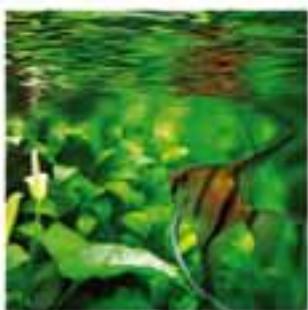


TUNZE®

**High-Tech
Aquarium Ecology**



Corporate philosophy



As the Managing Director of TUNZE® Aquarientechnik GmbH in Penzberg, I would like to welcome you to one of the strongest and best-known trademarks of aquarium technology. Since its establishment in 1960, TUNZE® has been focussing on providing its customers with high-quality products and thus a unique aquarium experience. We will continue to do everything we can to surprise you and improve water quality in the closed circulation system of an aquarium.

Dipl.Ing.(FH) Axel Tunze

Our vision

We produce quality aquarium components in the traditional manner of German Craftsmanship. Rather than punctuational changes in design, our products evolve and improve. It is not unusual for a product category to see a small technical improvement every few months when new knowledge or materials make such an improvement possible. Likewise, the best features may remain unchanged for decades. In the development of our products the focus is on durability, longevity, and energy savings. Combined these add up to long term value and economy and protect the environment as land fill space is spared by a long service life and replaceable parts. Further, the low energy consumption of the product and manufacturing processes as well as conscientious use of recyclable packaging reduces the footprint of our hobby.

Our service

What is a product without good service? We want to make sure that service goes beyond the sale. On the Internet, you have access to our whole range of products, instructions, videos, configurator, etc. All available spare parts can be ordered there directly. If you have any questions, please send us an email or call our telephone hotline. We would be more than happy to help.

Our future

The TUNZE® design language is not only reflected by the shape and appearance of a product, but also by the superior performance compared to typical market components. We keep focussing on opening new horizons and, calling everything into question in order to ensure that our technology meets the current requirements, in terms of aquarium ecology and in terms of electrical engineering.



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Turbelle® Circulation pumps

Effective aquarium circulation is not attained by using the most powerful pump available, but rather, by reproducing natural current situations as accurately as possible. In the following examples we detail the relevant reef zones and the pump models best suited to replicate the environmental conditions.

The recommended combinations are suitable for aquariums of approx. 200 to 2,000 litres. For more recommendations, special examples or recommendations for freshwater biotopes, visit our website www.tunze.com (TUNZE® Configurator) or send us an email.



Beach zone / algal zone

Medium-strong and gentle oscillating current. This sandy zone is frequently inhabited by algae and anemones. TUNZE® current: Wavebox in continuous operation; potentially with operation in night mode + current of the filter pump .



Cross-over zone / micro atolls

Medium-strong current with small waves; high tide and low tide slightly noticeable. The first formation of coral is found in this zone. TUNZE® current: Wavebox and Turbelle® nanostream® / stream with Multicontroller 7095 / 7096 or two Turbelle® nanostream® / stream with Multicontroller 7095 / 7096.



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 and Turbelle® nanostream® / stream with Multicontroller 7095 / 7096 or two Turbelle® nanostream® / stream with Multicontroller 7095 / 7096.



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 + two Turbelle® nanostream® / stream / masterstream with Multicontroller 7095 / 7096 or Turbelle® stream + Turbelle® e-jet with Multicontroller 7095 / 7096 or two Turbelle® masterstream with Multicontroller 7095 / 7096.



Outer reef edge

Zone of the reef with the strongest current; waves and illumination are very intensive. Acropora coral polyps, favia corals, porites hard corals thrive especially well in this zone. TUNZE® current: Wavebox in continuous operation + two Turbelle® stream with Multicontroller 7095 / 7096 or Turbelle® stream + Turbelle® e-jet with Multicontroller 7095 / 7096 or two Turbelle® masterstream with Multicontroller 7095 / 7096.



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 Multicontroller 7095 / 7096.



Forereef slope.

Deeper zone of the reef with parallel current lines. Plankton eating species mainly inhabit this zone.

TUNZE® current: Turbelle® steam in permanent operation, without waves, reduced to lower output.

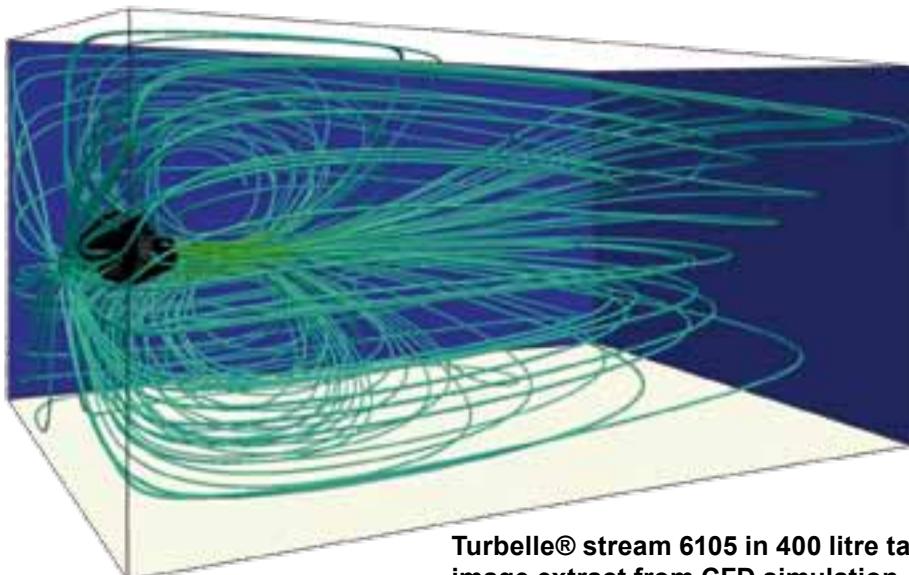
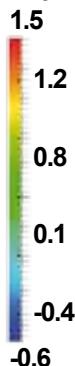
Turbelle® Propeller Technology

Since 2002, we have intensively focused on propeller pumps for the water circulation. For many aquarium owners or adventure zoos that is precisely what defines TUNZE®: the combination of sophisticated functionality with a modern design and the unique Turbelle® flow system. Our 2012 pump generation has pushed the envelope in terms of performance, power consumption, compact design and quiet operation.

Many years of research with the Turbelle® propeller pump have led to important results in the field of flow direction and turbulence reduction. Modern CAD and measuring methods, as well as practical experience show that our pumps produce superior flow patterns compared to pumps from other manufacturers. The current has a bundled direction, thus reaching further into the aquarium, at a very low power consumption.

For more information, visit our website at www.tunze.com / Produkt-Videos.

Axial speed



Turbelle® stream 6105 in 400 litre tank,
image extract from CFD simulation,
realized by R.Tech (www.rtech.fr).

Very silent operation

Special synthetic bearings and a special Silence Clamp enable very silent operation without wear.

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 Multicontroller 7095, 7096 or Wavecontroller 7092 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 10V to 24V 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.

Turbelle® nanostream®

Turbelle® nanostream® is the expression of an idea and a concept: a small ball, placeable in every aquarium or tank, 3D adjustable, compact and uncomplicated. This small revolution of only 70 mm (2.7 in.) in diameter combines aesthetics and function, producing a new way of thinking.



Non-controllable synchronous motor pumps

Turbelle® nanostream® 6015

For aquariums from 40 to 200 litres (10 to 55 USgal.)

Flow rate: about 1,800l/h (475 USgal./h)

Energy consumption: 3,5W

Voltage / frequency:

230V/50Hz (115V/60Hz)

Cable length: 2m (78.7 in.)

Dimensions: diam. 70mm (2.7 in.)

Outlet: diam. 40/15mm (1.5.59 in.)

Magnet Holder up to a glass thickness of 10mm (3/8")

6015.000

30.90 £



Propeller technology



Low motor heat

Turbelle® nanostream® 6025

For aquariums from 40 to 200 litres (10 to 55 USgal.)

Flow rate: about 2,800l/h (740 USgal./h)

Energy consumption: 5W

Voltage / frequency:

230V/50Hz (115V/60Hz)

Cable length: 2m (78.7 in.)

Dimensions: diam. 70mm (2.7 in.)

Outlet: diam. 40/15mm (1.5.59 in.)

Magnet Holder with Silence clamp up to a glass thickness of 12mm (3/8")

6025.000

50.00 £



3D adjustment



Includes Magnet Holder



Includes Silence clamp in 6025/6045

Turbelle® nanostream® 6045

For aquariums from 40 to 500 litres (10 to 135 USgal.)

Flow rate: 1,500 to about 4,500l/h (400 to 1,175 USgal./h)

Energy consumption: 5 to 7W

Voltage / frequency:

230V/50Hz (115V/60Hz)

Cable length: 2m (8.7 in.)

Dimensions: diam. 70mm (2.75 in.)

Ejection: diam. 40/15mm (1.5.59 in.)

Magnet Holder with Silence clamp up to a glass thickness of 15mm (1/2")

6045.000

70.60 £



Integrated protective thermostat

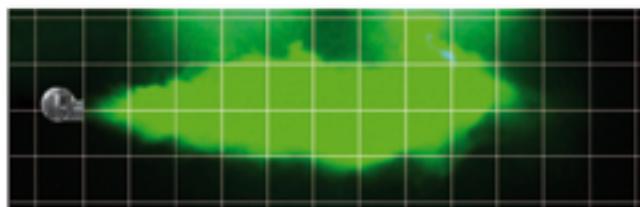


Turbelle® nanostream® electronic

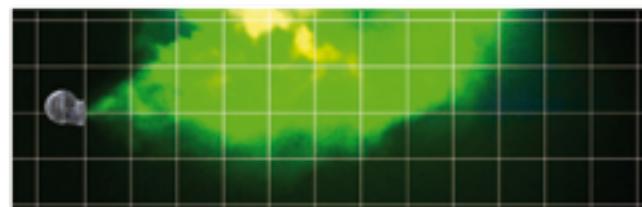
Turbelle® nanostream® electronic is a speed-controlled pump operating on safety extra-low voltage, to be employed ideally in every aquarium from 40 to > 1,000 litres (10 to > 265 USgal.) for simulation of lapping waves or tidal currents. It contains a new microprocessor-controlled motor and thus can be called an "intelligent pump": The electronic motor adapts its speed automatically to the pump load and always seeks the best efficiency at the lowest possible consumption of energy. This energy consumption is about fifty per cent lower than in conventional pump motors. The pumps will be stopped immediately in case of blockage. After the blockage has been removed, the pumps will start up automatically after a delay of 20 seconds. The pump driver has been provided with a fish care function, which causes a revolution of the propeller every twenty seconds when the pump is at a standstill.

It can be controlled by Multicontroller 7095, 7096 as well as Wavecontroller 7092.

Flow profile



Flow rate 6055: 0.7 - 0.73 m/s



Flow rate 6095: 0.87 - 0.89 m/s

Controllable pumps



Turbelle® nanostream® 6055

for aquariums from 40 to 500 litres
(10 to 135 USgal.).

Flow rate: 1,000 to about 5,500l/h
(250 to 1,450 USgal./h)

Energy consumption: 4 - 18W

Voltage / frequency: 100-240V / 50-60Hz

Cable length: 5m (196.8 in.)

Dimensions: diam. 70mm (2.7 in.)

Output: diam. 40/15mm (1.5/5.9 in.)

Magnet Holder with Silence clamp up to a
glass thickness of 15mm (1/2")

6055.000

183.90 £



Propeller technology



Low motor heat



3D adjustment



Includes Magnet Holder



Includes Silence clamp



Controllable speed, wave
simulation, tidal currents



Turbelle® nanostream® 6095

WIDE FLOW

for aquariums from 100 to 1000 litres
(25 to 265 USgal.).

Flow rate: 2,000 to about 9,500l/h
(550 to 2,500 USgal./h)

Energy consumption: 5 - 21W

Voltage / frequency: 100-240V / 50-60Hz

Cable length: 5m (196.8 in.)

Dimensions: diam. 70mm (2.7 in.)

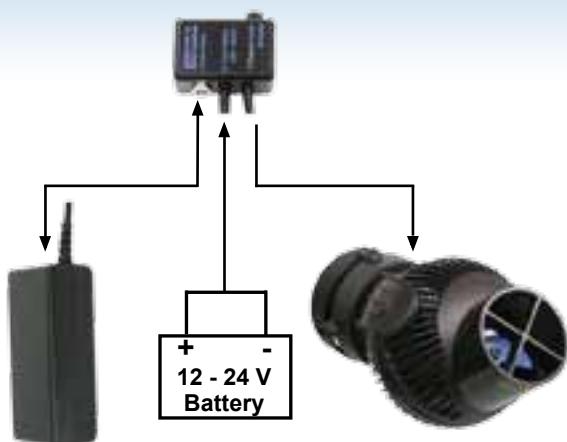
Output: diam. 50/10mm (1.96/3.9 in.)

Magnet Holder with Silence clamp up to a
glass thickness of 15mm (1/2")

6095.000

210.50 £

Turbelle® nanostream® electronic



Additional power supply for Turbelle®

nanostream® 6055 and 6095 – Safety Connector

The Turbelle® nanostream electronic pumps 6055 and 6095 feature an electronic motor. The pumps can be powered by any 10 to 24 V DC power supply (battery, solar cells). For safe connection to the pumps, we recommend the Turbelle® Safety Connector 6105.50 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.

Accessories (order separately)



① Magnet extension

The unit extends the holding power of Magnet Holder 6015.500 and 6025.512 for use on glass thicknesses of up to 15 mm (1/2"). In case of Magnet Holder 6025.515 and 3155.600 (as from year of construction 2012), the holding power is extended up to a glass thickness of 20 mm (3/4").

6025.501

18.60 £



② 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.

6105.500

40.90 £



③ 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

40.00 £



④ Cable Safe

Protects the TUNZE plug-in connection against splashing water, especially suitable for the connection of Turbelle® pumps.

6105.600

8.40 £



Turbelle® stream

Turbelle® stream is a powerful propeller pump with the special 90mm (3.5 in.) 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.



Non-controllable synchronous motor pumps



Turbelle® stream 6065

For aquariums from 250 to 800 litres (65 to 210 USgal.)

Flow rate: abt. 6.500l/h
(1,700 USgal./h)

Energy consumption: 12W

Voltage / frequency: 230V/50Hz
(115V/60Hz)

Cable length: 2m (78 in.)

Dimensions: diam. 90mm (3.5 in.)

Ejection: diam. 50mm (1.96 in.)

Magnet Holder with Silence clamp up to a glass thickness of 15mm (1/2")

6065.000

108.70 £



Propeller technology



Low motor heat



Turbelle® stream 6085

For aquariums from 400 to 1,000 litres (105 to 265 USgal.)

Flow rate: abt. 8.000l/h
(2,100 USgal./h)

Energy consumption: 14W

Voltage / frequency: 230V/50Hz
(115V/60Hz)

Cable length: 2m (78 in.)

Dimensions: diam. 90mm (3.5 in.)

Ejection: diam. 50mm (1.96 in.)

Magnet Holder with Silence clamp up to a glass thickness of 15mm (1/2")

6085.000

143.40 £



3D adjustment



Includes Magnet Holder



Turbelle® stream 6125

For aquariums from 400 to 2,000 litres (105 to 525 USgal.)

Flow rate: abt. 12.000l/h
(3,150 USgal./h)

Energy consumption: 22W

Voltage / frequency: 230V/50Hz
(115V/60Hz)

Cable length: 2m (78 in.)

Dimensions: diam. 90mm (3.5 in.)

Ejection: diam. 63mm (2.48 in.)

Magnet Holder with Silence clamp up to a glass thickness of 15mm (1/2")

6125.000

190.50 £



Includes Silence clamp

Turbelle® stream electronic

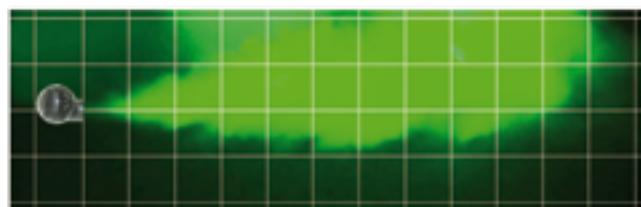
Turbelle® stream electronic is a speed-controlled pump operating on safety extra-low voltage, to be employed in every aquarium from 200 to > 3,000 litres (52.8 to > 792.5 USgal.) for simulation of lapping waves or tidal currents. It contains a new microprocessor-controlled motor and thus can be called an "intelligent pump":

The electronic motor adapts its speed automatically to the pump load and always seeks the best efficiency at the lowest possible consumption of energy. This energy consumption is about fifty per cent lower than in conventional pump motors. The pumps will be stopped immediately in case of blockage. After the blockage has been removed, the pumps will start up automatically after a delay of 20 seconds.

The pump driver has been provided with a fish care function, which causes a revolution of the spelling propeller every twenty seconds when the pump is at a standstill.

It can be controlled by Multicontroller 7095, 7096 as well as Wavecontroller 7092.

Flow profile



Flow rate 6105: 1.01 - 1.02 m/s



Flow rate 6155: 0.72 - 0.73 m/s

Controllable pumps



Turbelle® stream 6105

For aquariums from 200 to 2,000 litres (50 to 525 USgal.)

Flow rate: 3,000 up to abt. 13,000l/h (700 to abt. 3,400 USgal./h) - 24V

Energy consumption: max. 35W - 24V

Power supply unit: 100-240V / 50-60Hz

Cable length: 5m (196.8 in.)

Dimensions: diam. 90mm (3.5 in.), Output: diam. 50mm (1.96 / 2.48 in.)

Magnet Holder up to a glass thickness of 15mm (1/2")

Incl. additional WIDE FLOW propeller housing

Ejection: diam. 63mm (2.48 in.)

6105.000 **251.00 £**



Propeller technology



Low motor heat



3D adjustment



Includes Magnet Holder



Includes Silence clamp



Turbelle® stream 6155

For aquariums > 3,000 litres (800 USgal.)

Flow rate: 4,000 up to abt. 15,000l/h 1,050 to 3,950 USgal./h)

Energy consumption: max. 52W

Power supply unit: 100-240V / 50-60Hz.

Cable length: 5m (196.8 in.)

Dimensions: diam. 90mm (3.5 in.)

Ejection: diam. 63mm (2.4 in.)

Magnet Holder with Silence clamp up to a glass thickness of 20mm (3/4")

6155.000 **436.80 £**



Includes Magnet Holder



Includes Silence clamp



Turbelle® stream 6255

WIDE FLOW

for tanks > 4.000L (1,050 USgal.)

Flow performance: 5,000 to approx. 18,000l/h (1,300 to 4,800 USgal./h)

Energy consumption: max. 58W

Power supply unit: 100-240V / 50-60Hz

Length of cable: 5m (196.8 in.)

Dimensions: Ø90mm (3.5 in.), output: Ø75mm (3 in.)

Magnet Holder with Silence Clamp with pane thickness up to 27mm (1")

6255.000 **529.20 £**

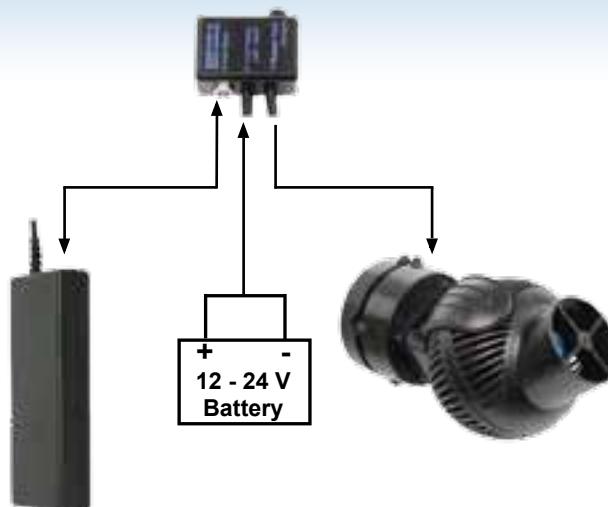


Controllable speed,
wave simulation,
tidal currents

Turbelle® stream electronic

Additional power supply for Turbelle® 6105, 6155 and 6255 – Safety Connector

The Turbelle® stream 6105, 6155 and 6255 are provided with an electronic motor. Thus, the pumps can be powered by any 10 to 24V DC power supply (battery, solar cells). For a safe connection to the pump, we recommend the Turbelle® Safety Connector Art. No. 6105.50 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.



Accessories (order separately)

① Magnet extension

The unit extends the holding power of Magnet Holder 6065.515 and 6105.515 from a glass thickness of 15 mm (1/2") to 20 mm (3/4").

6205.501 **46.80 £**



② 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.

6105.500 **40.90 £**



③ Stream Rock

With special insert for Turbelle® stream 6095 to 6155. 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 **58.50 £**



④ Cable Safe

Protects the TUNZE plug-in connection against splashing water, especially suitable for the connection of Turbelle® pumps.

6105.600 **8.40 £**



Turbelle® masterstream

The Turbelle® masterstream pumps are for the high-performance propeller pump market segment, and primarily intended for an implementation in experience zoos, research institutes, rehabilitation clinics and farms. But there is also a model 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 new 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.



Turbelle® masterstream

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 new Turbelle® masterstream.

Hose clamps for attachment to PVC pipe or rod, diam. 32 mm (1.25 in.).

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 ejector, diam. 125mm (4.91 in.) with integrated protection against injury in keeping with European standard EN 60335-1.

CONTROLLABLE PERFORMANCE

The Turbelle® masterstream are electronically speed-controlled pumps operating on safety extra-low voltage of 12 V to 24V. They can be used ideally for water circulation, wave action or wave-and-tide simulations.

A 12 V VERSION FOR SWIMMING POOLS

Model 6560 in 12V technology and a flow rate of 60,000l/h (15,850 USgal./h) has been designed especially for swimming pools or large aquariums.

100 PER CENT CORROSION-RESISTANT

All parts of the pumps are made of sustainable active microbicidal (SAN) polymers and polyoxymethylenes (POM); 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).

NO PROBLEM IN CASE OF POWER FAILURE

Fitted with Safety Connector 6515.50, Turbelle® masterstream can be operated on every 11 V to 24 V direct-current source (battery, solar cell). The safety connector permits normal operation with the TUNZE® power supply unit, but in case of a power failure it will automatically switch over to a battery or a direct-current source.

Turbelle® masterstream

ECO ENERGETIC

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

Tank volume: 60 m³, flow selection by centrifugal pump (32m³/h – 2,200W). At an annual operating time of 8,760 hours and a kilowatt price of EUR 0.28 this results in a cost saving of EUR 4,366 per annum !

NEW GENERATION



Turbelle® masterstream 6550

for aquariums of over
5,000L (1,320 USgal.)
Flow rate: 30,000 to about 50,000l/h
(7,900 to 13,000 USgal./h)
Flow velocity: 0.8 - 1.3m/s
(31.5 - 51 in./sec.)
Energy consumption: max. 110W
Power supply unit: 100–240V /
50–60Hz / 12VDC
Cable length: 10m (393.6 in.)
Dimensions: L340 x W165 x H227mm
(L13.4 x W6.5 x H8.9 in.)
Ejection: diam. 125mm (4.9 in.)
Attachment to pipe, diam. 32mm (1.25 in.)
6550.000 **1,193.10 £**



Propeller technology



100% sea-water proof,
titanium and plastic



Low motor heat

NEW GENERATION



Turbelle® masterstream 6560

for aquariums of over
10,000L (2,650 USgal.)
Flow rate: 30,000 to about 60,000l/h
(7,900 to 15,850 USgal./h)
Flow velocity: 0.8 - 1.5m/s
(31.5 - 59 in./sec.)
Energy consumption: max. 110-140W
Power supply unit: 100-240V /
50-60Hz / 12-14VDC
Cable length: 10m (393.6 in.)
Dimensions: L340 x W165 x H227mm
(L13.4 x W6.5 x H8.9 in.)
Ejection: diam. 125mm (4.9 in.)
Attachment to pipe, diam. 32mm (1.25 in.)
Supplied with Wavecontroller 7092
6560.000 **2,195.60 £**



2D adjustment



Safety extra-low voltage



Controllable speed, wave
simulation, tidal currents.

NEW GENERATION



Turbelle® masterstream 6580

for aquariums over 20,000L
(5,250 USgal.)
Flow rate: 45,000 to about 80,000l/h
(11,900 to 21,000 USgal./h)
Flow velocity: 1.1 - 2.0m/s
(43.3 - 78.7 in./sec.)
Energy consumption: 290-420W
Power supply unit: 100-240V /
50-60Hz / 24-30VDC
Cable length: 10m (393.6 in.)
Dimensions: L340 x W165 x H227mm
(L13.4 x W6.5 x H8.9 in.)
Ejection: diam. 125mm (4.9 in.)
Attachment to pipe, diam. 32mm (1.25 in.)
Supplied with Wavecontroller 7092
6580.000 **2,838.40 £**

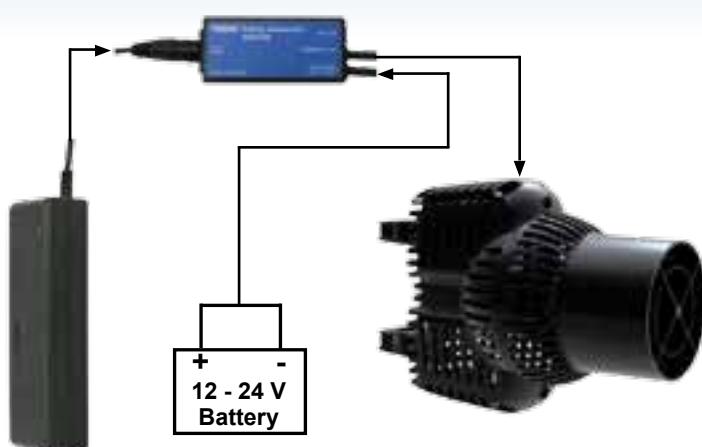
Turbelle® masterstream 6580 DC

structurally identical with 6580.000
I = 3-10A, V = 11-14V
Supplied with safety connector, without
power supply unit and controller.
6580.001 **2,552.20 £**

Turbelle® masterstream

Other power supply units for Turbelle® masterstream 6550, 6560, 6580 - safety connector

Turbelle® masterstream 6550, 6560 and 6580 are pumps fitted with an electronic motor. Thus, they can be operated on any direct-current source (battery, solar cells) from 10 V to 24V. For a safe connection to the pumps, the manufacturer recommends Turbelle® Safety Connector, article No. 6515.50. The safety connector contains a fuse and permits normal operation with the TUNZE® power supply unit, but in case of a power failure it will automatically switch over to a battery or a direct-current source.



Accessories (order separately)

① Safety Connector

6515.500

136.30 £

② Magnet Holder masterstream

Designed especially for Turbelle® masterstream 6550 up to a glass pane thickness of 30mm (1 1/8").

TUNZE® Magnet Holder 6508.500 (patent No. 20 1005 003 170) is used to attach the Turbelle® masterstream to panes up to a glass thickness of 30mm (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

229.40 £



③ Power Supply Box

The power supply box is a control box in keeping with protection standard IP33 (IEC 60529): Protected against solid foreign matter over a diameter of 2.5 mm (.09 in.) and against spray water which is sprayed at an angle of up to 60 deg. 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: L375 x W375 x H225mm (L14.8 x W14.8 x H8.9 in.).

6515.245

477.50 £



In 2004 TUNZE®, introduced the „Wavebox“, a patented wave generator for tanks from 200 to 1,200 litres. Today, the TUNZE® Wavebox 6208 and 6215 world renowned wave generators for tanks from 150 to 1,500 litres, producing an oscillation current corresponding to the wave formation and water movements in reef top zones. The Wavebox is based on the oscillation principle and is controlled by the Wavecontroller 7092 or Multicontroller 7096 with the inherent tank resonance. This creates optimum water movement with a very low power consumption. The water is in motion throughout the aquarium, even the smallest areas behind the decoration will be in motion.

Example: In the case of tanks of a length of 1.5m, the water level may rise by up to 3cm and more due to the wave generation.

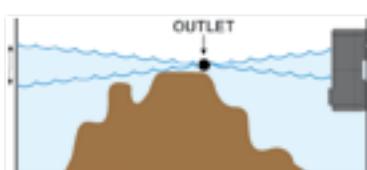


Additional flow pumps.

In the case of larger tanks, the system can be upgraded using an additional Wavebox extension 6215.50 (without Wavecontroller).

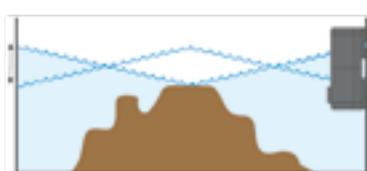
Average energy consumption in one cycle of 10W or 26W.
Supplied ready for installation with power supply and Magnet Holder, Wavecontroller and photocell.

FAQs about Wavebox 6208 / 6215



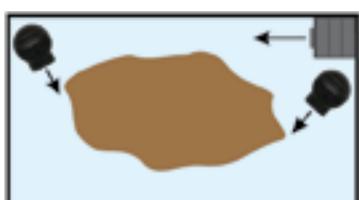
Can the Wavebox be fitted in an aquarium with outlet ?

Given a single wave, the water 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.



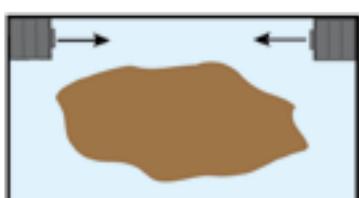
Can the Wavebox produce several waves ?

Given an aquarium of two metres (78 in.) 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 ?

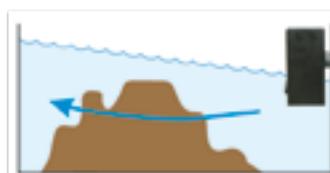
Wavebox can also be integrated in an aquarium with Turbelle® pumps. The circular current of the Turbelle® and the washing of the waves produced by the Wavebox superimpose each other and result in a strongly pulsating circular current for reef top biotopes, for example.



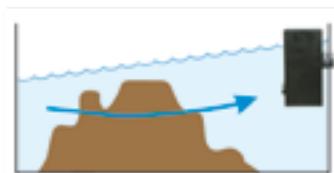
One Wavebox 6215 and one Wavebox Extension 6215.50 is needed for a tank with a content of 2,000 litres (525 USgal.). Do the Waveboxes are to be located next to each other in case of space problems ?

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, etcetera; 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.

TUNZE® Wavebox 6208

The Comline® Wavebox 6208 is a wave generator for small and medium-sized tanks from 150 to 800 litres. The new "Comline®" is easy to use, elegant and small. The Comline® Wavebox 6208 uses Turbelle® nanostream® 6055 and its very compact dimensions enable hidden installation in aquariums. The integrated Magnet Holder enables easy attachment anywhere in the aquarium up to a pane thickness of 15mm (1/2").



Oscillating current
with near-nature wave
movement and circulation.



De-sedimentation of the
entire aquarium habitat.



Wave generation at low
power consumption,
high efficiency and
low motor heat.



Safety extra-low
voltage, blocking and
run-dry protection.



① Comline® Wavebox

Dimensions: L110 x W90 x H255mm (L4.3 x W3.5 x H10 in.), Dimmersion depth: approx. 230mm (9.1 in.), average 10W, power supply: 100-240V / 50-60Hz.

Magnet Holder up to pane thickness of 15mm (1/2").

For tank sizes from 150 to 800 litres (35 to 210 USgal.).

6208.000

260.90 £



Accessories (order separately)

The standard Wavebox lid 6208.130 can be replaced by the intake lid 3162.130 very easily. This lid enables small quantities of surface water to be distributed to deeper regions of the aquarium again by the Turbelle® pump in the Wavebox.

Thus, the surface is cleaned regularly and the gas exchange in the aquarium is improved.

The bacteria film and the microorganisms living in it are distributed in the deeper water regions, thus serving as food for plankton-filtering animals.

② Intake lid

3162.130

5.00 £



Additional power supply – Safety Connector

The Wavebox can be powered by any 10 to 24V DC power supply (battery, solar cells). For safe connection, 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 switch to a battery or DC supply automatically in the case of a power failure.



TUNZE® Wavebox 6215

TUNZE® Wavebox 6215 is a patented wave generator for aquariums from 200 to 1.500 litres (50 to 400 US gal.). A special Wavebox pump, which belongs to the family of the Turbelle® stream pumps, is used as an installed pump. The integrated magnet holder permits an uncomplicated attachment at every point of the aquarium with a glass thickness of 19 mm (3/4").



Oscillating current with near-nature wave movement and circulation.



De-sedimentation of the entire aquarium habitat.



Wave generation at low power consumption, high efficiency and low motor heat.



Safety extra-low voltage, blocking and run-dry protection.



Wavebox

Dimensions: L125 x W113 x H 300mm (L4.9 x W4.4 x H11.8 in.), Immersion depth: approx. 280mm (11 in.), 18W on average at 18V, 26W at 24V, power supply unit: 100-240V / 50-60Hz, Magnet Holder up to a glass thickness of 19mm (3/4").

For tanks from 200 to 1,500 litres (50 to 400 USgal.).

6215.000

403.90 £

Wavebox extension

In case of aquariums with volumes of over 1,500 litres (400 USgal.), a Wavebox Extension 6215.50 should be added to the existing Wavebox. The Wavebox extension contains the Wavebox 6215, however without Wavecontroller. The combination of Wavebox and Wavebox Extension is suitable for aquariums up to about 3,000 litres (about 800 USgal.). Each additional extension (three maximum) increases the volume recommended by about 1,500 litres (about 400 USgal.). The Waveboxes can be placed beside each other or opposite each other, and a Wavebox Extension 6215.50 can be connected to Wavebox 6215 without any additional accessories. A Y adapter 7092.34 is required only for two or three Wavebox extensions.

The Wavebox extension is also suitable for operation with Multicontroller 7096.



Wavebox extension

Dimensions: L125 W113 x H300mm (L4.9 x W4.4 x H11.8 in.), Immersion depth: approx. 280mm (11.0 in.), on average 18W at 18V, 26W at 24V, power supply unit: 100-240V / 50-60Hz, Magnet Holder up to a glass thickness of 19mm (3/4").

6215.500

360.10 £

Additional power supply – Safety Connector

The Wavebox can be powered by any 10 to 24V DC power supply (battery, solar cells). For safe connection, 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 switch to a battery or DC supply automatically in the case of a power failure.



Turbelle® controller

An unbeatable team - Turbelle®pumps with electronic motor + Turbelle® controller - they can reproduce real reef currents in your tank. TUNZE® controller concentrate on the fundamentals. The following flow patterns can be produced in the aquarium very easily:



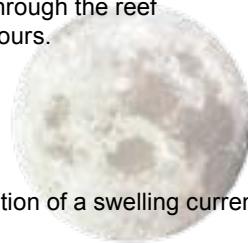
Wave simulation („Pulse only“) 7092 / 7095 / 7096

By setting the maximum and minimum outputs as well as the pulse duration, high and low water velocities can be produced generating a natural wash of waves under a one-metre water column.



Simulation of tidal currents (“Interval”) 7095 / 7096

The pump channels are switched on or off alternately. The water flows through the reef from both sides at an adjustable switching time from 1 minute up to 12 hours.



Sequential pump circuit („Sequential“) 7095 / 7096

The Turbelle® pumps are started sequentially, which permits the generation of a swelling current.



Random flow („Sequential“) 7095 / 7096

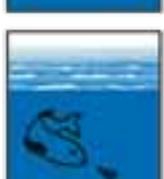
Random flow is generated by wave simulation and sequential pump operation. For quite a number of special reef zones (surf) this combination may produce an interesting water movement.



Oscillating current with Wavebox or Turbelle® pumps 7092 / 7096.

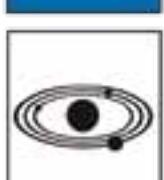
In Multicontroller 7092 and 7096, the pump channels can be used as a Wavecontroller for the direct or alternating operation of the Wavebox or the Turbelle® pumps.

This function comprises the automatic search of the resonance frequency, which can be combined with wash of waves or high and low tide simulation.



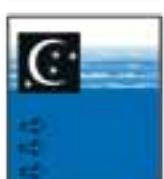
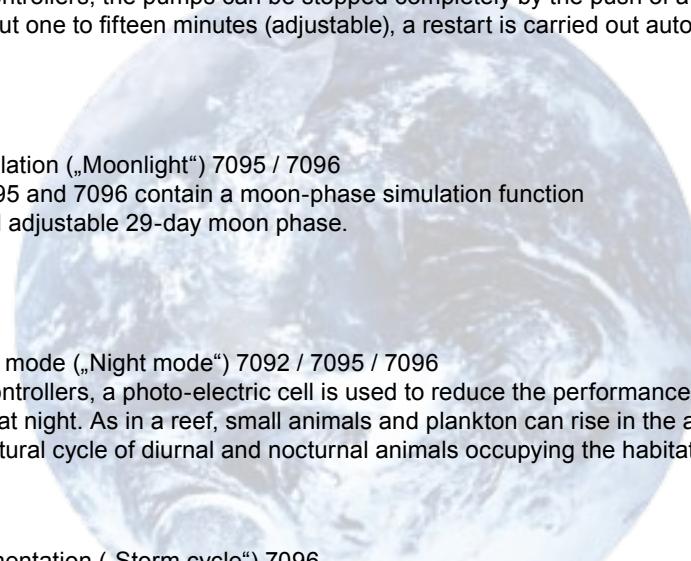
Feeding operation (Foodtimer) 7092 / 7095 / 7096

In all Turbelle® controllers, the pumps can be stopped completely by the push of a button to enable feeding. After about one to fifteen minutes (adjustable), a restart is carried out automatically.



Moon-phase simulation („Moonlight“) 7095 / 7096

Multicontroller 7095 and 7096 contain a moon-phase simulation function with LED light and adjustable 29-day moon phase.



Operation in night mode („Night mode“) 7092 / 7095 / 7096

In all Turbelle® controllers, a photo-electric cell is used to reduce the performance of the Turbelle® pumps at night. As in a reef, small animals and plankton can rise in the aquarium completing the natural cycle of diurnal and nocturnal animals occupying the habitat.



Storm for desedimentation („Storm cycle“) 7096

Like in nature, sediment should be removed from a reef aquarium in regular intervals. This function can be programmed in Multicontroller 7096 to be carried out automatically; the pumps connected are controlled on the basis of an efficient and precise rhythm.

Turbelle® controller



Multicontroller

TUNZE® Multicontroller 7095 is a digital control unit for all Turbelle® pumps with Driver 7240.26 / 7240.27 or electronic motor. The unit simulates the different marine flow conditions in the aquarium. By means of the Pump Adapter 7094.40, Turbelle® classic 2002 and 4002 can also be controlled. Multicontroller 7095 contains an LED moonlight with a 29-day moon phase and can control up to eight Turbelle®.

The clearly arranged operating panel with a waterproof membrane keypad and adjusting knobs ensures a precise and practice-oriented operation. The output of the controlled pumps is shown by an LED display indicating from 30 to 100 per cent. All pump connections are located on the lower side of the unit.

In case of a power failure, the various settings remain saved; after the power interruption, the Multicontroller continues to operate with the program.

Delivery with four connecting cables 7092.30 and a photo-electric cell. Up to four Turbelle® pumps and up to eight using the Y Adapter 7092.34 produce a near-nature flow control.

Dimensions: L100 x W40 x H195mm (L3.9 x W1.6 x H7.7 in.)

7095.000

218.70 £



Wavecontroller

Wavecontroller 7092 fitted with a membrane terminal is a control unit to be used on all Turbelle® pumps with electronic motor, and can synchronously or alternately control two Turbelle® pumps:

Wave simulation by setting the two pump outputs to maximum and minimum values as well as the pulse time.

Oscillating flow for the direct or reciprocal operation of the Wavebox.

Oscillating flow with Turbelle® pump for the operation of Turbelle® stream pumps.

Automatic search of the resonance frequency in case of oscillating flow.

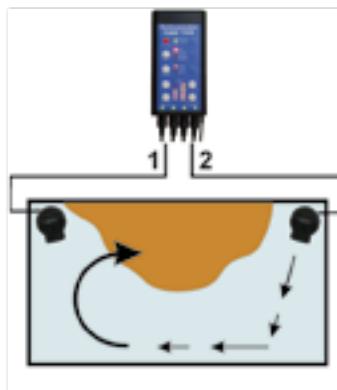
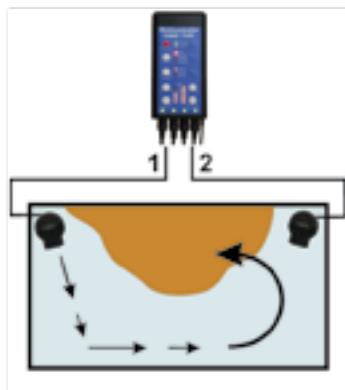
Ramp function for a gentle start of the pumps.

Foodtimer at the touch of a button; after about eight to ten minutes, a restart is carried out automatically.

If the Photo-Electric Cell 7094.05 (not included in the scope of delivery) is attached to the connecting port, the night-mode operation is activated automatically.

7092.000

61.50 £

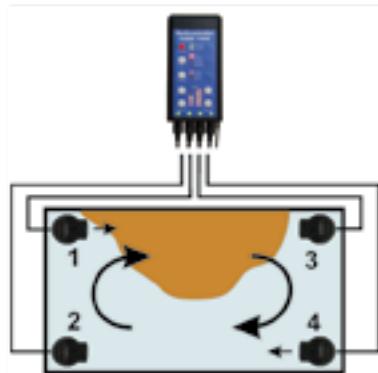
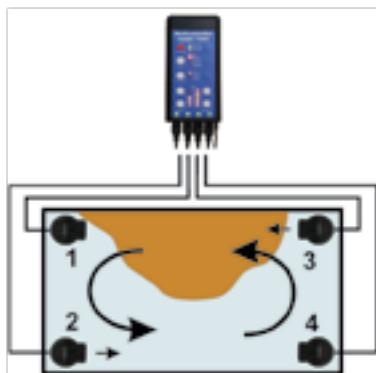


Turbelle® stream Kit TS24

= 2 pumps Turbelle® stream 6105
with 2x13,000 l/h, (2x3,170 USgal.)
+ Multicontroller 7095

For aquariums of 500 - 3,000L
(132 - 792.5 USgal.), wave simulation,
foodtimer, operation in night mode,
sequential pump circuit and tide simulation.
TS24

764.60 £



Turbelle® stream Kit TS48

= 4 pumps Turbelle® stream 6105
with 4x 13,000 l/h, (4x3,170 USgal.)
+ Multicontroller 7095

For aquariums of 1,000 - 6,000L
(264.1 - 1,585 USgal.), wave simulation,
foodtimer, operation in night mode,
sequential pump circuit and tide simulation.
TS48

1,310.40 £

Turbelle® controller

Multicontroller

The TUNZE® Multicontroller 7096 can be used for controlling all Turbelle® pumps featuring electronic motors. The controller is configurable and can be programmed using a computer with USB connectivity. It features a 8-Bit high-performance microprocessor with memory maintaining the settings in the case of a power failure:

For setup by means of a computer, the Multicontroller does not have to be connected to the pumps.

Upon completion and saving of the set-up on the computer, the data will also be saved in the Multicontroller.

The TUNZE® Multicontroller 7096 features the functions of Multicontroller 7095 and Wavecontroller 7092 as well as some new control options. It simulates the different ocean current conditions in the aquarium and features a particularly bright LED moonlight.

Scope of supply: Multicontroller with photocell / moonlight and holder, 5m USB cable, 4 connecting cables, CD with Windows-compatible control software.

Can be used with Windows 98, 2000, XP, Vista, Win7, Win8 and Mac.

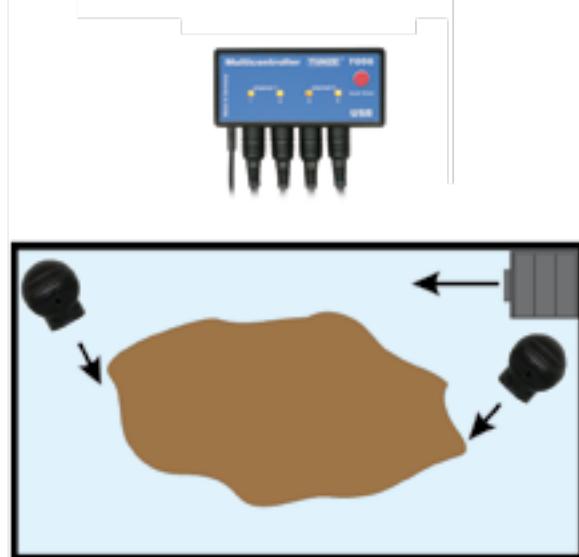
Dimensions: L120 x W31 x H56mm

7096.000

132.80 £



Example: Screen display of Multicontroller 7096 for Wavebox 6215 and two Turbelle® stream 6105.



Accessories (order separately)

① Y adapter

Extends two output connections to 2 x 2 input connections; including four connection cables 7092.30.

7092.340

43.30 £



② Photo-electric cell

Enables the night mode operation with Singlecontroller 7091 and Wavecontroller 7092. This is a standard feature of the Multicontroller 7095/7096.

7094.050

13.70 £



③ TUNZE Safeguard

Hidden installation of the many cables of an aquarium system, ideal in combination with multiple outlet strips, multicontrollers. Features cable openings on both sides, made from flame retardant synthetic material.

L237 x W131 x H117mm, white.

7096.600

57.40 £

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 innovative synchronous motor with its electronic starting system is based on the latest state of the art technology and 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.

Without modifications, they replace all Turbelle® powerhead / electronic built since 1988.

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.

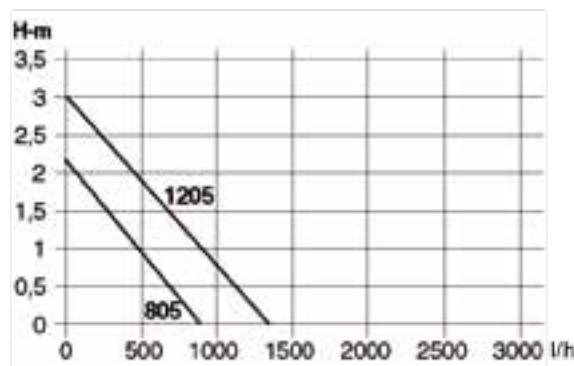
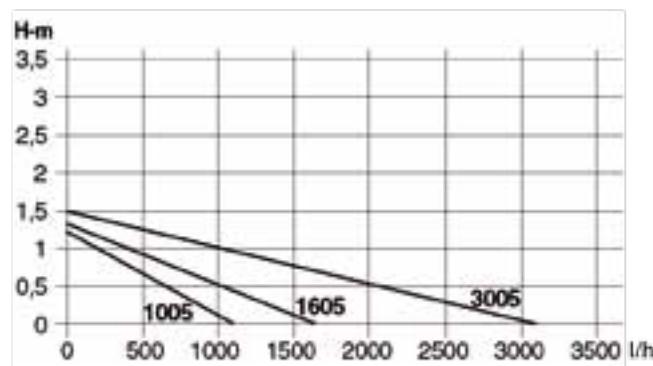
Assembled without holder, strainer and flow deflector, they can also be used as built-in pumps when fitted in Comline filters; for this purpose the upper cover of the motor block should be removed.

Dimensions: diam. 90 mm (3.5 in.) excluding magnet holder.



Performance tables of e-jet pumps.

These performance tables include a tolerance of +/- 5 per cent.



Turbelle® e-jet

Non-controllable synchronous motor pumps



Turbelle® e-jet 1005

Flow rate: 1,100l/h (290 USgal./h)
 Pumping head: 0.8m (31.5 in.)
 Energy consumption: 9W
 Voltage / frequency: 230V/50Hz (115V/60Hz)
 Cable length: 2m (78.7 in.)
 Dimensions: diam. 98 x 100mm (3.8 x 3.9 in.)
 Inlet: diam. 25mm (.98 in.)
 Outlet: diam. 25mm (.98 in.)
 Magnet holder up to a glass thickness of 15mm (1/2")

1005.000

66.30 £



Low motor heat,
high efficiency.



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



Turbelle® e-jet 1605

Flow rate: 1,600l/h (420 USgal./h)
 Pumping head: 1.1m (43.3 in.)
 Energy consumption: 12W
 Voltage / frequency: 230V/50Hz (115V/60Hz)
 Cable length: 2m (78.7 in.)
 Dimensions: diam. 98 x 100mm (3.8 x 3.9 in.)
 Inlet: diam. 25mm (.98 in.)
 Outlet: diam. 25mm (.98 in.)
 Magnet holder up to a glass thickness of 15mm (1/2")

1605.000

81.50 £



Titanium alloy shaft



Bearing-free pump
suction side



Turbelle® e-jet 3005

Flow rate: 3,150l/h (830 USgal./h)
 Pumping head: 1.2m (47.2 in.)
 Energy consumption: 22W
 Voltage / frequency: 230V/50Hz (115V/60Hz)
 Cable length: 2m (78.7 in.)
 Dimensions: diam. 98 x 100mm (3.8 x 3.9 in.)
 Inlet: diam. 25mm (.98 in.)
 Outlet: diam. 25mm (.98 in.)
 Magnet holder up to a glass thickness of 15mm (1/2")

3005.000

114.50 £



Replaces all Turbelle®
powerhead / electronic
built since 1988

Feed pumps with high pumping heads are required for aquarium cabinets. Turbelle® e-jet 805 and 1205 carry out this task in an especially power-saving way.



Turbelle® e-jet 805

Flow rate: 850l/h (225 USgal./h)
 Pumping head: 2.2m (86.6 in.)
 Energy consumption: 12W
 Voltage / frequency: 230V/50Hz (115V/60Hz)
 Cable length: 2m (78.7 in.)
 Dimensions: diam. 98 x 100mm (3.8 x 3.9 in.)
 Inlet: diam. 25mm (.98 in.)
 Outlet: diam. 11/17/25mm (.43/.67/.98 in.)
 Magnet holder up to a glass
thickness of 15mm (1/2")

0805.000

81.40 £



Turbelle® e-jet 1205

Flow rate: 1,200l/h (320 USgal./h)
 Pumping head: 2.9m (114.2 in.)
 Energy consumption: 22W
 Voltage / frequency: 230V/50Hz (115V/60Hz)
 Cable length: 2m (78.7 in.)
 Dimensions: diam. 98 x 100mm (3.8 x 3.9 in.)
 Inlet: diam. 25mm (.98 in.)
 Outlet: diam. 11/17/25mm (.43/.67/.98 in.)
 Magnet holder up to a glass
thickness of 15mm (1/2")

1205.000

131.40 £

Turbelle® e-jet electronic

Turbelle® e-jet 5005 is a pump operated on safety extra-low voltage, the speed of which can be controlled electronically. It is ideal for the simulation of lapping waves or tidal currents in every aquarium. It contains a new microprocessor-controlled motor and thus can be called an "intelligent pump":

The electronic motor adapts its speed automatically to the pump load and always seeks the best efficiency at the lowest possible consumption of energy. This energy consumption is about fifty per cent lower than in conventional pump motors. The pumps will be stopped immediately in case of blockage. After the blockage has been removed, the pumps will start up automatically after a delay of 20 seconds.

Turbelle® e-jet 5005 has been provided with a fish care function, which causes a revolution of the propeller every twenty seconds.

This pump can be controlled by Multicontroller 7094, 7095 and 7096 as well as by Wavecontroller 7092; and is supplied with a power supply unit.



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



Controllable speed, wave simulation, tidal currents.



12V, 18V or 24V adjustable



Replaces all Turbelle® powerhead / electronic built since 1988



Turbelle® e-jet 5005

Flow rate at 24V: 2,400 to 4,200l/h
(735 to 1,100 USgal./h)

Hmax. at 24V: 2.2m (89.6 in.)

Energy consumption at 24V: max. 40W

Voltage / frequency: 100–240V / 50–60Hz

Cable length: 5m (196.8 in.)

Dimensions: diam. 98 x 100mm (3.8 x 3.9 in.)

Inlet: diam. 25mm (.98 in.) / Outlet:

diam. 25mm (.98 in.)

Magnet holder up to a glass thickness of 15mm (1/2")

5005.000

161.10 £



Turbelle® e-jet 5005 replaces three pumps !

Turbelle® e-jet 5005 has been fitted with a power supply unit (article No. 6105.240) with three adjustment possibilities set by the lateral jumper.

Adjustment to 24V direct current (delivery condition):

Pump adjustable from 2,400l/h to 4,200l/h (635 to 1,100 USgal./h); energy consumption: max. 40W.

The adjustment of 12V, 18V or 24V is very simple by setting the jumper at the bottom of the power supply unit.

Turbelle® e-jet electronic

Turbelle® e-jet 5005 as a high-pressure pump; Hmax. 5,5 m (216.5 in.).

With a few additional parts only the Turbelle® e-jet 5005 can be converted into a high-pressure pump. After conversion, the pump can serve as a recirculation pump for special applications with high water columns or into a skimmer pump for a Venturi skimmer. The following parts have to be used to replace the drive unit and the impeller housing:

Impeller Housing 1201.13, Drive Unit 1205.700, and Sleeve 1200.15. Thus, the Turbelle® e-jet 5005 achieves the following performance: Adjustment to 24 V direct current:

(delivery condition):

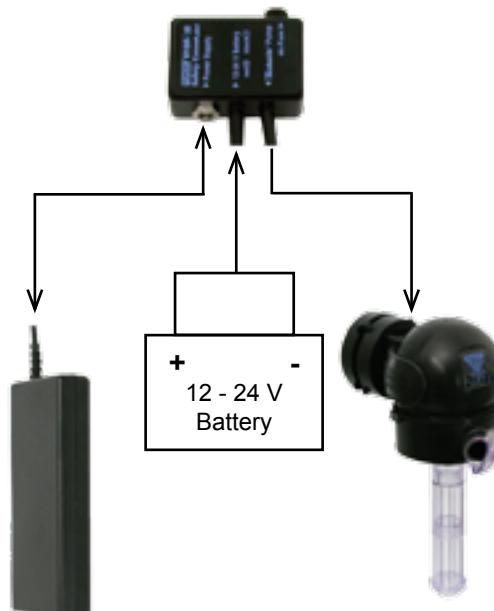
Pump adjustable between 800 and 1,400l/h (210 and 370 USgal./h); Hmax. 5.5m (216.5 in.); energy consumption max. 40W.

The adjustment of 12V, 18V or 24V is very simple by setting the jumper at the bottom of the power supply unit.



Other power supply units for Turbelle® e-jet 5005 - safety connector.

Turbelle® e-jet 5005 has been fitted with an electronic motor. The pump can be operated on any direct-current source (battery, solar cells) from 10V to 24V. For a safe connection to the pump, we recommend the Turbelle® Safety Connector 6105.50 (article No. 6105.50), which contains a 4 amps fuse. The safety connector permits normal operation with the TUNZE® power supply unit, but in case of a power failure it will automatically switch over to a battery or another direct-current source.



Accessories (order separately)

① 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.

6105.500

40.90 £

② Magnet Holder

Up to a glass thickness of 27mm (1") consisting of two equally dimensioned magnet halves of a width of 20mm (.8 in.) each.

6205.500

88.00 £

③ Cable Safe

Protects the TUNZE plug-in connection against splashing water, especially suitable for the connection of Turbelle® pumps.

6105.600

8.40 £



Turbelle® classic

Turbelle® classic centrifugal pumps were the first pumps to be developed especially for aquariums. Today, many aquarists use them with high regard on account of their special properties. They combine the advantages of high performance at low power consumption with easy handling as well as high operational safety. They are almost run-dry safe and suitable for pressure filters, and can be connected to Multicontroller or Wavecontroller by means of pump adaptor 7094.40. Irrespective of whether they are used in fresh or salt water, they will operate almost maintenance-free for many years. They are waterproof in keeping with German standard VDE 700/236.

The scope of supply comprises an intake strainer, a flow deflector, a holder and a mounting bracket made of V4A stainless steel. The mounting clamp and the mounting bracket are used for attachment to a horizontal glass cover; the mounting clamp only is required for attachment to a vertical glass pane.



Turbelle® classic 2002

Output: 2,400l/h (634.0 USgal./h).
Pump wattage: 38W.
230V/50Hz (115V/60Hz).
Pumping head H.max:
1.3m (51.1 in.).

2002.000

238.40 £



Turbelle® classic 4002

Output: 3,700l/h (977.4 USgal./h).
Pump wattage: 42W.
230V/50Hz (115V/60Hz).
Pumping head H.max:
1.45m (57 in.).

4002.000

266.20 £



Air cooling - no motor heat
is released into the water



Upper part of the pump only
is visible in the aquarium



Electronically controllable by
all TUNZE® motor controls



Attachment to horizontal
and vertical pane.

Accessories (order separately)



Pump adapter

Connection of Turbelle® centrifugal pumps to TUNZE® Multicontroller 7095 or TUNZE® Wavecontroller 7092. Pumps up to 200 W can be operated on each pump adapter (4 x 4002 or 5 x 2002 on multiple sockets). The pump adapter can be connected to the Wavecontroller; up to four adapters to the Multicontroller.

7094.400

86.60 £

Tunze® Individual filters

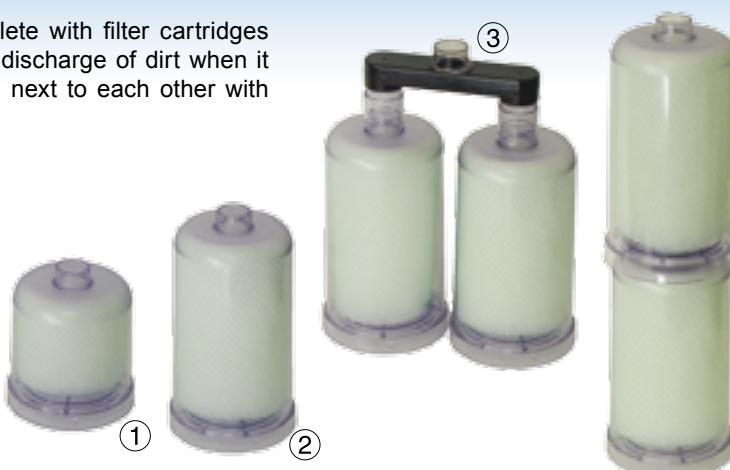
TUNZE® Pot Filters are quick-change filters complete with filter cartridges and a patented return inhibitor, which prevents the discharge of dirt when it is removed. If required, the filters can be arranged next to each other with connectors.

① Pot Filter 320

is a quickchange filter with ø95 x 110mm (3.7 x 4.3 in.).

0320.000

20.40 £



② Pot Filter 820

is a quickchange filter with ø95 x 171mm (3.7 x 6.7 in.).

0820.000

27.40 £

③ Connector

3200.520

14.40 £

TUNZE® Cartridge Filters are open cartridge filters with an optimized filtering performance, especially suitable for the high pumping capacities of the Turbelle® pumps. Baby fish are not sucked in, the leftover food can be eaten by the fish again and the filter change only takes a few seconds. If required, the filters can be arranged next to each other with connectors.

④ Cartridge Filter 300

is a cartridge filter with ø80 x 90mm (3.1 x 2.5 in.).

0300.000

10.50 £

⑤ Cartridge Filter 800

is a cartridge filter with ø80 x 145mm (3.1 x 5.5 in.).

0800.000

16.20 £

⑥ Cartridge Filter 1600

is a cartridge filter with ø80 x 230mm (3.1 x 9.0 in.).

1600.000

24.40 £

⑦ Cartridge Filter 3200

Consisting of two cartridge filters 1600 and connector 3200.520.

3200.000

44.10 £



TUNZE® Cartridges are refill cartridges for the TUNZE® Pot Filter, specially designed for the TUNZE® Filter Carbon or other filter materials with a granularity of more than 1.2mm (0.03 in.). TUNZE® Cartridges can also be directly connected to the Turbelle® pumps. If required, the refill cartridges can be arranged next to each other with connectors.

The wadding refill cartridge TUNZE® Cartridge 871 is exclusively designed for the use with any kind of loose filter wadding

⑧ Cartridge 370

is a refill cartridge with ø80 x 65mm (3.1 x 2.5 in.).

0370.000

13.20 £

⑨ Cartridge 870

is a refill cartridge with ø80 x 115mm (3.1 x 4.5 in.).

0870.000

17.80 £

⑩ Cartridge 1670

is a refill cartridge with ø80 x 210mm (3.1 x 8.2 in.).

1670.000

30.60 £



⑪ Cartridge 871

is a wadding refill cartridge with ø80 x 115mm (3.1 x 4.5 in.).

0871.000

17.70 £

Turbelle® Filter media

TUNZE® high-performance spare filter cartridges with deep-bed filter action and high absorption capacity. Perfect preliminary filtering action by adsorption on the acrylic wadding fibres; can be washed two to five times.



(1) Filter cartridges, 75mm (2.9 in.).

Ten spare filter cartridges with wound acrylic wadding fibres with a filter area of 75 x 1,500mm (2.9 x 59 in.)

Suitable for Turbelle® Pot-Type Filter 320 and Cartridge Filter 300.

0300.020

13.90 £

(2) Filter cartridges, 135mm (5.3 in.).

Five spare filter cartridges with wound acrylic wadding fibres with a filter area of 135 x 1,500mm (2.9 x 59 in.).

Suitable for Turbelle® e-jet, Pot-Type Filter 820, Cartridge Filter 800 and all Comline filters.

0800.010

9.60 £

(3) Filter cartridges, 225mm (8.8 in.).

Five spare filter cartridges with wound acrylic wadding fibres with a filter area of 225 x 1,500mm (8.8 x 59 in.).

Suitable for Turbelle® Cartridge Filter 1600 and 3200.

1600.010

13.20 £

Foam cartridge and cartridge filter mat

A filter cartridge made of aquarium sponge wrapped in wadding fleece, diam. 80 x 145mm (3.1 x 5.7 in.).



(4) Cartridge filter mat

Two cartridge fleeces for Foam Cartridge 800.14.

0800.220

2.20 £

(5) Foam cartridge

Filter cartridge made of aquarium sponge to be used separately or with Cartridge Filter Mat 800.22.

0800.140

3.20 £

(6) Carbon floss cartridge, 135mm (5.3 in.), 1 pc.

Activated carbon combined with acrylic wadding.

0800.030

4.00 £

(7) Carbon floss cartridge, 225mm (8.8 in.), 1 pc.

Activated carbon combined with acrylic wadding.

1600.030

7.10 £

(8) Macro Wadding, 250g (8.8oz.)

Macro wadding for very fine filtration in freshwater and marine aquariums; removes turbidity and bonds particulate matter, such as plant remains, fish excrement and food remains by absorption.

Suitable for Comline® filters, Turbelle® refillable cartridges or conventional filters.

0873.010

5.20 £

Macro wadding, 10 x 250g (8.8 oz.)

0873.000

46.70 £

(9) Micro Wadding, 60g (2.1oz.)

Micro wadding for very fine filtration in freshwater and marine aquariums; removes turbidity and bonds particulate matter, such as plant remains, fish excrement and food remains by absorption.

Suitable for Comline® filters, Turbelle® refillable cartridges or conventional filters.

0872.010

3.20 £

Micro wadding, 10 x 60g (2.1 oz.)

0872.000

28.70 £

Micro wadding, 5kg (176 oz.) sack

0872.050

60.90 £

Turbelle® Filter media

GRANOVIT - bio granules, pH neutral, highly porous clay slag granules to be filled into bio/hydro reactors, high biological reduction activity 300sqm/l (358 sqy/l), grain size approx. 2 - 5mm (.07 - .19 in.).



Granovit

700ml (23.6 oz.) packet.	2.60 £
10 x 700ml (23.6 oz.) packet.	21.70 £
5L (1.3 USgal.) bucket.	13.90 £

Calcium carbonate is 99% pure CaCO₃ with a grain size of 4 to 6mm (.15 to .23 in). It is ideally suited for use in Tunze Calcium Automat 3170 and other makes of Calcium reactor for buffering the pH value as well as increasing the calcium content.



Calcium carbonate

700ml (23.6 oz.) box.	3.50 £
10 x 700ml (23.6 oz.) packet.	33.90 £
5L (1.3 USgal.) bucket.	20.40 £

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



Filter carbon

700ml (23.6 oz.) packet.	5.60 £
10 x 700ml (23.6 oz.) packet.	51.90 £
5L (1.3 USgal.) bucket.	32.60 £



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

0910.000

18.90 £



Silphos 750 ml (25.4 oz.)
For long-term phosphate and
silicate removal with high
bonding capacity; Fe based.

0920.000

31.20 £



Zeolite 750 ml (25 oz.)
High-purity zeolite for aquariums
low in nutrients.

0930.000

13.00 £



Carbophos 750 ml (25.3 oz.)
Removes yellowing matter and
phosphates from fresh and salt water.

0940.000

17.10 £



NanoChem 300ml (10oz.)

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

15.00 £

Turbelle® Filter accessories



Bio connection for 805
and Turbelle® 1205.

0878.710

5.10 £

Bio connection for 3005
and Turbelle® 1005, 1605, 5005.

3178.710

9.80 £

Bio connection
for 2002, 4002
2002.710

10.70 £

Bushing, outside diam. 25mm (.98 in.)
To connect hoses or pipes to
Turbelle® 805, 1205.

1200.150

2.30 £

Bushing - outside diam. 25mm (.98 in.)
For Turbelle® 3005, 1605, 5005, hose
connection diam. 25mm (.98 in.).

1282.150

3.20 £

Flow deflector
For Turbelle® 805, 1205.
1001.770

2.70 £

Flow deflector
For Turbelle® 1005, 1605,
3005, 5005, 2002, 4002.
4002.770

4.40 £

① Overflow tube

Inside diameter 25mm (.98 in.), outside
diameter 27mm (1.06 in.).

1001.740

18.80 £

② Bushing, diam. 21/25mm (.82/.98 in.)

Joins two pipes 1001.760.

1001.780

1.80 £

③ Pipe for Turbelle®

To connect TUNZE filters with Turbelle® pumps,
inside diameter 25mm (.98 in.), outside diameter
27mm (1.06 in.), length 30cm (11.81 in.).

1001.760

4.50 £

④ Bushing, diam. 25/28mm (.98 / 1.1 in.)

Joins Turbelle® with filter.

3000.780

2.10 £

⑤ T-piece

With cap for tube 1001.760.

1001.800

4.80 £

⑥ Strainer, 7cm (2.7 in.)

Suitable for pipe 1001.760, bushing 3000.780 and T piece
1001.800, to be used up to 1,000 l/h (265 USgal./h).

0104.790

6.00 £

⑦ Strainer, 12cm (4.7 in.)

Suitable for pipe 1001.760, bushing 3000.780 and T piece
1001.800, to be used up to 4,000 l/h (1,050 US gal./h).

1001.790

7.80 £

⑧ Strainer, 17cm (6.6 in.)

Suitable for pipe 1001.760, bushing 3000.780 and T piece
1001.800, to be used up to 6,000 l/h (1600 US gal./h).

1652.790

10.60 £

Union for hose, diam.

9x12mm (.35 x .47 in.)
1278.460

6.50 £

Y branch

Y Branch With flow adjustment for
hose, inside diameter 6mm (.23 in.)
0390.460

4.10 £

Reducing adaptor for hose

For hose inside diameters 4
and 9mm (.15 and .35 in.)
0240.484

1.00 £

Glue-in nipple for hose,
diam. 9mm (.35 in.)
0312.344

1.00 £

Union for hose, diam.

6x9mm (.23 x .35 in.)
0390.040

0.80 £

Glue-in nipple for hose,
diam. 4x6mm (.15x.23 in.)

7070.012

1.00 £

Glue-in nipple 30° for hose,
diam. 4x6mm (.15 x .23 in.)

7070.015

1.00 £

Turbelle® Holder accessories

⑨ Turbelle® holder

Also for electrodes, heaters, et cetera.

3000.250

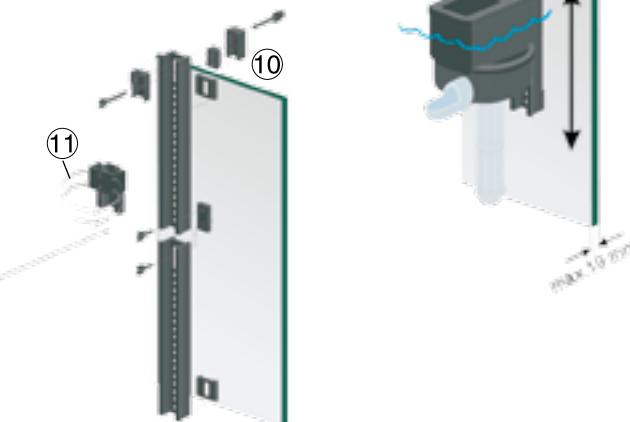
7.90 £

⑩ Holding device extension

For existing holding devices, enables other fastening variants, such as holder extension (extension of the perforated rail by 20cm (7.87 in.)), glass top attachment with a width of 4 to 15cm (1.57 to 5.9 in.), adhesive attachment and double attachment.

3000.260

9.80 £



⑪ Cable fastener

Length: 203mm (7.9 in.), width: 2.5mm (.09 in.).
100 units, black, UV stabilised.

3000.245

12.40 £

⑫ Holding bracket

For universal holding device permits TUNZE® holding rail to be fitted to vertical glass panes without the use of the usual clamp holders.

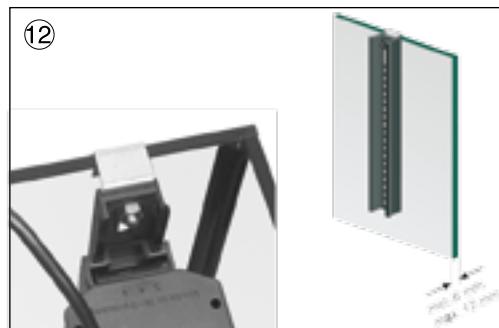
3000.280

2.30 £

⑬ Mounting clamp

0102.450

8.20 £



TUNZE magnet holder

Patented holder used to fit all Comline components and elder Turbelle® pumps, encapsulated construction, resistant to corrosion, with elastic buffer; dimensions: L112 x W15 x H103mm (L4.4 x W.59 x H4.0 in.).

Magnet holder

Up to a glass thickness
of 12mm (3/8").

6080.500

46.30 £

Magnet holder.

Up to a glass thickness
of 19mm (3/4").

6200.500

65.30 £

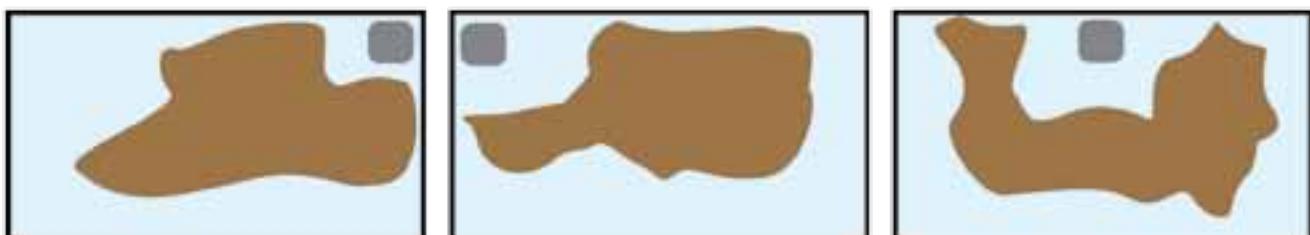


The new Comline® opens the way for compact aquarium components for internal operation, ultra-functional, sophisticated, with clearly defined lines.

The Comline® is a multi-functional product line: Surface and substrate zone intake, high flow propeller pump filter, flash protein skimming or wave movement, the system creates a natural environment in the aquarium with a compact footprint. The goal more performance from less space. Comline® components meet these requirements and the visual harmony of the aquarium is maintained. It is no longer necessary to hide technical equipment in the aquarium; instead, it forms an integral part of it. The system is highly effective; all organic pollutants are removed from the environment directly, while the path the water has to cover is short and direct. The risk of leakage is almost zero. The 100% efficient technology enables reduction of the volume of the internal equipment significantly at minimum energy loss.



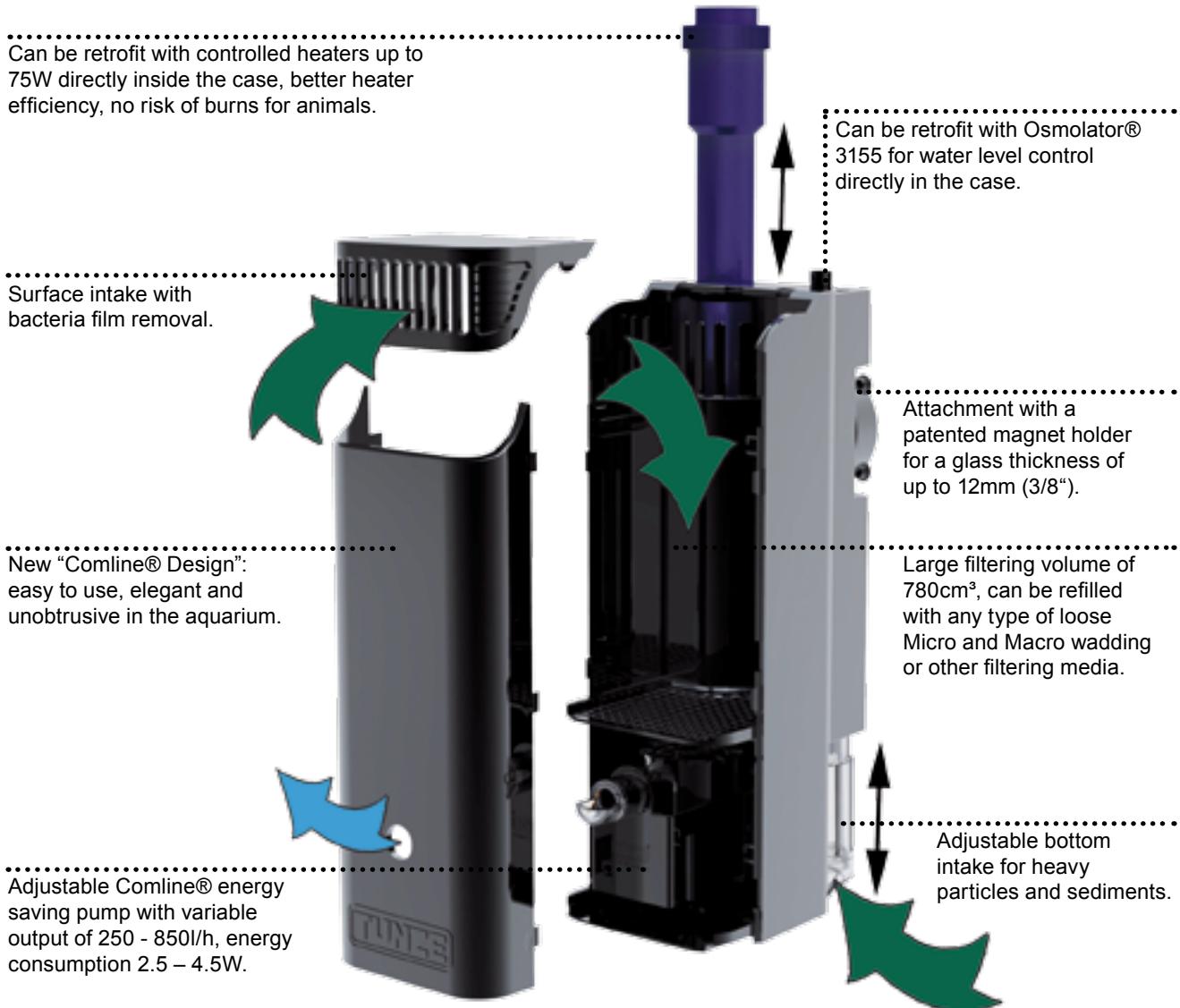
Aquarium arrangement examples



Comline® Filter 3162

The Comline® Filter 3162 is an internal fresh and saltwater filter for 60 to 400 litres (15 to 105 USgal.), depending on tank load, with bottom and surface intake, variable output of 250 - 850l/h (70 - 225 USgal./h), patented Magnet Holder up to a pane thickness of 12mm (3/8"). It can be upgraded with controlled heaters up to 75W, TUNZE® Osmolator and other Magnet Holders.

The Comline® Filter 3162 is 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 litres (15 to 105 USgal.), depending on tank load, variable pump output of 250 to 850l/h (70 to 225 US gal./h), 2.5 – 4.5W, 230V/50Hz (115V/ 60Hz), dimensions: L 110 x W 90 x H 255mm (L 4.3 x W 3.5 x H 10 in.), max. immersion depth approx. 230mm (9.1 in.), fixed by means of Magnet Holder up to a pane thickness of 12mm (3/8").

3162.000

57.60 £



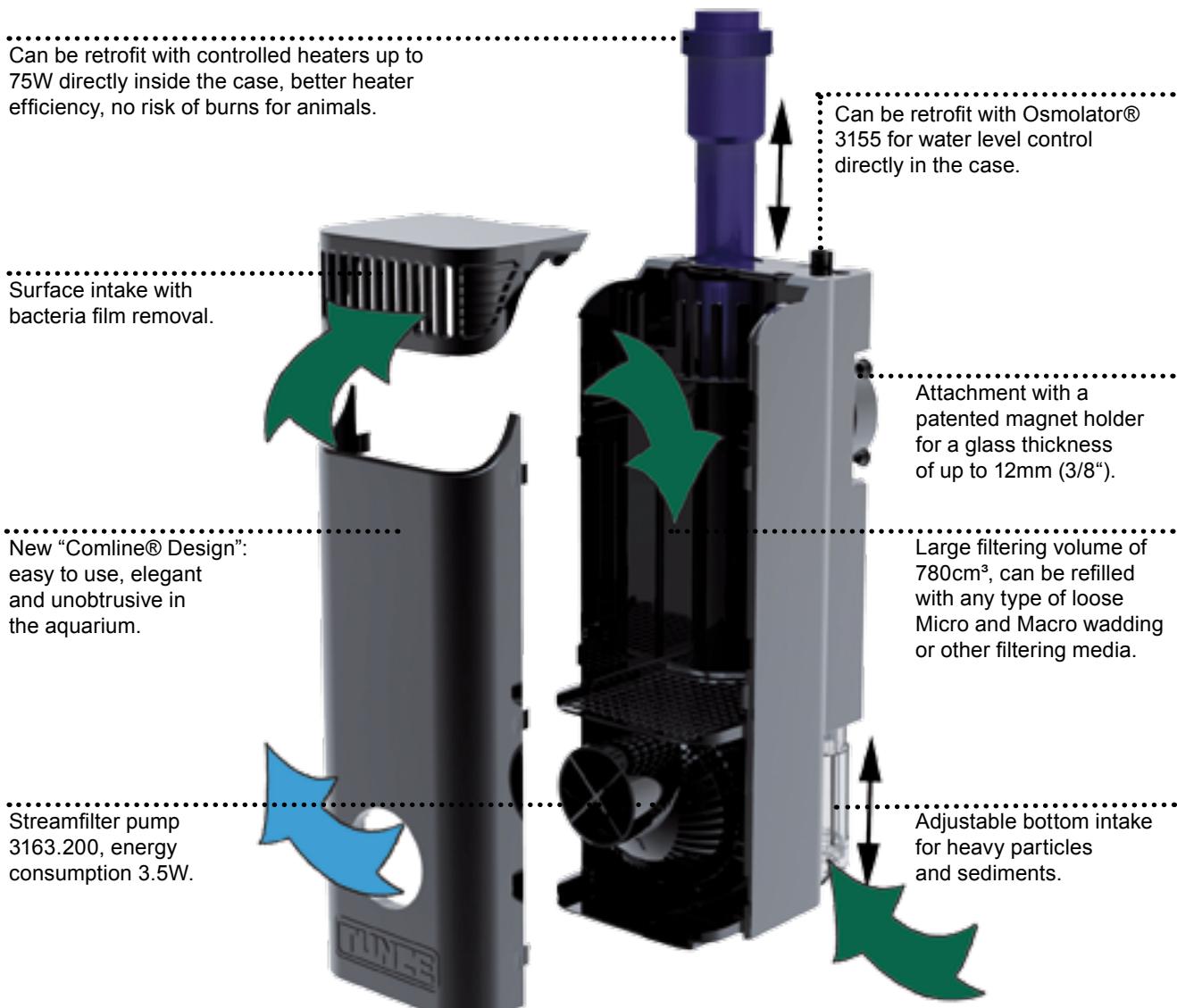
Accessories (order separately)

Micro Wadding, 60g (2.1oz.)	0872.010	3.20 £
Macro Wadding, 250g (8.8oz.)	0873.010	5.20 £
NanoChem 300ml (10oz.)	0950.000	15.00 £
Filter carbon	0870.901	5.60 £
Quickphos 750 ml (25 oz.)	0910.000	18.90 £
Silphos 750 ml (25.4 oz.)	0920.000	31.20 £
Zeolite 750 ml (25 oz.)	0930.000	13.00 £
Filter fleece	3162.200	4.40 £
Woven carbon filter medium	3162.300	5.40 £

Comline® Streamfilter 3163

The Comline® Streamfilter 3163 is an internal fresh and saltwater filter with propeller pump for filtering and current production, from 60 to 400 litres (15 - 105 USgal.), depending on tank load, with bottom and surface intake, 1,800l/h (475 USgal./h) Turbelle® nanostream® and patented Magnet Holder up to a pane thickness of 12mm (3/8"). It can be upgraded with controlled heaters up to 75W, TUNZE® Osmolator and other Magnet Holders.

The Comline® Streamfilter 3163 is ready for installation, including filtering media and filter bags for activated carbon or other filtering media.



Comline® Streamfilter 3163
for fresh and sea water from 60 to 400 litres (15 to 105 USgal.), depending on tank load, pump output of 1,800l/h (475 US gal./h), 3,5W, 230V/50Hz (115V/ 60Hz), dimensions: L 110 x W 90 x H 255mm (L 4.3 x W 3.5 x H 10 in.), max. immersion depth approx. 230mm (9.1 in.), fixed by means of Magnet Holder up to a pane thickness of 12mm (3/8").

3163.000 67.30 £

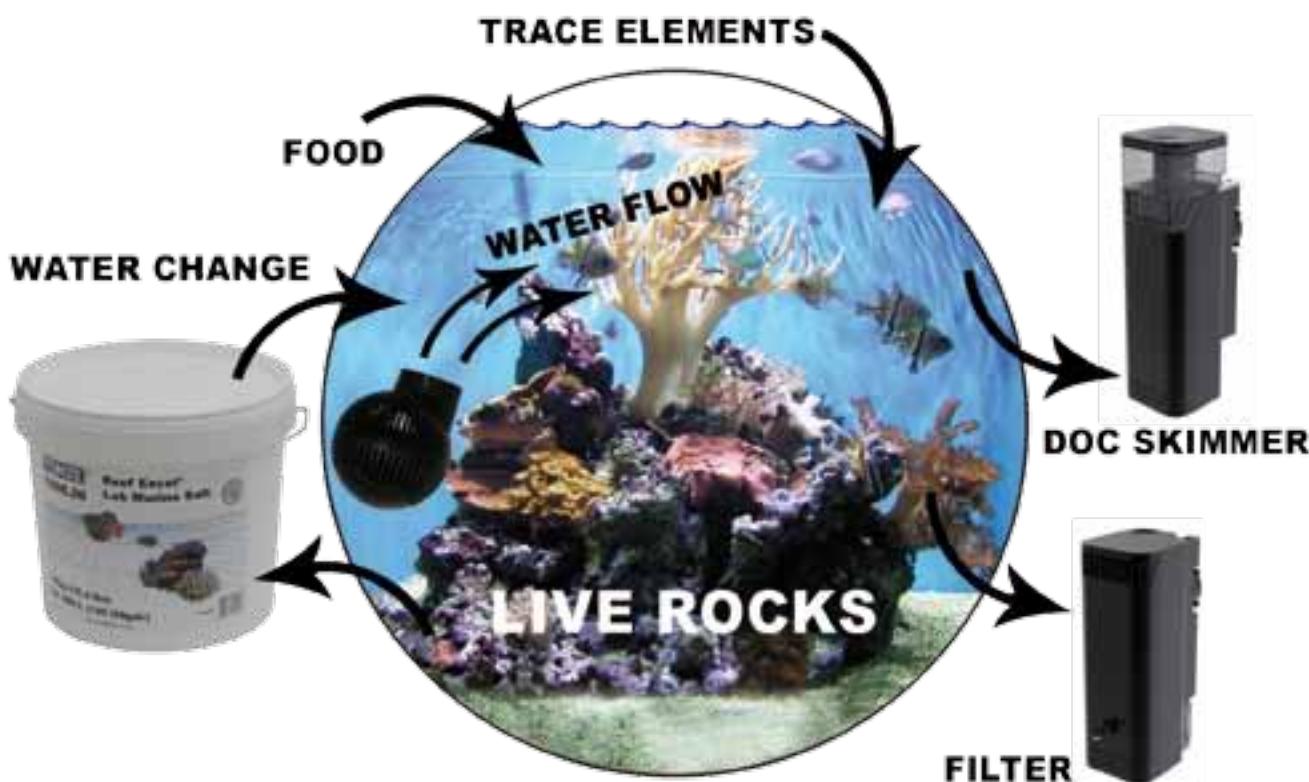


Accessories (order separately)

Micro Wadding, 60g (2.1oz.)	0872.010	3.20 £
Macro Wadding, 250g (8.8oz.)	0873.010	5.20 £
NanoChem 300ml (10oz.)	0950.000	15.00 £
Filter carbon	0870.901	5.60 £
Quickphos 750 ml (25 oz.)	0910.000	18.90 £
Silphos 750 ml (25.4 oz.)	0920.000	31.20 £
Zeolite 750 ml (25 oz.)	0930.000	13.00 £
Filter fleece	3162.200	4.40 £
Woven carbon filter medium	3162.300	5.40 £

Comline® Reefpack 250

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).



Water change with Comline® Reefpack 250:

Regular water changes are standard practice for maintaining any aquarium. The high efficiency of the Reefpack 250 reduces this need to a minimum as the filtration system is capable of maintaining a very low nutrient level on its own.

Comline® Reefpack 250

The Comline® Reefpack 250 features an optimum combination of technical filter components for seawater biotopes. It is designed to maintain near to natural conditions in sensitive seawater aquariums from 60 to 250 litres (15 to 65 USgal.).



The Comline®nano Reefpack 250 in detail:

Mechanical and chemical filtration with Comline® filter 3162, refillable with any type of filter medium.

Surface intake for removal of bacteria film, ground intake for heavy particles and sediments.

Loop current in aquarium by energy saving pump with variable performance from 250 to 850l/h (70 to 250 USgal./h).

Skimming with Comline® DOC Skimmer 9004, surface intake and high performance.

Storage tank 5002.10 with a volume of 13 litres (3.4 USgal.), serves as reservoir for refill water.

Energy consumption of only 8.5W for all components, 230V/50Hz (115V/60Hz).

Supplied ready for installation, including patented Magnet Holder up to a pane thickness of 12mm (3/8"), storage tank and filter cotton. Dimensions including skimmer cup: L110 x W180 x H305mm (L4.3 x W7.1 x H12 in.).

0250.000

164.60 £

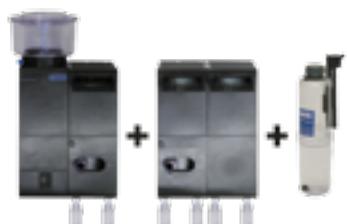
Comline Extensions

Since 1992, the extensive Comline has been known as a broad product range of components for aquariums with more than 250 liters (66 US gal.). As usual, it is very easy to operate and only requires electrical power to perform its work. There is no energy loss in long pipes or in a high water column, since the hydraulic routes are short and direct, thus reducing the risk of flooding. The Comline is standardly equipped with a Turbelle® e-jet and a Magnet Holder. The Comline Reefpack 505 and Riverpack 605 are modular solutions for seawater and fresh-water biotopes, which are ideally suited for an expansion with other Comline components.



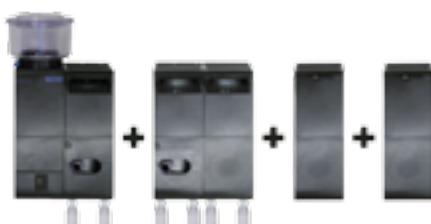
For hard coral biotope tanks up to 500L (135 USgal.):
Reefpack 505 extended by automatic calcium dispenser 3170.

3170.000 247.20 £



For soft coral tanks up to 800L (210 USgal.):
Reefpack 505 extended by Double Filter 3167.50 and Calcium Dispenser.

3167.500 187.70 £
5074.000 82.60 £



For marine fish tanks up to 800L (210 USgal.):
Riverpack 505 extended by two Bio-Hydro-Reactors 3179, Connection 3178.71, and Double Filter 3167.50.

3167.500 187.70 £
3178.710 9.80 £
3179.000 101.80 £
3179.000 101.80 £



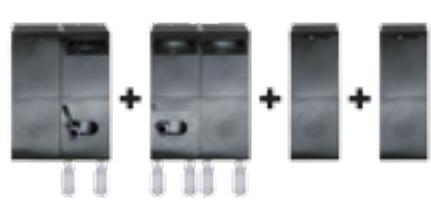
For Amazon tanks up to 1,000L (265 USgal.):
Riverpack 605 extended by two Bio-Hydro-Reactors 3179, Connection 3178.71, and Filter 3166.50.

3166.500 124.20 £
3179.000 101.80 £
3178.710 9.80 £



For Cichlidae tanks up to 1,000L (265 USgal.):
Riverpack 605 extended by Double Filter 3167.50.

3167.500 187.70 £



For Cichlidae tanks up to 1,500L (400 USgal.):
Riverpack 605 extended by two Bio-Hydro-Reactors 3179, Connection 3178.71, and Double Filter 3167.50.

3167.500 187.70 £
3178.710 9.80 £
3179.000 101.80 £
3179.000 101.80 £

We will be happy to design a system to your needs: info.english@tunze.com.

Comline Reefpack

Reefpack 505

The compact internal filter system Comline Reefpack 505 has been developed especially for mechanical filtration of marine aquariums of 200 to 500 litres (50 to 135 USgal.) at a low consumption of energy. It is ready-to-mount with magnet holder and storage container finding enough space in almost every aquarium. The system consists of a DOC Skimmer 9011 with an air output of 650l/h (170 USgal./h), a mechanical quick-run filter fitted with Turbelle® e-jet 1605 and Osmolator 3155. Comline Reefpack 505 ensures direct removal of dissolved organic compounds and suspended detritus from the aquarium without a bio filter, and thus is never in competition with the bio-dynamics in the aquarium biotope.

Details:

SKIMMER: Comline DOC Skimmer 9011 together with Comline Filter 3166.50 in one unit.

FILTER: Comline Filter 3166 combines bottom and surface suction with modern cartridge technology.

WATER CIRCULATION: Turbelle® e-jet 1605 with 1,600l/h (420 USgal./h) integrated in the filter.

WATER LEVEL CONTROL: Osmolator 3155 integrated in the filter plus storage tank 5002.25 with a volume of 27 litres (7.1 USgal.).

HOLDING DEVICE: Magnet Holder 6200.50 up to a glass thickness of 15mm (1/2").

POWER CONSUMPTION: Only 34W per hour, 230V/50Hz (115V/60Hz).

DELIVERY CONDITION: Completely ready for mounting with holding device, storage tank and filter cartridges. Dimensions of the skimmer cup: L225 x W113 x H418mm (L8.8 x W4.4 x H16.4 in.).

0505.000

496.00 £



Filter change in less than a minute



Noiseless powerful skimmer



Surface suction



Including Osmolator with optical sensor



Bottom suction



Including storage container and metering pump



Water circulation by Turbelle® e-jet 1605



Includes Magnet Holder

Accessories (order separately)

Comline support

Universal holder for a Comline element up to a glass thickness of up to 39mm (1.5").

3166.250

12.70 £



Comline Riverpack

Riverpack 605.

The compact internal filter system Comline Riverpack 605 has been developed especially for fresh-water aquariums from 200 to 600 litres (52 to 158 USgal.). It is ready-to-mount with magnet holder and storage container finding enough space in almost every aquarium. It consists of a mechanical quick-run filter fitted with Turbelle® e-jet 1605, Osmolator 3155, Bio-Hydro-Reactor 3179 and a fill of Granovit. Comline Riverpack 605 ensures direct removal of pollution from the aquarium water through an efficient quick-run filter, complemented with biological oxidation and reduction to permit a breakdown of nitrate, enabling stable and perfect water values.



Details:

FILTRATION: Comline Filter 3166 combines bottom and surface suction with modern cartridge technology. The filter cartridge can be washed, but the system also comes with five spare cartridges.

BIO HYDRO REACTOR: Part of the purified water is diverted from the quick-run filter and is irrigated over the two-zone Bio-Hydro-Reactor 3179 with a fill of Granovit. Thus nitrogenous waste, such as ammonia, nitrite and nitrate, are processed without any special effort. Used as a hydroponics reactor, it also relieves the aquarium water, which is especially important when keeping Cichlidae, for example.

WATER CIRCULATION: Turbelle® e-jet 1605 with 1,600l/h (422.7 USgal./h) integrated in the filter.

WATER LEVEL CONTROL: Osmolator 3155 integrated in the filter plus Storage Tank 5002.25 with a volume of 27 litres (7.1 USgal.).

HOLDING DEVICE: Magnet Holder 6200.50 up to a glass thickness of 15mm (1/2").

POWER CONSUMPTION: Only 12W per hour, 230V/50Hz (115V/60Hz).

DELIVERY CONDITION: Completely ready for mounting with holding device, storage tank and filter cartridges. Dimensions: L225 x W135 x H300mm (L8.8 x W5.3 x H11.8 in.).

0605.000

286.50 £



Filter change in less than a minute



Integrated to reactor



Surface suction



Including Osmolator with optical sensor



Bottom suction



Including storage container and metering pump



Water circulation by Turbelle® e-jet 1605



Includes Magnet Holder



Accessories (order separately)

Comline support

Universal holder for a Comline element up to a glass thickness of up to 39mm (1.5").

3166.250

12.70 £



Comline Bio-Hydro-Reactor



Comline Bio-Hydro-Reactor 3179 is a two-stage reactor (oxidation / reduction) provided with a magnet holder for attachment to glass panes up to a thickness of 12mm (3/8"). The unit contains a fill of highly porous GRANOVIT granulate (highest biological degradation activity 300m²/l), and is constantly supplied with a small volume of the filtered water from Comline Quick-Run Filter 3166.50/3167.50. For this reason a TUNZE® bio-hydro-reactor does not need any maintenance.

The aquarium water enriched with (air) oxygen causes an oxidation zone in the GRANOVIT granulate. Ammonia and nitrite are degraded here.

A reduction zone is produced in the medium area of the granulate, in which the nitrate is degraded. On account of the fine pores, very high biological degradation activities are possible.

In marine biotopes Comline Bio-Hydro-Reactor 3179 has a similar biological effect as highly porous live rock (approx. 10 kg (22 lbs.)).

Bio-hydro-reactor

Dimensions: L125 x W113 x H300mm (L4.9 x W4.4 x H11.8 in.).

Immersion depth: 150 to 290mm (5.9 to 11.4 in.).

Cleaning performance:

up to 500 L (135 USgal.) of fresh or salt water.

Magnet holder up to a glass thickness of 12mm (3/8").

3179.000

101.80 £

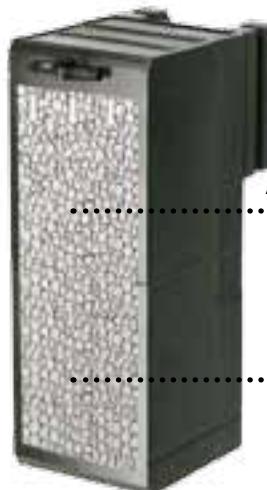


Suitable bio connection for Filter 3166.50 / 3167.50 and Turbelle ® e-jet to be ordered separately:

1005 -> Article No. 1060.71

1605 -> Article No. 3178.71

3005 -> Article No. 3178.71



A - Oxydation

B - Reduction

Comline Filter

Compact and comfortable, Comline Filter 3166.50 and Double Filter 3167.50 are mechanical quick-run filters supplied complete with quick-change filter cartridge, Turbelle® e-jet and magnet holder for attachment. The Comline filter can remove bottom as well as surface water. Instead of the installed Filter Cartridges 800.01, activated carbon with acrylic wadding can be used in combination with Cartridge 800.03, Refillable Cartridge 870/871 for carbon, Quickphos, Silphos or loose wadding as well as Cartridge Core 800.14 with Cartridge Mat 800.22.

All Comline filters can be retrofitted with Osmolator 3155 for perfect surface suction as well as the required compensation of evaporation.



Filter change in less than a minute



Surface suction



Bottom suction



Includes Magnet Holder



Includes Turbelle® e-jet



Comline filter

For aquariums from 200 to 600 litres
(50 to 160 USgal.)

Filter performance: 1,650l/h (420 USgal./h)

Energy consumption: 11W

Voltage / frequency: 230V/50Hz (115V/60Hz)

Cable length: 2m (78.7 in.)

Dimensions: L113 x W135 x H300mm

(L4.4 x W5.3 x H11.8 in.)

Magnet holder up to a glass thickness of 15mm (1/2")

3166.500

124.20 £

Comline filter

Without pump suitable for all Turbelle® powerhead / e-jet

Dimensions: L113 x W135 x H300mm (L4.4 x W5.3 x H11.8 in.)

Maximum immersion depth: approx. 280mm (11 in.)

Magnet holder up to a glass thickness of 15mm (1/2")

Filtration capacity for aquariums from 100 to 700 litres (25 to 200 USgal.)
of fresh water or 100 to 500 litres (25 to 135 USgal.) of seawater

3166.000

101.80 £

Comline Filter

Comline Double Filter 3167.50 consists of two chambers as a single unit and a pump. This filter is especially suitable for larger tanks, with a pumping capacity of 3,100l/h (830 USgal./h).

Comline double filter

For aquariums from 200 to 1,000L (50 to 265 USgal.)

Filter performance: 3,100l/h (830 USgal./h)

Energy consumption: 23W

Voltage / frequency: 230V/50Hz (115V/60Hz)

Cable length: 2m (78.7 in.)

Dimensions: L225 x W135 x H300mm

(L8.8 x W5.3 x H11.8 in.)

Two magnet holders up to a glass thickness of 15mm (1/2")

3167.500

187.70 £



Comline double filter

Without pump suitable for all Turbelle® powerhead / e-jet.

Dimensions: L225 x W135 x H300mm (L8.8 x W5.3 x H11.8 in.), Maximum immersion depth: approx. 280mm (11 in.).

Two magnet holders up to a glass thickness of 15mm (1/2"),

Filtration capacity for aquariums from 400 to 1,200 litres (105.6 to 317 USgal.) of fresh water or 400 to 800 litres (105 to 210 USgal.) of seawater.

3167.000

153.00 £



Accessories (order separately)

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, metering pump, hose, magnet holder for sensors.

3155.000



161.70 £

Filter cartridges, 135mm (5.3 in.)

Fitted with best aquarium wadding, can be washed two to five times.

0800.010

9.60 £



Cartridge 870

for aquarium carbon or fine wadding.

0870.000

17.80 £



Filter carbon

700ml packet (23.6 fl.oz.), pH neutral, highly activated.

0870.901

5.60 £



Foam cartridge and cartridge filter mat

A filter cartridge made of aquarium sponge wrapped in wadding fleece, diam. 80 x 145mm (3.1 x 5.7 in.).

0800.140

3.20 £

0800.220

2.20 £



Comline support

Universal holder for a Comline element up to a glass thickness of up to 39mm (1.5").

3166.250

12.70 £



Cartridge 871

for medium-sized and coarse aquarium wadding.

0871.000

17.70 £

Micro Wadding, 60g (2.1oz.)

For very fine filtration.

0872.010

3.20 £



Macro Wadding, 250g (8.8oz.)

For fine to coarse suspended particles.

0873.010

5.20 £

Comline Calcium Automat

Marine aquariums with soft corals, stone corals, snails or calcareous algae need regular supplementation of calcium and bicarbonate ions. In 1989, TUNZE® Aquarientechnik was the first manufacturer to build a CO₂ controlled calcium reactor. A pump is used to pass the water enriched with carbon dioxide through the Calcium Carbonate. The carbon dioxide reacts with water to produce carbonic acid and dissolves the calcium carbonate. The hardened water leaves the reactor through a control valve.

Today's generation of automatic calcium reactors combine high efficiency and a compact size, consisting of a reactor with pump and the Comline housing. Calcium Automat 3170 needs no additional supply pump, and is operational with a minimum water level of 60mm (2.3 in.). It is suitable for operation in the aquarium as well as in a cabinet filter. The set-up:

Transparent reactor housing with pump and water distribution in one unit.

Granulate content: 1,200ml (42.2 fl. oz.).

Comline housing for attachment and light protection for direct operation in the aquarium.

Dissolution of the CO₂ in the pump housing and recirculation of the undissolved gases provide an especially economical CO₂ consumption.

Easy refill of the granulate by a screw cover.

Adjustment of the drip rate by means of a precise control valve.

Can be used as a "stand-alone" solution.

Silent operation.

For complete operational safety, we recommend the use of a CO₂ controller 7074/2 fitted with a pH meter and CO₂ valve. In this case the pH meter will control the infeed of CO₂ in accordance with the setpoint value entered. The danger of excessively low pH values during the night is averted.

Delivery condition: Ready for mounting with hardness granulate, bubble counter, pump and holding device similar to Comline filter holder.



Comline Calcium Automat

For aquariums from 200 to 1,000L
(50 to 265 USgal.) of salt water

Energy consumption: 8W

Voltage / frequency: 230V/50Hz (115V/60Hz)

Cable length: 2m (78.7 in.)

Immersion depth: approx. 60 to 280mm (2.3 to 11.0 in.)

Filling volume: 1,200ml (40.5 fl.oz.)

Delivery: up to 1.9l/h (0.5 USgal./h)

Dimensions: L113 x W113 x H300mm
(L4.4 x W4.4 x H11.8 in.)

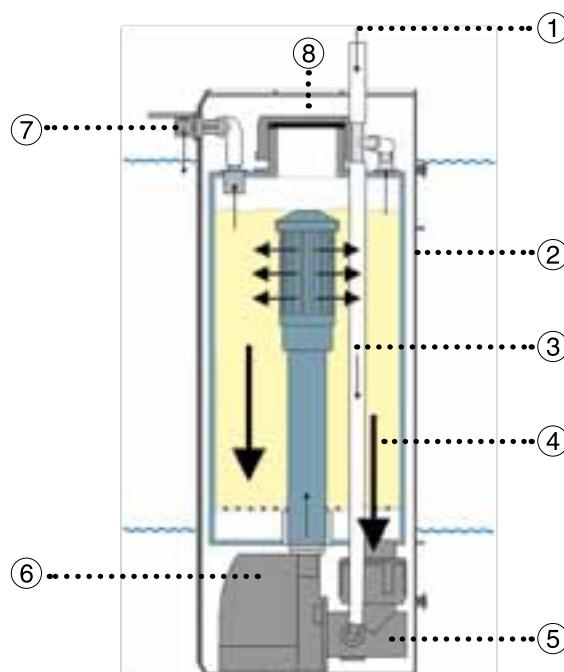
Magnet holder up to a glass thickness of 12mm (3/8")

3170.000

247.20 £



With SILENCE pump



(1) CO₂ inlet

(2) Comline housing serves as a protection against light

(3) Recirculation of the undissolved gases

(4) Transparent reactor with high water flow rate; easy to clean

(5) Water induction

(6) Pump 80 l/h (211.3 USgal./h)

(7) Water outlet through precision cock

(8) Screw cap, easy to open

Comline Calcium Automat



Calcium Automat Extension

The Automatic Calcium Dispenser 3170 can be supplemented with a second reaction stage. A Comline housing is fitted with an additional granulate chamber. They can be placed next to each other and connected with a hose.

- It increases the efficiency by about 20 per cent
- It neutralises the carbon dioxide at the outlet of the reactor
- It increases the granulate volume
- It permits a higher throughput of water

For aquariums from 200 to 1,000L (50 to 265 USgal.) of seawater

Immersion depth: approx. 60 to 280mm (2.3 to 11.0 in.)

Filling volume: approx. 2,500ml (.66 USgal.)

Dimensions: L113 x W135 x H300mm (L4.4 x W5.3 x H11.8 in.)

Magnet holder up to a glass thickness of 12mm (3/8")

3170.500

101.80 £



Accessories (order separately)

① pH/CO2 controller set

7074/2 **355.40 £**

② Pressure reducer

7077/3 **82.40 £**

CO2 cylinder - 1.5 kg (3.3 lbs.)

7079.150 **126.00 £**

CO2 cylinder - 2.0 kg (4.4 lbs.)

7079.200 **131.10 £**

CO2 non-return valve

7070.010 **10.80 £**

③ Reef Excel® Lab carbonate test

Carbonate hardness Titration Test (TH) for fresh and sea water, approx. 100 tests.

7014/2 **52.40 £**

④ Reef Excel® Lab calcium test

Colorimetric determination of calcium for fresh and sea water, approx. 200 tests.

7015/2 **69.70 £**

Calcium carbonate is 99% pure CaCO₃ with a grain size of 4 to 6mm (.15 to .23 in). It is ideally suited for use in Tunze Calcium Automat 3170 and other makes of Calcium reactor for buffering the pH value as well as increasing the calcium content.

⑤ Calcium carbonate

700ml (23.6 oz.) box.

0880.901 **3.50 £**

Calcium carbonate

10 x 700ml (23.6 oz.) packet.

0880.900 **33.90 £**

⑤ Calcium carbonate

5L (1.3 USgal.) bucket.

0880.950 **20.40 £**

Table: Calcium Automat 3170 / Extension 3170.50

Water output	0,5 CO ₂ bubbles / s		1 CO ₂ bubbles / s		2 CO ₂ bubbles / s	
	KH output 3170	KH output 3170.50	KH output 3170	KH output 3170.50	KH output 3170	KH output 3170.50
1 drops/s = 8ml/Min	24	26	34	42	42	54
2 drops/s = 16ml/Min	22	26	26	36	38	52
3 drops/s = 24ml/Min	20	24	24	36	34	50
4 drops/s = 32ml/Min	18	22	22	34	30	46

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

Due 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.



Comline® DOC Skimmer / DOC Skimmer / Master DOC Skimmer

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 per cent reduction

A medium organic sensitivity is usually found in mixed aquariums inhabited with leather and stoney corals (LPS). Filter-feeding animals, sponges, et cetera, are found there frequently as well. For these aquariums, a reduction of about 40 per cent of the skimming capacity is calculated. Thus, a DOC skimmer for 1,000 litres (265 USgal.) should be used for a tank with a maximum content of 600 litres (158 USgal.).

Increased sensitivity, 60 per cent 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", thus a model for 1,000 litres (265 USgal.) should be used for a tank with a maximum content of 400 litres (105 USgal.).

High sensitivity and high load. 70 per cent reduction

Hard coral aquariums (SPS) with a high population of fish require an extremely high skimming capacity. The skimmer has to ensure the degree of purity for hard corals in case of above-average fish stock; as a "stand-alone solution" an especially high performance is required. Thus, a DOC skimmer for 1,000 litres (265 USgal.) should be used for a tank with a maximum content of 300 litres (79 USgal.).

Nano DOC Skimmer / Classic DOC Skimmer

These skimmers operate on the horizontal rotation principle; the skimmer uses an osmotic skimming process, and for this reason coarser particles the size of plankton are not removed. This operational method is very gentle; the extremely flat construction makes it the smallest skimmer in its performance class.

Low sensitivity, no reductions

In leather coral aquariums with long-polyp corals and anemones, for example, the level of dissolved organic matter may be higher, sometimes it may even vital. In this type of aquarium, the recommended aquarium volume can be used without reduction.

High sensitivity for breeding tanks with plankton, 70 per cent 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. Thus, a Classic DOC skimmer for 1,000 litres (265 USgal.) should be used for a tank with a maximum content of 300 litres (79 USgal.).

Comline® DOC Skimmer

The Comline® DOC Skimmer 9004 is designed for use in seawater up to 250 liters (66 US gal.). It operates according to the Tunze® Flash Skimming Principle and acquires the water through an efficient surface suction with a surface film removal, and can therefore also be used as a „stand-alone“ solution in the aquarium. The TUNZE® Foamer generates large volumes of fine air bubbles with a diameter of between 0.1 to 0.3 mm (.0039 to .011 in.) and is especially quiet during the operation. The Comline® DOC Skimmer with a magnet holder for glass up to a thickness of 12 mm (1/2") is supplied installation-ready.

Skimmer cup, 0.2L
(.05 USgal.) volume, also accommodates the foam reactor, easy to remove.

Surface intake with bacteria film removal.

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

Bubble-free outgoing water.

Air flow regulation and silencer for an exceptionally quiet operation.

Attachment with a patented magnet holder for a glass thickness of up to 12mm (3/8").

Intermediate chamber with patented anti-overfoaming system.



TUNZE® Foamer 9004.040, high air output and low energy consumption.



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 0.1 and .3mm. 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.



DOC Skimmer 9004

Recommended, depending on tank load, from 60 to 250 litres (15 to 65 USgal.) of sea water. Immersion depth: approx. 225mm to 245mm (8.86 to 9.65 in.), skimmer cup volume: 0.2L (.52 in.), air output: approx. 150/l/h (40 USgal./h), 4W, 230V/50Hz (115V/60Hz), dimensions: L110 x W90 x H305mm (L4.3 x W3.5 x H12 in.), fixed by means of Magnet Holder up to a pane thickness of 12mm (3/8").
9004.000 **118.30 £**

Accessories (order separately)

Filter fleece

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

3162.200

4.40 £



Comline DOC Skimmer

The model series of the Comline DOC skimmers has been developed for an effective and modern protein skimming process in marine biotopes from 200 to 2,000 litres (50 to 525 USgal.). They stand out for their compact dimensions at the same time ensuring a high foam cup capacity, and producing a very high throughput on account of their air capacity of 650 or 1,300l/h (170 or 340 USgal./h), for example, depending on the model. They can be placed directly in the aquarium or in cabinet systems with a variable water level.

Comline DOC Skimmer 9011 as internal skimmer



TUNZE® Hydrofoamer
This especially developed component consists of a high-performance centrifugal pump with a defined sense of rotation, directly coupled to an air diffuser nozzle. The Hydrofoamer generates large volumes of fine air bubbles with a diameter of between 0.1 to 0.4mm (.0039 to .015 in.).

Comline DOC Skimmer

All Comline DOC skimmers are prepared for a direct and discrete positioning in the aquarium ex factory, at an immersion depth between 240 and 290mm (9.5 to 11.4 in.). However, they can also be installed in aquarium cabinets with a variable height from 100 to 280mm (3.9 to 11.0 in.), whereas the supplied accessories must be implemented to create a constant internal water level. Depending on the model, the water circulation can reach a flow rate of 850l/h (224 USgal./h), 1,300l/h (340 USgal./h) or 2,600l/h (680 USgal./h), and the cartridge core on the outlet pipe ensures a bubble-free discharge. Skimmer cup and foam reactor form a single unit in all TUNZE® DOC skimmers: During every cleaning of the skimmer cup the reactor is also cleaned at the same time, therefore ensuring a very constant and efficient foam production. During the cleaning process, the Hydrofoamer remains operational and automatically executes the flushing of the jet and the air passage. Delivery form: Completely ready for installation with magnet holder and Hydrofoamer with Turbelle® e-jet pump.

DOC Skimmer 9006.

Recommended for aquariums up to 600 litres (155 USgal.) of seawater.
Dimensions: L125 x W113 x H378mm (L4.9xW4.4xH14.8 in.)

Voltage / frequency:
230V/50Hz (115V/60Hz)
Energy consumption: 12W
Water throughput: 850l/h (224 USgal./h)
Air capacity: 500l/h (132 USgal./h)
Skimmer cup volume: .4L (.10 USgal.)
Magnet holder up to a glass thickness of 12mm (3/8")
For operation in an aquarium cabinet, use DOC Skimmer Extension Set 9005.40 in addition!

9006.000



220.30 £

DOC Skimmer 9016.

Recommended for aquariums up to 1,600 litres (420 USgal.) of seawater.
Dimensions: L125 x W113 x H478mm (L4.9 x W4.4 x H18.8 in.)

Voltage / frequency:
230V/50Hz (115V/60Hz)
Energy consumption: 22W
Water throughput: 1,200l/h (317 USgal./h)
Air capacity: 650l/h (171 USgal./h)
Skimmer cup volume: .4L (.10 USgal.)
Magnet holder up to a glass thickness of 19mm (3/4"). Equipped with the accessories for internal and aquarium cabinet operation.

9016.000



375.30 £

DOC Skimmer 9011.

Recommended for aquariums up to 1,100 litres (290 USgal.) of seawater.
Dimensions: L125 x W113 x H418mm (L4.9 x W4.4 x H16.8 in.)
Voltage / frequency: 230V/50Hz (115V/60Hz)
Energy consumption: 22W
Water throughput: 1,200l/h (317 USgal./h)
Air capacity: 650l/h (171 USgal./h)
Skimmer cup volume: .7L (.18 USgal.)
Magnet holder up to a glass thickness of 12mm (3/8"). Equipped with the accessories for internal and aquarium cabinet operation.

9011.000



281.00 £

DOC Skimmer 9021.

Recommended for aquariums up to 2,100 litres (550 USgal.) of seawater.
Dimensions: L125 x W113 x H460mm (L4.9 x W4.4 x H18.1 in.)
Voltage / frequency: 230V/50Hz (115V/60Hz)
Energy consumption: 44W
Water throughput: 2,400l/h (634 USgal./h)
Air capacity: 1,300l/h (343 USgal./h)
Contained with two reactors with removal of foaming water. Delivery in Storage Container 5002.25 (can be used as skimmer tank), with 2 x 40cm (2 x 15.7 in.) drain hose, magnet holder up to a glass thickness of 19mm (3/4"), and accessories for the operation in aquarium cabinets. If the tank is to be situated far below the skimmer, we recommend 2 x 1075.2 accessories.

9021.000



440.40 £

Accessories (order separately)

Comline skimmer support
3130.250 **18.10 £**



DOC skimmer extension set

Contains all parts for the use of the Comline DOC Skimmer 9006 in aquarium cabinets.
9005.400 **41.70 £**



Cleaning set
0220.700 **51.30 £**



Foam extraction unit

Including reactor, to be used in DOC Skimmer 9011, 9016, 9211 and 9410. With 90 deg. angle and drain hose, diam. 40mm x 40cm (1.57 x 15.7 in.).
9020.140 **86.40 £**



Magnet holder.

Up to a glass thickness of 19mm (3/4").
6200.500 **65.30 £**



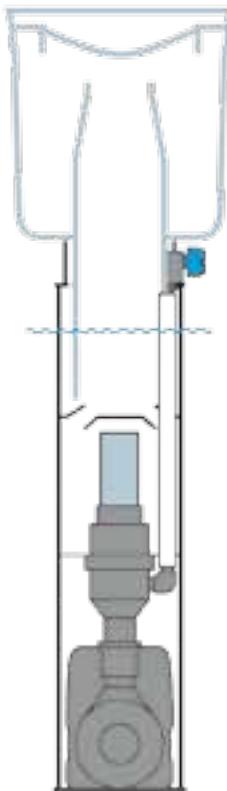
Outlet hose

Consisting of 2m (78.7 in.) special outlet hose, diam. 40mm (1.57 in.), with clamps and holder.
1075/2 **38.00 £**



Nano DOC Skimmer

The "Nano" model series has been designed for use in reef biotopes up to 200 litres (50 USgal.), and is gentle to plankton in operation. The DOC Skimmer 9002 removes up to 80 per cent of organic waste matter, such as protein and cellulose, from the aquarium water. Very little space is required in the aquarium, and installation and maintenance is very easy. Delivery condition: Ready for mounting with patented magnet holder up to a glass thickness of 12mm (3/8").



With SILENCE pump

Principle

By means of the water jet of the Silence pump and a high-performance Venturi, a fine pearly air mixture is produced which collects into an easy-to-clean skimmer cup through a newly developed reflection system. The protein-containing aquarium water diffuses into the skimmer through the opening in the bottom and on the rear, by utilizing passive diffusion, no living plankton is drawn in, thus it is particularly suitable for breeding tanks with living plankton.

DOC Skimmer 9002

Recommended for aquariums from 40 to 200 litres (10 to 50 USgal.) of salt water.

Dimensions: L125 x W55 x H338 mm
(L4.9 x W2.1 x H13.3 in.)

Immersion depth: approx. 180 to 220mm (7 to 8.6 in.)

230V/50Hz (115V/60Hz) 8W

Skimmer cup volume: .3 L (.079 USgal.)

Air capacity: 150l/h (40 USgal./h)

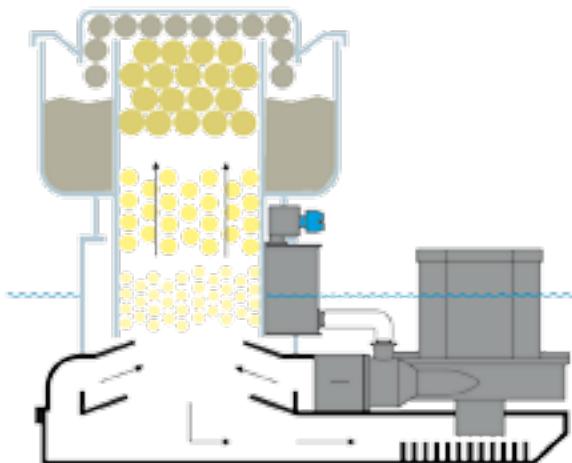
9002.000

103.00 £



Classic DOC skimmer

The foamers of the Classic DOC Skimmer line are based on the first-generation horizontal rotation principle, upgraded with the e-jet Hydrofoamer. Despite its small size, it has a high skimming performance and is particularly suitable for breeding tanks with live plankton. The DOC Skimmer classic can be placed easily and unobtrusively directly in the aquarium, the immersion depth is 60 to 90mm. They can also be installed in aquarium cabinets and tolerate water level variations of +/- 20mm without air output readjustment. In all TUNZE® DOC Skimmer classic models, the skimmer cup and foam reactor are accommodated in one unit. Supplied ready for installation with holder for vertical glass panes and horizontal glass supports up to 19mm.



General information

In 1963, TUNZE® developed the first series-produced protein skimmer with its own air production. In this rotating Venturi skimmer, the jet of a pressure pump is used to produce a constant fine mixture of air bubbles, which is collected in an easy-to-clean skimmer cup by means of an effective removal system. An integrated contact pipe is used to remove protein particles from the water. The protein from the aquarium then is drawn in automatically by means of molecular compensation pressures (diffusions). This TUNZE® invention of contact skimming makes sure that no living plankton is drawn into the pump circulation.



DOC Skimmer 9206.

For aquariums of up to 600 litres (155 USgal.) of seawater.
Dimensions: L280 x W157 x H205mm (L11 x W6.1 x H8.1 in.),
immersion depth: approx. 60 to 90mm (2.3 to 3.5 in.),
voltage / frequency: 230V/50Hz (115V/60Hz),
energy consumption: 12W, air capacity: 500l/h (132 USgal./h).

9206.000

220.30 £



DOC Skimmer 9211.

Recommended for aquariums up to 1,100 litres (290 USgal.) of seawater.
Dimensions: L280 x W157 x H235 mm (L11 x W6.1 x H9.2 in.),
immersion depth: approx. 60 to 90mm (2.3 to 3.5 in.),
voltage / frequency: 230V/50Hz (115V/60Hz),
energy consumption: 22W,
air capacity: 650l/h (171 USgal./h).

9211.000

279.00 £

Accessories (order separately)

Foam extraction unit

Including reactor, to be used in DOC Skimmer 9011, 9016, 9211 and 9410.
With 90 deg. angle and drain hose,
diam. 40mm x 40cm (1.57 x 15.7 in.).

9020.140

86.40 £



Outlet hose

Consisting of 2m (78.7 in.)
special outlet hose, diam.
40mm (1.57 in.), with
clamps and holder.

1075/2

38.00 £



TUNZE® 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 a power consumption of only 11W (15W), the new DOC Skimmer has equivalent performance to much larger skimmers consuming more than twice as much power. In addition, no settings are required; it is extremely silent; it is easy to operate and it is nice to look at.

DOC Skimmer 9410 in cabinet operation

Skimmer cup (diam. 160mm (6.2 in.)) with large capacity; also contains the foam reactor; can be removed easily.

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

The removable post-filter at the outlet of the skimmer permits perfect mechanical filtration through 300µm (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.

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.

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.

TUNZE® Hydrofoamer Silence 9410.04 is a pump specifically developed for protein skimmers. The Hydrofoamer generates large volumes of fine air bubbles with a diameter of between 0.1 to 0.3mm (.0039 to .011 in.). It has an energy consumption of only 11W (15W) at an air output of 600l/h (158 USgal./h) which places this air generator at the top of its product class. At a water flow of 900l/h (237 USgal./h), it is also used to supply the aquarium water to the skimmer.



DOC Skimmer 9410

Recommended for salt water aquariums up to 1,000 liters (265 USgal.).

Immersion depth of 140 to 240mm (5.5 to 9.5 in.), dimensions without post-filter: L250 x W180 x H415mm (L9.8 x W7.0 x H16.3 in.), 230V/50Hz, 11W, water flow rate: 900l/h, (115V/60Hz, 15W, water flow rate: (237.7 USgal./h), water throughput: 600l/h (158.5 USgal./h), skimmer cup volume: 0.7L (0.18 USgal.).

9410.000

265.50 £

Accessories (order separately)



Foam extraction unit

Including reactor, to be used in DOC Skimmer 9011, 9016, 9211 and 9410. With 90 deg. angle and drain hose, diam. 40mm x 40cm (1.57 x 15.7 in.).

9020.140

86.40 £



Post-filter bag

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

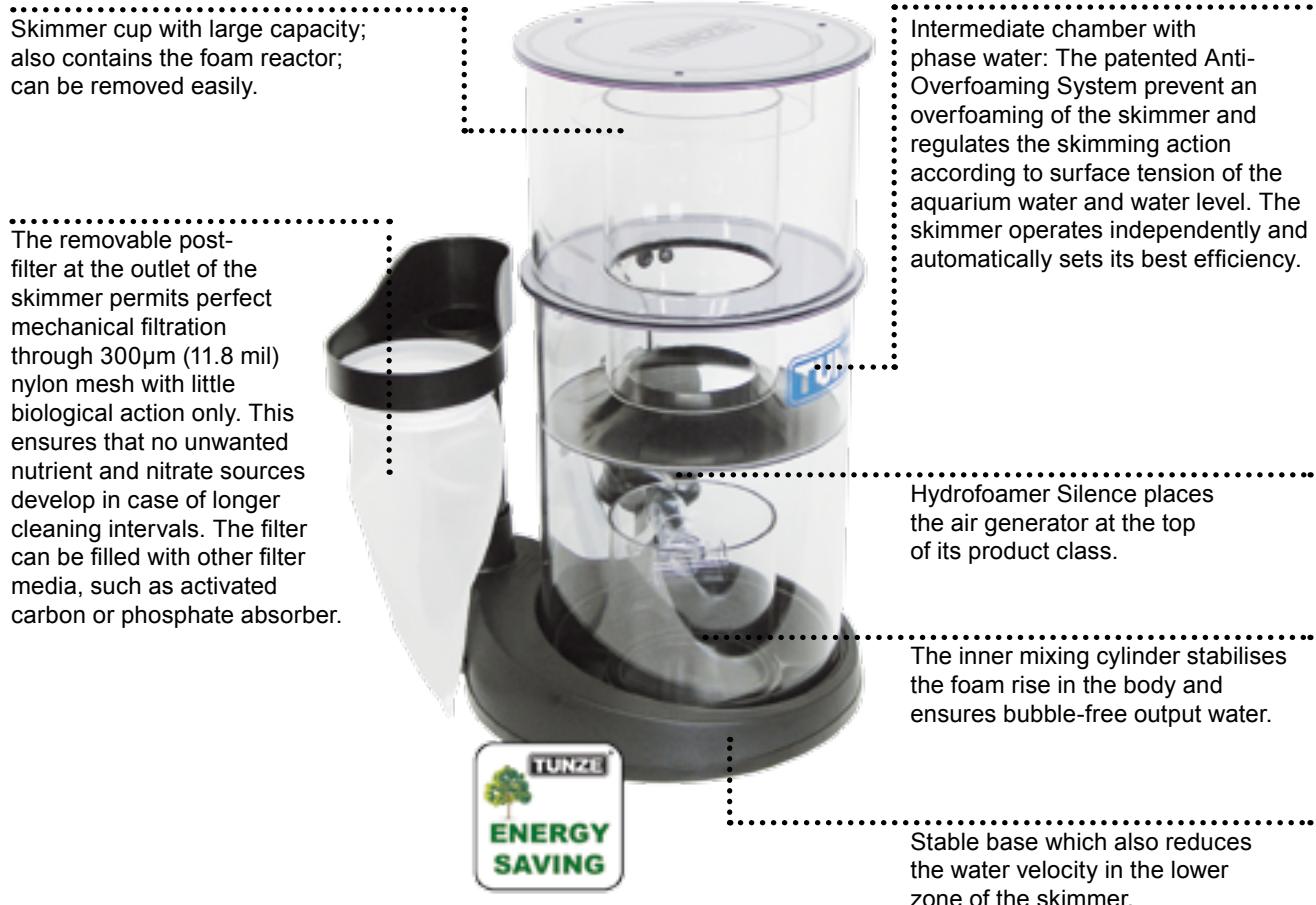
9410.200

12.20 £

TUNZE® DOC Skimmer

The DOC Skimmers 9415 and 9430 combine very compact design with high performance and are ideal for installation in aquarium cabinets. They feature TUNZE® Hydrofoamers 9420.04 or 9430.04 which ensure proper foam production and water circulation at the same time.

The Master DOC Skimmer model 9480 operates together with the TUNZE® Hydrofoamer 9420.04, which enables the water circulation to reach a throughput of 5,200 l/h. Delivery form: Ready to mount; dimensions with the cleaning accessories. Supplied ready for installation, including cleaning accessories.



"Anti-foaming system" in three steps:



Normal foam production: the foam rises evenly into the foam reactor.



Overfoaming A: Foam production increases due to the surface tension and pulls the bubbles out of the foam reactor.



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.

TUNZE® DOC Skimmer



DOC Skimmer 9415

Recommended for aquariums up to 1,500 litres (400 USgal.) of salt water.

Immersion depth from 100 to 200mm (3.9 to 7.9 in.) without setting.

Dimensions: L350 x W300 x H440mm (L13.8 x W11.8 x H17.3 in.).

230V/50Hz, 15W, water flow rate: 900l/h (237.8 USgal./h).

Air capacity: 1,000l/h (264.2 USgal./h);

skimmer cup volume: 2L (.52 USgal.).

9415.000

440.70 £



DOC Skimmer 9430

Recommended for aquariums up to 3,000 litres (800 USgal.) of salt water.

Immersion depth from 100mm (3.9 in.) to 200mm (7.9 in.) without setting.

Dimensions: L350 x W300 x H490mm (L13.8 x W11.8 x H19.3 in.).

230V/50Hz, 24W (115V/60Hz, 32W), water

flow rate: 1,500l/h (396.3 USgal./h),

Air capacity: 1,400l/h (369.8 USgal./h);

skimmer cup volume: 2L (.52 USgal.).

9430.000

505.10 £



Master DOC Skimmer 9480

Contains four Hydrofoamer Silence 9420.04, recommended for aquariums up to 8,000L (2,100 USgal.) of salt water.

Immersion depth of 160 to 370mm (6.2 to 14.5 in.),

dimensions: L530 x W500 x H700mm (L20.8 x W19.6

x H27.5 in.) , 230V/50Hz (115V/60Hz), 60W, water flow

rate: 5,200l/h (1,373 USgal./h); air capacity: 3,400l/h

(898 USgal./h), skimmer cup volume: 7L (1.8 USgal.).

9480.000

1,077.80 £

Hydrofoamer Silence

TUNZE® Hydrofoamers Silence are specially developed pumps for TUNZE® protein skimmers DOC Skimmer and Master DOC Skimmer, they can also be used as replacement needle wheel pumps on any suitable skimmer available on the market. They have a high air output at a very low power consumption and low operating noise. 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

Mains connection: 230V/50Hz (115V/60Hz), 2m (78.7 in.) cable.

Maximum air capacity: 600l/h (160 USgal./h) at a water flow rate of 900l/h (235 USgal./h).

Energy consumption: 11W (15W) at an air capacity of 600l/h (160 USgal./h).

Motor winding with protective thermostat.

Pump outlet with 3/4 in. BSP thread (NPT).

Pump housing with strainer and silencer.

Pump drive: Rotor with high-performance one-part magnet, with all-ceramic bearing.

Equipped with air regulation and silencer.

9410.040

123.20 £

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



Hydrofoamer Silence

Mains connection: 230V/50 Hz (115V/60 Hz), 2m (78.7 in.) cable.

Maximum air flow performance: 1,200l/h (317 USgal./h) at a water flow rate of 1,000l/h (264 USgal./h).

Power consumption: 15W with an air flow rate of 1,200l/h (317 USgal./h), motor with protective thermostat.

Pump outlet with 3/4 in. BSP thread (NPT).

Pump housing with strainer and silencer.

Pump drive: Rotor with high-performance one-part magnet, with a full-ceramic bearing.

Equipped with a coupling and silencer.

9420.040

152.00 £

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

Mains connection: 230V/50Hz (115V/60Hz), 2m cable (78.7 in.).

Maximum air flow performance: 1.600l/h (423 USgal./h) at a water flow rate of 2,000l/h (528 USgal./h).

Power consumption: 24W (32W) at an air capacity of 1,600l/h (423 USgal./h), motor with a protective thermostat.

Pump outlet with 3/4 in. BSP thread (NPT).

Pump housing with strainer and silencer.

Pump drive: Rotor with high-performance one-part magnet, with a full-ceramic bearing.

Equipped with a coupling and silencer

9430.040

180.90 £

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



TUNZE® Skimmer Kit

TUNZE® Skimmer Kit 15 - aquarium cabinet filter which ensures direct removal of detritus and dissolved organics from the aquarium water circuit by means of DOC Skimmer 9410 fitted with a post-filter. It has been designed specifically for reef tanks from 200 to 500 litres (50 to 135 USgal.), and require minimal preparation, such as fitting the inlet and outlet connections. Their dimensions permit easy integration in standard furniture or in special designs.

Outlet and inlet are situated on the same side.

Cover prevents humidity in the aquarium cabinet.

The removable post-filter at the outlet of the skimmer permits a perfect mechanical filtration through 300 µm acrylic wadding fibers with only minor biological action. This ensures that no unwanted nutrient and nitrate deposits can develop due to longer cleaning intervals. The filter can be filled with other filter media, such as activated carbon or phosphate absorber.



Integrated water level regulator with optical sensor.
The control unit indicates all functions by light-emitting diodes and emits an acoustic warning in case of failures.

DOC Skimmer 9410 for aquariums up to 1,000 litres (265 USgal.).

Adjustable recirculation pump Silence 1073.020 (2,400 l/h, Hmax. 2 m) (630 US gal./h, 78.7 in.).



Compact glass container with a safety volume of 21 litres (5.5 USgal.); dimensions: L 320 x W 300 x H 460 mm (L 12.5 x W 11.8 x H 18.1 in.).



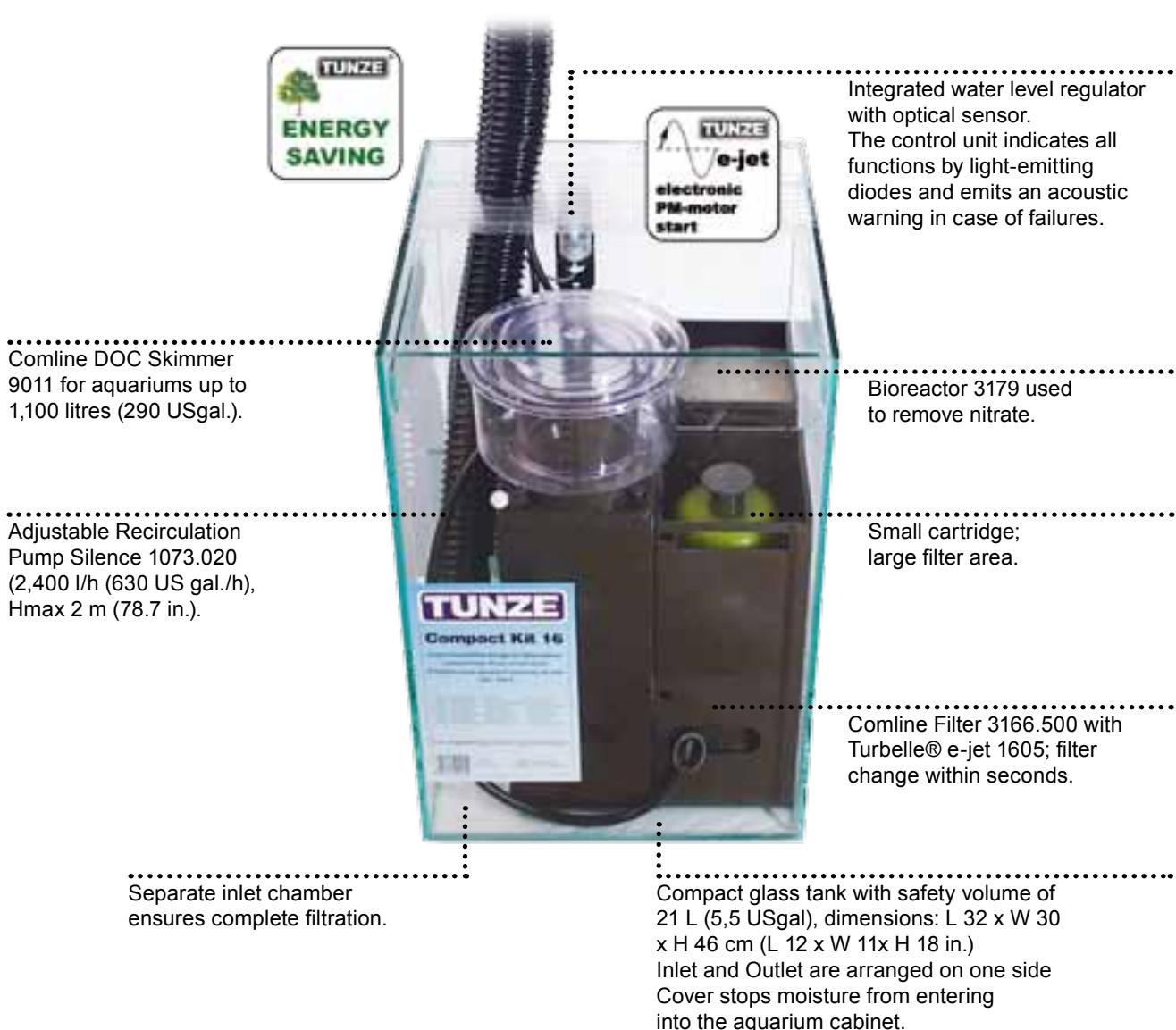
Skimmer Kit 15

For salt water up to 500 litres (135 USgal.) in a hard-coral tank
Glass tank 1591.100 (300 x 320 x 460 mm / 11.8 x 12.5 x 18.1 in.)
Safety volume 21 litres (5.5 USgal.)
DOC Skimmer 9410 with post-filter
Osmolator 3155 with infra-red technology and alert sound emitter
Recirculation pump Silence 1073.020 (2,400 l/h, Hmax. 2 m) (630 US gal./h, 78.7 in.)
Storage container 5002.25
Total energy consumption 41 W
0015.000

557.70 £

TUNZE® Compact Kits

TUNZE® compact kits - aquarium cabinet kits have been developed specifically for complete water treatment in fresh-water and marine aquariums. They are completely assembled and require very little preparation, such as filling the bio reactor, connection of outlets and inlets. Their dimensions permit easy integration in standard furniture or in special designs. All TUNZE® compact kits - filter systems are based on direct detritus removal from the aquarium water circulation by efficient and compact components. In models fitted with a bio reactor, nitrate reduction and stabilisation through biological degradation processes is guaranteed. TUNZE® cabinet kits enhance the development of life in the aquarium and support the bio dynamics in the aquarium biotope.



Compact Kit 16

For seawater up to 500 litres (135 USgal.)
 Glass tank 1691.100 (300 x 320 x 460 mm / 11.8 x 12.5 x 18.1 in.)
 Safety volume: 21 litres (5.5 USgal.)
 Comline DOC Skimmer 9011
 Comline Filter 3166.000
 Filter pump Turbelle® e-jet 1605
 Comline Bio Hydro Reactor 3179
 Bio Connection 3178.71
 Osmolator 3155 with infra-red technology and alert sound emitter
 Recirculation Pump Silence 1073.020
 (2,400 l/h, Hmax. 2 m)
 (630 US gal./h, 78.7 in.)
 Storage Container 5002.25
 Total energy consumption: 64 W

0016.000

814.00 £

TUNZE® Compact Kits



Compact Kit 18

For seawater tanks up to 1,000 litres (265 USgal.) – soft coral / fish tanks
Glass Tank 1891.100 (490 x 320 x 460 mm / 19.2 x 12.5 x 18.1 in.)

Safety volume: 45 litres (11.8 USgal.)
Comline DOC Skimmer 9021

Storage Container 5002.100 for the removal of foaming water
Comline Filter 3167.000

Filter Pump Turbelle® e-jet 3005
Comline Bio Hydro Reactor 3179

Bio Connection 3178.71
Osmolator 3155 with infra-red technology and alert sound emitter

Recirculation Pump Silence 1073.040 (3,000 l/h, Hmax. 3 m)

(790 US gal./h, 118.1 in.)

Storage Container 5002.25

Total energy consumption: 110 W

0018.000

1,401.50 £



Compact Kit 18.7

For seawater up to 1,000 litres (265 USgal.) in a hard-corall tank
Glass Tank 1891.100 (490 x 320 x 460 mm / 19.2 x 12.5 x 18.1 in.)

Safety volume: 45 litres (11.8 USgal.)
Comline DOC Skimmer 9021

Storage Container 5002.100 for the removal of foaming water
Comline Filter 3167.000

Filter Pump Turbelle® e-jet 3005
Comline Calcium Automat 3170

Bio Connection 3178.71
Osmolator 3155 with infra-red technology and alert sound emitter

Recirculation Pump Silence 1073.040 (3,000 l/h, Hmax. 3 m)

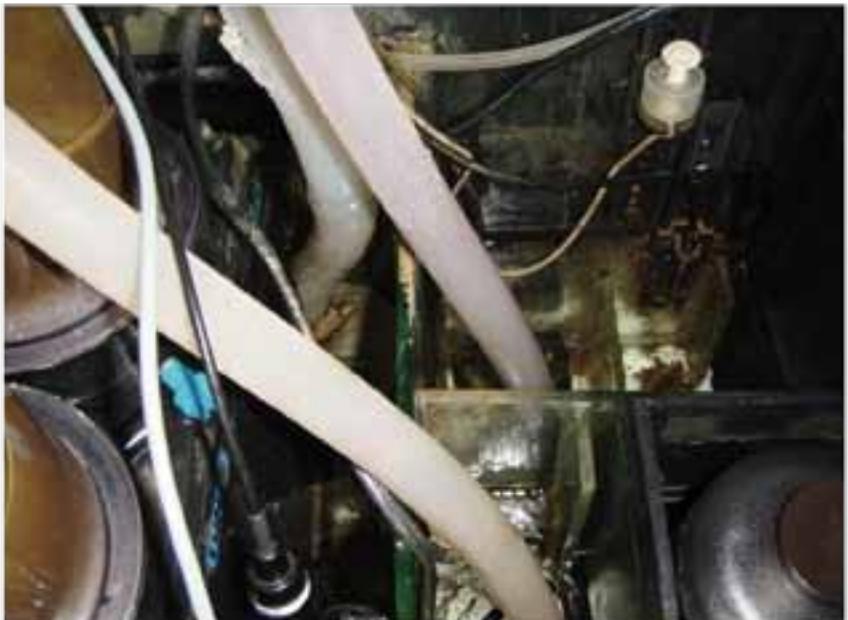
(790 US gal./h, 118.1 in.)

Storage Container 5002.25

Entire energy consumption: 118 W

0018.700

1,548.60 £



TUNZE® Outlets

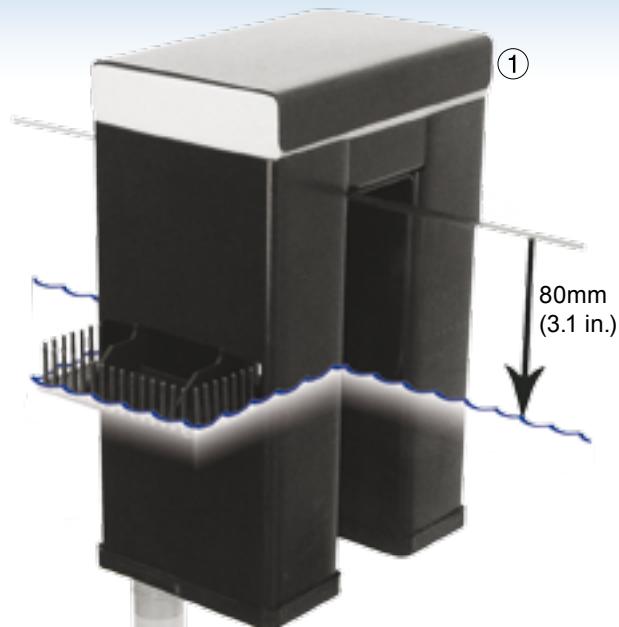
TUNZE® outlets with surface suction are an ideal solution for gravity water supply below the aquariums. An equal ratio of surface water and water from the lower water column are removed. The outlets remove only as much water as is pumped into the aquarium. On account of the light-protected construction, they are almost maintenance-free.

TUNZE® outlets are supplied ready for mounting, with detailed mounting instructions. Inlet and outlet pipes are not included.

Two outlet systems should be used in aquariums with more than 600 litres capacity (160 USgal.).

At the outlet side, commercially available outlet pipes can be connected to the pipe sockets. However, we recommend the use of the outlet hose system 1075/2 to keep the noise as low as possible.

For the inlet, we recommend our inlet hose set 1073. The connecting hose for the pump in the cabinet is included.



① Overflow Box

Overflow for supplementary installation with surface and bottom suction up to about 1,200 l/h (320 US gal./h). No boreholes in the glass required, and thus it can be retro-fitted easily. Even after an interruption of the recirculation pump, it will restart the siphon automatically. With additional U pipe 1001.74 (cf. Turbelle® filter accessories), a throughput of 1,500 l/h (400 US gal./h) is possible. Water outlet diam. 40 mm (1.57 in.).

For easy installation and quiet operation, we recommend the use of overflow hose set 1075/2.

1074/2

112.40 £

② Wall Overflow

Built-in overflow for lateral glass boreholes, diam. 43 to 45 mm (1.69 to 1.77 in.), on the rear or lateral wall of the aquarium, with surface and bottom suction up to about 1,500 l/h (400 US gal./h). Water outlet diam. 40mm (1.57 in.).

For easy installation and quiet operation, we recommend the use of overflow hose set 1075/2.

1076/2

95.00 £

③ Central Overflow

Central overflow with surface and bottom suction up to about 1,500 l/h (400 US gal./h). Is used for aquariums with a central internal drain pipe. Fitted with a socket for PVC pipes, diam. 40 mm (1.57 in.).

For complete installation, we recommend the use of screw connection, pipe and hose 1077.100.

1077.000

95.00 £

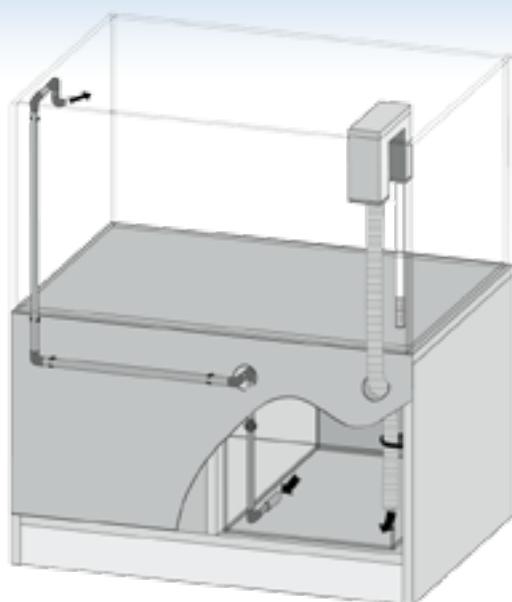
④ Screw connection, pipe and hose

For outlet 1077, consisting of screw connection 40/50 mm (1.57/1.96 in.), 1 3/4 in. glass borehole in the bottom, abt. 55 mm (2.1 in.) in diameter, and upright stand pipe 1 m (39.3 in.) by 40 mm (1.57 in.) in diameter. A stainless steel clamp with outlet hose 1 m (39.3 in.) by 40 mm (1.57 in.) in diameter is supplied. Delivery without mounting instructions; to be mounted by experienced expert only.

1077.100

50.80 £





① Outlet hose

Consisting of 2m (78.7 in.) special outlet hose, diam. 40mm (1.57 in.), with clamps and holder.

1075/2

38.00 £

② Inlet hose and fittings

Consisting of four pipes, diam. 25 mm (.98 in.) x 1 m (39.3 in.) and three sleeves, diam. 25 mm (.98 in.), seven 90° angles, connecting hose and clamps.

1073.000

70.60 £

③ Outlet filter

Mechanical precleaner filter for all cabinet filter tanks, placed directly next to the drain hose of TUNZE® outlet, with removable post-filter with 300 µm (11.8 mil) nylon mesh.

1075.500

56.80 £

④ Post-filter bag

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

9410.200

12.20 £

Turbelle® Filter Accessories

For pipe extension in aquariums over 50 cm (19.6 in.) in height, to be ordered separately:

⑥ Strainer, 12cm (4.7 in.)

1001.790

7.80 £

⑦ T-piece

1001.800

4.80 £

⑧ Pipe for Turbelle®

1001.760

4.50 £

⑨ Bushing, diam. 21/25mm (.82/.98 in.)

1001.780

1.80 £

⑩ Silicone hose, diam. 22 x 28 mm

x 2 m (.86 x 1.1 x 78.7 in.)

is used as feed hose for an easy connection of the recirculation pump to the aquarium. To be used for all cabinet filter systems, 100 % resistant to saltwater.

1073.200

32.30 £



Recirculation pumps

The compact and manageable TUNZE® recirculation pumps cover many application scenarios which are common in today's market, for example, the filtration in aquariums, indoor fountains, design of stream courses and cascades in model construction as well as industrial applications. During the manufacturing of these pumps, a key emphasis is placed on the quality which will subsequently ensure a low-maintenance permanent operation for many years. The compact TUNZE® recirculation pumps are built in accordance with the strictest international safety standards.

Universal pump Mini 5024.04

Pump capacity: 150 – 300 l/h (40 - 80 US gal./h)

Power consumption: 5W

Pressure height: 0.7 m (27.5 in.), outlet pipe:

L 16mm (0.6 in.), ø13/10,5mm (0.5/0.4 in.)

Voltage / frequency: 230V/50Hz (115V/60Hz)

Cable length: 2m (78.7 in.)

Dimensions without outlet and suction cups:

44 x 43 x 42 mm (1.7 x 1.6 x 1.5 in.)

5024.040

13.80 £



Recirculation Pump Silence

Pumping power: 150 to 800 l/h (40 to 210 US gal./h).

Energy consumption: 3 to 8 W.

Pumping head: 1.25 m (49.2 in.), ½" NPT hose supports

Voltage / frequency: 230 V / 50Hz (115 V / 60Hz).

Cable length: 2 m (78.7 in.).

Dimensions without outlet and suction cups:

87 x 67 x 48 mm (3.4 x 2.63 x 1.88 in.)

1073.008

28.40 £



Use in water or outside

Although centrifugal pumps are widely used in aquariums, users rarely consider their efficiency. Basic components can be real energy hogs: aquarium pumps, for example, work around the clock.

Cheap or poorly designed synchronous motor pumps may waste a great portion of the consumed energy, while high-tech pumps and motors allow significant energy savings over extended periods. The Comline® energy saving pump was specially developed for internal filtering systems, with insignificant heat loss in the aquarium and offering very high reliability with low power consumption and maintenance requirements. Pump output can be controlled mechanically between 30 and 100%, the compact design enables very easy installation in Comline® filters or standard internal filter systems.

Comline® Pump

Pump output: 250 – 850l/h (65 to 225 US gal./h)

Energy consumption: 2.5 – 4.5W

Pumping head: 0.7m

Voltage / frequency: 230V/50Hz (115V/60Hz)

Length of cable: 2m (78.7 in.)

Dimensions without outlet: 60 x 60

x 40mm (2.4 x 2.4 x 1.6 in.)

Putlet: ø13mm (.51 in.)

0900.000

26.30 £



TUNZE® Recirculation pumps

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

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



Use in water or outside.



3/4 in. NPT thread connectable to PVC fittings, such as for calcium reactors, filters, et cetera.

Ergonomic design.



Very low energy consumption.

Adjustable output.

Stability ensured by four integrated suction cups.



Recirculation Pump Silence

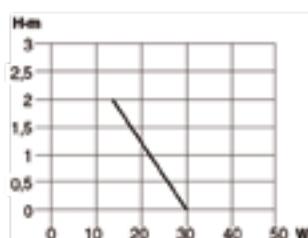
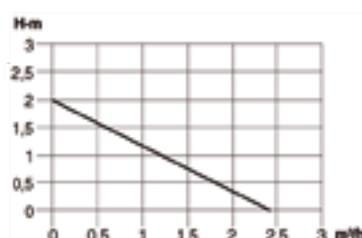
Pumping power: 200 to 2,400 l/h (50 to 630 US gal./h)
Energy consumption: 14 to 30 W (15 to 34 W)
Pumping head: 2 m (78.7 in.), 3/4" NPT hose barbs
Voltage / frequency: 230 V / 50 Hz (115 V / 60 Hz)
Cable length: 2 m (78.7 in.)
Dimensions without outlet and suction cups:
118 x 94 x 75 mm (4.6 x 3.7 x 2.9 in.)

1073.020

68.70 £

Performance tables - Silence pumps

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

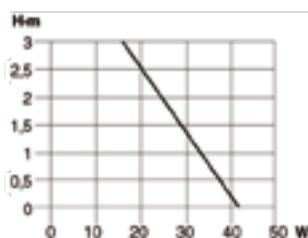
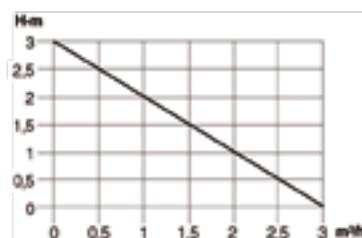


Recirculation Pump Silence

Pumping power: 300 to 3,000 l/h (80 to 790 US gal./h)
Energy consumption: 16 to 42 W (18 to 47 W)
Pumping head: 3 m (118 in.), 3/4" NPT hose barbs
Voltage / frequency: 230 V / 50 Hz (115 V / 60 Hz)
Cable length: 2 m (78.7 in.)
Dimensions without outlet and suction cups:
118 x 94 x 75 mm (4.6 x 3.7 x 2.9 in.)

1073.040

115.80 £





Recirculation pumps

The Silence electronic is a safety low voltage, speed-controlled recirculation pump. It can be used in any aquarium and features a new microprocessor-controlled motor, which makes it an "intelligent pump":

The electronic motor speed is adjusted to the pump load automatically, always searching for the optimum output/energy consumption ratio. Energy consumption is approx. 50% lower than of conventional pump motors. 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. It can be controlled by Multicontroller 7095, 7096 as well as Wavecontroller 7092.

Recirculation pump Silence electronic

Flow rate at 18 V: 900 to 2,200

l/h (240 to 580 US gal./h)

Flow rate at 24 V: 1,100 to 3,000

l/h (290 to 790 US gal./h)

Hmax. at 18 V: 2.5 m (98.4 in.)

Hmax. at 24 V: 3.9 m (153.5 in.)

¾" NPT hose barbs

Energy consumption at 18 V: max. 26 W

Energy consumption at 24 V: max. 43 W

Voltage / frequency: 100 – 240 V / 50 – 60 Hz

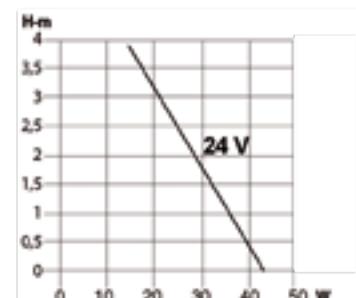
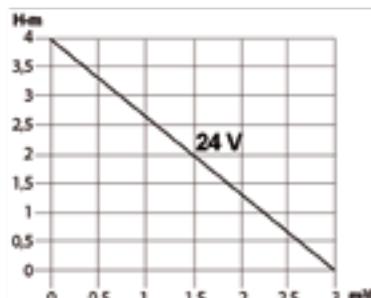
Cable length: 5 m (196.8 in.)

Dimensions without outlet and suction cups:

118 x 94 x 75 mm (4.6 x 3.7 x 2.9 in.)

1073.050

175.30 £



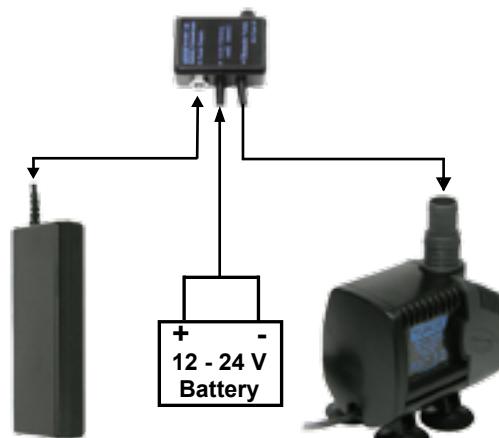
Performance tables - Silence pumps

These performance tables include

a tolerance of +/- 10 per cent.

Additional power supply for recirculation pump Silence 1073.05 – Safety Connector

The Silence 1073.05 recirculation pump features an electronic motor. Thus, the pump 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 Art. No. 6105.50 which features a 4A fuse. 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.



Accessories (order separately)

① 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.

6105.500

40.90 £



② Cable Safe

Protects the TUNZE plug-in connection against splashing water, especially suitable for the connection of Turbelle® pumps.

6105.600

8.40 £

TUNZE® Recirculation pumps

TUNZE® Silence PRO 1073.11 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.



Silence PRO

Pumping power: 11,000 l/h (2,900 US gal./h)
 Energy consumption: 95 to 125W (125 to 152W) depending on counter-pressure
 Pumping head: 4.65 m (183 in.),
 1 ½" NPT hose connection
 Voltage / frequency: 230 V / 50 Hz (115 V / 60 Hz)
 Cable length: 3 m (118 in.)
 Dimensions without outlet and silicon feet:
 242 x 120 x 160 mm (9.5 x 4.7 x 6.3 in.)

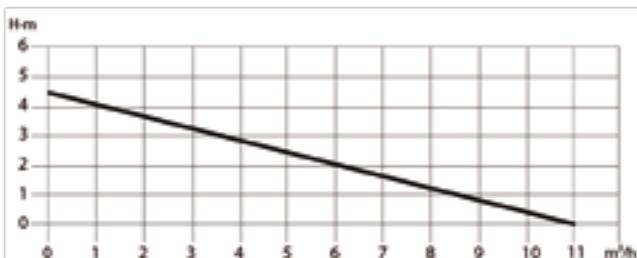
1073.110

302.20 £



Performance table - Silence PRO

This performance table includes a tolerance of +/- 10 per cent.

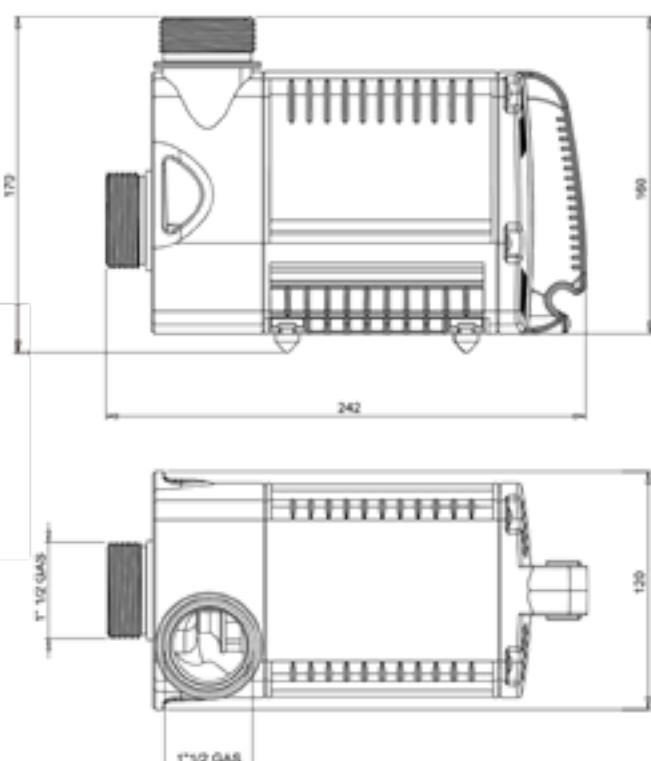


Accessories (order separately)

Suction housing

1073.114

27.50 £





Water level alarm

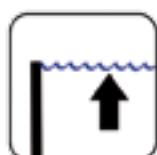
The water level alarm is used as a supplement to water refill units. In the event of a failure, the switched socket outlet switches off all connected appliances; in addition a warning signal is sounded and a red LED lights up. Please note: The water level alarm is not a remedy for defects in installation or maintenance.



For aquariums with a floor unit filter, the water level alarm protects the aquarium from overflowing, for example, when the drain pipe system is clogged.



The water level alarm protects filter systems in aquariums or in floor units from dry running and helps to avoid damages that could arise, for example, through unintentionally pumping the filter container dry. However, it can also protect from dry running by the water level controller without water for refilling.



The water level alarm can monitor existing refill systems (osmolators) with too much water reserves and work as an overflow protection.

Function of the sensors

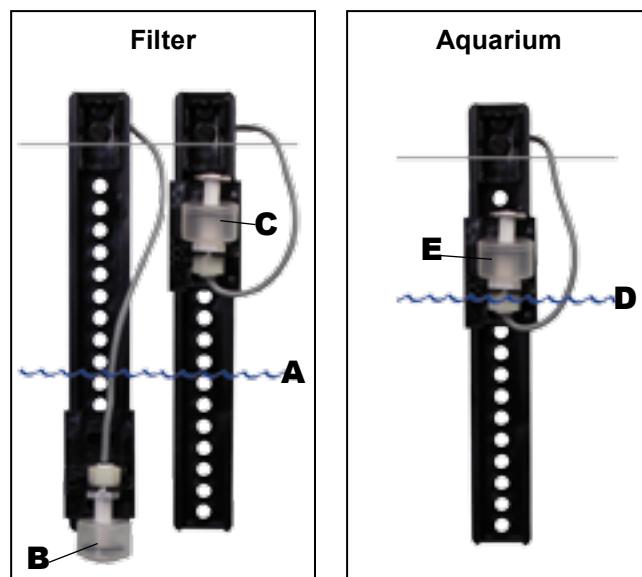
A = second "too high" overflow sensor in the filter tank provides a protective function in case the water refill system is not switched off

B = run-dry protection sensor, which protects the filter system if the water refill system fails and the normal water level C is "too low"

C = normal water level in the filter tank

D = overflow sensor „too high“ in the aquarium protects, for example, against a clogged drain

E = Normal water level in the aquarium



Water level alarm

This water level alarm comes with three sensors, a run-dry sensor and two overflow sensors. Each sensor comes with a holding device which can be attached with silicone or can be clamped to horizontal or vertical panes. The holding devices can also be combined. The control unit has an optical indicator for each sensor and an alert sound emitter. The switched socket outlet has a switching capacity for pumps of up to 230V / 1,800W (at 115V / 900W).

7607/2

156.80 £



TUNZE® Osmolator® nano

For small aquariums, a stable osmotic balance is important, because they are particularly sensitive to constantly changing salt concentrations. The Osmolator® nano which was specifically designed for this, is a water level controller with only a single sensor and is equipped with a processor-based controller that protects against overfilling. It is suitable for nano aquariums or small aquariums up to 200 liters (55 USgal.).

.....
Micro-processor controlled controller with time monitoring for aquariums under 100 liters or up to 200 liters, adjustable with internal jumper.



.....
Sensor with magnet holder, light protected, can be positioned at any desired position on the glass pane from 4 to 10mm.

Osmolator® nano

Water level controller with only one sensor for nano aquariums or small aquariums with up to 200 liters (55 USgal.). Can be installed in a cabinet filter or directly on the aquarium edge. Scope of delivery: ready for installation with 11V power supply, low-voltage metering pump, 3m (118 inch) hose, magnet holder for up to 10mm (3/8") glass thickness and a protective cover for the sensor.

3152.000

76.50 £

Accessories (order separately)



Metering pump

Replacement dosing pump with low voltage 3-12V DC for osmolator, power with 4mm hose at 11V: 0.9m – 110l/h, 1.4m – 80l/h, 1.8m – 58l/h, Hmax 3.6m.

5000.020

18.10 £



Storage container

13L (3.4 USgal.)

Container with a contents of 13L (3.4 USgal.); size for an open 250L (66 USgal.) tank; fill lasts for approx. one week, diam. 27,7 x 24,2 x 27cm (8.9 x 9.5 x 10.6 in.).

5002.100

8.60 £

TUNZE® Osmolator®

In 1985 Tunze® invented the automatic refill system for aquariums. 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. Only the Osmolator® is able to provide you with the necessary security and reliability, since it is based on the vast experience that Tunze has been able to gather throughout the course of many years.



The Osmolator® will be supplied with low voltage pump, mounting magnets, tubing controller and power supply. You only need a reservoir and water!

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, metering pump, hose, magnet holder for sensors.

3155.000

161.70 £

Accessories (order separately)

Switched Socket Outlet

In the Osmolator®, the enclosed low-voltage centrifugal pump can be replaced by this switched socket outlet in combination with a more powerful pump. The switched socket outlet can be used to switch metering pumps with 230V (115V), max. 1,800W (900W), such as Turbelle® e-jet 805, 1205, Silence 1073.02, 1073.04 or a peristaltic pump.

3150.110

52.90 £

Metering pump

Replacement dosing pump with low voltage 3-12V DC for osmolator, power with 4mm hose at 11V: 0.9m – 110l/h, 1.4m – 80l/h, 1.8m – 58l/h, Hmax 3.6m.

5000.020

18.10 £

Water valve

Operating on low voltage 9 to 12 VDC, replaces the enclosed meter pump in the Osmolator® for several aquariums with gravity line, for example.

8555.200

67.60 £

TUNZE® Osmolator®



Calcium Dispenser

The addition of lime water is another method to increase the calcium in marine aquariums. The calcium hydroxide is dissolved in a separate chamber by means of the water jet of the metering pump included with the Osmolator. The calcium dispenser is fitted between the metering pump and the feed hose supplying the lime water to the aquarium in small volumes in regular intervals. The calcium dispenser can be fitted in any water storage tank and should be topped up with calcium hydroxide every one to two weeks. The calcium dispenser and the calcium reactor can be combined. An especially stable pH is achieved during the day as well as at night. Delivery condition: Reactor, calcium hydroxide fill, holding device and connections to Osmolator, suitable for hard coral aquariums of up to approx. 1,000L (265 USgal.). Dimensions: 350 x 140mm (13.7 x 5.5 in.).

5074.000

82.60 £



With non-return valve

Calcium hydroxide - 250 g (.55 lbs.)

Refill pack for Calcium Dispenser 5074.

5074.500

9.20 £



Calcium Dispenser Kit 68

Kit 68 consists of a calcium dispenser 5074, Osmolator® Universal 3155 as well as a storage container 5002.25.

0068.000

262.80 £



Storage container

13L (3.4 USgal.)

Container with a contents of 13L (3.4 USgal.); size for an open 250L (66 USgal.) tank: fill lasts for approx. one week, diam. 27,7 x 24,2 x 27cm (8.9 x 9.5 x 10.6 in.).

5002.100

8.60 £



Storage container 27L (7.1 USgal.)

Container with a contents of 27L (7.1 USgal.); large cover opening to facilitate topping up and cleaning. Size for an open 600L (158 USgal.) tank: fill lasts for approx. one week, diam. 34 x 43.5 cm (13.3 x 17.1 in.).

5002.250

16.30 £

TUNZE® RO Station

Reverse osmosis is a natural and environmentally friendly process used to remove dissolved salts and impurities safely from the water by physical methods only.

Nano RO station

30 to 60 litres/day (8 to 15 USgal.) at 3 to 6 bar (43 to 87 PSI) and 15 deg. to 25 deg. Celsius (59 deg. to 77 deg. F).

TUNZE® Nano RO Station 8515 is a compact high-quality reverse osmosis unit for the easy production of pure water (RO water) to be used for irons, preparation of ice cubes, bubble humidifiers, car batteries, et cetera. In aquarism, it is especially suitable for small and medium-sized marine and fresh-water aquariums. It is very easy to operate and can be connected directly to a water tap using the accessories supplied by the manufacturer.

8515.000

93.20 £



Accessories (order separately)

Carbon Block Filter

8515.120

8.30 £



RO station.

100 to 200 litres/day (26 to 50 USgal.) at 3 to 6 bar (43 to 87 PSI) and 15 deg. to 25 deg. Celsius (59 deg. to 77 deg. F).

TUNZE® RO Station 8550 is a high-quality reverse osmosis unit used to produce pure water. In aquarism it is especially suitable for marine and fresh-water aquariums. RO Station 8550 consists of a 20 µm sediment filter, a 5 µm sediment filter, a 1 µm carbon sediment filter, and a TFC membrane (polysulfone compound). The average retention rate is 98 per cent, the share of pure water amounts to 20 - 25 per cent of the processed water.

8550.000

189.70 £



Accessories (order separately)

① Sediment filter 5µm

8522.120

9.70 £



② Carbon sediment filter 1 µm

8550.100

11.70 £



③ Sediment filter 20 µm

8550.120

8.30 £



TUNZE® RO Station



RO Ion Exchanger

This additional filter can be fitted to the outgoing water outlet of the RO Station. It is delivered filled with mixed bed deionization resin and will remove all traces of minerals remaining after the RO process. Alternatively, it can be filled with Calcium Carbonate for example, and be used to add calcium and carbonate ions lost after RO filtration. For use where water supplies are high in silicate, Silphos can be used to remove remaining silicate. The cylinder includes two screw caps with plug-type connectors for the hose of the osmosis plant and two brackets for a direct attachment on the RO Station. A mixed-bed ion exchange resin with colour change is used as a refill medium (article No. 8550.501).

8550.600

43.90 £



RO TDS Monitor

RO TDS Monitor 8533 is used for the precise determination of the water quality of reverse osmosis units. It continuously measures the conductivity in ppm at the water inlet / water outlet of the reverse osmosis plants and provides information on the necessity of a filter or membrane change.

8533.000

72.80 £



Accessories (order separately)

Mixed Bed Ion Exchanger

8550.501

17.50 £



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 an 11 V power supply unit. Depending on the use, the water valve can be replaced by switched socket outlet 3150.11 for mains operation.

If the position of the sensors of the RO water controller is reversed, the switched socket outlet 3150.11 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

160.20 £



Accessories (order separately)

Switched Socket Outlet

3150.110

52.90 £



pH/CO₂ controller

TUNZE® digital measuring instruments have been developed specifically for use in aquarism. The instruments with their electrodes operate at a high accuracy and are comparable with laboratory instruments in quality. The clearly arranged operating panel with key pad and adjustment knobs ensure fast and easy operation. The controller comes with parts for two different types of wall mounting.

Measuring range: pH 1 - 14.
Display accuracy: ± 0.01 pH.
Switching range: pH 5 - pH 9.
Metering time: adjustable abt. 2 - 6 min.
Metering break: or without 5 - 15 min.
Ambient temperature: 0° to 45°C (32 to 113°F).
Dimensions: L156 x W83 x H30mm (L6.1 x W3.2 x H1.1 in.).

pH controller

This handy inexpensive pocket measuring instrument is supplied with a universal wall mount and electrode holder along with a long-life glass electrode, buffer solution and 9 V battery. The Auto Power Off function ensures a long life of the battery.

With the optional CO₂ valve and power supply unit, the pH controller can be extended into a complete CO₂ control station. The switched socket outlet 7075.12 can be used to switch other valves as well.

7070/2

256.30 £



pH/CO₂ controller set

Consisting of pH controller 7070/2 and CO₂ valve set 7074.11 with power supply unit 5012.01. The 12 Volt valve is nickel-plated and protected against corrosion.

The adjustable time-interval meter permits the controlled distribution of CO₂, preventing an overdose.

The control station operates on safety extra-low voltage.

7074/2

355.40 £



Accessories (order separately)

Buffer solution for pH 7 and 9

For all pH measuring instruments.

7040.120

10.00 £



CO₂ Valve Set

Including Non-Return Valve 7070.01 and a 5 meter (196.8 in.) Hose 7072.30.

7074.110

107.70 £



Buffer solution for pH 5 and 7

For all pH measuring instruments.

7040.130

10.20 £



Power supply unit 11V

For the operation of Valve Set 7074.11 - 230 V / 50 Hz (115V/60Hz).

5012.010

15.20 £



Cleaning solution

For pH, mV and conductivity electrodes.

7040.200

6.10 £



pH Electrode 7070.11

Made of glass, BNC, cable length 2m (78.7 in.), suitable for units 7070 or 7070/2 or for commercially available measuring instruments.

7070.110

85.00 £



Switched socket outlet

Comprises power supply unit for connection to controller 7070/2 to switch units up to a maximum of 1,800W (230V), such as 900W (115V) CO₂ valves.

7075.120

87.00 £



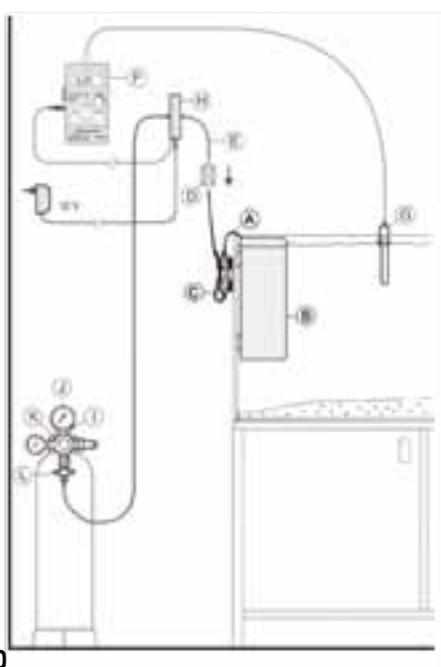
pH Electrode 7070.10

Made of plastic, BNC, cable length 2m (78.7 in.), suitable for units 7070 or 7070/2 or for commercially available measuring instruments.

7070.100

75.90 £





Pressure reducer

Precision device with fine adjustment for standard CO₂ 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

82.40 £

CO₂ cylinder - 1.5 kg (3.3 lbs.)

Supplied with base, carrying handle and filled with CO₂ (without fill in case of air transport).

The pressure cylinder has been manufactured according to European standard p0685, and the cylinder valve has been provided with an M21.8 x 1/4" thread in keeping with German standard DIN 477.

7079.150

126.00 £

CO₂ cylinder - 2.0 kg (4.4 lbs.)

Supplied with base, carrying handle and filled with CO₂ (without fill in case of air transport).

The pressure cylinder has been manufactured according to European standard p0685, and the cylinder valve has been provided with an M21.8 x 1/4 in. thread in keeping with German standard DIN 477.

7079.200

131.10 £

CO₂ diffuser

is a carbon dioxide distributor, used to increase dissolved CO₂ levels in freshwater aquariums when little space is available. It is attached to the aquarium edge, up to a glass thickness of 15 mm (1/2"), with a magnetic holder and ensures a distribution of up to four CO₂ bubbles per second. In the aquarium the diffuser operates as a "stand-alone" solution with a small submerged pump, which draws in the water and thoroughly mixes it with CO₂. The efficient diffuser ensures that no carbon dioxide is wasted. The diffuser is suitable for freshwater aquariums up to 1,000 liters (264 US gal.). 230V/50Hz (115V/60Hz), 5 W, cable 2 m (78.7 in.).

7074.500

34.30 £

Example: Kit 75

- A - CO₂ connection
- B - Calcium Automat 3170
- C - Bubble Counter 1572.20
- D - Non-Return Valve 7070.01
- E - Hose 4 x 6 mm (.15 x .23 in.) 7072.30
- F - pH/CO₂ Controller Set 7074/2
- G - pH Electrode 7070.11
- H - Control valve of 7074/2
- I - Cylinder + cylinder valve
- J - Pressure Regulator 7077/2
- K - Pressure adjusting screw of 7077/3
- L - Fine adjustment of 7077/2

Kit 75

Ca dosing plant Comline
-> CO₂ Controller 7074/2
-> Pressure Regulator 7077/3
-> Calcium Automat 3170
-> CO₂ Cylinder 7079.15

0075.000

811.80 £

Kit 79

CO₂ dosing plant
-> CO₂ Controller 7074/2
-> Pressure Regulator 7077/3
-> CO₂ Diffuser 7074.50
-> CO₂ Cylinder 7079.15

0079.000

589.40 £



Redox-Controller

TUNZE® digital measuring instruments have been developed specifically for use in aquarism. The instruments with their electrodes operate at a high accuracy and are comparable with laboratory instruments in quality. The clearly arranged operating panel with key pad and adjustment knobs ensure fast and easy operation. The controller comes with parts for two different types of wall mounting.



Measuring range: +/- 1,900 mV.
Display accuracy: +/- 1 mV.
Switching range: -150 mV to 500 mV.
Metering time: adjustable abt. 2 - 6 min.
Metering break: without or 5 - 15min.
Permissible ambient temperature: 0° - 45°C (32° - 113°F).
Dimensions: L156 x W83 x H30mm (L6.1 x W3.2 x H1.1 in.).



mV controller

This pocket-sized measuring instrument has been designed to match the pH controller. The measuring instrument is mounted by means of two types of wall holding device. The electrode includes a universal holding device and thus solves almost all mounting problems. The controller is supplied with a long-life high-quality glass electrode, a cleaning solution and a 9V battery. The measuring instrument has been provided with an auto power off function so that the battery lasts for a very long time. Along with the switched socket outlet, the mV controller can be extended to a complete ozone control station.

7071/2

291.50 £

mV Controller Set

This set consists of mV Controller 7071/2 and switched socket outlet 7075.12. The switching output has an Ohmic load of 1,800 W at 230 V (900 W / 115 V). The switched socket outlet also serves as a power supply for the controller.

On account of the adjustable time interval metering system, a careful ozone distribution is possible to prevent an overdose.

7075/2

365.60 £



Accessories (order separately)

Cleaning solution

For pH, mV and conductivity electrodes.

7040.200

6.10 £



Switched socket outlet

Comprises power supply unit for connection to controller 7070/2 to switch units up to a maximum of 1,800W (230V), such as 900W (115V) CO2 valves.

7075.120

87.00 £



mV Electrode

Made of glass, BNC, cable length 2 m (78.7 in.), suitable to replace mV Controller 7071/2, 7075/2 or commercially available mV measuring instruments.

7055.100

142.50 £



TUNZE® Temperature / Conductivity



Temperature Controller Set °C

This controller set is a measuring and regulating station used to heat or cool with a reading in °Celsius. The included switched socket outlet also serves as a power supply unit for the controller. The switching output is 1,800 W at 230 V. With batteries installed (not contained in the scope of supply) the instrument can be used as an easy-to-handle and precise temperature measuring instrument. The measuring instrument comes with two different types of wall mount. The electrode comes with a universal holding device and thus solves almost all mounting problems.

7028/3

194.30 £



Temperature controller set °F

Controller Set with a reading in °F; the switched socket outlet switches an ohmic load of 900W at 115V/60Hz.

7028/3_A

194.30 £

Measuring range: 0° to +55°C (32° to 131°F).

Switching range: 3° to +40°C (37° to 104°F).

Switching accuracy: ± 0.1° to 0.2°C (3.38° to 6.76°F).

Ambient temperature: 0° to 45°C (32° to 113°F).

Switching output: 1,800W/230V Ohmic

load (900W/115V Ohmic load).

Dimensions: L156 x W83 x H30mm (L6.1 x W3.2 x H1.1 in.).



Conductivity Meter

The unit is used for precise determination of the conductivity value in fresh, brackish and salt water. In salt water this conductivity meter displays the salt content through conductivity which is several times more accurate than specific gravity or salinity. This unit combines a robust hard carbon electrode and a temperature probe in a single unit. The measurement is temperature compensated automatically. The measuring unit runs efficiently on a 9 Volt battery provided with an auto power off function. Continuous operation is possible without any problems when connected to a separate power-supply unit. The measuring instrument comes with two types of wall holding device. The probe has a universal profiled holder and thus solves almost all installation problems.

7032/2

252.30 £



Measuring range: 0.1 µS/cm - 199.9 mS/cm.

Display accuracy: 1 digit.

Ambient temperature: 0° to 45°C (32° to 113°F).

Dimensions: L156 x W83 x H30mm (L6.1 x W3.2 x H1.1 in.).

Accessories (order separately)

Cleaning solution

For pH, mV and conductivity electrodes.

7040.200

6.10 £



Calibration solution 600 µS/cm

For fresh water.

7005.140

6.10 £



Power supply unit 11V

For the operation of Valve Set 7074.11
- 230 V / 50 Hz (115V/60Hz).

5012.010

15.20 £

Calibration solution 50 mS/cm

For salt water.

7030.140

6.10 £



Reef Excel® Lab Marine Salt



Reef Excel® laboratory marine salt is the result of decades of research and the further refinement of hW sea salt. In its composition, this sea salt is based on the latest international marine biological findings as well as detailed chemical analyses, and contains trace and bio elements in quantities which are identical to those in natural sea water. In regular intervals, Reef Excel® is examined for constant quality and composition by an independent testing laboratory accredited in keeping with German/European standard DIN EN 45001. Produced and analysed in keeping with the criteria for quality management in conformity with international standard ISO 9000ff, Reef Excel® will dissolve crystal clear and free from precipitate within a very short period of time.



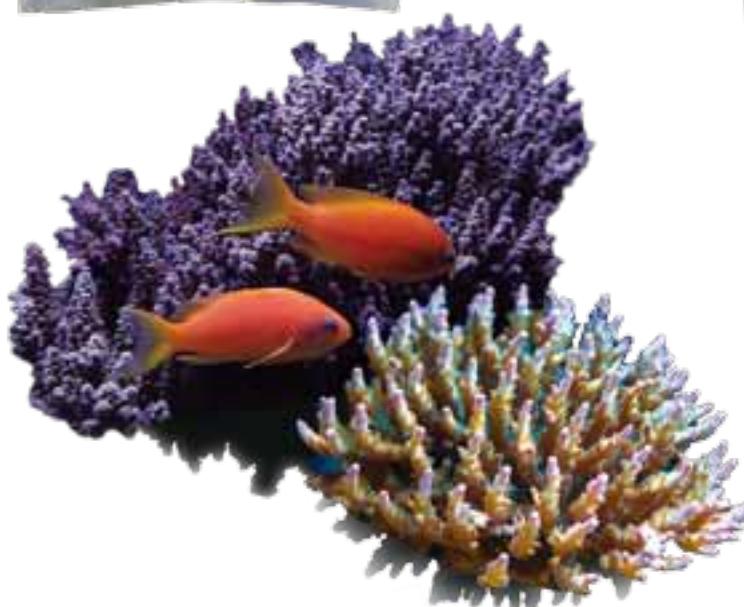
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① Reef Excel® Lab Marine Salt, 2kg

(4.4 lbs.) sack for 60 litres (63.4 USgal.) at a density of 1.020 at 20 deg. C (68 deg. F).
7008.100 8.10 £

② Reef Excel® Lab Marine Salt, 8kg

(17.6 lbs.) sack for 240 litres (63.4 USgal.) at a density of 1.020 at 20 deg. C (68 deg. F).
7008.000 26.00 £

③ Reef Excel® Lab Marine Salt, 16 kg

(35.2 lbs.) bucket for 480 litres (126.8 USgal.) at a density of 1.020 at 20 deg. C (68 deg. F).
7008.200 54.00 £

Reef Excel® Lab Marine Salt, 10 x 2kg
10 sacks of 4.4 lbs. each in a box.

7008.300 80.70 £

Reef Excel® lab marine salt, 4 x 8kg
4 sacks of 17.6 lbs. each in a box.

7008.400 104.00 £

Reef Excel® lab marine salt, 20kg
(44 lbs.) sack for 600 litres (158.5 USgal.) at a density of 1.020 at 20 deg. C (68 deg. F).
7008.500 61.80 £

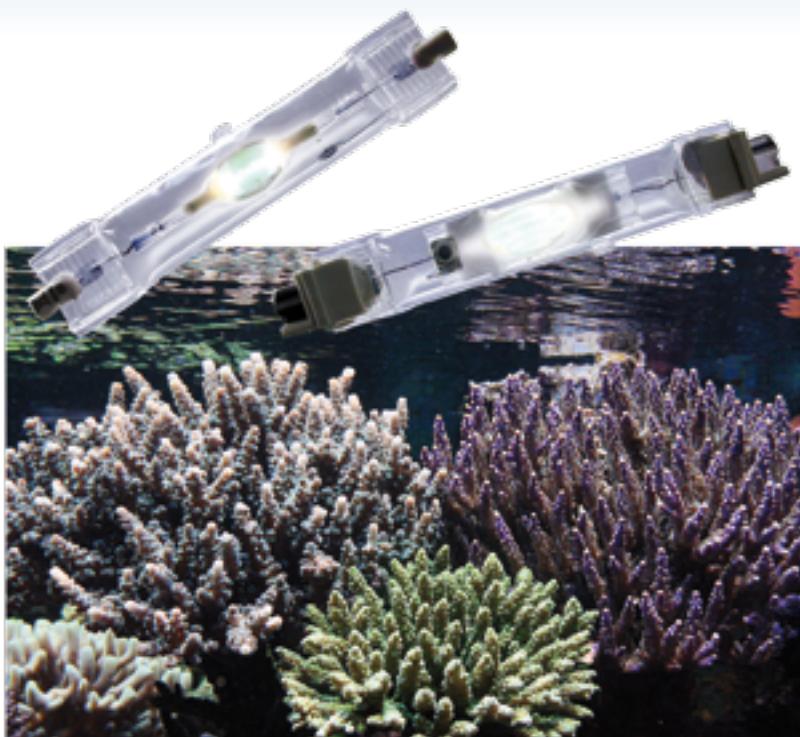
Freight surcharges may apply for this article.

Like sunlight below

5m (16 ft.) of water

The HQI lamps from TUNZE® 8043 and 8045 produce an intensive illumination for all marine aquaria; they are the best alternative to natural light. At a colour temperature of 10,000 K they have a reduced red content and an increased blue content of the light spectrum, rendering visible all colours of the fish and coral. Even sensitive types of coral find ideal growth conditions under TUNZE® HQI lamps.

Service life: About 9,000 hours; very high colour stability throughout the entire service life of the lamp.



**HIT bulb 150W,
10,000 K, RX7s
8043.000**

57.20 £



**HIT bulb 150W,
14,000 K, RX7s
8043.070**

103.70 £



**HIT bulb 250W,
10,000 K, Fc2/18
8045.000**

65.60 £



**HQI bulb 250W/D,
5,200 K, Fc2/18
8044.000**

101.00 £



**HIT bulb 70W, 10,000 K, RX7s
8041.000**

76.00 £



**HIT bulb 250W,
14,000 K, Fc2/18
8045.070**

120.50 £



**HIT bulb 70W, blue,
>15 K, RX7s
8041.100**

65.00 £



**HQI bulb 250W, 10,000 K, E40
8048.000**

126.40 £



**HQI bulb 150W/D,
5,200 K, RX7s
8042.000**

51.50 £



**HQI bulb 400W, blue, E40
8049.000**

122.20 £



**HIT bulb 150W, blue,
>15K, RX7s
8043.100**

88.50 £



**HIT bulb 400W, 10,000 K, E40
8051.000**

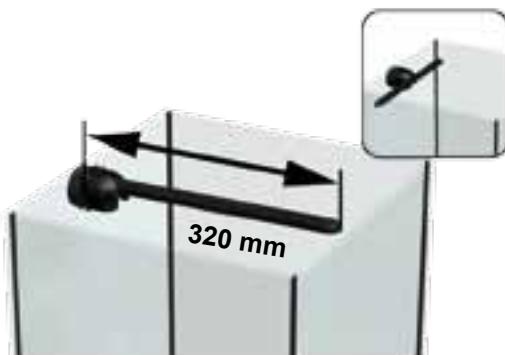
\$ 228.49

The way in which aquariums are designed and equipped today has changed considerably. The Tunze® LED is our response to this ongoing trend, and an impressive example of how pump and lighting technology can be transformed into a form of art. The purpose of this new technology is the creation of sophisticated lighting and energy conditions, and to enable every aquarium to utilize all the benefits that state-of-the-art technology advantages have to offer.



The TUNZE® LED is distinguished by impressive illuminating power and a very compact design, innovatively combined with a flexible mounting with magnet holder. It is water proof and can be installed to reduce the loss of light underwater. Nevertheless, the installation may also occur close to the surface like no other lights on the market. All TUNZE® LEDs are passively cooled and guarantee a long lifespan through a low operating temperature and perfect heat distribution. The optimal light distribution is also ideal as a main lighting for a nano-aquarium or as an "add-on" for larger aquariums. Thanks to the low casing dimensions, combinations of multiple lights are easily possible, which multiplies the light power corresponding with their number if the lights are installed directly next to each other. The light color and intensity of the lights can be controlled with the new 7097 multi-controller. Dimensions without holder: L305mm x W25mm x H17mm.

Adaptability to aquariums



TUNZE LED marine

Suitable for stony coral aquariums up to 60 liters (15 US gal.) and soft coral aquariums up to approx 100 liters (26 USgal.).

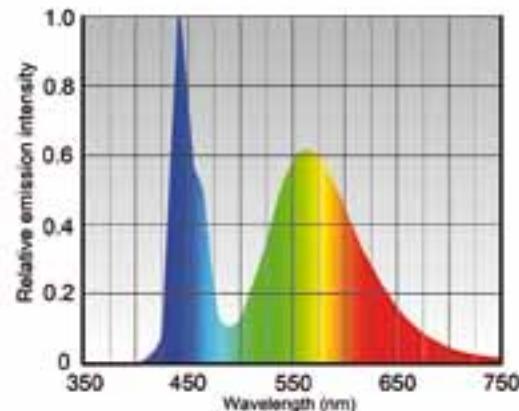
Equipped with 42 white LEDs (6500K), 20 blue LEDs (470nm) with 750 lumens.

This combination yields a color temperature of approx. 15,000K.

11 W overall power consumption, including magnet holder for a glass thickness of up to 12 mm (3/8").

8810.000

133.10 £



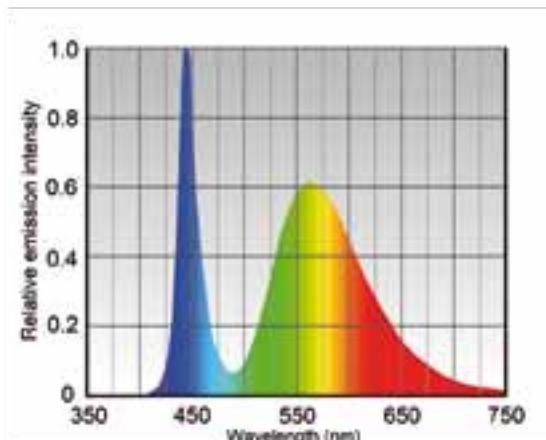
TUNZE LED white

Suitable for soft coral or freshwater aquariums up to approx. 120 liters (30 USgal.).

Equipped with 62 white LEDs (6500K), 1050 lumens, 12 W overall power consumption, including magnet holder for a glass thickness of up to 12 mm (3/8").

8820.000

133.10 £



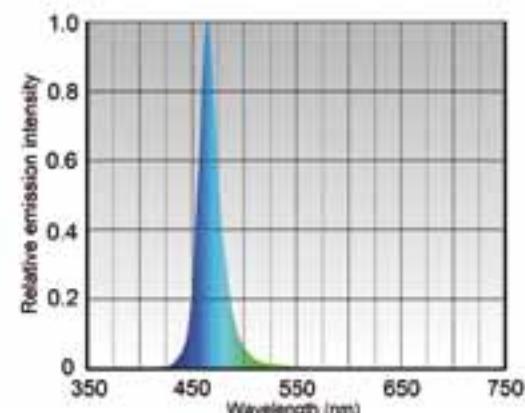
TUNZE LED blue

Suitable for use as an extra lighting for aquariums up to approx. 300 liters (80 USgal.).

Equipped with 62 blue LEDs (470nm), 8 W overall power consumption, including magnet holder for a glass thickness of up to 15 mm (1/2").

8830.000

133.10 £



TUNZE® Power Magnet

The TUNZE magnetic pane cleaners are used for cleaning aquarium panes.

The TUNZE Power Magnet has been developed especially for the requirements of glass thicknesses of 6 to 55mm (1/4" to 2").

On account of the casing they are corrosion resistant and may remain in the aquarium without any adverse effect on your aquarium biotope. They consist of an inner section with a rough surface and an outer section with a felt or velour surface. The two sections are connected with the retaining cord supplied along with the unit to allow easy retrieval, if they separate.



Super magnet for panes of 6 to 55mm (1/4 -2") in thickness



Absolutely waterproof



Retaining cord for easy removal from the aquarium



Large cleaning surface 59 x 77mm (2.3 x 3.0 in.) for fast and effective action



Cleaning surfaces can be replaced easily

TUNZE® Power Magnet

① Power Magnet 220.53

Glass thicknesses: 6 to max. 12mm

(1/4" to max. 3/8").

Cleaning surface: 59 x 77mm (2.3 x 3.0 in.).

Height: 22mm (.86 in.).

0220.530

16.30 £



① Power Magnet 220.54

Glass thicknesses: 10 to max. 18mm

(3/8" to max. 5/8").

Cleaning surface: 59 x 77 mm (2.3 x 3.0 in.).

Height: 22mm (.86 in.).

0220.540

30.70 £

① Power Magnet 220.55

Glass thicknesses: 12 to max. 30mm

(3/8" to max. 1 1/8").

Cleaning surface: 59 x 77 mm (2.3 x 3.0 in.).

With felt for acrylic panes.

Height: 22mm (.86 in.).

0220.550

107.60 £

① Power Magnet 220.56

Glass thicknesses: 15 to max. 40mm

(1/2" to max. 1 1/2").

Cleaning surface: 59 x 77 mm (2.3 x 3.0 in.).

With felt for acrylic panes.

Height: inside 18mm (.70 in.),
outside 22mm (.47 in.).

0220.560

200.90 £

② Power Magnet 220.57

Glass thicknesses: 35 to max. 55mm

(1 1/4 - 2").

Cleaning surface: 115 x 77 mm (4.5 x 3.0 in.).

With felt for acrylic panes.

Height: inside 26mm (1.02 in.),
outside 27mm (1.06 in.).

0220.570

430.80 £



Accessories (order separately)

③ Rough surface, 77 x 59mm (3.0 x 2.3 in.)

Spare rough surface for the inside magnets: 220.53, 220.54, 220.55, 220.56. Suitable for glass panes.

0220.521

2.20 £

③ Rough surface, 115 x 77mm (4.5 x 3.0 in.)

Spare rough surface for the inside magnets 220.57. Suitable for glass panes.

0220.571

5.40 £

④ Fleece for acrylic panes

This soft fleece is an add-on for the rough surface of the inside magnets: 220.53, 220.54, 220.55, 220.56. Aquariums with acrylic panes can be cleaned gently with this fleece. Order two units for magnet 220.57.

0220.568

1.30 £

⑤ Pile fabric surface, 77 x 5 mm (3.03 x 2.3 in.)

On outside, to be used for 220.53, 220.54.

0220.526

1.50 £

⑥ Felt on the outside, 77 x 59mm (3.03 x 2.3 in.)

To be used for 220.55, 220.56.

0220.558

3.50 £

⑥ Felt on the outside, 115 x 77mm (4.5 x 3.03 in.)

To be used for 220.57.

0220.572

8.90 £



TUNZE® Magnet Holder



Magnet holder

Universal holder for attachment up to a glass thickness of 20mm (3/4"), dimensions: diam. 50mm (1.9 in.) x W15mm (.59 in.).

6025.500

31.00 £

Magnet Holder

Universal holder for attachment up to a glass thickness of 20mm (3/4"), dimensions: diam. 70mm (2.6 in.) x W20mm (.79 in.).

6065.520

57.70 £

Magnet Holder

Universal holder for attachment up to a glass thickness of 27mm (1"); dimensions: diam. 70mm (2.6 in.) x W20mm (.79 in.).

6205.500

88.00 £



TUNZE® Accessories for aquariums

For over 15 years now, TUNZE® has been providing Coral Glue to specifically promote the growth of stony corals. Our new product line includes epoxy-based adhesives, and a two-component adhesive for a quick adhesion.

The Coral Glues do not emit any pollutants into the aquarium water and avoid an over-foaming of the skimmer.



Coral Gum, 112 g (4 oz.)

Epoxy resin based adhesive for safe attachment of coral offshoots on stone substrates. Dyed red, similar to calcareous algae, suitable especially for coral reef aquariums. It is also suitable for attaching glass, ceramic, wood and many plastics. Contents: 112 g (4 oz.).

0104.740

10.30 £



Coral Gum instant, 120 g (4.23 oz.)

Coral Gum instant is a 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 (4.23 oz.)

0104.750

17.20 £



Coral Gum instant, 400g (14.11oz.)

Coral Gum instant is a 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 200g (14.11oz.)

0104.760

37.80 £



TUNZE® Accessories for aquariums



① TUNZE® Aquawind

TUNZE® Aquawind is an especially low-noise aquarium ventilator provided with a 5V low-voltage power supply unit. Moreover, it comes with an attachment clamp, which can be used for every aquarium edge up to 25mm (.98 in.). It produces a laminar air movement over the surface of the water, accelerating the evaporation process and thus achieving a cooling of the water. In standard aquariums, the cooling may amount to 1° to 2° Celsius (1.8° to 3.6° F) on 500 litres (132 USgal.).

Dual speed adjustment, with power supply unit and universal holder.

Dimensions: L270 x W100 x H30mm (L10.6 x W3.9 x H1.13 in.).

7028.900

60.70 £

② Black mangrove

Various types of mangrove have been used in aquarism. The black mangrove (*Avicennia germinans*) has the advantage that it needs little humidity for its growth. This particular species has been selected especially for its ideal and fast growth in an appropriate planter or refugium.

Delivery: The black mangrove is supplied as seeds or small plants for the exclusive use in saltwater. In the packaging, it can survive for about ten days. Availability depends on season.

3178.500

27.40 £



③ Mangrove Box

The Comline Mangrove Box 3178 has been developed for the growth of mangroves in saltwater or hydroponic plants in fresh-water paludariums. The plants grow well because the bacterially decomposed organic waste matter is concentrated and absorbed by the roots. At the same time, the aquarium water is relieved of nutrients. The Comline Mangrove Box has an ideal immersion depth of 100 to 130mm (3.9 to 5.1 in.). On account of the water exchange surface on the lower side, no additional water circulation is required in the aquarium. Attachment with Magnet Holder 6200.500 up to a glass pane thickness of 15mm (1/2"). Dimensions: L125 x W113 x H300mm (L4.9 x W4.4 x H11.8 in.).

3178.000

68.00 £



④ Theben-timer 7080

Timer switch for the socket-outlet, 230V~16A, dimensions (LxWxH) 70 x 70 x 45 mm (2.7 x 2.7 x 1.7 in.), only available for German-type socket-outlets! Switching increment 15 min.

7080.000

32.10 £



Adhesives for aquariums:

⑤ Silicone, 50 ml (1.7 oz.)

Transparent silicone for glass and TUNZE® products.

0104.720

5.30 £

⑥ Instant adhesive

For all materials, 3 g (.1 oz.).

0104.730

5.90 £



TUNZE® Accessories for aquariums

⑧ Protective gloves

10 pcs. with arm protection ideal for working in an aquarium (e.g. protection against nematophores).

0220.510

5.50 £



⑨ Cleaning set

Complete cleaning set for aquarium pumps, filters and skimmers in a plastic container.

Contents: Special cleaning brushes, various tools especially for Turbelle® pumps, cleaning cloth, spray bottle for citric acid solution, concentrated citric acid for decalcifying, and DVD demonstrating the maintenance of Turbelle® pumps.

0220.700

51.30 £



⑩ Citric acid

110 g (3.8 oz.) citric acid for Cleaning Set 0220.700.

0220.710

7.40 £

⑪ Brush Set

Five-part brush set with towel for pumps and skimmers.

0220.500

12.70 £



⑫ 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: 800mm (32 in.). Material: Lexan®. Suitable for use inside and outside of the aquarium.

0220.400

23.80 £



PVC hose - diam. 6 x 9mm x 1m

(diam. .23 x .34 x 39.1 in.)

Black, suitable for all TUNZE bio reactors.

1678.390

2.10 £

PVC hose - diam. 6 x 9mm x 2m

(diam. .23 x .34 x 78.7 in.)

Black, suitable for all TUNZE bio reactors.

1678.370

3.10 £

PVC hose - diam. 6 x 9mm x 10m

(diam. .23 x .34 x 393.6 in.)

Black, suitable for all TUNZE bio reactors.

1678.380

14.40 £



PVC hose - diam. 4 x 7mm x 3m

(diam. .15 x .27 x 118.1 in.)

Black, suitable for all TUNZE osmotic regulators.

5000.390

3.90 £

PVC hose - diam 4 x 7mm x 10m

(diam. .15 x .27 x 393.6 in.)

Black, suitable for all TUNZE osmotic regulators.

5000.380

11.30 £



PVC hose - diam. 4 x 6mm x 5m

(diam. .15 x .23 x 196.8 in.)

Transparent, suitable for air pumps or CO2 systems.

7072.300

4.50 £

Silicon hose - diam. 4x1,5mm x5m

(diam. 15 x.27 x196.8 in.)

Transparent, also suitable for air pumps with ozone.

7072.200

14.40 £

www.tunze.com

Our new website is a direct link between TUNZE® and the aquarists.

Written in ten languages, you will find among other things:

A configurator, in which you enter the dimensions of your aquarium, and the requested filtering or flow technology will be determined automatically;

complete description of products with illustrations and recommended retail prices; spare parts shop with illustrations for direct purchase of spare parts from TUNZE®; e-mail address for technical assistance or information on the products; all instructions for use in PDF format for downloading; and dealer addresses.

Email: tunze.uk@tunze.com

The prices rendered are recommended retail prices in pound Sterling and contain the legally applicable value-added tax of 20 per cent at present. Subject to change in prices and technical modifications. Larger movements in the exchange rate of the pound Sterling may cause change in prices at short notice.

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Art. No. 0090.000_G

Nominal charge

£ 2.70

Edition 01/2014