. 35 W
Power supply unit: 100-240V / 50-60Hz
Cable length: 5 m (196.8"), Dimensions: ø90 mm (3.5"), Outlet: ø50 mm (2")
Magnet Holder with Silence clamp up to a glass thickness of 15 mm (⅔").
Including a second WIDE FLOW propeller housing.
Outlet: ø63 mm (2.5")

6105.000

Flow profile

Turbelle® stream 6255 WIDE FLOW

For aquariums >4,000 liters (1,050 USgal.).
Flow rate: 5,000 to approx. 17,000 l/h
(1,300 to 4,490 USgal./h) with Turbelle® Controller
Energy consumption: max. 51 W
Power supply unit: 100-240V / 50-60Hz
Cable length: 5 m (196.8")
Dimensions: ø90 mm (3.5")
Outlet: ø75 mm (3")
Magnet Holder with Silence Clamp up to a glass thickness of 27 mm (1").

6255.000

Flow profile

TUNZE 24 V BEMF BLDC MOTOR

TUNZE MAGNETIC BEARING

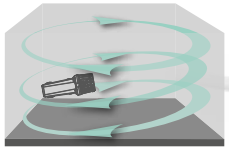
Turbelle® STREAM 3 & 3+

5 YEARS WARRANTY TUNZE Aquatic Eco Engineering

Customize your stream

With its innovative design, Turbelle® stream3 and stream3+ can integrate almost invisibly into every aquarium, they are compact, powerful, energy efficient and, beyond that, absolutely quiet thanks to their special magnetic-bearing pump drive – even at higher power levels. Due to the different attachments, the two pumps can be used in a variety of ways. For example, the flow rectifier facilitates an additional flow length of more than 3 meters (118") – ideal for long aquariums! The 0.8 Hz FishCare function prevents injuries to fish or other living animals. Every 24 hours, the pump automatically performs an 8-second backflushing operation with a capacity of 30%.

CIRCULAR FLOW



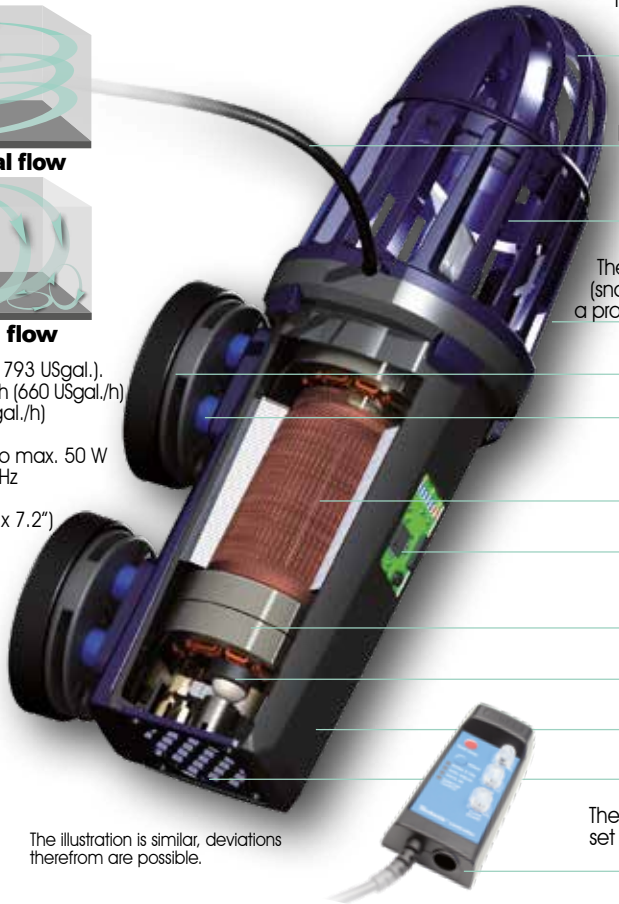
Horizontal flow

Vertical flow

For aquariums up to 3,000 liters 793 USgal.).
Circulation performance: 2,500 l/h (660 USgal./h) to approx. 15,000 l/h (3,962 USgal./h) with Turbelle® Controller
Energy consumption: from 3.5 to max. 50 W
Power supply: 100-240V / 50-60Hz
Dimensions (L x W x H):
93 x 70.6 x 184 mm (3.7" x 2.7" x 7.2")
Cable length: 5 m (197")
With flow deflector, protective grating and flow rectifier.

Turbelle® stream 3
Silence Magnet Holder up to a glass thickness of 15 mm (⅔").
6150.000

Turbelle® stream 3+
Silence Magnet Holder up to a glass thickness of 19 mm (¾").
6150.001



The illustration is similar, deviations therefrom are possible.

Adjustable and removable flow deflector, in order to precisely adapt the flow to the aquarium. Through this, the stream 3 can also be arranged vertically and discreetly in a corner deeper in the aquarium.

Highly resistant polyurethane cable (5 m; 197").

The acoustically optimized low-frequency propeller provides the best possible hydraulic performance.

The large intake strainer with massive locking hooks (snap fits), is easy to remove, and can be fitted with a protective grating for small animals, anemones, etc.

Hybrid support comprised of a suction cup and magnet.

Vibration decoupling through silicone buffers.

Microprocessor-controlled motor with an intelligent operating condition monitoring and highly efficient power electronics.

Operating time counter with LED-interface.

Magnetic bearing for a contact-free radial support which neutralizes motor noises.

The bearing is made of technical ceramics and high-performance plastic.

Durable outer housing in a high-gloss finish.

Intake aperture for an optimal rotor cooling.

The Turbelle® controller is a device which is used to set the variable pump performance, wave motion simulation, oscillation flow, Foodtimer, etc.

Additional power supply for all Turbelle® electronic pumps – Safety Connector

The Turbelle® electronic pumps are provided with an electronic motor. Thus, the pumps can be powered by any 10 to 24 V DC power supply (battery, solar cells). For a safe connection to the pump, we recommend the Turbelle® Safety Connector 6105.500 which features a 4A fuse. The Safety Connector enables normal operation using the TUNZE® power supply and will connect a battery or DC supply automatically in the case of a power failure.

Safety Connector
6105.500

Moonlight Turbelle®
With photo diode. Simulates a 29-day moon phase and controls the night-time reduction at pumps with a Turbelle® Controller add-on or together with SmartController 7000. Suitable for all Turbelle® electronic pumps with 5-pin connector and power supply unit.
7097.050

Magnet Holder
Universal holder for attachment up to a glass thickness of 20 mm (¾").
Dimensions: ø50 mm (1.9") x W15 mm (.59")
6025.500

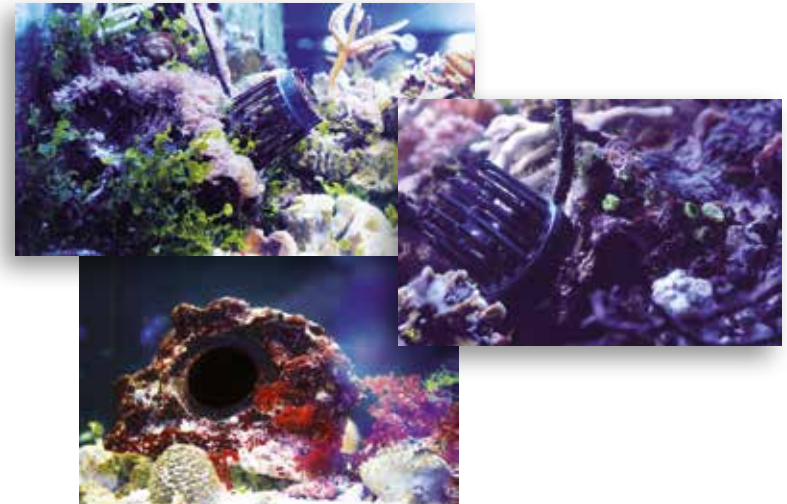
Y-Adapter Kabel
Connects two Turbelle® Controllers for simultaneous controlling. An additional third pump or Moonlight 7097.050 can be connected. Connects SmartController 7000 with Turbelle® pumps and / or TUNZE® LEDs or the Moonlight 7097.050.
7090.300

Kabel 1,2 m Turbelle® Controller
Connects two Turbelle® controllers for a simultaneous controlling or connects one Turbelle® Controller with a SmartController 7000.
7092.300

Nanostream® Rock
For Turbelle® nanostream® 6015, 6025, 6045 and 6055. Consisting of a highly porous ceramic stone with Live Rock Function, suitable for fresh and sea water, and a high water flow rate. It enables the highly decorative integration of the circulation pump into the aquarium environment.
6025.250

Stream Rock
With special insert for Turbelle® stream. Consists of very porous ceramic stone with live rock function, suitable for fresh water and salt water, for high water throughput. It enables a highly decorative integration of these circulation pumps in the aquarium.
6200.250

Stream 3 Rock
With special insert for Turbelle® stream 3 and stream 3+. Consists of very porous ceramic stone with Live Rock function, suitable for fresh water and salt water, for high water throughput. It enables a highly decorative integration of these circulation pumps in the aquarium. Dimensions (L x W x H): 22 x 18 x 18 cm (8.7" x 7.1" x 7.1")
6150.250



Turbelle® MASTERSTREAM

298m³ – Musée de la mer Biarritz, France

it streams
in the shadows

An intelligent and innovative micro-processor controlled PM motor operating on safety extra-low voltage of 12 V to 24 V is the core of the Turbelle® masterstream.

Hose clamps for attachment to PVC pipe or rod, ø32 mm (1.3").

Corrosion-resistant screws with nuts.

The pump housing is used as a huge intake strainer; the suction area is 3.95 times larger than the discharge area. The Turbelle® masterstream needs no additional intake strainer.

Performance propeller with low rotational speed and axle made of titanium alloy.

Flow rectifier, ø125 mm (4.9") with integrated protection against injury in keeping with European standard EN 60335-1.

The Turbelle® masterstream pumps are intended for the high-performance propeller pump market segment, and primarily predetermined for an implementation in experience zoos, research institutes, rehabilitation clinics and fish or algae farms. We also offer a version for aquarists who operate large aquariums and require a strong as well as wide flow rate for their reef tanks. Turbelle® masterstream pumps are designed to provide a maximum degree of efficiency, combined with a low energy consumption. Thanks to the extra-low safety voltage of the electronic TUNZE® PM motor, the pumps will operate at a pleasant noise level even at peak performance, while consuming significantly less power for the same output compared to conventional water pumps.

Controllable performance

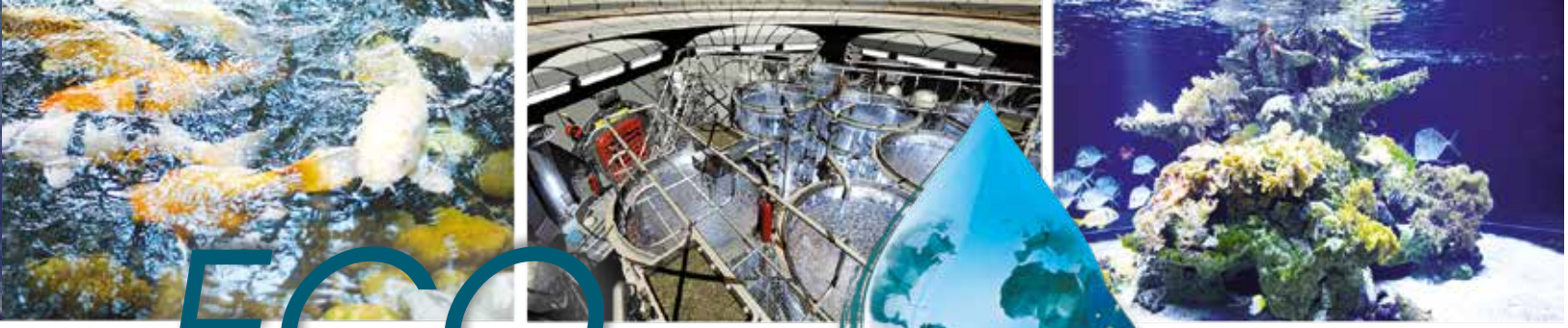
The Turbelle® masterstream pumps are electronically speed-controlled by Turbelle® Controller / SmartController 7000. They can be used ideally for water circulation, wave action or wave-and-tide simulations.

100% corrosion-resistant

All parts of the pumps are made of ASA, POM and adjuvant enriched PA6.6. PU coated cable; the motor axle is made of titanium alloy; the motor and the electronics are cast in polyurethane (PU) resin.

No external control

The pump control is integrated completely in the motor block ensuring a low-maintenance operation with high efficiency and ideal water cooling. All Turbelle® masterstream pumps only require one external power supply unit or safety connector with a corresponding direct-current source (battery, solar cell, et cetera).



ECO ENERGETIC

A small sample calculation using Turbelle® masterstream 6580 (80 m³/h (21 USgal./h) – 420 W) reveals that energy efficient water movement results in enormous cost effectiveness:

Tank volume: 60 m³ (15.9 USgal.)
Flow selection by centrifugal pump: (32 m³/h (8.5 USgal./h) – 2,200 W)
At an annual operating time of 8,760 hours and a kilowatt price of € 0.35 / £ 0.30 / US$ 0.36 this results in a cost saving of about € 5,382 / £ 4,700 / US$ 5,610 per annum.

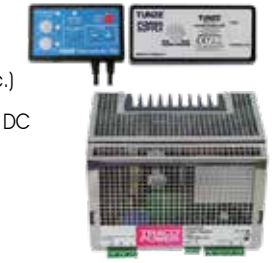
Turbelle® masterstream 6550

For aquariums >5,000 liters (1,320 USgal.).
Flow rate: 30,000 to approx. 50,000 l/h
(7,900 to approx. 13,000 USgal./h)
Flow velocity: 0.8 - 1.3 m/s (31.5" - 51"/sec.)
Energy consumption: max. 110 W
Power supply unit: 100-240V / 50-60Hz / 12V DC
Cable length: 10 m (393.6")
Dimensions (L x W x H):
340 x 165 x 227 mm (13.4" x 6.5" x 8.9")
Output: ø125 mm (4.9")
Attachment to pipe, ø32 mm (1.3")

6550.000

Turbelle® masterstream 6580

For aquariums >20,000 liters (5,250 USgal.).
Flow rate: 45,000 to approx. 80,000 l/h
(11,900 to approx. 21,000 USgal./h)
Flow velocity: 1.1 - 2.0 m/s (43.3" - 78.7"/sec.)
Energy consumption: 290-420 W
Power supply unit: 100-240V / 50-60Hz / 12V DC
Cable length: 10 m (393.6")
Dimensions (L x W x H):
340 x 165 x 227 mm (13.4" x 6.5" x 8.9")
Output: ø125 mm (4.9")
Attachment to pipe, ø32 mm (1.3")
Supplied with Wavecontroller 7092.



6580.000

Turbelle® masterstream 6580 – 15 m

Structurally identical with 6580.000.
Cable length: 15 m (590.6") instead of 10 m (393.6")

6580.002

TUNZE ENERGY SAVING

TUNZE 12 V 24 V ELECTRONIC PM-MOTOR

TUNZE PROPELLER TECHNOLOGY
Propeller Technology


100% sea-water proof, titanium and plastic


Low motor heat


2D adjustment

12/24 V DC
Safety extra-low voltage


Controllable speed, wave simulation, tidal currents

Magnet Holder masterstream

(patent No. 20 2005 003 170) is especially designed for the attachment of Turbelle® masterstream up to a glass thickness of 30 mm (1 1/8").
It consists of three linked magnetic units with silicon buffer. On account of their encapsulated construction, the magnets are resistant to corrosion, and cause no harmful effects for the aquarium biotope.

6508.500

Power Supply Box

Control box in keeping with protection standard IP33 (IEC 60529): Protected against solid foreign matter over a diameter of 2.5 mm (.09") and against spray water which is sprayed at an angle of up to 60° to both sides of the vertical. This control box is especially made for the power supply units of Turbelle® masterstream 6560 and 6580, and is fitted with a lateral master switch, a high-quality fan and a DIN rail.
Dimensions (L x W x H): 375 x 375 x 225 mm (14.8" x 14.8" x 8.9").

6515.245

NEW

5 YEARS WARRANTY TUNZE Aquatic Eco Engineering

TUNZE® HUB

One platform – many end devices

All compatible devices can be clearly managed in one place on the TUNZE® HUB.

- 5 years warranty
- Made in Germany
- Uncomplicated "over the air" updates
- 5 year update guarantee
- Failsafe: Internet only for configuration & notification necessary. Not for operation.
- Including temperature probe
- Including wall mount
- Integrated real time clock: → No program shift in case of power failure
- Precise pH or redox measurement

- Funding from hardware, no hidden operating costs.
- Browser-based web interface: operating system independent, no drivers, no programs.
- No hidden data collection.
- Measured values are permanently secured online and can be viewed online.
- Redundant servers at different locations in Europe.
- Control: Fully configurable reaction system.
- Complete communication encrypted. Server to end device as device-individual AES256 encryption.
- Fully configurable notification system.

Controls up to:

- 4x TUNZE® switched socket / valve
- 4x TUNZE® LED 8850 / Kessil® 0-10 V
- 4x TUNZE® Turbelle® electronic / 0-10 V pump
- 4x TUNZE® Aquawind

SmartController 7000
With temperature probe, 4 connection cables, universal connection cable, mounting set.
Dimensions without mount (L x W x H): 133 x 33 x 116 mm (5.2" x 1.2" x 4.5")
7000.001

Turbelle®
E-JET

Turbelle® e-jet are high-performance centrifugal pumps. They have an impeller with a defined sense of rotation which is used to produce a water jet without any harmful shearing forces and fifty per cent less consumption of energy than conventional aquarium pumps. The synchronous motor with its electronic starting system offers very high reliability requiring less servicing and less current consumption. The extraordinary design, which includes the magnet holder, permits 3D adjustment and an uncomplicated attachment at any point on the aquarium pane. Turbelle® e-jet are attached individually to the glass pane as circulation pumps or filters, and for this reason are supplied with magnet holder, strainer, flow deflector and filter cartridge.

Low motor heat, high efficiency.

Magnetic rotors running on aqueous film bearings for low-maintenance and noiseless operation.

Titanium alloy shaft

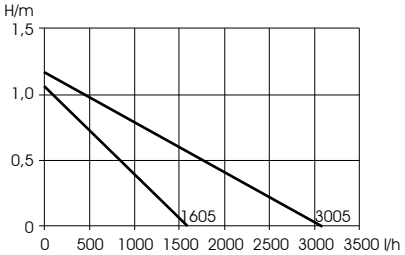
Bearing-free pump suction side

Replaces all Turbelle® powerhead / electronic built since 1988

5 YEARS WARRANTY TUNZE Aquatic Eco Engineering

Performance table of e-jet pumps

This performance table includes a tolerance of +/- 5 per cent.



Turbelle® e-jet 1605

Flow rate: 1,600 l/h (420 USgal./h)
Pumping head: 1.1 m (43.3")
Energy consumption: 12 W
Voltage / frequency:
230V/50Hz (115V/60Hz)
Cable length: 2 m (78.7")
Dimensions: ø98 x 100 mm (3.8" x 3.9")
Inlet: ø25 mm (1")
Outlet: ø25 mm (1")
Magnet holder up to a glass thickness of 15 mm (⅔").

1605.000

Turbelle® e-jet 3005

Flow rate: 3,150 l/h (830 USgal./h)
Pumping head: 1,2 m (47.2")
Energy consumption: 22 W
Voltage / frequency: 230V/50Hz (115V/60Hz)
Cable length: 2 m (78.7")
Dimensions: ø98 x 100 mm (3.8 " x 3.9")
Inlet: ø25 mm (1"), Outlet: ø25 mm (1")
Magnet holder up to a glass thickness of 15 mm (⅔").

3005.000

Cartridge 870

Refill cartridge for aquarium carbon or fine wadding with ø80 x 115 mm (3.1" x 4.5").

0870.000

Filter cartridges, 225 mm

Five spare filter cartridges with wound acrylic wadding fibers.
Suitable for Turbelle® cartridge filter 1600.

1600.010

Filter cartridges, 135 mm

Five spare filter cartridges with wound acrylic wadding fibers. Fitted with best aquarium wadding, can be washed two to five times. Suitable for Turbelle® e-jet, Cartridge 870, Cartridge Filter 800 and all Comline® filters.

0800.010

Turbelle®

COMLINE®
WAVEBOX

Comline® Wavebox 6208
For aquariums from 150 to 800 liters (40 - 211 USgal.).
With Turbelle® Controller.
Immersion depth: approx. 230 mm (9.1")
Energy consumption: average 10 W
Power supply unit: 100-240V / 50-60Hz
Dimensions (L x W x H): 110 x 90 x 255 mm (4.3" x 3.5" x 10")
Magnet Holder up to a glass thickness of 15 mm (⅔").

6208.000

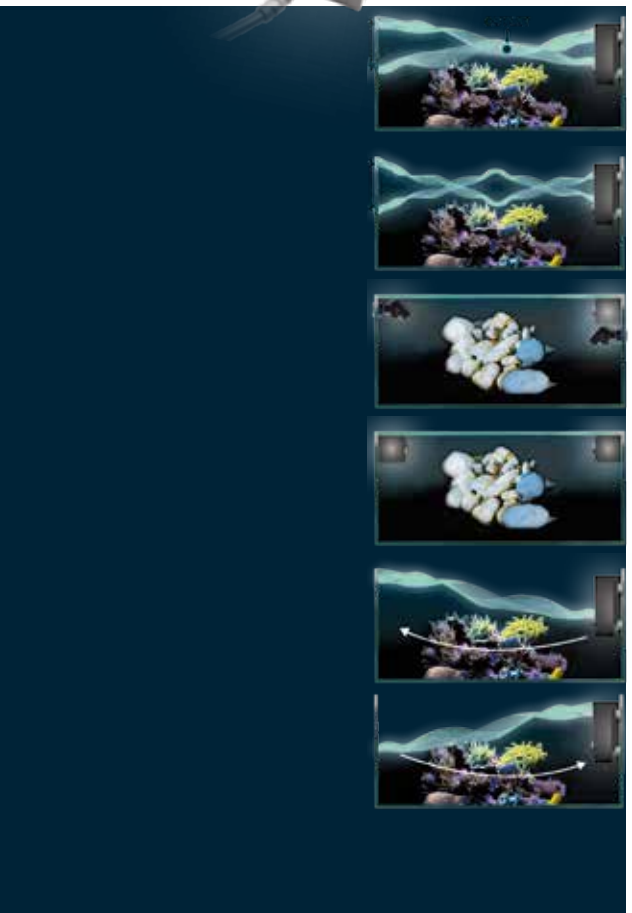
Comline® Wavebox 6214
For aquariums from 400 to 1,400 liters (106 to 370 USgal.).
With Turbelle® Controller.
Immersion depth: 255 to 285 mm (10" - 11")
Energy consumption: average 26 W at 24 V
Power supply unit: 100-240V / 50-60Hz
Dimensions with Magnet Holder (L x W x H): 140 x 110 x 300 mm (5.5" x 4.3" x 12")
Silence Magnet Holder up to a glass thickness of 19 mm (¾").

6214.000

Comline® Waveboxes are easy to operate and use a controller for operation. The compact size allows discrete mounting in an aquarium. Silicone buffers on the Wavebox prevent vibrations from being transmitted to the aquarium pane. With Moonlight Turbelle® — controls the night setback of the controller.

The Comline® Wavebox 6208 uses a Turbelle® nanostream® 6055. The integrated Magnet Holder enables easy attachment anywhere in the aquarium up to a pane thickness of 15 mm (⅔").

The Comline® Wavebox 6214 is operating with a Turbelle® stream. The embedded Magnet Holder allows the simple mounting of the Wavebox everywhere inside aquariums with glass panes up to a thickness of 19 mm (¾").



Can the Wavebox be fitted in an aquarium with outlet?

Given a single wave, the water level varies only very little in the centre of the aquarium (relative to the longitudinal axis). If and when possible, this zone should be used for the outlet and inlet. The greater the distance from this zone, the higher the difference in water level. TUNZE® outlets can withstand such variations without any problems, but they may cause noise.

Can the Wavebox produce several waves?

Given an aquarium of two meters (78") in length, a double wave can be produced. In order to get an indication for this frequency, the resonance frequency of single wave has to be divided by two. However, this can be achieved by means of the bigger Wavebox only.

Is the Wavebox compatible with other Turbelle® pumps?

Wavebox can also be integrated in an aquarium with Turbelle® pumps. The circular current of the Turbelle® and the washing of the waves produced by the Wavebox superimpose each other and result in a strongly pulsating circular current for reef top biotopes, for example.

Two Waveboxes 6214 are needed for a tank with a content of 2,000 liters (528 USgal.). Do the Waveboxes have to be located next to each other in case of space problems?

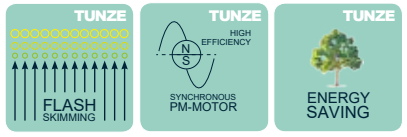
Two Waveboxes can be placed in opposite corners of the tank; in this case they will operate alternatingly: When one Wavebox operates, the other is switched off, et cetera; Wavecontroller 7092 is used to control the entire system.

How does the Wavebox operate?

The pump in the Wavebox presses the water to the left-hand side of the tank causing all polyps in every position in the aquarium to move to the left.

The pump is stopped; the wavebox fills up; and the entire water in the aquarium returns to the right-hand side. All polyps move to the right.

COMLINE®
REEFPACK



Filters, skimmers and biological know-how are requirements in marine aquariums; natural conditions are obtained, provided that there is a balance between the input and removal of food, waste and additives. The combination of equipment and know-how results in balance, where pollutants discharged into the water by some organisms (e.g. fish) are either utilized by other species (e.g. corals, small organisms) or removed by means of technical equipment (e.g. filters, skimmers).

Comline® Reefpack 100

For nano seawater habitats from 30 to 100 liters (8 to 26 US gal.).
Power consumption only 7 W for all components, 230V/50Hz (115V/60Hz).

- Comline® DOC Skimmer 9001.
- Comline® Filter 3161 for mechanical and chemical filtration, refillable with any kind of filter media.
- Filter wadding 0873.010
- Storage tank 5002.100 with a volume of 13 liters (3.4 USgal.) to hold the refill water.
- Magnet Holder up to a glass thickness of 10 mm (⅜").

Dimensions (L x W x H): 115 x 123 x 215 mm (4.5" x 4.8" x 8.5")

0100.000

Comline® Reefpack 250

For seawater biotopes from 60 to 250 liters (15 to 65 USgal.).
Power consumption only 8.5 W for all components, 230V/50Hz (115V/60Hz).

- Comline® DOC Skimmer 9004 for high performance skimming.
- Loop current in aquarium by energy saving pump with variable performance from 250 to 850 l/h (70 to 250 USgal./h).
- Comline® Filter 3162 for mechanical and chemical filtration, refillable with any type of filter medium.
- Storage tank 5002.100 with a volume of 13 liters (3.4 USgal.) to hold the refill water.
- Magnet Holder up to a glass thickness of 12 mm (½").

Dimensions (L x W x H): 110 x 180 x 305 mm (4.3" x 7.1" x 12")

0250.000

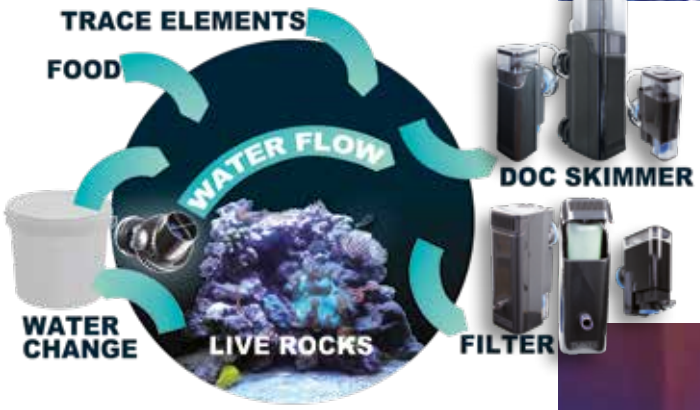
Comline® Reefpack 500

For seawater biotopes from 200 to 500 liters (53 to 132 USgal.).
Power consumption only 31 W for all components, 230V/50Hz (115V/60Hz).

- Comline® DOC Skimmer 9012 for high performance skimming.
- Loop current in aquarium by energy saving pump with variable performance from 500 to 2,100 l/h (132 to 555 USgal./h).
- Comline® Multifilter 3168 (cartridge quick filter)
- Osmolator® 3155
- Storage tank 5002.250 with a volume of 27 liters (7.1 USgal.) to hold the refill water.
- Magnet Holder up to a glass thickness of 15 mm (⅔").

Dimensions (L x W x H): 140 x 220 x 415 mm (5.5" x 8.6" x 16.3")
Can be easily combined with other TUNZE® products.

0500.000



Water change with Comline® Reefpack:

In the past, regular water changes have been standard practice for maintaining any aquarium. The high efficiency of the Reefpack filtering reduces this need to a minimum as the filtration system is capable of maintaining constant parameters on its own.

TUNZE PROPELLER TECHNOLOGY

TUNZE HIGH EFFICIENCY SYNCHRONOUS PM-MOTOR

TUNZE ENERGY SAVING

COMLINE® FILTER

3161 NANO FILTER

3162 FILTER

3163 STREAM FILTER

Comline® Nanofilter 3161

For fresh and sea water depending on the tank load of 30 liters (8 USgal.) to 100 liters (26 USgal.) (filter for nano aquariums) or up to 1,000 liters (264 USgal.) (surface filter).
Filter volume: 250 cc
Adjustable Comline® energy-saving pump. Variable pumping power from 250 l/h (66 USgal./h) up to 850 l/h (225 USgal./h).
Power consumption: 2.5 - 4.5 W, 230V/50Hz (115V/60Hz)
Max. immersion depth: approx. 160 mm (6.3")
Dimensions (L x W x H): 115 x 60 x 175 mm (4.5" x 2.4" x 6.9")
Silence Magnet Holder up to a glass thickness of 10 mm (⅜").

3161.000

Can be retrofit with controlled heaters up to 75 W directly inside the case, better heater efficiency, no risk of burns for animals.

Surface intake with bacteria film removal.

Can be retrofit with Osmolator® 3155 for water level control directly in the case.

Attachment with a patented magnet holder for a glass thickness of up to 12 mm (½").

Large filtering volume of 780 cm³ (0.21 USgall.), can be refilled with any type of loose Micro and Macro wadding, loose activated carbon or other filtering media.

Comline® Design: easy to use, elegant and unobtrusive in the aquarium.

Adjustable bottom intake for heavy particles and sediments.

Ready for installation, including filtering media and filter bags for activated carbon or other filtering media.

Comline® Filter 3162

For fresh and saltwater from 60 to 400 liters (15 to 105 USgal.), depending on tank load.
Adjustable Comline® energy saving pump.
Variable pump output from 250 to 850 l/h (70 to 225 US gal./h)
Energy consumption: 2.5 - 4.5 W, 230V/50Hz (115V/ 60Hz)
Dimensions (L x W x H): 110 x 90 x 255 mm (4.3" x 3.5" x 10")
Max. immersion depth: approx. 230 mm (9.1")
Fixed by means of Magnet Holder up to a pane thickness of 12 mm (½").

3162.000

Comline® Streamfilter 3163

For fresh and sea water from 60 to 400 liters (15 to 105 USgal.), depending on tank load.
Streamfilter pump 3163.200.
Pump output: 1,800 l/h (475 US gal./h)
Energy consumption: 3.5 W, 230V/50Hz (115V/ 60Hz)
Dimensions (L x W x H): 110 x 90 x 255 mm (4.3" x 3.5" x 10")
Max. immersion depth: approx. 230 mm (9.1")
Fixed by means of Magnet Holder up to a pane thickness of 12 mm (½").

3163.000

Foam insert
3162.200

Filter Carbon
0870.901

Magnet Holder
6025.512

Micro wadding
60 g (2.1 oz.)
0872.010

Macro wadding
250 g (8.8 oz.)
0873.010

Silphos
400 g (14 oz.)
0920.000

Quickphos
750 ml (25 oz.)
0910.000

Ionic Carbon
300 ml (10 oz.)
0950.000

Osmolator®
3155.000

3168 MULTI FILTER

The practical quick filter for every aquarium…

The Comline® Multifilter 3168 is a mechanical quick filter for aquariums from 200 to 500 liters (53 to 132 USgal.), completely installation-ready with a cartridge quick-change filter, Comline® Pump 2000 and Silence Magnet Holder. The filter can be used for both bottom as well as surface water, and its performance is easily adjustable from 500 up to 2,200 l/h (132 to 581 USgal.). It can be retrofitted with the Osmolator® 3155 to enable a perfect surface suction as well as the required compensation for the evaporation. Instead of the installed Filter cartridges 0800.010, it is also possible to use the activated carbon acrylic wadding cartridges 0800.030 or refillable cartridges 870 for carbon, Quickphos, Silphos or loose wadding.

... is also a universal internal filter for all filter media.

Only two parts need to be replaced (included in the delivery) and the Multifilter is transformed into a universal internal filter with a filter volume of 1,200 cm^3 (73 in^3). It can be refilled with all kinds of loose micro and macro wadding, activated carbon or other filter media, and integrates itself as a main filter into aquariums from 200 to 500 liters (53 to 132 USgal.) and also as an additional filter for a targeted filtering (activated carbon, zeolite, etc.) in larger systems. Silicone buffers on the Multifilter prevent the transfer of vibrations to the aquarium glass pane.

Comline® Multifilter 3168

For fresh and sea water, depending on the tank load from 200 to 500 liters (53 - 132 USgal.).
Variable pump capacity from 500 to 2.100 l/h (132 to 555 USgal./h).
Energy consumption: 10 - 18 W, 230V/50Hz (115V/60Hz)
Immersion depth: approx. 270 mm (10.6") to 290 mm (11.4") in the aquarium and min. 250 mm (9.8") in cabinet systems.
Dimensions with Magnet Holder (L x W x H):
140 x 110 x 300 mm (5.5" x 4.3" x 11.8")
Fixed by means of Silence Magnet Holder up to a pane thickness of 15 mm ($^2/_3$").

3168.000

Osmolator®

Water level regulator with two sensors suitable for use in cabinet filters, in Comline® filters or directly on the edge of the aquarium. Scope of delivery: ready for mounting with power supply unit 12 V, metering pump, hose, magnet holder for sensors.

3155.000

Magnet Holder

6025.512

Macro wadding

250 g (8.8 oz.)
0873.010

Quickphos

750 ml (25 oz.)
0910.000

Silphos 400 g (14 oz.)

0920.000

Filter Carbon

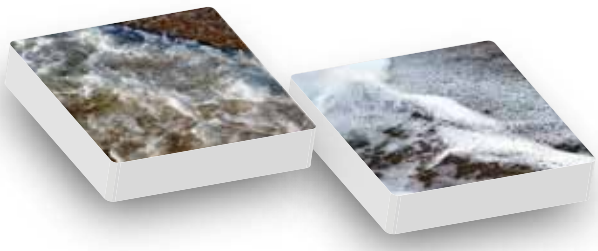
0870.950

Filter cartridge 135 mm (5.3")

0800.010

Cartridge 870

0870.000



COMLINE®
DOC SKIMMER

How do you select the right DOC skimmer for a marine aquarium?

Due to its biotope composition, every marine aquarium has a different sensitivity with respect to the organic load. Based on a standard marine aquarium with leather corals, the data on the suitable aquarium size may differ for other biotope compositions. For this reason, the aquarium volumes recommended for the skimmer should be reduced for more sensitive biotopes, if and when necessary.

Low sensitivity, no reductions

In leather coral aquariums with long-polyp corals and anemones, for example, the load of dissolved organic matter may be higher, sometimes it may even be vital.

The DOC Skimmer can be used for the recommended aquarium volume without reductions.

Average sensitivity, 40% reduction

A medium organic sensitivity is usually found in mixed aquariums inhabited with leather and stoney corals (LPS). Filters, sponges, etc. can also be found there. A DOC skimmer that is designed for 1,000 liters (264 USgal.) is likely to only skim 40% of organic substances with this light pollution.

A DOC skimmer for 1,000 liters (264 USgal.) should be used for a tank with a maximum content of approx. 600 liters (158 USgal.).

Increased sensitivity, 60% reduction

Aquariums with primarily small-polyp stoney corals (SPS) require an especially high degree of purity. They should have no load of phosphates or nitrates worth mentioning. Good oxygen saturation and very clear water are the pre-requisites. In this type of aquarium, the DOC skimmer is frequently used as a "stand-alone solution".

A DOC skimmer for 1,000 liters (264 USgal.) should be used for a tank with a maximum content of approx. 400 liters (106 USgal.).

High sensitivity and high load, 70% reduction

Hard coral aquariums (SPS) with a high population of fish require an extremely high skimming capacity. The skimmer has to ensure the proper degree of purity for hard corals in case of an excessive fish burdening, whereas an especially high performance is required if it's used as a "stand-alone solution".

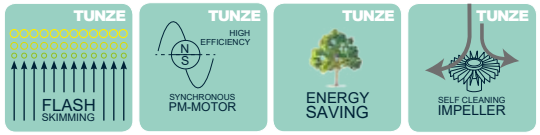
A DOC skimmer for 1,000 liters (264 USgal.) should be used for a tank with a maximum content of approx. 300 liters (79 USgal.).

Especially for Comline® DOC skimmers used as contact skimmers for breeding tanks with plankton, 70% reduction

Stone coral aquariums or other breeding tanks with plankton food require an especially high degree of purity. Good oxygen saturation and very clear water are the pre-requisites.

A Comline® DOC skimmer for 1,200 liters (317 USgal.) should be used for a tank with a maximum content of approx. 360 liters (95 USgal.)

Flash Skimming



The flash skimming principle enables highly efficient foam production. Organic-rich surface water is mixed thoroughly with small air bubbles in the TUNZE® Foamer. On the surface of the air bubbles, pollutants such as protein, cellulose, dead cells, etc. are adsorbed immediately, the air bubbles are very fine, with a diameter between .1 and .3 mm (.004" - .012"). The water / air mixture expands and stabilizes in the skimmer cup reactor, the water returns to the aquarium, and the protein-loaded air bubbles spill over into the skimmer cup. The patented anti-overfoaming system intermediate chamber prevents the skimmer from overfoaming and controls the skimmer performance, depending on the water level and organic load.
The particularly high efficiency of the flash skimming principle, compared to large skimmers with long contact time, is obtained because the substances adsorbed by the air bubbles are not released again, thus they don't return to the aquarium water.

Simple, quiet and effective – these are the current demands towards aquarium components. That is precisely what distinguishes the small Comline® DOC Skimmer 9001 – a true "plug and play" skimmer for small seawater aquariums.
There is no complicated setting or regular adjustment required for the operation. A simple installation into a corner of the aquarium is sufficient and it will work autonomously.
Immersion depth: approx. 135 - 155 mm (5.3 " - 6.1")
Skimmer cup volume: 0.2 liters (.05 USgal.)
Dimensions (L x W x H): 110 x 63 x 215 mm (4.3" x 2.5" x 8.5")
Patented Silence Magnet Holder for a glass thickness of up to 10 mm (3/8").

Comline® DOC Skimmer 9001

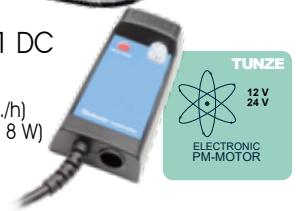
Recommended from 20 to 140 liters
(5.3 to 37 USgal.) of sea water.
Air capacity: approx. 100 l/h (26 USgal./h)
Energy consumption: 2.5 W,
230V/50Hz (115V/60Hz)

9001.000

Comline® DOC Skimmer 9001 DC

Recommended from 20 to 160 liters
(5.3 to 42.3 USgal.) of sea water.
Air capacity: approx. 150 l/h (39.6 USgal./h)
Energy consumption: approx. 5 W (max. 8 W)
Power supply unit: 100-240V / 50-60Hz
Cable length: 3 m (118") up to the
Turbelle® Controller

9001.001

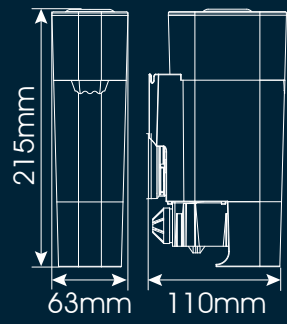


Foam insert

Avoids discharge of bubbles
at the skimmer during the
run-in-phase.

9001.200

+ 9001



9004

COMLINE®
DOC SKIMMER

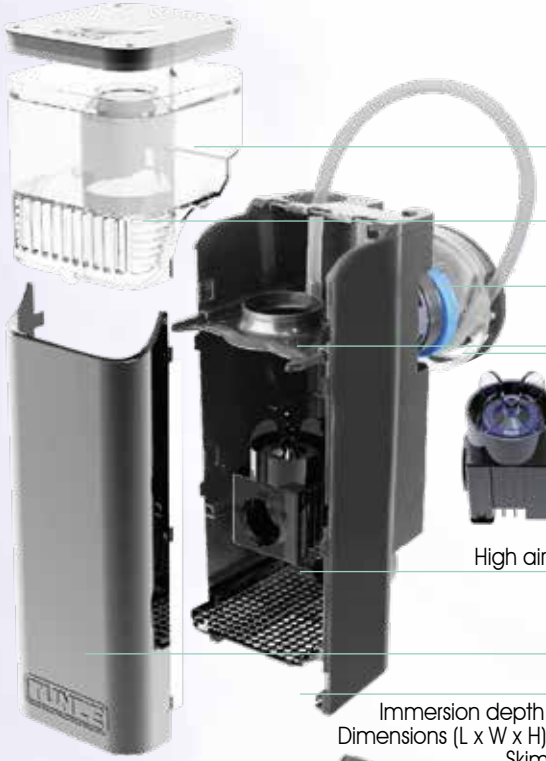
CONTACT SKIMMING = NO BUBBLES

TUNZE ENERGY SAVING

TUNZE SELF CLEANING IMPELLER

TUNZE FLASH SKIMMING

TUNZE HIGH EFFICIENCY SYNCHRONOUS PM-MOTOR



Skimmer cup with foam reactor, easy to remove.

Surface intake with bacteria film removal as a stand-alone solution.

Attachment by patented Silence Magnet Holder for a glass thickness of up to 12 mm (½").

Intermediate chamber with patented anti-overfoaming system.

Air regulation and silencer for particularly quiet operation.

TUNZE® Foamer, generates large volumes of fine air bubbles with a diameter of between .1 and .3 mm (.004" - .012"). High air output and low energy consumption.

Comline® Design: comfortable use, elegant and unobtrusive in the aquarium.

Bubble-free outgoing water.

Immersion depth: approx. 225 to 245 mm (8.9" to 9.7")
Dimensions (L x W x H): 110 x 90 x 305 mm (4.3" x 3.5" x 12")
Skimmer cup volume: 0.2 liters (.05 Usgal.)

Foam insert

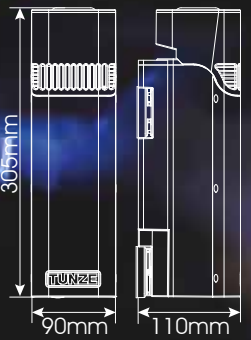
Avoids discharge of bubbles at the skimmer during the run-in-phase.

3162.200

Skimmer cup Holiday

For DOC Skimmer 9004, with appropriate hose connection and 2 m (78.7") silicone hose. Provides the accumulation of significantly larger quantities of foam, e.g. in a bucket, cup or directly into the drain. For aquariums during holiday/ vacation, for professional systems, larger aquariums, etc.

9004.145



Comline® DOC Skimmer 9004

Recommended, depending on tank load, from 60 to 250 liters (15 to 65 USgal.) of sea water.
Air capacity: approx. 150 l/h (40 USgal./h)
Energy consumption: 4 W, 230V/50Hz (115V/60Hz)

9004.000

Comline® DOC Skimmer 9004 DC

Recommended, depending on tank load, from 60 to 300 liters (15 to 79 USgal.) of sea water.
Air capacity: approx. 200 l/h (52.8 USgal./h)
Energy consumption: approx. 5 W (max. 10 W)
Power supply unit: 100-240V / 50-60Hz
Cable length: 3 m (118") up to the Turbelle® Controller

9004.001

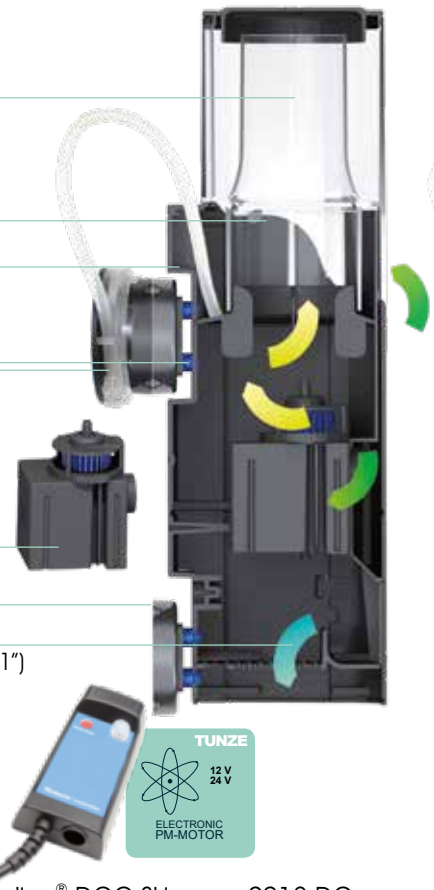
COMLINE®
DOC SKIMMER

CONTACT SKIMMING = NO BUBBLES

TUNZE FLASH SKIMMING

TUNZE HIGH EFFICIENCY SYNCHRONOUS PM-MOTOR

TUNZE ENERGY SAVING



Skimmer cup with foam reactor, easy to remove.

Intermediate chamber with a patented anti-overfoaming system.

Surface suction with surface film removal.

Silicone buffers on the skimmer prevent the transfer of vibrations to the aquarium glass pane.

Air flow regulation and silencer for an exceptionally quiet operation.

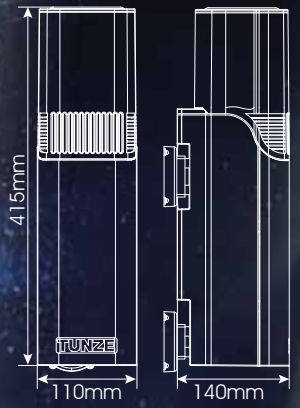
TUNZE® Foamer 9012.040, generates large volumes of fine air bubbles with a diameter of between .1 and .3 mm (.004" - .012"). High air flow performance and low energy consumption.

Attachment with a patented Silence Magnet Holder for a glass thickness of up to 15 mm (⅔").

Bubble-free outgoing water.

Immersion depth: approx. 255 to 285 mm (10" - 11")
Skimmer cup volume: 0.7 liters (0.18 USgal.)
Dimensions (L x W x H): 140 x 110 x 415 mm (5.5" x 4.3" x 16.3")

+9012



Comline® DOC Skimmer 9012

Recommended, depending on tank load, from 200 to 1,200 liters (53 to 317 USgal.) of sea water.
Air capacity: approx. 400 l/h (105 USgal./h)
Energy consumption: 13 W, 230V/50Hz (115V/60Hz)

9012.000

Comline® DOC Skimmer 9012 DC

Recommended, depending on tank load, from 200 to 1,400 liters (53 to 370 USgal.) of sea water.
Air capacity: approx. 450 l/h (118.9 USgal./h)
Energy consumption: approx. 17 W (max. 21 W)
Power supply unit: 100-240V / 50-60Hz
Cable length: 3 m (118") up to the Turbelle® Controller

9012.001

Skimmer cup Holiday

For DOC Skimmer 9012, with appropriate hose connection and 2 m (78.7") silicone hose. Provides the accumulation of significantly larger quantities of foam, e.g. in a bucket, cup or directly into the drain. For aquariums during holiday/ vacation, for professional systems, larger aquariums, etc.

9012.145

9410

DOC SKIMMER

Skimming, filtering and aerating a saltwater aquarium without power consumption is impossible. But, no unit uses less current than TUNZE® DOC Skimmer 9410, at least not with an equivalent performance. In addition, no settings are required, it is extremely silent and easy to operate.

The mixing chamber with flow distributor binds an especially high amount of organic material.

The booster ring permits a fine adjustment of the performance, thus adapting the water level inside the skimmer as required for the production of somewhat wetter foam, for example.

Ozone improves the skimming process and at the same time removes any yellowing matter in the aquarium water.

The TUNZE® Hydrofoamer Silence 9410.040 is a pump specifically developed for protein skimmers which generates large volumes of fine air bubbles with a diameter of between .1 to .3 mm (.004" - .012"). For its optimal flow rate it is also used to supply the aquarium water to the skimmer.

Skimmer cup volume: 0.7 liters (0.2 USgal.)
Immersion depth from 140 to 240 mm (5.5" - 9.5") without setting.
Dimensions without post-filter (L x W x H): 250 x 180 x 415 mm (9.8" x 7.0" x 16.3")

Anti Overfoaming System in three steps:

1. Normal foam production: The foam rises evenly into the foam reactor.
2. Overfoaming A: Foam production increases due to the surface tension and pulls the bubbles out of the foam reactor.
3. Overfoaming B: Foam production increases further, bubble production is stopped immediately, foam production is reduced.

After the improvement of the water parameters, the skimmer returns to the normal operating condition again.

DOC Skimmer 9410
Recommended for salt water aquariums up to 1,000 liters (265 USgal.).
Water flow rate: 900 l/h (237.7 USgal./h)
Air capacity: 600 l/h (158.5 USgal./h)
Energy consumption: 11 W, 230V/50Hz (15 W, 115V/60Hz)

9410.000

DOC Skimmer 9410 DC
Recommended for salt water aquariums up to 1,200 liters (317 US gal.).
Water flow rate: adjustable up to 1,200 l/h (317 US gal.)
Air flow performance: adjustable up to 750 l/h (198 US gal./h)
Energy consumption: up to approx. 16 W,
Power supply unit: 100-240V / 50-60Hz
Cable length: 3 m (118") up to the Turbelle® Controller

9410.001

Foam extraction unit
Including reactor, to be used in DOC Skimmer 9410. With 90° angle for connection to drain hose, ø40 mm (1.6").

9020.140

Post-filter bag
300 µm (11.8 mil) nylon mesh, suitable for post-filters.

9410.200

DOC SKIMMER

9415
9430

The DOC Skimmers 9415 and 9430 combine a very compact design with high performance and are ideal for installation in aquarium cabinets. They feature TUNZE® Hydrofoamers 9420.040 or 9430.040 which ensure proper foam production and water circulation at the same time.
Delivery form: Ready to mount; with accessories.

Skimmer cup with large capacity; also contains the foam reactor; can be removed easily.

Intermediate chamber with phase water: The patented Anti-Overfoaming System prevents an overfoaming of the skimmer and regulates the skimming action according to surface tension of the aquarium water and water level. The skimmer operates independently and automatically sets its best efficiency.

The removable post-filter at the outlet of the skimmer permits perfect mechanical filtration through 300 µm (11.8 mil) nylon mesh with little biological action only. This ensures that no unwanted nutrient and nitrate sources develop in case of longer cleaning intervals. The filter can be filled with other filter media, such as activated carbon or phosphate absorber.

Hydrofoamer Silence places the air generator at the top of its product class.

The inner mixing cylinder stabilises the foam rise in the body and ensures bubble-free output water.

Stable base which also reduces the water velocity in the lower zone of the skimmer.

DOC Skimmer 9415

Recommended for salt water aquariums up to 1,500 liters (400 USgal.).
Immersion depth from 100 to 200 mm (4" - 8") without setting.
Skimmer cup volume: 2 liters (.5 USgal.)
Dimensions of the skimmer cup including lid: ø215 x H.218 mm (ø8.46 x H. 8.58")
Headroom required to remove skimmer cup: minimum 71 mm (2.8")
Water flow rate: 900 l/h (238 USgal./h)
Air capacity: 1,000 l/h (264 USgal./h)
Energy consumption: 15 W, 230V/50Hz (15 W, 115V/60Hz)
Dimensions (L x W x H): 350 x 300 x 440 mm (13.8" x 11.8" x 17.3").

9415.000

DOC Skimmer 9430

Recommended for salt water aquariums up to 3,000 liters (800 USgal.).
Immersion depth from 100 to 200 mm (4" - 8 in.) without setting.
Water flow rate: 1,500 l/h (396 USgal./h)
Air capacity: 1,400 l/h (369 USgal./h)
Energy consumption: 24 W, 230V/50Hz (32 W, 115V/60Hz)
Skimmer cup volume: 2 liters (.5 USgal.)
Dimensions of the skimmer cup including lid:
ø215 x H.218 mm (ø8.46" x H. 8.58")
Dimensions (L x W x H): 350 x 300 x 490 mm (13.8" x 11.8" x 19.3")
Headroom required to remove skimmer cup:
minimum 71 mm (2.8")

9430.000

DOC Skimmer 9430 DC

Recommended for salt water aquariums up to 3,500 liters (925 USgal.).
Immersion depth from 100 to 200 mm (3.9" - 7.8 in.).
Water flow rate: adjustable up to 2,500 l/h (660 US gal.)
Air flow performance: adjustable up to 1,800 l/h (476 US gal./h)
Energy consumption: up to approx. 38 W
Power supply unit: 100-240V / 50-60Hz
Cable length: 3 m up to Turbelle® controller
Skimmer cup volume: 2 liters (.5 USgal.)
Dimensions of the skimmer cup including lid:
ø15 x H.218 mm (ø8.46 x H.8.58")
Dimensions (L x W x H): 350 x 300 x 490 mm
(13.8" x 11.8" x 19.3")
Headroom required to remove skimmer cup:
minimum 71 mm (2.8")

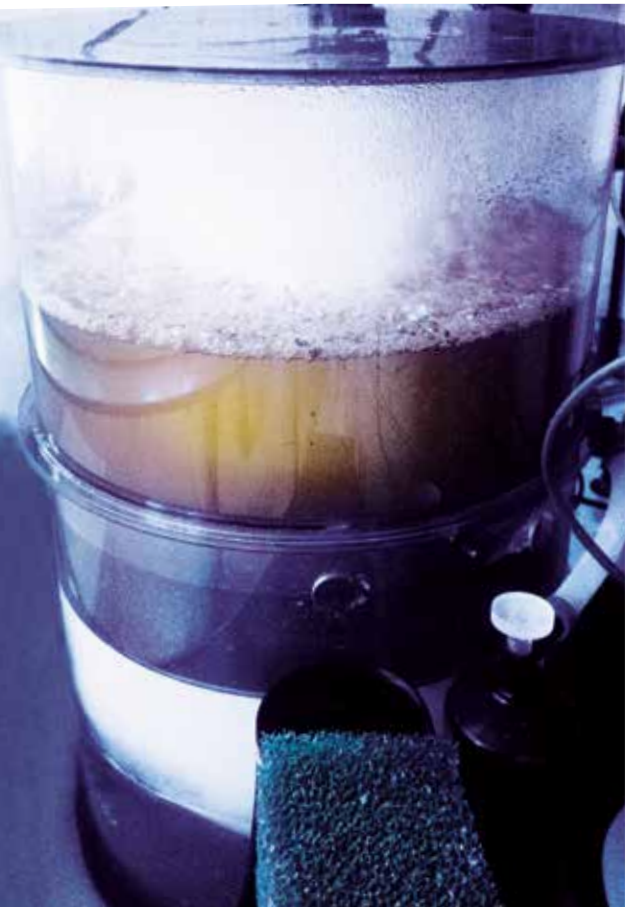
9430.001

9460

DOC SKIMMER

More than 5,000 liters (1,321 US gal.) of air per hour with the TUNZE® high performance automatic DOC Skimmer 9460!

In 1963, TUNZE® developed the revolutionary first protein skimmer with its own pump and air generator. In 2005, the first TUNZE® Flash Skimming models with powerful air injection and low-wattage consumption came onto the market. Today we designate our low-profile, ultra-efficient skimmers for tighter spaces as high performance automatic DOC skimmers because all models achieve very high standards for quality, performance and ease of use. The DOC Skimmer 9460 delivers an enormous air output of more than 5,000 l/h (1,321 USgal./h) with a very compact design and a water output of more than 3,500 l/h (925 USgal./h). It can be easily used in any aquarium with a cabinet system, but also in professional systems or aquarium stores up to 6,000 liters (1,585 USgal.) of water, the water level can vary between 150 and 250 mm (5.9" - 9.8"). It performs with the amazing TUNZE® Hydrofoamer 9460.040 skimmer pump that ensures foam production and water circulation at an energy consumption of only 58 W.



- High skimming performance with low energy consumption.
- The return water is completely free of bubbles.
- Only high quality materials are used for the DOC Skimmer.
- After the start-up phase, no adjustments are necessary – it works automatically with stable performance.
- The patented Anti-Overfoaming System avoids skimmer overflows and regulates foam production.
- It also captures the energy of output water: The DOC Skimmer contains two removable post-filters that perform a perfect mechanical filtration through 300 µm acrylic wadding. The post-filters can be filled with filter media such as loose wadding, activated carbon or phosphate adsorbers.
- Easy cleaning: skimmer cup and foam reactor are one unit.
- Very quiet operation with Hydrofoamer Silence 9460.040 pump – thanks to special silicone feet and an oversized air silencer – this DOC Skimmer 9460 is one of the quietest devices on the market.
- Particularly robust construction of the pump drive: Air injector and high-performance rotor are built in one piece.

DOC Skimmer 9460

Recommended for salt water aquariums up to 6,000 liters (1,585 USgal.).
Immersion depth from 150 to 250 mm (5.9" - 9.8") without setting.
Energy consumption: 58 W, 230V/50Hz (54 W, 115V/60Hz)
Water flow rate: 3,500 l/h (925 US gal./h)
Air capacity: >5,000 l/h (1,321 US gal./h)
Skimmer cup volume: 7 liters (1.8 USgal.)
Dimensions (L x W x H): 558 x 320 x 544 mm (22" x 13" x 21")
Dimensions of the skimmer cup including lid:
ø320 x H. 259 mm (ø13 x H. 10")
Operated by Hydrofoamer Silence 9460.040.
Headroom required to remove skimmer cup: minimum 63 mm (2.5 in.).

9460.000

HYDROFOAMER SILENCE

TUNZE® Hydrofoamers Silence are specially developed pumps for TUNZE® protein skimmers DOC Skimmer. They can also be used as replacement needle wheel pumps on any suitable skimmer available on the market. Additionally, they have a high air output at a very low power consumption and low operating noise. Motor with protective thermostat. Pump drive: Rotor with high-performance one-part magnet, with all-ceramic bearing. Mains connection: 230V/50Hz (115V/60Hz).

The performance tables include a tolerance of +/- 15%. Depending on the skimmer reactor, the performance may vary due to the counterpressure of the water column.

Hydrofoamer Silence

For TUNZE® DOC Skimmer 9410.
Cable: 2 m (78.7")
Maximum air capacity: 600 l/h (160 USgal./h)
Water flow rate: 900 l/h (235 USgal./h)
Energy consumption:
11 W (15 W) at an air capacity of 600 l/h (160 USgal./h)
Pump outlet with ¾" BSP thread (NPT).
Pump housing with strainer and silencer.
Equipped with air regulation, coupling and silencer.

9410.040

Air flow (l/h)	Water flow (l/h)	Pump wattage
600 (air max.)	900	11
300	1200	15
0	1800	20

Hydrofoamer Silence

For TUNZE® DOC Skimmer 9415.
Cable: 2 m (78.7")
Maximum air capacity: 1,200 l/h (317 USgal./h)
Water flow rate: 1,000 l/h (264 USgal./h)
Energy consumption:
15 W at an air capacity of 1,200 l/h (317 USgal./h).
Pump outlet with ¾" BSP thread (NPT).
Pump housing with strainer and silencer.
Equipped with coupling and silencer.

9420.040

Air flow (l/h)	Water flow (l/h)	Pump wattage
1200 (air max.)	1000	15
600	1600	18
300	2400	24
0	3700	39

Hydrofoamer Silence

For TUNZE® DOC Skimmer 9430.
Cable: 2 m (78.7")
Maximum air capacity: 1,600 l/h (423 USgal./h)
Water flow rate: 2,000 l/h (528 USgal./h).
Energy consumption:
24 W (32 W) at an air capacity of 1,600 l/h (423 USgal./h).
Pump outlet with ¾" BSP thread (NPT).
Pump housing with strainer and silencer.
Equipped with coupling and silencer.

9430.040

Air flow (l/h)	Water flow (l/h)	Pump wattage
1600 (air max.)	2000	24
900	2500	27
600	2900	30
300	3300	38
0	4200	56

Hydrofoamer Silence 9410.044 DC

Equipped like Hydrofoamer 9410.040.
With TUNZE® electronic PM-Motor and Turbelle® controller for capacity setting.
Maximum air flow performance:
750 l/h (198 USgal./h) at a water flow rate of 1,200 l/h (238 USgal./h)
Power consumption: max. 29 W
Power supply unit: 100-240V / 50-60Hz
Cable length: 3 m (118") up to the Turbelle® Controller

9410.044

Hydrofoamer Silence 9430.044 DC

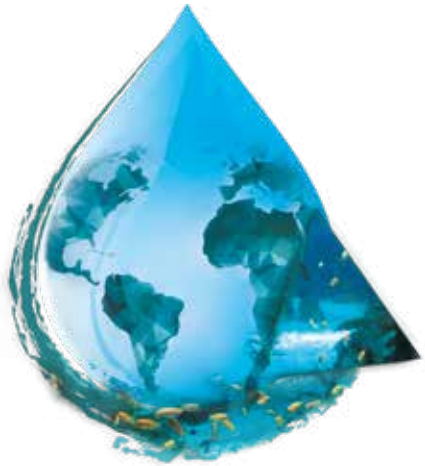
Equipped like Hydrofoamer 9430.040.
With TUNZE® electronic PM-Motor and Turbelle® controller for capacity setting.
Maximum air flow performance:
1,800 l/h (476 USgal./h) at a water flow rate of 2,500 l/h (660 USgal./h)
Power consumption: approx. 38 W (max. without air 63 W)
Power supply unit: 100-240V / 50-60Hz
Cable length: 3 m (118") up to the Turbelle® Controller

9430.044

Hydrofoamer Silence

For TUNZE® DOC Skimmer 9460.
Cable: 3 m (118")
Maximum air capacity: 5,400 l/h (1,426 USgal./h)
Water flow rate: 3,500 l/h (925 USgal./h)
Energy consumption:
58 W at 5,400 l/h (1,426 USgal./h) air capacity
Pump outlet with 1" GAS thread.
Pump housing with nozzle and angle 90°.

9460.040



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® 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® 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® pump 2500 electronic
- Turbelle® Controller basic 7090.200
- Silicone hoses

3181
3182

Macro Algae Reactor 3181

For aquariums from 100 to 600 liters (26 - 159 USgal.).
Flow rate adjustable from 1,000 to 2,400 l/h
(264 - 634 USgal.).
Energy consumption of the pump: approx. 10 to 31 W
Energy consumption of the LED: 9 W
Measurements of the reactor (L x W x H):
233 x 195 x 422 mm (9.2" x 7.7" x 16.6")

3181.000

Macro Algae Reactor 3182

For aquariums from 500 to 1,600 liters (132 - 423 USgal.).
Flow rate adjustable from 1,000 to 2,400 l/h
(264 - 634 USgal.).
Energy consumption of the pump: approx. 10 to 31 W
Energy consumption of the 2 LEDs: 18 W
Measurements of the reactor (L x W x H):
310 x 250 x 430 mm (12.2" x 9.8" x 16.9")

3182.000

CALCIUM AUTOMAT

3171
3172

In 1989, TUNZE® Aquarientechnik was the first manufacturer to develop a CO_2-controlled calcium reactor. A circulation pump is used to pass the water enriched with carbon dioxide through the hardness granulate. The carbon dioxide reacts with water to form carbonic acid which dissolves the calcium carbonate, thus discharging softened water from the reactor.

The Calcium Automat 3171 is suitable for cabinet systems and aquariums up to 1,200 liters (317 USgal.) with a granulate capacity of 1.85 liters (0.4 USgal.).

The Calcium Automat 3172 for cabinet systems and aquariums with 2,000 liters (528 USgal.) and more (depending on the coral population) has a granulate capacity of 10 liters (2.6 USgal.) and an especially high degree of efficiency.

All models are self priming, which significantly facilitates their operational start. The water flow rate is adjusted prior to the granulate, and will thus remain very consistent over time. All devices are equipped with a reabsorption function for the undissolved gases, and therefore consume very little CO_2. The models 3171 and 3172 use a cover with a wide opening, and contain a special connector for an internal pH probe.

1. Return suction of the undissolved gases.
2. The heart of the Calcium Automat is a special calcium pump with a blending centrifuge, for a particularly high degree of efficiency and CO_2 mixing.
3. Water inlet, self-priming system.
4. CO_2 input.
5. Transparent reactor with a large granulate capacity.
6. Cover with screws – wide opening for filling or cleaning.
7. Seal for internal pH probe.
8. Water outlet to the aquarium.

Calcium Automat 3171

For marine aquariums up to 1,200 liters
(317 USgal.) depending on the coral population.
Energy consumption: 17 W (25 W)
Voltage / frequency: 230V/50Hz (115V/60Hz)
Cable length: 2.2 m (86.6")
External operation or in a cabinet
(recommended), self-priming.
Filling quantity: 1,850 ml (488.7 USgal.), without filling
Dimensions (L x W x H): 230 x 150 x 350 mm
(9.1" x 5.9" x 13.8")

3171.000

Calcium Automat 3172

For marine aquariums up to 2,000 liters
(528 USgal.) depending on the coral population.
Energy consumption: 17 W (25 W)
Voltage / frequency: 230V/50Hz (115V/60Hz)
Cable length: 2.2 m (86.6")
External operation or in a cabinet
(recommended), self-priming.
Filling quantity: 10 liters (2.6 USgal.), without filling
Dimensions (L x W x H): 310 x 250 x 520 mm
(12.2" x 9.8" x 20.5")

3172.000

NEW

CarbonDoser®

CO_2-SYSTEMS

Many aquarists have wished for this must-have,
TUNZE® Aquarientechnik is bringing it to the market!

The CarbonDoser® is an electronic CO_2 valve for a targeted and very precise CO_2 supply in freshwater aquariums or calcium reactors for sea water. It has an electronically controlled valve that produces one CO_2 portion / bubble every 0.1 to 10 seconds.

The advantages:
The CarbonDoser® replaces a CO_2 valve and a bubble counter, and additionally ensures stable, precision CO_2 dosing with guaranteed safety.
In freshwater — especially aquascaping — the CarbonDoser® is an indispensable tool for providing the perfect CO_2 dosage regulation to optimize plant growth without laborious CO_2 adjustment.
In seawater — especially reef systems - it allows the convenient and risk-free use of a calcium reactor to maintain the biotope balance.
The CarbonDoser® is delivered with very detailed instructions for use, quality non-return valve, all necessary hoses and a 12V power supply.

7077.200

Pressure reducer
Precision device with fine adjustment for standard CO_2 cylinders, thread in keeping with German standard DIN 477 (US version with CGA 320 thread). To be mounted without tools; precise adjustment; two pressure gauges; pressure-relief valve. Made in Germany.

7077/3

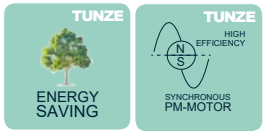
COMLINE®
RECIRCULATION PUMPS

Comline® Pump 900
Pump output: 250 - 850 l/h (65 - 225 US gal./h)
Energy consumption: 2.5 - 4.5 W
Pumping head: 0.7 m (27.6")
Voltage / frequency: 230V/50Hz (115V/60Hz)
Cable length: 2 m (78.7")
Dimensions without outlet: 60 x 60 x 40 mm (2.4" x 2.4" x 1.6"). Outlet: ø13 mm (½")

0900.000

Comline® Pump 2000
Pump output: 500 - 2,200 l/h (132 - 581 US gal./h)
Energy consumption: 10 - 18 W
Pumping head: 0.8 m (31.5")
Voltage / frequency: 230V/50Hz (115V/60Hz)
Cable length: 2 m (78.7")
Dimensions without outlet: 78 x 72 x 51 mm (3.1" x 2.8" x 2"). Outlet: ø25 mm (1")

2000.000



Comline® Pump 2500 electronic
Pump capacity at 12 V: 550 to 1,200 l/h (145-317 USgal/h)
Energy consumption: 3 to 10 W
Pressure height: 0.27 to 0.8 m (10.6"-31.5")
Pump capacity at 24 V: 1,200 to 2,200 l/h (317-581 USgal/h)
Energy consumption: 10 to 31 W
Pressure height: 0.8 to 1.70 m max (31.5"-66.9")
Dimensions without outlet: 90 x 70 x 50 mm (3.5"x 2.8" x 2")
Outlet: ø25 mm (1")
Cable length to the controller: 3 m (118")
Completely assembled with Turbelle® Controller basic 7090.200.
A power supply should be ordered separately.

2500.000

Turbelle®
HIGH JET

5 YEARS WARRANTY TUNZE Aquatic Eco Engineering

NEW

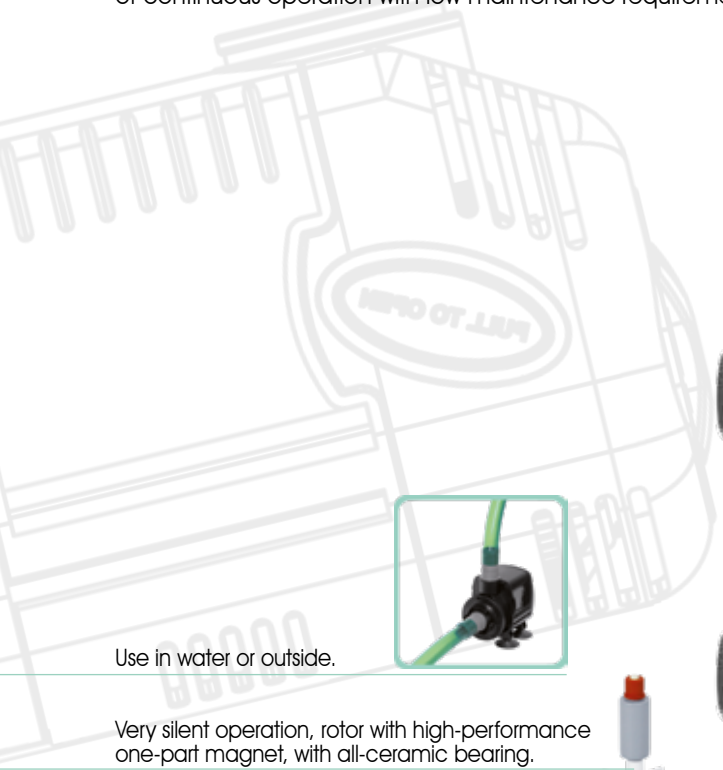
The Turbelle® High Jet belongs to a new generation of centrifugal pumps with a high delivery height and small dimensions. They are very quiet and almost wear-free thanks to the new pump bearings and high-performance drive. It is suitable for use in or out of the water and operates on safety extra-low voltage. The Turbelle® High Jet Pump comes standard with plug-in connection and release sleeve for hoses with a diameter of 6 mm (0.24").

Turbelle® High Jet
Replacement dosing pump
with safety extra low voltage 12 V DC
for Osmolator® nano 3152 and Osmolator® 3155.
Performance with 6 mm tube (0.24"):
1.0 m - 120 l/h (39.4" - 31.7 US gal.)
1.5 m - 100 l/h (59.1" - 26.4 US gal.)
2.0 m - 83 l/h (78.8" - 21.9 US gal.)
H_{max}: 6.2 m (244.1")
5000.021

SILENCE RECIRCULATION PUMPS

TUNZE ENERGY SAVING

A variety of recirculation pumps with different ratings and footprints exist on the aquarium equipment market. The TUNZE® Silence recirculating pumps for the use in water or outside. combine all the benefits you may expect from modern, powerful recirculation pumps for seawater and freshwater aquariums. Quality is the focus to give many years of continuous operation with low maintenance requirements. The TUNZE® recirculation pumps Silence are made in accordance with the strictest international safety standards.



Use in water or outside.

Very silent operation, rotor with high-performance one-part magnet, with all-ceramic bearing.

¾" NPT thread connectable to PVC fittings, such as for calcium reactors, filters, et cetera.

Ergonomic design.

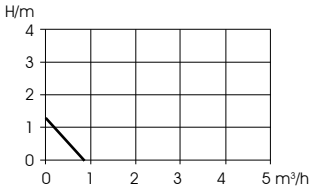
Adjustable output.

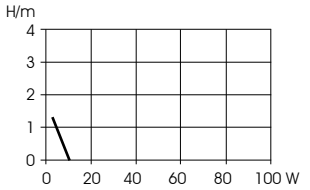
Stability ensured by four integrated suction cups.

Recirculation Pump Silence

Pump output: 150 to 800 l/h (40 to 210 US gal./h)
Pumping head: 1.25 m (49.2")
½" NPT hose connection
Energy consumption: 3 to 8 W
Voltage / frequency: 230V / 50Hz (115 V / 60Hz)
Cable length: 2,2 m (86.6")
Dimensions without outlet and suction cups:
87 x 67 x 48 mm (3.4" x 2.63" x 1.88")

1073.008

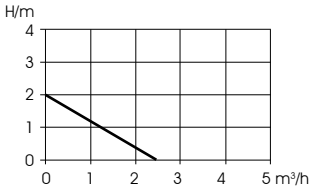


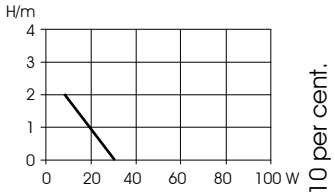


Recirculation Pump Silence

Pump output: 200 to 2,400 l/h (50 to 630 US gal./h)
Pumping head: 2 m (78.7")
¾" NPT hose connection
Energy consumption: 14 to 30 W (15 to 34 W)
Voltage / frequency: 230V/50 Hz (115V/60Hz)
Cable length: 2,2 m (86.6")
Dimensions without outlet and suction cups:
118 x 94 x 75 mm (4.6" x 3.7" x 2.9")

1073.020

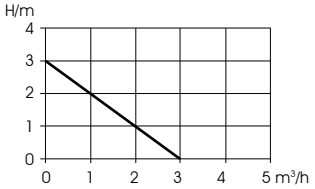


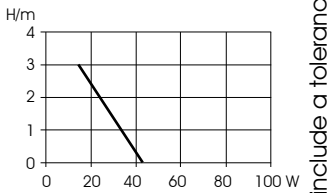


Recirculation Pump Silence

Pump output: 300 to 3,000 l/h (80 to 790 US gal./h)
Pumping head: 3 m (118")
¾" NPT hose connection
Energy consumption: 16 to 42 W (18 to 47 W)
Voltage / frequency: 230V/50Hz (115V/60Hz)
Cable length: 2,2 m (86.6")
Dimensions without outlet and suction cups:
118 x 94 x 75 mm (4.6" x 3.7" x 2.9")

1073.040

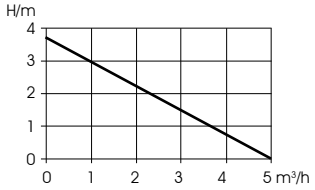


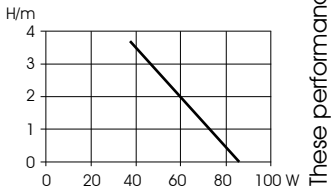


Recirculation Pump Silence

Pump output: 2,500 to 5,000 l/h (660 to 1,321 US gal./h)
Pumping head: 3.7 m (146")
1" - ¾" NPT hose connection
Energy consumption: 38 to 85 W
Energy consumption without hose connection: 105 W
Voltage / frequency: 230V/50Hz (115V/60Hz)
Cable length: 2.2 m (86.6")
Dimensions without outlet and suction cups:
174 x 113 x 87 mm (6.8" x 4.4" x 3.4" in.)

1073.060

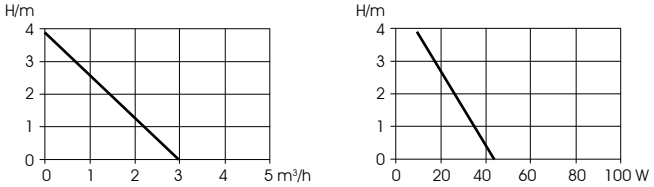




These performance tables include a tolerance of +/- 10 per cent.

Silence electronic – electronically controllable by the Turbelle® Controller

The Silence electronic is a safety low voltage, speed-controlled recirculation pump. It can be used in any aquarium and features a microprocessor-controlled motor, as well as a Turbelle® Controller.
The electronic motor speed is adjusted to the pump load automatically, always searching for the optimum output / energy consumption ratio. If the pump is blocked, it will be turned off immediately. Once the blockage has been removed, the pump will restart automatically after a delay of 20 seconds. It features a Fish Care function, which will cause a propeller rotation every 20 seconds if the pump is stopped.



These performance tables include a tolerance of +/- 10 per cent.

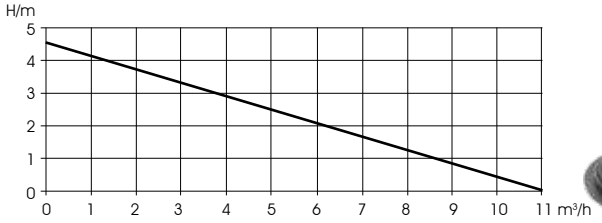
Recirculation Pump Silence electronic

Flow rate: 1,100 to 3,000 l/h (290 to 790 US gal./h)
with Turbelle® Controller
H_{max}: 3.9 m (153.5")
¾" NPT hose connection
Energy consumption: 10 - 43 W
Voltage / frequency: 100 - 240 V / 50 - 60 Hz
Cable length: 3 m (118")
Dimensions without outlet and suction cups:
118 x 94 x 75 mm (4.6" x 3.7" x 2.9")

1073.050

Silence Pro – powerful and yet quiet

The TUNZE® Silence Pro 1073.110 pump has been designed especially for operation as a recirculation pump for aquarium filters with a high water column. It is ideal for aquarium shops, large aquariums, or if the filter system is situated below the aquarium, for example, the filter is in the cellar and the aquarium is on the first floor. This pump is a synthesis between efficiency and quality for a low-maintenance continuous operation for many years. It can be used as a submerged motor-driven pump for salt and fresh water or outside of the aquarium, and like all Silence pumps it is especially quiet.



Use in water or outside.

Rotor with high-performance one-part magnet, with ceramic bearing.

1 ½" NPT hose connection compatible with PVC pipes, filters, et cetera.

Very efficient synchronous motor protected against running dry and blocking.

Ergonomic design, compact construction.

Stability ensured by four integrated silicone feet.

Recirculation Pump Silence Pro

Pump output: 11,000 l/h (2,900 US gal./h)
Pumping head: 4.65 m (183")
1 ½" NPT hose connection
Energy consumption: 95 to 125 W
Voltage / frequency: 230V/50Hz (115V/60Hz)
Cable length: 3 m (118")
Dimensions without outlet and silicone feet:
242 x 120 x 160 mm (9.5" x 4.7" x 6.3")

1073.110

OSMOLATOR®

For nano aquariums or small aquariums up to 200 liters (55 USgal.), a stable osmotic balance is important, because they are particularly sensitive to constantly changing salt concentrations. The Osmolator® nano was specifically designed for these requirements. It is a water level controller with only a single, light protected sensor which can be positioned at any desired position on the glass pane from 4 to 10 mm (.2" to .4") of an aquarium or cabinet filters by the integrated Magnet Holder. The microprocessor-based controller with time monitoring is adjustable by the internal jumper and protects against overfilling.

Osmolator® nano

Water level controller with only one sensor for nano aquariums or small aquariums with up to 200 liters (55 USgal.). Ready for installation with 12 V power supply, low-voltage metering pump, 3 m (118") hose, magnet holder for up to 10 mm (3/8") glass thickness and a protective cover for the sensor.

3152.000

In 1985 TUNZE® invented the automatic refill system for aquariums. At that time, some people regarded this invention as a useless accessory.... but they forgot something very important: sensitive aquarium animals need a constant osmotic pressure within their cells. The Osmolator® (osmotic regulator) is very easy to install and provides its complete functionality in a single compact unit. The Controller 5017 displays all functions optically and sounds an alarm in case of failures. An optical mini sensor recognizes the water level precisely. Redundant security: the main sensor is a proprietary optic sensor. Should that fail, a safety float switch shuts the unit off and sounds an alarm. Even if that fails, the safety circuit shuts off the pump after 10 minutes.

Osmolator®

Water level regulator with two sensors suitable for use in cabinet filters, in Comline® filters or directly on the edge of the aquarium. Ready for mounting with power supply unit 12V, metering pump, hose, magnet holder for sensors.

3155.000

RO Water Controller

TUNZE® RO Water Controller 8555 is an automatic water level controller used in the collection container of TUNZE® RO station. The controller is also suitable for other water tanks or can be connected to an automatic refill system. It consists of a controller, two sensors, a water valve and a 12 V power supply unit. Depending on the use, the water valve can be replaced by switched socket outlet 3150.110 for mains operation. If the position of the sensors of the RO water controller is reversed, the switched socket outlet 3150.110 and a pump can be used to empty a water tank, and thus it can also be used for automatic filling or emptying of tanks. By means of a combination of two units, a water changing system can be built.

8555.000

Metering pump

Replacement dosing pump with low voltage 3-12 V DC for Osmolator®, power with 4 mm (.2") hose at 12 V:
.9 m - 100 l/h (35.4" - 26.4 USgal.),
1.4 m - 80 l/h (55.2" - 21.1 Ugal.),
1.9 m - 58 l/h (74.8" - 15.3 USgal.),
H_{max} 3,6 m (141.7")

5000.020

NEW

Multi Tube Holder

Four hose holders for Osmolator®, Osmolator® nano and other fastening solutions. For hose diameters from 6 to 7 mm (0.236" - 0.276"). Attachment to pane and other material thicknesses from 0 to 22 mm (0" - 0.866").

3154.555

AQUAWIND ECO CHIC

NEW

5 YEARS WARRANTY TUNZE Aquatic Eco Engineering

The TUNZE® Aquawind eco chic 7028.500 is a very low-noise aquarium ventilator provided with 12 V safety low voltage and it is easy to install on the edge of aquariums with a glass thickness of 0 up to 22 mm (0" - 0.866"). The angle of the Aquawind can be individually varied by tilt adjustment. The Aquawind creates an even air movement above the water surface and thereby accelerates the evaporation process. For standard aquariums of up to 800 liters (211 USgal.) (across an aquarium length of 2 m / 78.7"), this cooling can reach 2 to 4°Celsius (3.6° to 7.2° F). Due to its special design, a targeted flow is achieved over long distances. One ventilator is enough to efficiently cool even large aquariums.

IP57 WATER RESISTANT FAN

Aquawind eco chic
Power consumption: approx. 1,7 W
Branded power supply unit 12V,
100-240V / 50-60Hz
Dimensions (L x W x H): 148 x 150 x 55 mm
(5.83" x 5.91" x 2.16")
7028.500

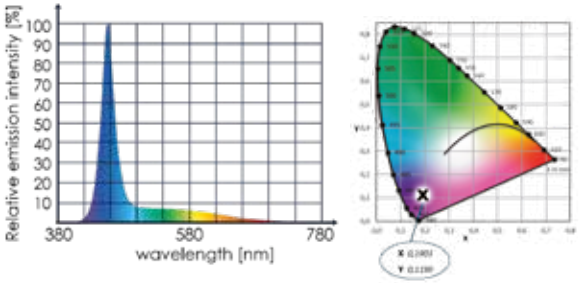
LED ECO CHIC

A product may be "eco" – that is, economical, ecological, good value and at the same time stylish and "chic". The TUNZE® LED eco chic lights with protection class IP 68 combine both attributes in highly effective lighting for aquariums.
The special manufacturing process doesn't just guarantee the water resistance, it also enables the permanent underwater operation which also relieves the pressure on the aquarium heater. This underwater lighting avoids light reflections on the water surface making the lighting source even more efficient. An immersion depth here of 1 to 2 cm (.4" - .8") is more than adequate. A compact housing, which can be attached flexibly using the Magnet Holder, has been developed through the use of the latest components. Operation with extra-low safety voltage ensures risk-free underwater use without electrical losses. The built-in overheating protection as a safety function ensures that the performance of the lamps is gradually reduced from 10 W to 7 W at temperatures of approx. 25°C (77°F).
These lamps contain built-in LED bulbs. The bulbs in the lamps can not be replaced.
Power supply 100-240V/50-60Hz. Including Magnet Holder for a glass thickness up to 10 mm ($^3/_8$").
Dimensions without holder (L x W x H): 305 x 25 x 13 mm (12" x 1" x 0.5"). Cable length: 1.5 m (59")

LED marine eco chic

Suitable for stony coral aquariums up to approx. 20 liters (5.5 USgal.) and soft coral aquariums to approx. 40 liters (11 USgal.).
Equipped with 15 white LEDs (6.500 K) and 15 blue LEDs (455 nm).
Color temperature: approx. 25,000 K
Perceived brightness: 410 lm
Photosynthetically Active Radiation Flux (PAR): 3 W
Photosynthetic photon flux: 12.0 µmol / s
Power consumption: 10 W
This lamp is intended exclusively for illuminating aquariums.

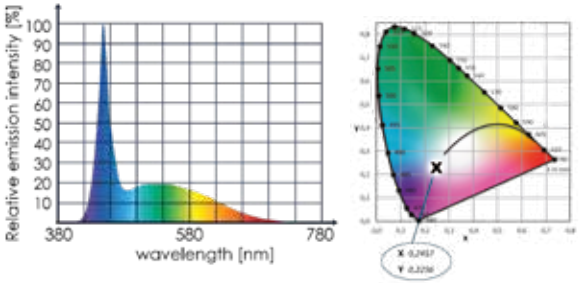
8811.000



LED white eco chic

Suitable for soft coral aquariums to approx. 40 liters (11 USgal.) and freshwater aquariums up to approx. 60 liters (16 USgal.).
Equipped with 30 white LEDs.
Color temperature: > 13,000 K
Perceived brightness: 700 lm
Photosynthetically Active Radiation Flux (PAR): 3 W
Photosynthetic photon flux: 12.8 µmol / s
Power consumption: 10 W
This lamp is intended exclusively for illuminating aquariums.

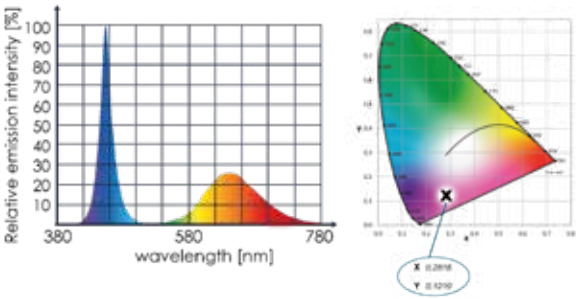
8821.000



LED eco chic refugium

Spectrum especially suitable for refuge and basin for algae growth in seawater and plant growth in freshwater.
Photosynthetically Active Radiation Flux (PAR): 2.22 W
Photosynthetic photon flux: 10.1 µmol / s
Power consumption: 9 W
This lamp is intended exclusively for growing algae and plants.

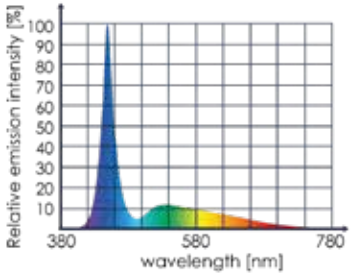
8831.000

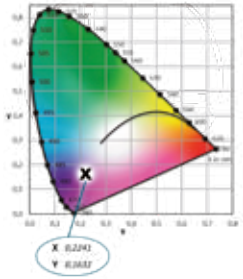


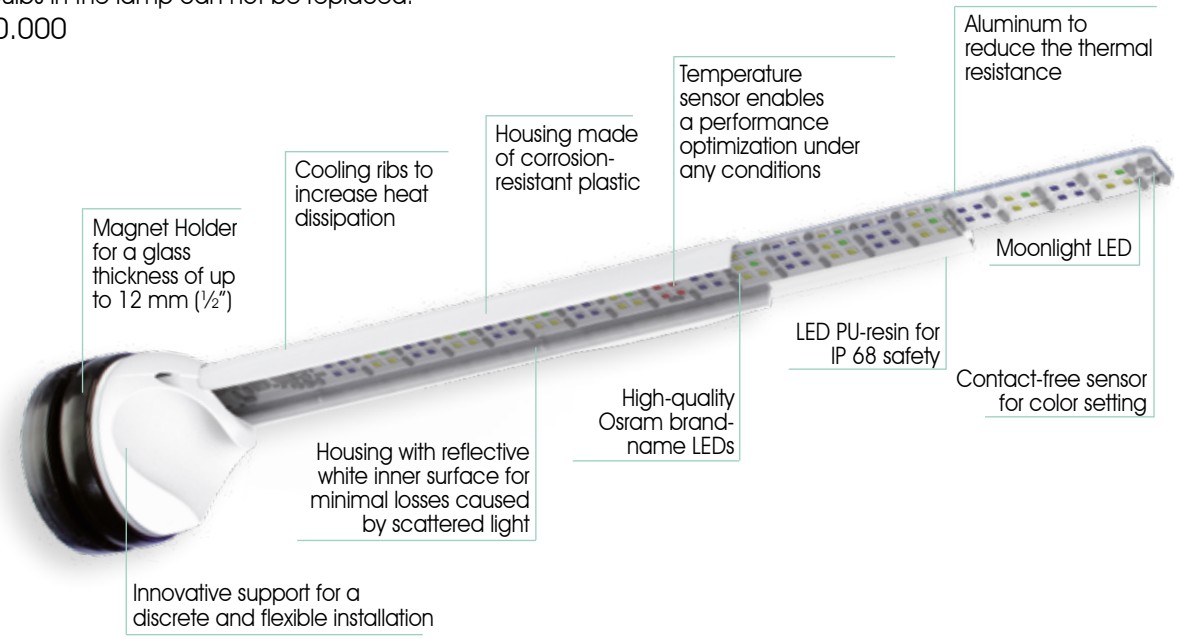
LED FULL SPECTRUM

The TUNZE® LED full spectrum 8850 is suitable for stony coral aquariums up to approx. 40 liters (11 USgal.), soft coral aquariums up to approx. 60 liters (16 USgal.), and freshwater aquariums up to approx. 80 liters (21 USgal.).
Equipped with 76 1-watt LEDs with Ultra Low Current Technology. Cold white, blue LEDs (450 nm), green and red LEDs for an adjustable light spectrum from > 13,000 K up to pure blue light.
Manuall adjustment with included magnet holder, alternatively with separately available SmartController 7000.
Active power control: The power is adjusted depending on the luminaire temperature in order to protect the LED as much as possible.
Permanently usable under water: the improved cooling increases the output up to a maximum of 26 W total output, correspondingly, the brightness and photosynthetically active radiation.
Factory settings in air:
Color temperature: approx. 30,000 K
Perceived brightness: 400 lm
Photosynthetically Active Radiation Flux (PAR): 2.2 W
Photosynthetic photon flux: 9.2 µmol / s
Power consumption: 9.5 W
Power supply: 100-240V/50-60Hz.
Magnet Holder for a glass thickness up to 12 mm (1/2").
Dimensions without holder (L x W x H): 305 x 25 x 13 mm (12" x 1" x 0.7")
Cable length: 2.5 m (98.4")
This lamp is intended exclusively for illuminating aquariums and contains built-in LED bulbs. The bulbs in the lamp can not be replaced.

8850.000







CARE & CULTURE

TUNZE® coral glues are specifically intended to promote the growth of stony corals. This product line includes epoxy-based adhesives, and two-component adhesives for a quick processing. The coral glues do not emit any pollutants into the aquarium water and avoid an over-foaming of the skimmer.

NEW

Coral Gel, 20 g (0.7 oz.)
Gel-like, thixotropic superglue.
Does not run, can also be applied on vertical surfaces. Particularly suitable for bonding when fragmenting soft corals. Also suitable for slightly porous substrates.

0104.730

Coral Gum fast, 115 g (4 oz.)
Two-component epoxy putty.
Particularly suitable for fixing hard corals on frag plugs or in the reef.
Processing time: 3-4 min. Handling strength: 8-10 min (continues to cure up to 24 hours later).

0104.747

Coral Gum instant, 120 g (4 oz.)
Two-component coral adhesive
For safe cementing of coral fragments to stone substrates. No deleterious matter or adhesive residue is introduced into the aquarium water; it is unbreakable, yet remains flexible and withstands high loads. Can be used in fresh-water and marine aquariums.
Contents: 2 x 60 g (2 x 4.23 oz.)

0104.750

Coral Gum instant, 400 g (14 oz.)
Two-component coral adhesive:
For safe cementing of coral fragments to stone substrates. No deleterious matter or adhesive residue is introduced into the aquarium water; it is unbreakable, yet remains flexible and withstands high loads. Can be used in fresh-water and marine aquariums.
Contents: 2 x 200 g (2 x 7.05 oz.)

0104.760

Coral Gel duo, 10 g (0.4 oz.)
Two-component superglue.
Particularly suitable for gluing corals or underwater equipment.
Particularities:
- Can be used directly under water thanks to the mixing nozzle without the risk of tube sticking.
- Gap-filling up to 6 mm (0.24"), also suitable for porous substrates.
- Thixotropic: Can also be used on vertical areas
- Cures transparent without white haze
- Remains slightly flexible after curing process

0104.770

CARE & CULTURE

Coral Rack nano

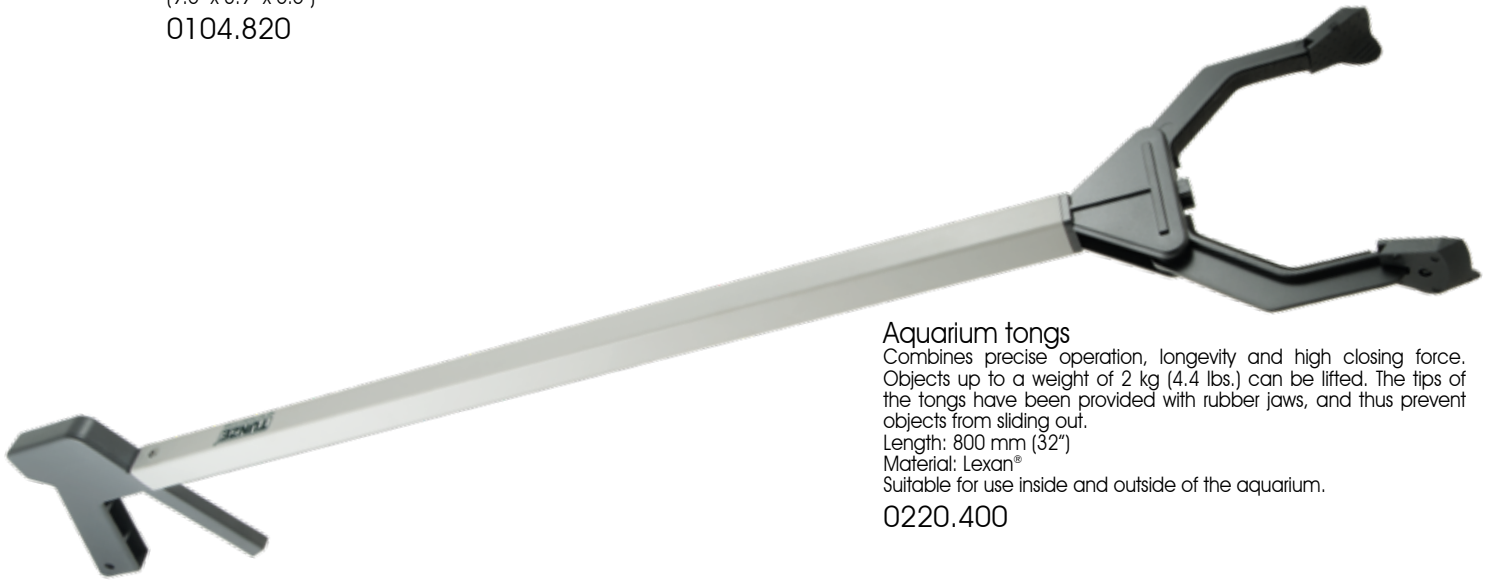
Growing stone for the placement of corals. Consists of a highly porous ceramic stone with a Live Rock Function, and has indentations to accommodate approximately 6 coral fragments as well as Reef Plugs (approx. ø11 mm / .43"). Suitable for fresh and sea water. It enables the highly decorative integration on the aquarium glass pane. Thanks to the strong magnetic holder, the Coral Rack nano is suitable for aquariums with a glass thickness of up to 15 mm (⅔"). Under water it can be loaded with corals up to approx. 1 kg (2.2 lbs) dry weight with a glass thickness of up to 12 mm (½"). With 15 mm (⅔") it can only be loaded with a dry weight of up to 0.5 kg (1.1 lbs).
Dimensions (L x W x H) approx.: 180 x 60 x 130 mm
(7.1" x 2.4" x 5.1")

0104.800

Coral Rack long

Growing stone for the placement of corals. Consists of a highly porous ceramic stone with a Live Rock Function, and has indentations to accommodate approximately 8 coral fragments as well as Reef Plugs (approx. ø11 mm / .43"). Suitable for fresh and sea water. It enables the highly decorative integration on the aquarium glass pane. Thanks to the two strong magnetic holders, the Coral Rack long is suitable for aquariums with a glass thickness of up to 12 mm (½"). Under water it can be loaded with corals up to approx. 2 kg (4.4 lbs) dry weight with a glass thickness of up to 12 mm (½"). With 15 mm (⅔") it can only be loaded with a dry weight of up to 0.8 kg (1.8 lbs).
Dimensions (L x W x H) approx.: 240 x 100 x 140 mm
(9.5" x 3.9" x 5.5")

0104.820



Aquarium tongs

Combines precise operation, longevity and high closing force. Objects up to a weight of 2 kg (4.4 lbs.) can be lifted. The tips of the tongs have been provided with rubber jaws, and thus prevent objects from sliding out.
Length: 800 mm (32")
Material: Lexan®
Suitable for use inside and outside of the aquarium.

0220.400

CARE MAGNET

With Care Booster and coloured end caps

The Care Booster literally «boosts» the Care Magnets long, strong and strong+. Two floats ensure that the inner cleaning magnet of Care Magnet can float to the surface as soon as it detaches from the outer magnet. The Care Booster can also be used as a convenient grip aid for the outer magnet.

With the colored end caps, the style-conscious aquarist can visually adapt her or his aquarium pane cleaner to different aquarium landscapes. The classy blue end cap adapts great for marine scenarios, the green end cap will offer freshwater aquarists a lot of pleasure in designing their overall concept. Especially for nano aquariums, the elegant black and white end caps will certainly generate big fans very quickly.

Care Magnet pico

For 3 up to a glass thickness of 6 mm (.12"-24").
Width: 40 mm (1.57"), Length: 81 mm (3.19").
Inside part: 20 mm (.79")
Outer part: 17 mm (.67")
Plastic blades are firmly installed and not interchangeable.

0220.006

Care Magnet nano

For 6 up to a glass thickness of max. 10 mm ($^1/_4$"-$^3/_8$").
Width: 45 mm (1.77"), Length: 78 mm (3.07")
Including 1 replacement plastic blade 45 mm (1.77") and 8 colored end caps (blue, green, white, black).

0220.010

Width: 86 mm (3.4"), Length: 140 mm (5.5")
Including: 1 stainless steel blade,
2 spare plastic blades,
2 Care Booster, 4 clips,
8 colored end caps
(blue, green, white, black).

Care Magnet long

For a glass thickness of
10 to max. 15 mm ($^3/_8$"-$^2/_3$").

0220.015

Care Magnet strong

For a glass thickness of
15 to max. 20 mm ($^2/_3$"-$^3/_4$").

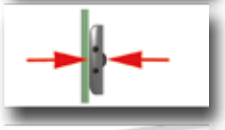
0220.020

Care Magnet strong+

For a glass thickness of
20 to max. 25 mm ($^3/_4$"-1").

0220.025

The patented principle, which uses plastic blades with a different length, creates a varying application pressure, enabling the narrow blade to remove even tightly attached algae. With the wide blade, it is possible to perform a large-scale algae removal.



Thanks to its slim design, the plants and the corals will not be disturbed.

The Care Magnet can also be used on round aquarium panes or round-arched panes.

Plastic blades with round edges enable a smooth transition to the next pane at the aquarium edges without damaging the silicone joints.

It doesn't distribute the algae within the aquarium as a green dust; it rather roles them up completely, and through this turns the algae film into actual food for the fish.

It can also be used as a hand scraper.

NEW

PREMIUM CARE BOOSTER

Grip for Care Magnet long, strong and strong+

Premium Care Booster
Elegant and convenient grip aid for the external magnet of Care Magnet long, strong and strong+. Noble wood replica made from fast-growing "Save the Rain Forest" wood.

Palisander (Rosewood)
0222.003

Makassar
0222.002

Olive
0222.001

Care Booster
2 floats with 4 clips for Care Magnet long, strong and strong+.
0222.000

8 end caps for Care Magnet,
blue / green / black / white
0222.152

Plastic blades
86 mm (3.39"), 2 pcs.
0220.153

Blades set 86 mm (3.39")
made of plastic and stainless steel.
0220.154

Plastic blades
45 mm (1.77"), 2 pcs.
0220.156

Stainless steel blades
3 pcs.
0220.155

Stainless steel blades
20 pcs.
0220.158

Felt strip
98 x 19 mm
(3.9" x .8"), 1 pc.
0220.257

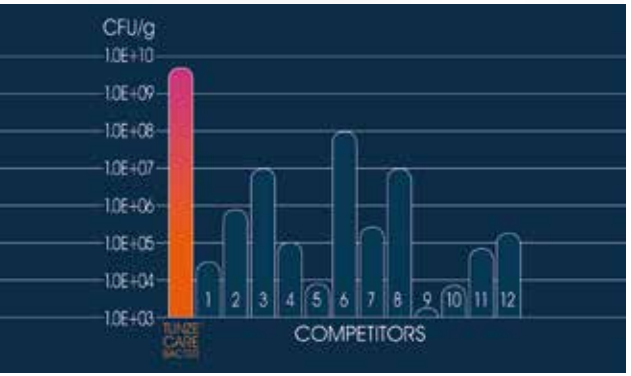
Felt pads
19 x 38 mm (1.5" x .8"), 2 pcs.
0220.157

CAREBACTER & CAREPANES

More than 1 billion ultra-efficient bacteria per gram for a healthier and cleaner aquarium

Care Bacter is an exceptional blend of bioactive filtering organisms which was specially formulated to effectively clean both sea and freshwater aquariums, and to ensure an optimal biological balance.
Care Bacter consists of bacteria strains, which are neither genetically altered (EC directive 200054) nor a pathogen, and work together in combination extremely well and synergistically during the water purification. One of the strains of the bacteria acts as a decomposer, thus ensuring the complete removal of dead organic components in the aquarium (protein → ammonium /ammonia → nitrite → nitrate) and thereby additionally binds the resulting nitrate.
This bacteria also removes phosphate by absorbing it. This yields a highly effective water purification. The absence of phosphate and nitrate therefore prevents the propagation of algae.
The second bacteria strain is used against pathogenic bacteria of the genus Vibrio, which are extremely harmful to an aquarium biotope. Through this, Care Bacter protects fish, shellfish, corals, etc against pathogen bacteria, and facilitates their acclimatization to the aquarium. For hard coral such as L.P.S. and S.P.S. types, Care Bacter significantly reduces the risk of a rapidly progressive tissue necrosis R.T.N. Finally, Care Bacter significantly enhances the biofilm in the aquarium, and thus supports certain types of coral or soil animals.
Thereby Care Bacter demonstrates an impressive side effect: The aquarium glass panes remain clean even longer! Additionally, Care Bacter can also be used in garden ponds, and is effective there at temperatures above 15°C.
Concentration: 10^9 CFU/g

Comparison of bacteria concentrations
Logarithmic scale (CFU/g – colony forming units per gram)



Contents: 40 ml (1.33 fl oz)
0220.005

Contents: 200 ml (6.76 fl oz)
0220.007

Care Panes effectively cleans the outer aquarium glass panes and all smooth surfaces made of glass, plexiglas, plastic, metal, painted wood, and many more materials. Care Panes consists of a combination of organic surfactants with an ethereal oil, and can be used to easily and effectively clean aquariums, aquarium cabinets and lighting components. Thanks to its gentle ingredients Care Panes is safe for aquatic life and is already being used successfully in medical areas, public buildings and schools. Even extremely small amounts of Care Panes provides optimal results, is fast drying and doesn't leave any traces.

With 99.9% natural ingredients and its great yield, Care Panes reduces the environmental impact to a negligible minimum. Care Panes contains extremely powerful organic surfactants, which are up to 500 times more effective than conventional chemical surfactants from the petrochemical industry. Care Panes doesn't have a hazard labelling, is designed to minimize the risk of allergies, and is free of genetically modified ingredients.

Since it can be applied in a targeted manner, the special spray foam reduces the aerosol development, thus avoiding any chance of Care Panes being inhaled or distributed uncontrollably across the aquarium. Care Panes is designed to be completely eco-friendly. Its active ingredients are made of renewable resources, and the packaging is made of 100% recyclable plastic without metal.
Contents: 500 ml (16.7 oz.)

0220.002

FILTERMEDIA

Filter carbon is a special filter carbon, pH neutral, highly activated, approx. 1,000 sqm/g (1,195 sqy/g) of capillary surface. Decolourises and detoxifies fresh and salt water over night. Ideal with refillable cartridges.

Filter Carbon
Bag of 1,000 ml / 33.8 fl.oz. (500 g / 50 oz. bulk weight)
0870.901

Calcium carbonate is 99% pure $CaCO_3$ (lime) with a grain size of 4 to 6 mm (.15" to .23"). It is ideally suited for use in TUNZE® Calcium Automat and other makes of Calcium reactor for buffering the pH value as well as increasing the calcium content.

Calcium Carbonate
Bag of 1,000 ml / 33.8 fl.oz. (1,400 g / 17.6 oz. bulk weight)
0880.901

Quickphos 750 ml (25 oz.)
Quick-acting phosphate remover; Al based.
0910.000

Silphos 400 g (14 oz.)
For long-term phosphate and silicate removal with high bonding capacity; Fe based.
0920.000

Ionic Carbon 300 ml (10 oz.)
Removes colouring matter and organic components; prevents the development of nitrates and phosphates; stabilises the pH value. Can be used immediately in a nylon filter bag.
0950.000

More accessories
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www.tunze.com

Technical support

Our support is available during our business hours.

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