

# Ultrafly A/30/xx Series Brushless, Sensorless Motors



## Features:

Ultrafly Model proudly presents our new “A Series” brushless, sensorless motors. Their peak efficiency of 80%+ is the result of an intensive research effort. Their design is unique in that an “OutRunner” high-torque motor is contained within their conventional housing. The outer shell is made from a beautiful, super-strong carbon fiber cloth. Because they were designed as a direct replacement for 400-class brushed motors (Mabuchi RS-380), the “A Series” motors can be easily adapted to most “400” type gearboxes. They are designed to power sport and aerobatic models under 1kg (2.2lbs), while drawing eighty to one-hundred-fifty watts of power from your battery.

We have two versions in the A Series. Consumers may use the same gearbox, gear ratio, battery & propeller but replace the brushed motor with one of our brushless motors to reach one of two goals:

- 1) Power boost by 50%+ with the 10-15% higher current draw using the power boost A/30/29 model
- 2) Extend the flying time by 30% and gain 10% more power with the efficiency motor A/30/24, but only draw 85% of the original current.

<i>Specifications</i>						
Motor Dimensions		Shaft Dimensions		Mounting Dimensions		Weight
Diameter	Length	Length	Diameter	Spacing	Screw Size	
27.5mm	42.5mm	11.2mm	2.3mm	16mm, 19mm	M3x3.5mm, M2.6x3.5mm	50g (1.8 oz)

<i>Performance Parameters</i>					
	Continuous Current Max	Max Efficiency Current Range	RPM/Volt ( Kv )	Do NOT Exceed Temperature	Max Input Wattage
A/30/24	13A	9-11A	2400	100 Celsius (212 f)	180W
A/30/29	16A	10-13A	2900		

## Cautions:

**Speed Controller:** You must use a brushless, sensorless speed controller.

**Cooling:** You must provide proper cooling to avoid exceeding the 100-degree-celsius limit. Overheating will damage magnets and windings, and is not covered under warranty.

**Over current:** Please use a current meter to control the battery cell count and the propeller size. When changing gear ratio, propeller size, or battery type you must measure the current. You must limit current to the “continuous” specifications above, or less, to avoid damage to the motor. Reduce prop size or battery cell count to reduce current.

Rotation: Switch any two of the three wires between speed controller and motor to reverse motor direction. NEVER reverse polarity from battery to speed controller.

## Limited Warranty:

Ultrafly brushless motors have a one-year, limited warranty from date of purchase. All motors are guaranteed to be free from manufacturing defects for one year. The warranty does not cover over-current, over-temperature, or crash damage. The customer must properly cool the motor and keep the current and input wattage within specifications. Improper use of the motor can be determined in service and will not be covered in the warranty. All warranty issues shall be handled by your dealer first. If necessary, you may also contact us for warranty issues. Send mail to [service@ultraflymodel.com](mailto:service@ultraflymodel.com) or contact the distributor in your country.