Aquamot



Trend

# Aquamot Trend



### Good. Better. Aquamot Trend.

The new Trend models are motors with a cutting-edge technology. The new Trend models are comparable with petrol engines starting from 3.5hp up to 45hp, but they are cleaner, quieter and more efficient. Furthermore this product line is available in different styles. The outboard motors are suitable for small dinghies up to boats with 4 tons and more. The flange motors or fixed pod motors are applicable for small sailing boats at calm and maneuvering inside the marinas. Moreover the Trend line is characterized by the following features:

### **UNRIVALED THRUST**

These motors are real powerhorses with thrust value at the highest level. And success is no accident. Hitherto producer of electric motors only considers the propeller itself. But the streaming line at the housing is also as important as the upstream flow to the propeller. The values can be only achieved with consequent and meticulous improvements of the whole stream at motor and propeller. In addition to calculating with state-of-art viscous computational models our engineers made a lot of tests in our in-house streaming canal to achieve the max. thrust. Therefore all Trend models have the best thrust in the market in our understanding. See it yourself...

### UNRIVALED ROBUSTNESS

And it works and works and works... This phrase characterized Aquamot motors in the past. And it stays that way. All motors are manufactured of a high-strength, very light and seawater-resistant aluminum which is also used in aircraft constructions. All motors don't have any electronic inside the motor housing because electric components often create errors underwater. And the Trend outboard motors also have another highlight: the new-developed suspension trips automatically when touching on the ground and therefore it prevents a worse damage at the motor. So everything is done that products of Aquamot will stay the sustainable, most robust electric motors in future.





#### **UNRIVALED SMOOTH OPERATION**

Electric motors are quieter than combustion engines. That's clear. But Aquamot motors are quieter than other electric motors for boats. It is often used small, alienated motor with high rpm and a gearbox. The result: an annoying and high-frequent whir with losses up to 30% and an additional wearing part in the motor system. Aquamot has also decided to choose a direct drive without a gearbox, the result: The Trend line is almost soundless, more efficient and has one wearing part lesser. A superior perfection –it is an Aquamot for sure.

### **UNRIVALED EFFICIENCY**

Everybody knows that electric motors have a better efficiency than combustion engines, but also electric motors distinguish themselves. As written above gearboxes often waste valuable power. Aquamot only uses direct drives for their motors. Furthermore Aquamot uses the latest three-phase technology for the motors. Parameters like air-gap, rotor design, laminations can be optimized through exact and modern calculations perfectly for the application of an electric motor for a boat. This was coupled with the hydrodynamic processes outside of the motors. Therefore all Aquamot motors have more thrust and are more efficient than all other electric boat motors.

### AQUAMOT TREND - A RELIABLE PARTNER ONBOARD

The list of all features of the new Aquamot Trend is really long: high—efficient and brushless motor technology, streaming-optimized and robust aluminum housings, perfected propeller designs, unrivaled smooth operation, sophisticated suspension system for the electric outboard motors, stepless control forward and backward, integrated display, biggest integrated Li-lon battery in serial delivery, etc. Every extra makes electric boating much more interesting – and this is what we want.

# Outboard motors TREND 1.1 - 1.6



### Benefits

- Most powerful electric outboard motors with an integrated Lithium battery on the market
- Biggest battery capacity in standard equipment
- Without any cables the models Trend 1.1 & 1.6 can be handled without any visible cables
- Lithium cell from international well-known suppliers
- Superior robustness through the light aluminum housing
- Fast stowed and carried away
- Tiller can be fixed in height
- Obtainable with tiller and remote control
- Brushless motor technology
- Trimmable and swing up by hand



# Aquapedia

You ask - We answer

#### WHICH MOTOR FOR WHICH BOAT?

Both motors are applicable for infant boats, small dinghies and other small boats. Having satisfactory reserves for wind and wave we recommend depending on the hull type the model Trend 1.1 up to 1.5tons, and Trend 1.6 up to 1.8tons.

### WHAT IS THE CRUISING RADIUS WITH ONE 640 WH BATTERY?

Trend 1.1 with 1.100 Watt Trend 1.6 with 1.600 Watt

 Slow
 06 h 30 min
 04 h 30 min

 Half power
 02 h 30 min
 01 h 45 min

 Full power
 00 h 40 min
 00 h 29 min

The cruising radius can be doubled with a 1.280 Wh battery.

### HOW CAN THE CRUISING RADIUS BE INCREASED?

The cruising radius can be prolonged through to using an extra battery 640 Wh or 1.280 Wh which is easy to change. The second battery can be bought budget-friendly at an Aquamot dealer.

#### **HOW SAFE IS THE AQUAMOT TREND?**

Of course very safe. On the one hand the kill switch protects against an unwanted operation on the other hand the battery management system (BMS) protects with numerous safety functions against for example over- and under-voltage, short circuits, over- and under-temperature, etc. 8 years after date of manufacturing the battery has to verify by an Aquamot Service Center to insure the max. safety.

### WHAT IS INCLUDED AT THE STANDARD SCOPE OF DELIVERY?

Basically you are ready to start with a motor package of a Trend 1.1 & 1.6. Starting from the high efficient motor incl. propeller with display and kill switch through to Lithium battery, charger and anode is everything included.

### WHAT IS THE WARRANTY?

The warranty period is 2 years from the date of purchase for non-commercial use.



#### **COMFORTABLE ON-BOARD COMPUTER**

The integrated display shows the status of the battery. It is also possible to see this information through the backlight during night and dawn.

# HIGH PERFORMANCE LITHIUM BATTERY INCL. BMS WITH REDUNDANT PROTECTIVE FUNCTIONS

The 640 Wh light weight lithium battery offers a superior safety system in addition to a considerable performance.

High safety cells made from well-known manufactures incl. the high-intelligent BMS ensure highest possible safety. Certainly this battery is a safety partner.

### **VERTICALLY ADJUSTABLE TILLER**

The tiller is adjustable in height. Therefore the Aquamot Trend is comfortable to use for fisherman and sailor.

A tiller extension is also available. Alternative the Trend can be delivered for remote control.

### **SOPHISTICATED SUSPENSION**

It goes without saying that an outboard motor is able to trim in 3 positions and swing up by hand. But this motor swings up automatically when it touches on the ground. This is brand new.

Furthermore the suspension has an additional bore for bolting it against theft.

### **PROFILES SHAFT DESIGN**

The steering of the motor has been improved through the design of the shaft. There are 3 different shaft lengths available: S, L and XL

### HIGH EFFICIENT & CALM PROPULSION CHAIN

QUIET & POWERFUL – these specifications have to have a first-class electric outboard motor. This can be only realized through a direct drive with a gearbox and a superior propeller design.

### ROBUST, FLOW-OPTIMIZED ALUMINUM HOUSING

Standard electric outboard motors with this power consist of less robust plastic. All Trend motors are designed and manufactured of a high-tensile aluminum for having the highest robustness.

### **FIN INCL. INTEGRATED ANODE**

The fin improves the steering of the boat and furthermore it protects the motor against running aground. The anode protects against corrosion also in sea-water.

### Model and accessories overview

Model	Power	Control	Comp. thurst comb. engine	Thrust	Integrated battery	Battery	Weight	Shaft length	Warranty
Trend 1.1S-P	1.100 W	Tiller	3,5 hp	72 lbs	Yes - removable	640 Wh – Li-Ion	14,2 kg	62 cm	2 Years
Trend 1.1L-P	1.100 W	Tiller	3,5 hp	72 lbs	Yes - removable	640 Wh – Li-Ion	14,6 kg	71 cm	2 Years
Trend 1.6S-P	1.600 W	Tiller	5,0 hp	89 lbs	Yes - removable	640 Wh – Li-Ion	15,3 kg	62 cm	2 Years
Trend 1.6L-P	1.600 W	Tiller	5,0 hp	89 lbs	Yes - removable	640 Wh – Li-Ion	15,9 kg	71 cm	2 Years
Trend 1.1S-F	1.100 W	Remote	3,5 hp	72 lbs	Yes - removable	640 Wh – Li-Ion	14,6 kg	62 cm	2 Years
Trend 1.1L-F	1.100 W	Remote	3,5 hp	72 lbs	Yes - removable	640 Wh – Li-Ion	14,2 kg	71 cm	2 Years
Trend 1.6S-F	1.600 W	Remote	5,0 hp	89 lbs	Yes - removable	640 Wh – Li-Ion	15,3 kg	62 cm	2 Years
Trend 1.6L-F	1.600 W	Remote	5,0 hp	89 lbs	Yes - removable	640 Wh – Li-Ion	15,9 kg	71 cm	2 Years
Surcharge for 1.280 Wh battery	-	-	-	-	-	1.280 Wh – Li-lon	5,1 kg	-	2 Years
Spare battery Trend 1.1-1.6	-	-	-	-	-	640 Wh – Li-Ion	4,7 kg	-	2 Years
Spare battery Trend 1.1-1.6	-	-	-	-	-	1.280 Wh – Li-lon	9,8 kg	-	2 Years
Surcharge XL-shaft	-	-	-	-	-	-	+0,3 kg	80 cm	2 Years
Spare Propeller				Foi	Trend 1.1 and 1.6				
Long-throttle arm				Long	-throttle arm - 65cm				
Charger				Foi	Trend 1.1 and 1.6				

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# Outboard motors TREND 2.2 - 4.3



### Benefits

- Superior thrust none other comparable motor has a bigger thrust than these electric outboard motors
- Unrivaled smooth operation through direct drive no annoying high-frequent whir
- >> High comfort smart display and height-adjustable tiller
- Unrivaled durability through high-performance aluminum
- Obtainable with tiller and remote control
- Brushless motor technology
- Trimmable and swing up by hand



# Aquapedia

You ask - We answer

### WHICH TREND FOR WHICH BOAT?

Both motor types are useable for Dinghis and smaller boats. Having satisfactory reserves for wind and wave we recommend depending on the hull type the model Trend 2.2 from 2.0tons up to 2.5tons, and Trend 4.3 up to 4.0tons.

### WHAT IS THE CRUISING RADIUS?

The cruising radius depends from the quality and capacity of the batteries. Below you will find examples with the Aquamot Longlife Deep-Cycle Silicone batteries:

Trend 2.2 with 2 pcs. Aquamot ALS batteries 12 V / 260 Ah Trend 4.3 with 4 pcs. Aquamot ALS batteries 12 V / 260 Ah

 Slow
 10 h 00 min
 10 h 00 min

 Half power
 05 h 30 min
 05 h 30 min

 Full power
 02 h 15 min
 02 h 15 min

### IS IT POSSIBLE TO RAISE OR REDUCE THE BATTERY CAPACITY?

Of course, there are several possibilities to raise or reduce the cruising radius. Generally only traction batteries should be used because they are designed for a higher current during a long time period (ATTENTION: no starter or semi-traction batteries). Furthermore a min. capacity of 110Ah is recommended. All batteries should have the same capacity for having the max. lifetime. Therefore please always ask an Aquamot dealer or Aquamot regarding the dimensioning of the battery capacity.

### WHAT IS INCLUDED AT THE STANDARD SCOPE OF DELIVERY?

Generally it is everything included except batteries and chargers. Therefore it is also the lever and display included at the remote models. At the tiller models it is included in the motor. The cable lengths are standardized: 3m for power cable and 30cm battery connection, 6m to the display. An extension is supplied by Aquamot.

#### WHAT IS THE WARRANTY?

The warranty period is 2 years from the date of purchase for non-commercial use.



### **COMFORTABLE ON-BOARD COMPUTER**

The integrated display shows the status of the battery. It is also possible to see this information through the backlight during night and dawn.



### **VERTICALLY ADJUSTABLE TILLER**

The tiller is adjustable in height. Therefore the Aquamot Trend is comfortable to use for fisherman and sailor.

A tiller extension is also available. Alternative the Trend can be delivered for remote control.

### **SHORT OR LONG SHAFT**

The motor can be delivered in 2 different lengths: S & L. Furthermore the steering of the motor has been improved through the design of the shaft.

### **OPTIMIZED ANTI-CAVITATIONS-PLATE**

The anti-cavitations plate which is optional available enables a low immersion depth.

### HIGH EFFICIENT & CALM PROPULSION CHAIN

QUIET & POWERFUL – these specifications have to have a first-class electric outboard motor

This can be only realized through a direct drive with a gearbox and a superior propeller design.

#### **SOPHISTICATED SUSPENSION**

It goes without saying that an outboard motor is able to trim in 3 positions and swing up by hand. But this motor swings up automatically when it touches on the ground. This is brand new.

Furthermore the suspension has an additional bore for bolting it against theft.

### HIGH-TECH MOTOR WITHOUT ELECTRONICS INSIDE THE HOUSING

The sensorless asynchronous AC motors (=brushless) promise a superlative performance. Through exact calculations the motor has been well adapted for the application of an electric motor for a boat.

### Model and accessories overview

Model	Power	Voltage	Control	Comp. thurst comb. engine	Thrust	Weight	Shaft length	Warranty
Trend 2.2L-P	2.200 W	24 V	Tiller	6,5 hp	124 lbs	23,4 kg	70 cm	2 Years
Trend 4.3L-P	4.300 W	48 V	Tiller	11 hp	197 lbs	24,8 kg	70 cm	2 Years
Trend 2.2L-F	2.200 W	24 V	Remote	6,5 hp	124 lbs	23,4 kg	70 cm	2 Years
Trend 4.3L-F	4.300 W	48 V	Remote	11 hp	197 lbs	24,8 kg	70 cm	2 Years
Trend 11.0L-F	11.000 W	48 V	Remote	28 hp	n/a	52,2 kg	75 cm	2 Years
Trend 15.0L-F	15.000 W	48 V	Remote	35 hp	n/a	53,3 kg	75 cm	2 Years
Trend 20.0L-F	20.000 W	96 V	Remote	40 hp	n/a	55,4 kg	75 cm	2 Years
Trend 25.0L-F	25.000 W	96 V	Remote	45 hp	n/a	58,2 kg	75 cm	2 Years
Cable extension motor cable - 2 m				with high voltage plug				
Cable extension leaver - 2 m				with plug				
Anti-cavitations-plate				Consist of stainless steel				
Spare Propeller				For Trend 2.2 and 4.3				
Long-throttle arm				Long-throttle arm - 65cm				

# Fixed pod motors TREND 1.1 - 1.6



### Benefits

- >> First fixed-pod motor system with a portable Li-lon battery
- Small resistance through optimization with state-of-the-art computational models and folding propeller
- Not visiable or hearable but very powerful
- Battery is fast stowed and carried away
- Lithium cells from international well-known suppliers
- Brushless motor technology
- Customized compensation wedge for a perfect alignment available



# Aquapedia

### You ask - We answer

#### WHICH TREND FOR WHICH BOAT?

Both motor types are specially designed for sailing boats and smaller dinghies. Having satisfactory reserves for wind and wave we recommend depending on the hull type the model Trend 1.1 up to 1.5tons, and Trend 1.6 up to 1.8tons.

### WHAT IS THE CRUISING RADIUS WITH ONE 640 WH BATTERY?

Trend 1.1 with 1.100 Watt Trend 1.6 with 1.600 Watt

 Slow
 06 h 30 min
 04 h 30 min

 Half power
 02 h 30 min
 01 h 45 min

 Full power
 00 h 35 min
 00 h 25 min

The cruising radius can be doubled with a 1.280 Wh battery.

### WHERE AND HOW SHOULD FIXED POD MOTORS BE MOUNTED?

Generally fixed pod motors are mounted between keel and ruder. Moreover it is better that the motor is placed closer to the keel than to the rudder. After the propeller there are hydrodynamics turbulences and therefore vibrations at the rudder can be the consequences. Furthermore the motor is also positioned at the lee side from the keel and the motor has a lesser resistance. The fixed pod motors should be mounted parallel to the waterline for having the max. thrust. This is why Aquamot supply custom-made compensation wedges which are also vibration-dumping.

### WHAT IS INCLUDED AT THE STANDARD SCOPE OF DELIVERY?

Basically you are ready to start with a motor package of a Trend 1.1 & 1.6. Starting from the high efficient motor incl. propeller with display, key switch and throttle through to Lithium battery, charger and anode is everything included. Optional a customized compensation wedge and a folding propeller is available.

### WHAT IS THE WARRANTY?

The warranty period is 2 years from the date of purchase for non-commercial use.



### **VIBRATION DUMPING COMPENSATION WEDGE**

The motor should be mounted parallel to the water-line for having the optimal thrust.

Therefore the angel of compensation wedge is manufactured customized. Furthermore it also dumps vibrations due to using a special material.

Consequently a high thrust and a smooth operation is ensured.

### **SOLID MOUNTING**

The mounting is done by 2x M10 stay bolts which are made of stainless steel.

### HIGH EFFICIENT MOTOR

The high efficient motor turns the propeller with a low rpm. Due to not using any gearbox the motor is very quiet.

### HIGH-PERFORMANCE PROPELLER

The propeller is adjusted to the motor perfectly and ensures the highest thrust on market.

Especially for sailing boats we recommend folding propellers to minimize the drag.

### FLOW-OPTIMIZED ALUMIUM HOUSING

The motor has a very less drag due to using special flow calculations. The housing consists of a sea-water resistant aluminum.

### Model and accessories overview

Model	Power	Comp. thurst comb. engine <sup>2</sup>	Thrust <sup>1</sup>	Integrated battery	Battery	Weight	Warranty		
Trend 1.1FM	1.100 W	3,5 hp	72 lbs	Yes - removable	640 Wh – Li-Ion	10,2 kg	2 Years		
Trend 1.6FM	1.600 W	5,0 hp	89 lbs	Yes - removable	640 Wh – Li-Ion	11,3 kg	2 Years		
Surcharge for 1.280 Wh battery	-	-	-	-	1.280 Wh – Li-Ion	+5,1 kg	2 Years		
Spare battery for Trend 1.1-1.6	_	-	-	-	640 Wh – Li-Ion	4,7 kg	2 Years		
Spare battery for Trend 1.1-1.6	-	-	-	-	1.280 Wh – Li-Ion	9,8 kg	2 Years		
Folding propeller	For Trend 1.1 and 1.6 for reducing the resistance								
Compensation wedge	Customized compensation wedge - max. 50mm								
Spare Propeller	For Trend 1.1 and 1.6								
Charger	For Trend 1.1 and 1.6								

<sup>1</sup>Measured with fixed propeller

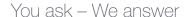
# Fixed pod motors TREND 2.2 - 25.0



### Benefits

- Small resistance through optimization with state-of-the-art computational models and folding propeller
- Not visiable or hearable but very powerful
- Quieter than all the others through a superior direct drive
- Brushless motor technology
- Customized compensation wedge for a perfect alignment available





### WHICH TREND FOR WHICH BOAT?

Both motor types are specially designed for sailing boats and smaller boats. Having satisfactory reserves for wind and wave we recommend depending on the hull type the model Trend 2.2 up to 2.5tons, and Trend 4.3 up to 4.0tons.

### WHAT IS THE CRUISING RADIUS?

The cruising radius depends on the quality and capacity of the batteries. Below you will find examples with the Aquamot Longlife Deep-Cycle Silicone batteries:

Trend 2.2 with 2 pcs. Aquamot ALS Trend 4.3 with 4 pcs. Aquamot ALS batteries 12 V / 145 Ah batteries 12 V / 145 Ah

 Slow
 08 h 30 min
 10 h 00 min

 Half power
 03 h 30 min
 04 h 00 min

 Full power
 01 h 35 min
 01 h 40 min

### WHERE AND HOW SHOULD FIXED POD MOTORS BE MOUNTED?

Generally fixed pod motors are mounted between keel and ruder. Moreover it is better that the motor is placed closer to the keel than at the ruder. After the propeller there are hydrodynamics turbulences and therefore vibrations at the ruder can be the consequences. Furthermore the motor is also positioned at the lee side from the keel and the motor has less resistance. The fixed pod motors should be mounted parallel to the waterline for having the max. thrust. This is why Aquamot supplies custom-made compensation wedges which are also vibration-dumping.

### WHAT IS INCLUDED AT THE STANDARD SCOPE OF DELIVERY?

Basically everything is included in the serial delivery except batteries and charger. Starting from the high-efficient motor incl. fixed pitch propeller, display till to the lever and on/off switch is included. Optional a customized compensation wedge and a folding propeller is available.

### WHAT IS THE WARRANTY?

The warranty period is 2 years from the date of purchase for non-commercial use.



### **VIBRATION DUMPING COMPENSATION WEDGE**

The motor should be mounted parallel to the waterline for having the optimal thrust. Therefore the angel of compensation wedge is manufactured customized.

Furthermore it also dumps vibrations due to using a special material.

Consequently a high thrust and a smooth operation is ensured.

### **SOLID MOUNTING**

The mounting is done by 2x M10 stay bolts which are made of stainless steel.

### **HIGH-TECH MOTOR**

The acutely efficient sensorless and brushless motor works with a low rpm. Furthermore they are very quietly due to using a direct drive (with gearbox).

### HIGH-EFFICIENT PROPELLER

The target of a propeller is to realize the highest possible thrust. And Aquamot propellers do this. The own-developed propeller design ensures the max. thrust.

Especially for sailors we recommend folding propellers.

### FLOW-OPTIMIZED ALUMIUM HOUSING

The motor has a very less drag due to using special flow calculations. The housing consists of a sea-water resistant aluminum.

### Model and accessories overview

Model	Power	Voltage	Control	Comp. thurst comb. engine	Thrust <sup>1</sup>	Weight	Warranty			
Trend 2.2FM	2.200 W	24 V	Remote	6,5 hp	124 lbs	12,2 kg	2 Years			
Trend 4.3FM	4.300 W	48 V	Remote	11 hp	197 lbs	13,9 kg	2 Years			
Trend 11.0FM	11.000 W	48 V	Remote	28 hp	n/a	44,3 kg	2 Years			
Trend 15.0FM	15.000 W	48 V	Remote	35 hp	n/a	45,2 kg	2 Years			
Trend 20.0FM	20.000 W	96 V	Remote	40 hp	n/a	47,6 kg	2 Years			
Trend 25.0FM	25.000 W	96 V	Remote	45 hp	n/a	48,9 kg	2 Years			
Folding propeller	For Trend 2.2 and 4.3 for reducing the resistance									
Compensation wedge	Customized compensation wedge - max. 50mm									
Spare Propeller	Fixed pitch propeller for Trend 2.2 and 4.3									
Cable extension motor cable - 2 m	with high voltage plug									
Cable extension leaver - 2 m	with plug									

<sup>1</sup>Measured with fixed propeller



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