



Instructions For E4990 Sensored Brushless Motor For RC Cars

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Warnings

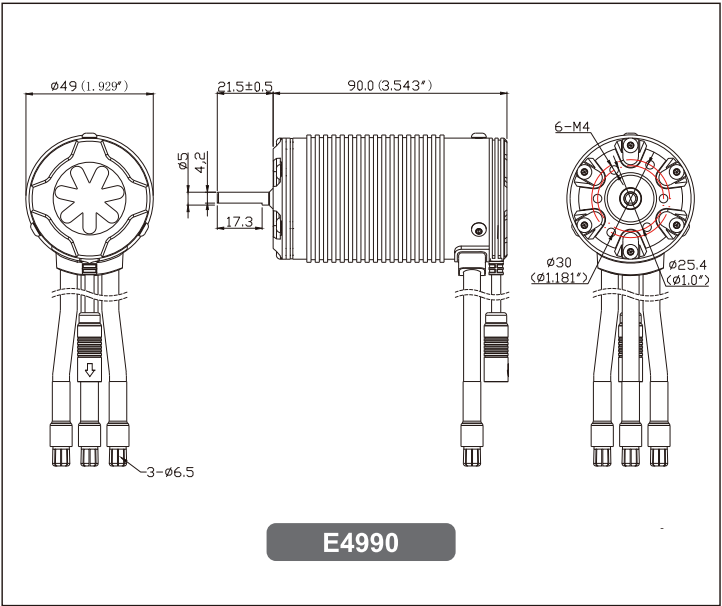
Please refer to the manual of power devices and vehicles to ensure a reasonable power configuration and avoid motor overload and personal injury due to incorrect power configuration. Do not run the motor at high speed without load for a long time, as it may cause damage to motor. Do not keep the temperature of the motor case above 100 degrees Celsius for long periods, as high temperatures may cause rotor demagnetization resulting in irreparable damage to motor.

1 . Features

- 1.Outstanding magnetic circuit combining with ultrathin silicon steel and high slot fill factor of high temperature resistant enameled wire winding will effectively reduce losses, improve efficiency and reduce operating temperature of motor.
- 2.Special rotor winding process with explosion-proof, high precision balance for increasing rotor's service life and high-speed stability
- 3.High precision bearings, reinforced alloy aluminum shell and high toughness stainless steel shaft improves motor's structural performance.
- 4.Innovative waterproof design at driving end achieves excellent waterproof and dust-proof performance

2 . Specification

Model	E4990
KV	1650KV
Cells	3~8
No-load Current (Test Voltage: 10kV)	≤7.0A
Weight	710 g
Outer diameter/Length	Ø49mm(1.929in)/L90mm(3.543in)
Shaft diameter/ End length of shaft	Ø5mm(0.197in)/L21.5mm(0.846in)
Bearings	D19*d8*T6
Pairs of poles	2
Applicable to	1/7 On-road, Short Course, Truck, 1/8 Monster(Heavy-duty)



3 . Installation & connection

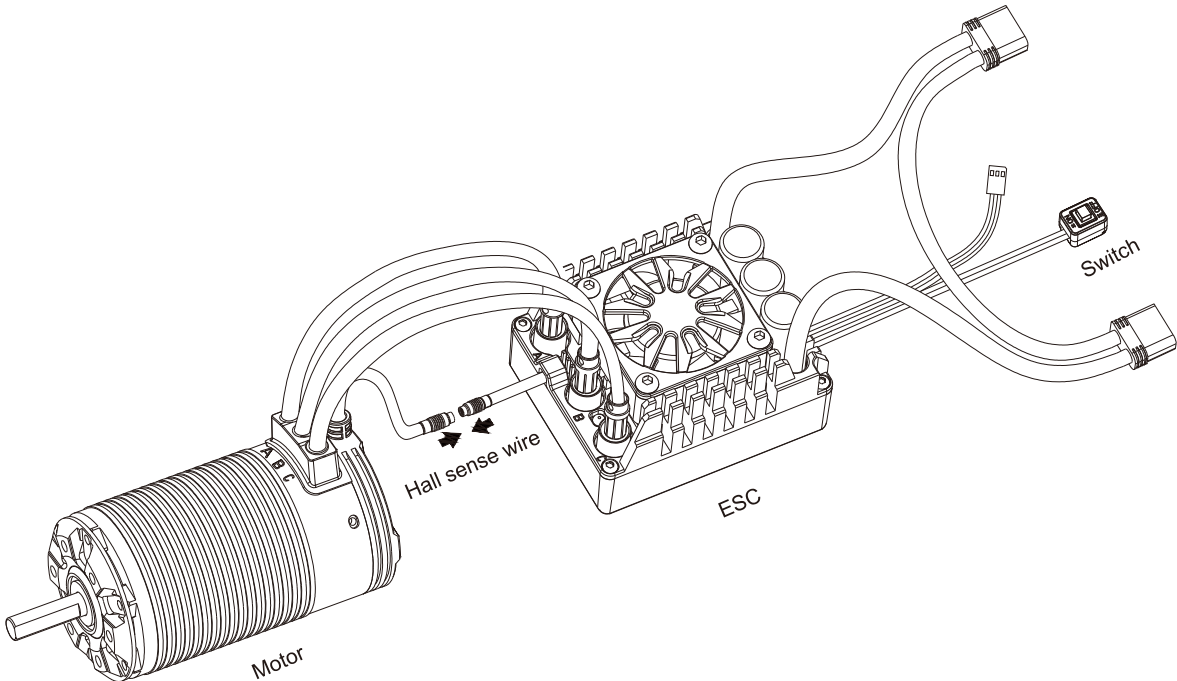
1.Install the motor

There are 12 screws in M4 specification, and the mounting holes are 7.5mm in depth. Before installing, please carefully confirm whether the specification of the screws is suitable for the thickness of the motor mounting plate to avoid assembly abnormality or abnormal operation of motor due to overlong screws.

2.When connecting the motor and esc

When connecting the motor and esc, please pay attention to the marked three-phase A, B and C to ensure that the three wires of the motor and esc are connected correspondingly. Otherwise, it cannot run normally and even damage the esc and motor.

That is: Wire A of the esc matches wire A of the motor, wire B of the esc matches wire B of the motor, wire C of the esc matches wire C of the motor.



4 . Gearing

Reasonable selection of gear ratio is very critical. Improper gear ratio may cause you great loss.

1. The operating temperature of the motor

The motor temperature should be lower than 100 degrees Celsius in operation. Because high temperature may reduce the magnetism of rotor, and cause short circuit due to coil melting partly resulting in ESC damage. A proper gear ratio can effectively prevent the motor from overheating.

2. Gear ratio selection

Go through the manual of RC vehicle, and pair the gears according to recommended gear ratio. If the motor and ESC temperature always stay at a low level during the running, you can change a big pinion and monitor the motor and ESC temperature to ensure that the new pairing is suitable for your vehicle.