

SEAKING

USER MANUAL

Sensorless Brushless Motor

SEAKING 54113SL V2
SEAKING 4685SL V2

20250311

HW-SMB712DUL00

01 Warnings

- Read the manuals of all the items being used in the build. Ensure setup, and overall install is correct and reasonable.
- All connections, must be made correctly. You may loose control, or run into major issues caused by improper, bad, weak, or poor connections.
- Ensure reliable connection of water cooling pipes to avoid motor overheating and damage.
- Stop usage if the motor exceeds 100°C/212°F . High temperature will cause the rotor to weaken and even damage the motor.

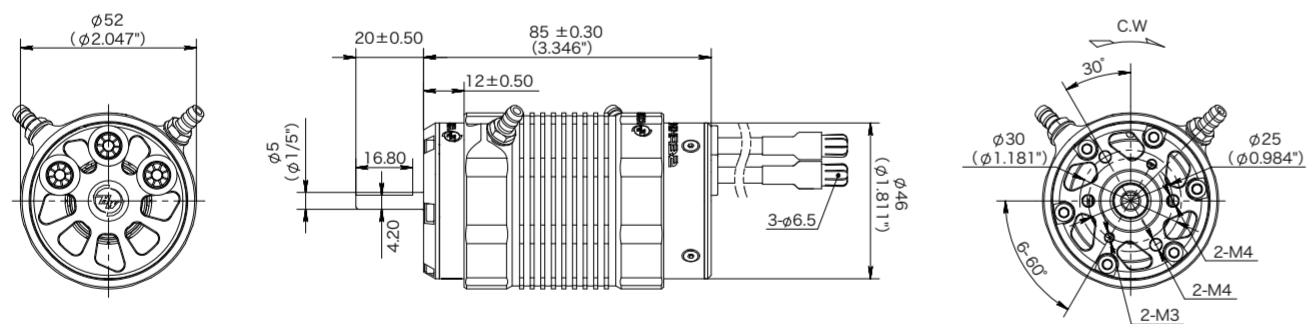
02 Features

- Powerful output with smooth startup, perfect for big size boats.
- Eye-catching water cooling jacket with excellent cooling performance.
- Optimized ESC Compatibility: Designed for seamless integration with the SEAKING 300A/200A HV V4 ESC, enabling higher speeds and increased power output when paired.
- Durable build: CNC aluminum case, high-temp coils, Kevlar-wrapped rotor, ultra-thin silicon steel sheet, stainless shaft, and premium bearings.
- Modular design for easy maintenance.

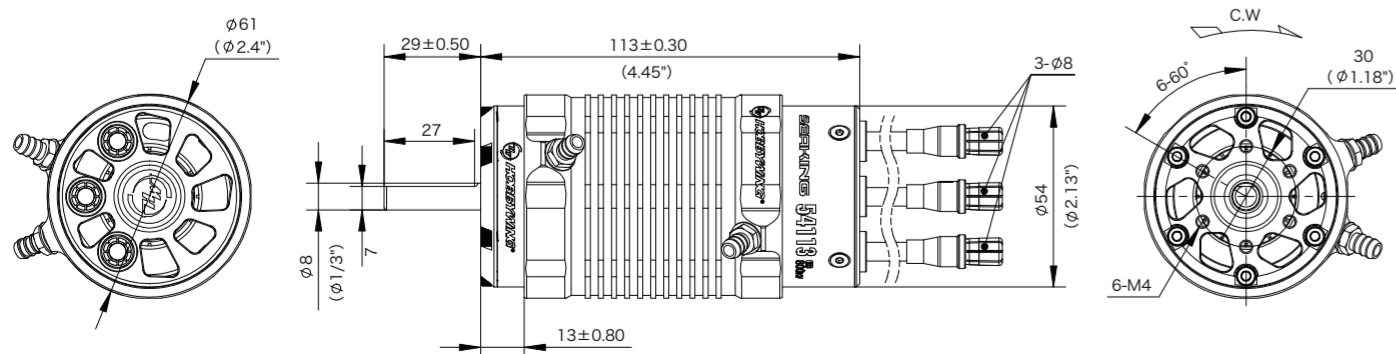
03 Specifications

Model	KV	LiPos	No-load Current	Diameter/Length (w/o water cooling jacket)	Shaft Diameter/Length	Bearing size (mm)	Poles	Weight	Applications
SEAKING 4685SL 900KV V2	900KV	6-14S	2.7A	φ=46mm(1.81") L=85mm(3.35")	φ=5mm(0.20") L=20mm(0.79")	Front: D19*D6*t6 Rear: D15*D6*t5	4	610g	Length< 140cm
SEAKING 4685SL 1500KV V2	1500KV	6-8S	4.7A					642g	
SEAKING 54113SL V2	800KV	8-12S	6.8A	φ=54mm(2.13") L=113mm(4.45")	φ=8mm(0.32") L=29mm(1.14")	Front: D22*D8*t7 Rear: D22*D8*t7		1260g	Length< 180cm

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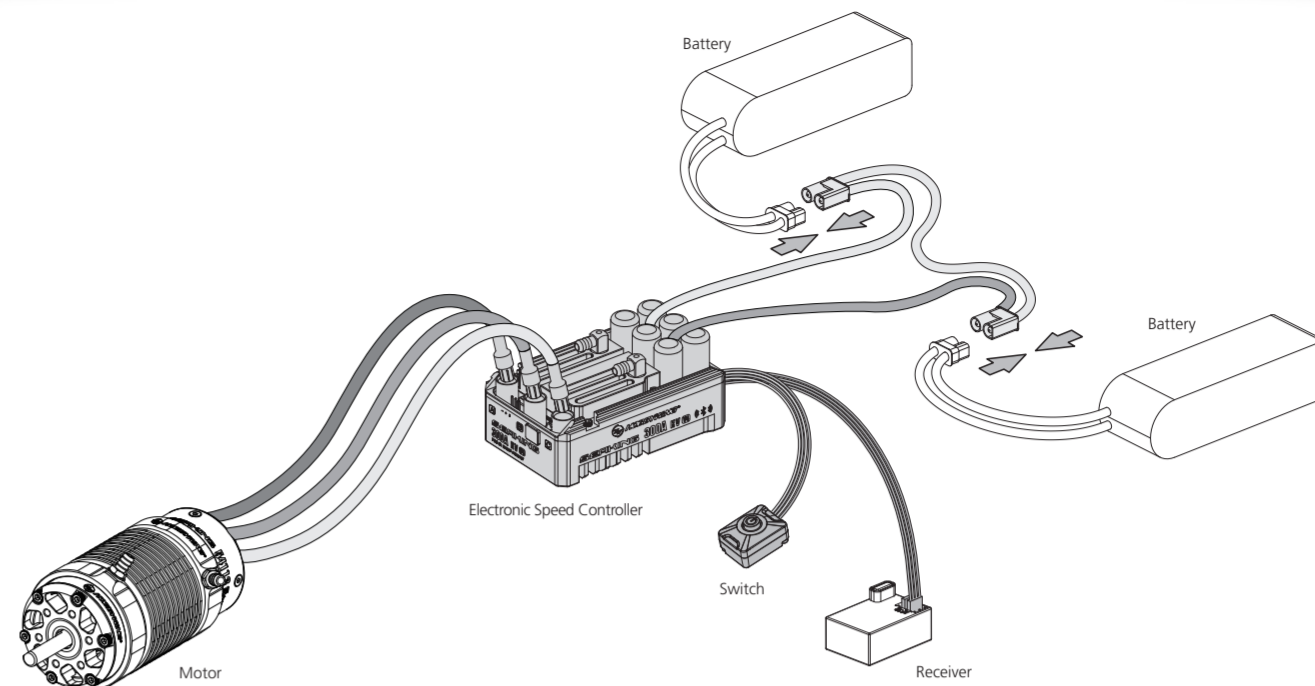


SEAKING 54113 V2



Thank you for purchasing this HOBBYWING product! This motor is very powerful. Any improper use may cause personal injury and damage to the product and related devices. We strongly recommend reading through this user manual before use and strictly abide by the specified operating procedures. We shall not be liable for any liability arising from the use of this product, including but not limited to reimbursement for incidental or indirect losses. Meanwhile, we do not assume any responsibility caused by unauthorized modification of the product. We have the right to change the product design, appearance, performance and use requirements without notice.

04 Installation & Connection



1. Installation of the motor

For 4685 motor, The specifications of mounting hole screws are two sets of M4 and one sets of M3; For 54113 motor, there are 6 motor mounting holes in M4 specification, and the mounting holes are 7mm in depth; Please confirm whether the specification of the screws is appropriate.

2. How to Connect the Motor to an ESC

There are no wire sequencing requirements for the connection between the esc and the motor. If the motor rotates in the opposite direction, you can exchange two of the motor wires, or set the "Motor Rotation" parameter to change the motor direction.

3. Connect the water-cooling pipe:

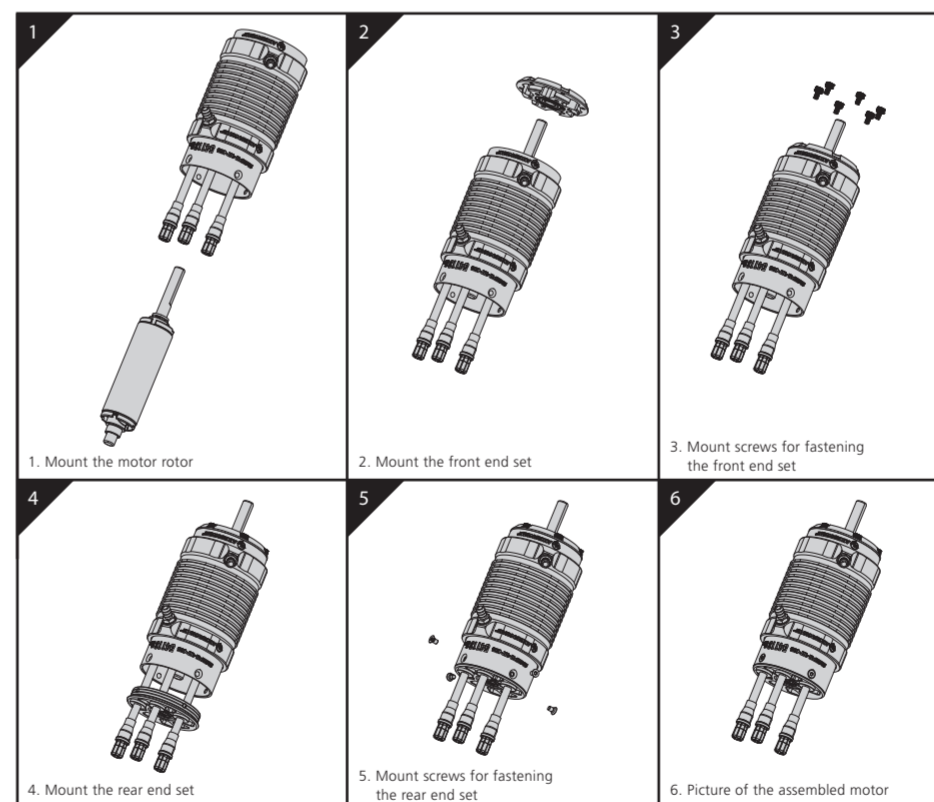
Connect the corresponding water-cooling pipes to the motor according to the wiring of the water-cooling pipe inside the boat. It is recommended to use clamps or ties to secure the water cooling tube to prevent loosening.

4. Inspection

Before powering on the esc, please check the motor installation and the order of all connections.

05 Assembly and Disassembly

In order to make the motor have longer service life and higher efficiency, we suggest to regularly check the bearing and clean the dirt in the motor. The specific time depends on the frequency of using the motor and the site conditions. When installing, please follow the steps in the following assembly drawing; when disassembling, follow the reverse steps.



Parts List

