

SEAKING

USER MANUAL

Sensorless Brushless Motor

SEAKING 54113SL V2
SEAKING 4685SL V2
SEAKING 4082SL V2
SEAKING 3674SL V2
SEAKING 3660SL V2
SEAKING 2850SL V2
SEAKING 2040SL V2



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HW-SMB716DUL00



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.

01 Warnings

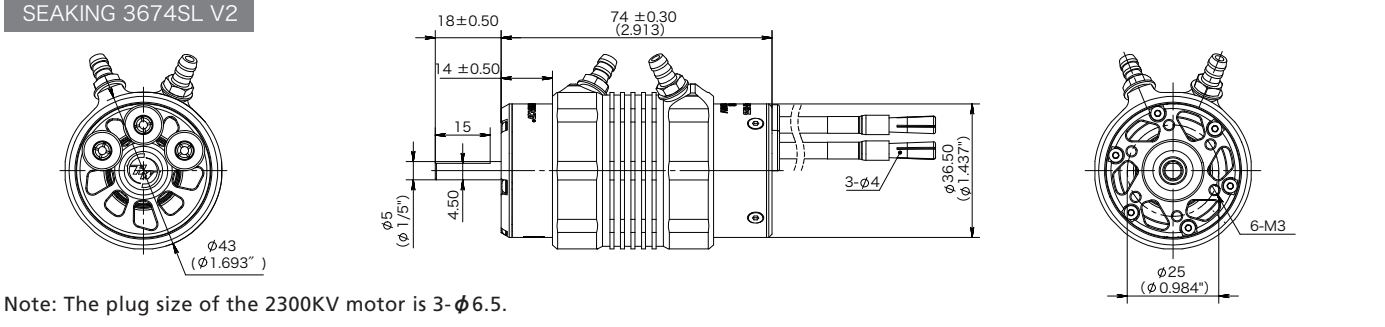
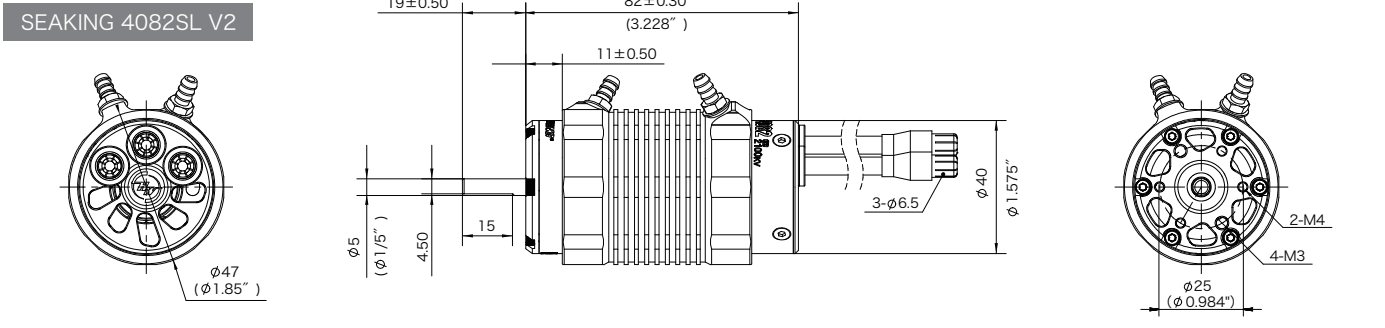
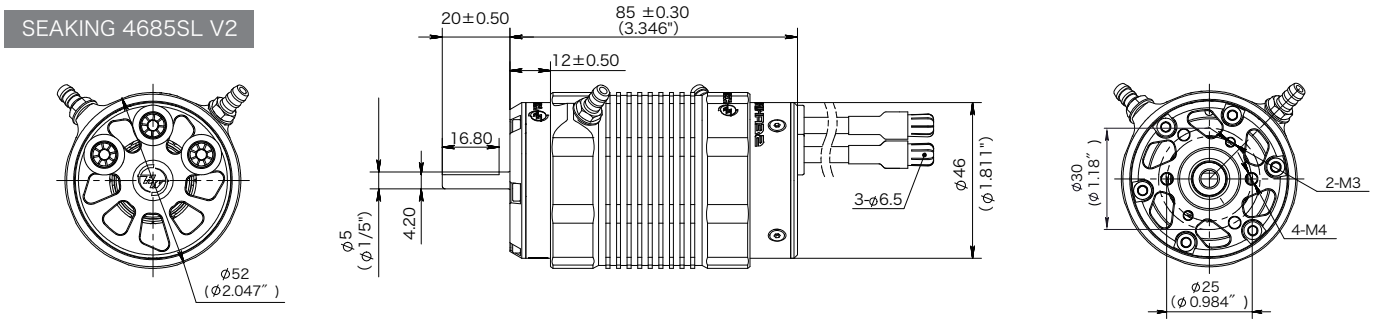
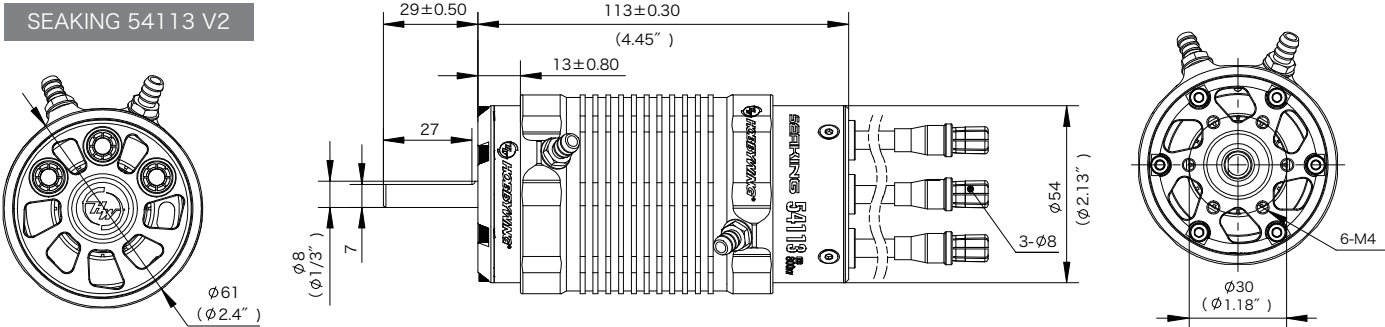
- Read the manuals of all the items being used in the build. Ensure setup,and overall install is correct and reasonable.
- All connections, must be made correctly. You may loose control, or run into major issues caused by improper, bad, weak, or poor connections.
- Ensure reliable connection of water 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 boats.
- Eye-catching water cooling jacket with excellent cooling performance.
- Optimized ESC Compatibility: Designed for seamless integration with the SEAKING 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.

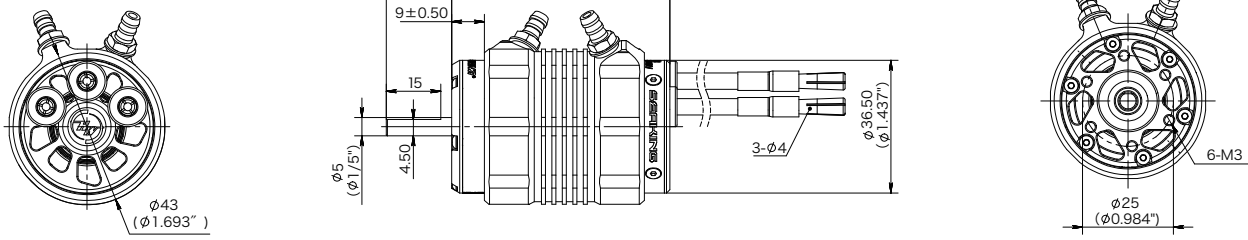
03 Specifications

| Model | KV | LiPos | No-load Current(A) | Diameter/Length (w/o water cooling jacket) | Shaft Diameter/ Length | Bearing size (mm) | Poles | Weight | Applications |
|--------------------------|------|-------|--------------------|--|-------------------------------|-------------------------------------|-------|--------|----------------|
| SEAKING 54113SL 800KV V2 | 800 | 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 | 4 | 1260g | Length < 180cm |
| SEAKING 4685SL 1500KV V2 | 1500 | 6-8S | 4.7A | φ=46mm(1.81") L=85mm(3.35") | φ=5mm(0.20") L=20mm(0.79") | Front: D19*D6*T6 Rear: D15*D6*T5 | | 642g | Length < 140cm |
| SEAKING 4685SL 900KV V2 | 900 | 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 | | 610g | Length < 140cm |
| SEAKING 4082SL 2100KV V2 | 2100 | 3-6S | 7.8 | φ=40mm(1.57") L=82mm(3.23") | φ=5mm(0.20") L=19mm(0.75") | Front: D16*D5*T5 Rear: D13*D5*T4 | | 490g | Length ≤ 120cm |
| SEAKING 4082SL 1700KV V2 | 1700 | 3-8S | 5.6 | φ=40mm(1.57") L=82mm(3.23") | φ=5mm(0.20") L=19mm(0.75") | Front: D16*D5*T5 Rear: D13*D5*T4 | | 490g | Length ≤ 120cm |
| SEAKING 3674SL 2300KV V2 | 2300 | 2-6S | 6.1 | φ=36.5mm(1.44") L=74mm(2.91") | φ=5mm(0.20") L=18mm(0.71") | Front: D16*D5*T5 Rear: D11*D5*T5 | | 372g | Length ≤ 100cm |
| SEAKING 3674SL 1900KV V2 | 1900 | 2-6S | 4.3 | φ=36.5mm(1.44") L=74mm(2.91") | φ=5mm(0.20") L=18mm(0.71") | Front: D16*D5*T5 Rear: D11*D5*T5 | | 290g | Length ≤ 100cm |
| SEAKING 3660SL 3400KV V2 | 3400 | 2-3S | 7.6 | φ=36.5mm(1.44") L=60mm(2.36") | φ=5mm(0.20") L=18mm(0.71") | Front: D16*D5*T5 Rear: D11*D5*T5 | 2 | 284g | Length ≤ 80cm |
| SEAKING 3660SL 2600KV V2 | 2600 | 2-4S | 8.4 | φ=36.5mm(1.44") L=60mm(2.36") | φ=5mm(0.20") L=18mm(0.71") | Front: D16*D5*T5 Rear: D11*D5*T5 | | 284g | Length ≤ 80cm |
| SEAKING 2850SL 4500KV V2 | 4500 | 2S | 4.0 | φ=28mm(1.1") L=50mm(1.97") | φ=4mm(0.16") L=15mm(0.59") | Front: D9*D4*T4 Rear: D8*D3*T4 | | 146g | Length ≤ 60cm |
| SEAKING 2850SL 3600KV V2 | 3600 | 2-3S | 3.7 | φ=28mm(1.1") L=50mm(1.97") | φ=4mm(0.16") L=15mm(0.59") | Front: D9*D4*T4 Rear: D8*D3*T4 | | 146g | Length ≤ 60cm |
| SEAKING 2040SL 5000KV V2 | 5000 | 2S | 1.1 | φ=20mm(0.79") L=41.2mm(1.62") | φ=3mm(0.12") L=12mm(0.47") | Front: D8*D3*T4 Rear: D8*D3*T4 | | 73g | Length ≤ 45cm |
| SEAKING 2040SL 4000KV V2 | 4000 | 2-3S | 0.9 | φ=20mm(0.79") L=41.2mm(1.62") | φ=3mm(0.12") L=12mm(0.47") | Front: D8*D3*T4 Rear: D8*D3*T4 | | 73g | Length ≤ 45cm |

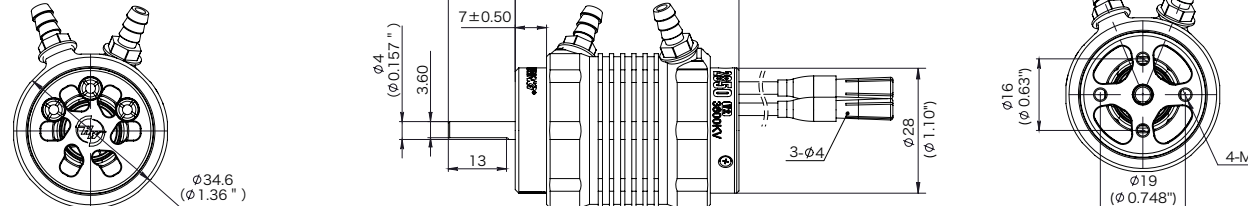


Note: The plug size of the 2300KV motor is 3-φ6.5.

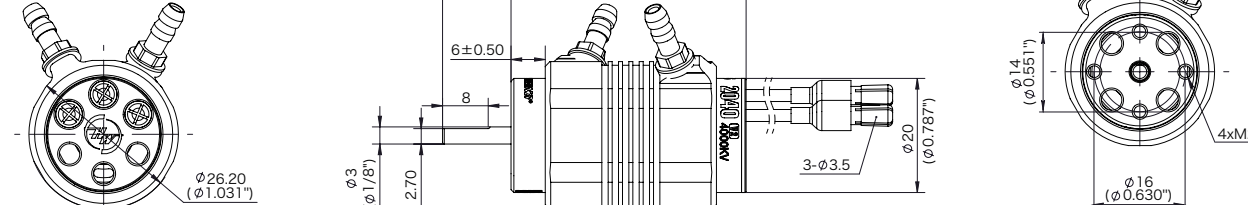
SEAKING 3660SL V2



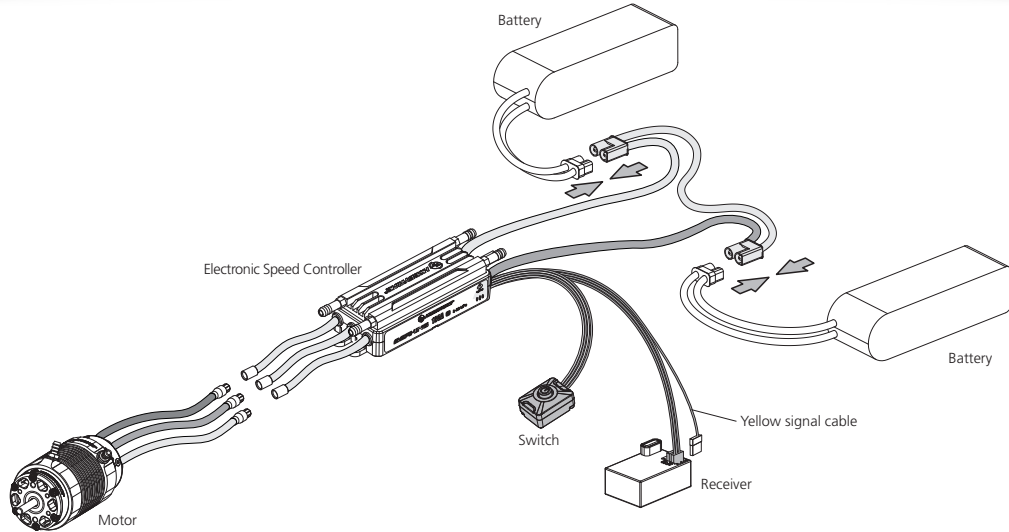
SEAKING 2850SL V2



SEAKING 2040SL V2



04 Installation & Connection



1. Installation of the motor

For 54113 motor, there are 6 motor mounting holes in M4 specification, and the mounting holes are 7mm in depth;
For 4685 motor, there are 4*M4 and 2*M3 mounting holes with a depth of 7mm;
For 4082 motor, there are 2*M4 and 4*M3 mounting holes with a depth of 6mm;
For 3674/3660 motor, there are 6 motor mounting holes in M3 specification, and the mounting holes are 6mm in depth;
For 2850 motor, there are 4 motor mounting holes in M3 specification, and the mounting holes are 5mm in depth;
For 2040 motor, there are 4 motor mounting holes in M2.5 specification, and the mounting holes are 3.5mm 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:

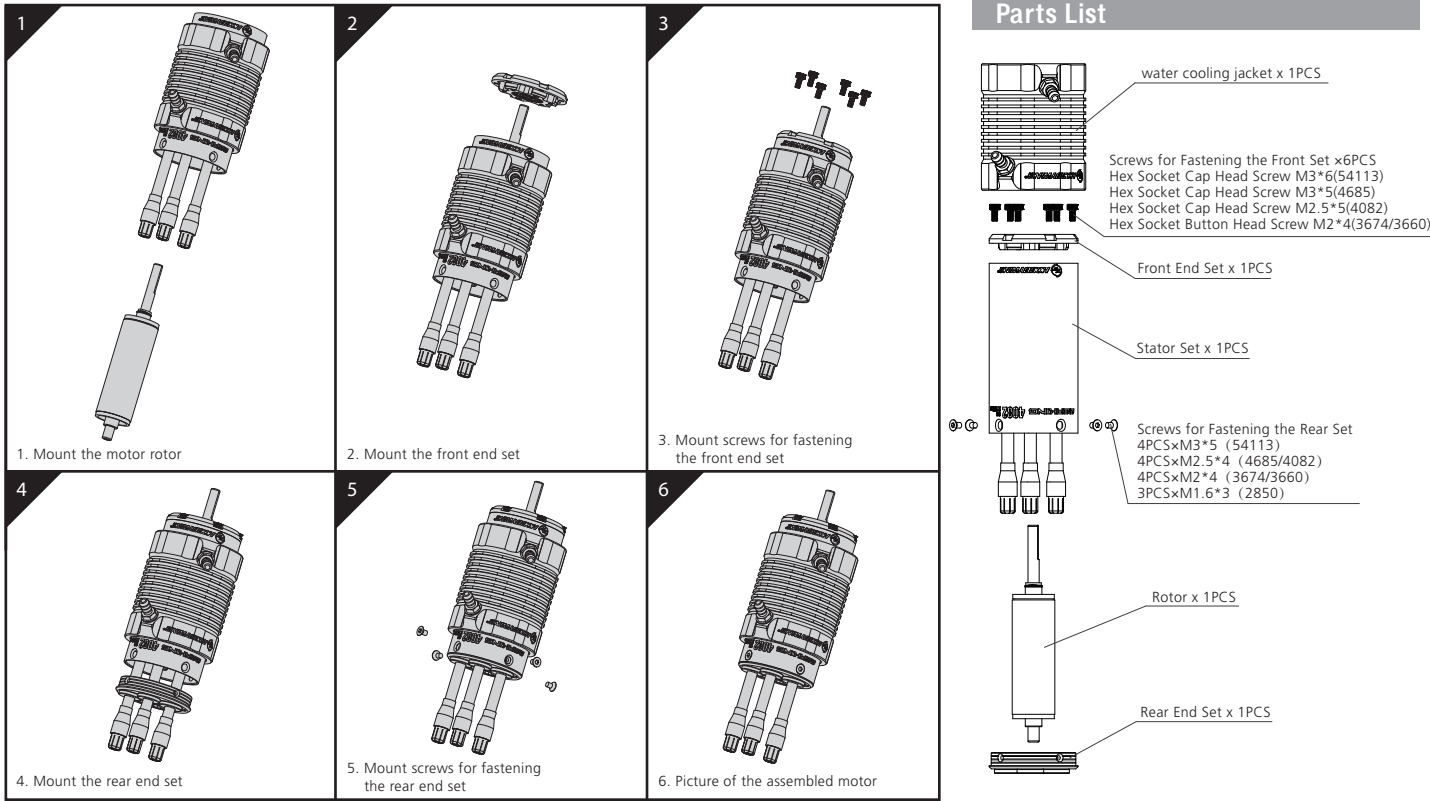
Connect the corresponding water-cooling pipes to the motor according to the wiring of the water-cooling pipes inside the boat. It is recommended to use clamps or ties to secure the water cooling pipes to prevent loosening.

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.



Note: The 2850 motor no screws to fix the front end cover. And both the front and rear covers of 2040 motor have no fixing screws.

Resources & Specifications

Visit www.hobbywing.com/en/rc-systems/rc-boat-power-system/seaking-v2 for more details about SeaKing V2 RC Boat Motors