

# Ultrafly F/18/xx Series

## Brushless, Sensorless Motors



### A light weight motor that is Strong, Powerful, Versatile & Economy

Ultrafly's new F/18/xx series brushless sensorless motor is a light weight 105g motor with over whelming 350 watt power. It was designed based on our famous B/18 series. The versatile application covers 3D flying, Park Flyers & small helicopters as well as E-conversion a 25/30 class gas power model. The precision CNC tooling with hi-quality material allows this motor to operate at higher RPM without vibrations. A unique patented design forces the magnet to hold its position when your propeller suddenly stops in high RPM. Quality, Strong and Efficiency are the goal we are shooting for! Versatile is the word best describe its capability!

### Specification

Shaft diameter: 4mm

Shaft Length: 65.0mm

Motor Diameter: 32.8mm

Motor Length: 40.5mm

Motor Weigh: 105g (3.7oz)

Distance of mounting holes: 16mm & 21mm

Mounting screw: M3x3mm

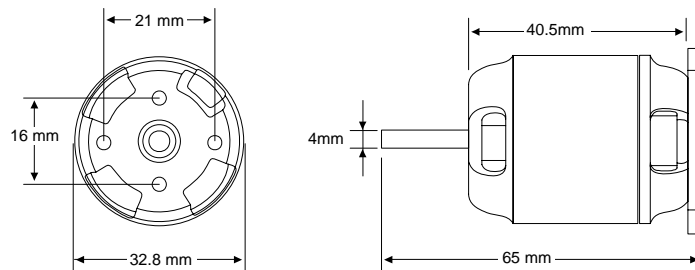
Maximum Input Power: 350 watt (with ventilation air flow through)

Maximum RPM: 15,000

Maximum Operating Temperature: 100 ° C

Magnet: Neodymium (150 ° C temperature tolerance)

KV: F/18/10 KV=1,000 F/18/12 KV=1,200



### Option Parts:

UFP-ADT-4060 Aluminum Propeller Adapter 4.0/6.0 mm

UFP-SFT-023 4.0x65mm v2 motor shaft for F/18

UFP-BRN-013 4X8X3mm bearing for F/12 & F/18

UF-MNT-001 Aluminum back mount plate for B, F series motor

### Cautions:

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

**Cooling:** You must provide proper cooling to avoid exceeding the 100-degree-celcius limit.

Overheating will damage the magnets and windings, and is not covered under warranty. Proper cooling is necessary when you are trying to use it in larger power (>200 watt) application. In poor air flow applications like Helicopter or boat, you

may have to use proper airflow redirection device or power fan to cool the motor or you may result in over heat situation to the motor.

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

**Max input watt:** For each motor, its structural design will limit its heat dissipation. Watt input is proportional to heat generated. The maximum watt input for F/18 series is 350 watts. Do not exceed this limit or you may easily burn out the motor.

**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.

Distributor List in all countries:

North America Area: Hobbico Inc. TEL: 217-398-0007

Chile: Mirax Hobbies. TEL: 562-246-3460

United Kingdom: CML Distribution. TEL: 1527-575349

Germany, Austria, Italy & Eastern Europe: JSB Distribution TEL: 49 4121 46199 66

Japan: Angel Japan TEL: 06 6790 3338

Northern Europe: Minicars Distribution AB. TEL: 18 60 65 72

Australia & New Zealand: O'Reilly Model Products. TEL: 08-8351-0544

Korea: Sung Kwang RC. TEL: 31-719-6371



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