

Ultrafly B/12/xx Series

Brushless, Sensorless Motors

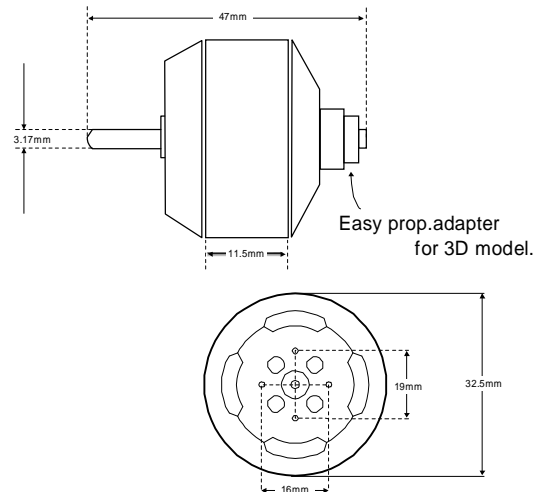


The Most Versatile Motor for Park Flyers and

Ultrafly's B/12/xx series brushless sensorless motor is a light weight 65.5g motor with over whelming 250 watt power. It may be used for 3D models, Park Flyers, small helicopters as well as E-conversion a 20/25 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, efficiency and light weight are the goal we are shooting for! Versatile is the word best describe it capability! Please use the table below to match your application.

Specification

- Shaft diameter: 3.17mm, 1/8inch
- Shaft Length: 11.5mm
- Motor Diameter: 32.5mm
- Motor Length: 47mm
- Motor Weigh: 65.5g (2.30oz)
- Distance of mounting holes: 16mm & 19mm
- Mounting screw: M3x3mm
- Maximum Input Power: 250watt
- Maximum RPM: 16,000
- Maximum Operating Temperature: 100 ° C
- Magnet: Neodymium (150 ° C temperature tolerance)



Model	Max Amp	RPM/Volt	Airplane	AUW	Prop size
B/12/08	18	750	3D	600 g,21oz	10 – 11 inch
			Sports	1.2kg, 42oz	9 – 12 inch
			Hi-Wing	1.8kg, 63oz	9 – 12 inch
B/12/10	20	1000	3D	500g, 17oz	8 – 10 inch
			Sports	1.2g, 42oz	8 – 10 inch
			Hi-Wing	1.5g,32oz	9 – 10 inch
B/12/12	22	1200	Sports	1.2kg, 42oz	8 – 9 inch
			Hi-Wing	1.2kg, 35oz	8 – 9 inch
			Speedy	750g, 26oz	7 – 8 inch

B/12/xx motor application reference table with APC propeller

MODEL	V	A	W	RPM
B/12/08				
9*7.5SF	8.0	7.3	58.40	5340
	10.0	10.1	101.00	6300
	10.8	11.3	122.04	6630
9x7.5E	8.0	7.3	58.40	5340
	10.0	10.1	101.00	6300
	10.8	11.3	122.04	6630
10x4.7SF	8.0	7.7	61.60	5220
	10.0	10.9	109.00	6160
	10.8	11.8	127.44	6480
10x7SF	8.0	10.3	82.40	4800
	10.0	13.6	136.00	5490
	10.8	15.3	165.24	5830
10x5E	8.0	5.9	47.20	5580
	10.0	8.4	84.00	6630
	10.8	9.6	103.68	7020
11x5.5E	8.0	7.4	59.20	5280
	10.0	10.2	102.00	6240
	10.8	11.6	125.28	6570
11x7E	8.0	8.9	71.20	5040
	10.0	12.7	127.00	5880
	10.8	13.6	146.88	6180
	12.0	16.0	192.00	6510
12x6E	10.0	13.6	136.00	5730
	10.8	14.4	155.52	5970
	12.0	16.9	202.80	6360
12x10E	10.0	16.5	165.00	5100
	10.8	18.7	201.96	4950
	12.0	20.5	246.00	4620
B/12/10				
8x8E	8	11.7	93.60	6810
	10	16.4	164.00	8100
	10.8	18.90	204.12	8700
9x6SF	8	15.30	122.40	6420
	10	21.60	216.00	7230

	10.8	23.70	255.96	7440
9x6E	8	10.60	84.80	7080
	10	14.70	147.00	8430
	10.8	16.30	176.04	8880
9x7.5E	8	14.20	113.60	6510
	10	19.40	194.00	7620
	10.8	21.80	235.44	7980
10x4.7SF	8	15.10	120.80	6300
	10	21.10	211.00	7380
	10.8	23.70	255.96	7680
10x7E	8	14.30	114.40	6600
	10	18.80	188.00	7830
	10.8	20.80	224.64	8220
B/12/12				
7x5E	8	7.6	60.8	9150
	10	10.6	106.00	1104
	10.8	12.4	133.92	1170
8x6SF	8	17.5	140.00	7710
	10	25.5	255.00	9030
8x4E	8	7.8	62.40	8400
	10	11.4	114.00	10200
	11.8	15	177.00	11370
8x6E	8	13.9	111.2	8310
	10	19.3	193.00	9840
	10.8	21.2	228.96	10380
8x8E	8	17.3	138.40	7740
	10	24.1	241.00	9030
9x6E	8	15.8	126.4	8100
	10	21.6	216.00	9480
	10.8	24.2	261.36	9960

Option Parts:

UF-PS001	Aluminum Propeller Adapter 3.17/5.0 mm
UF-SFT-011	3.17x47mm v1 motor shaft for B/06 & B/12
UF-SFT-012	3.17x53mm v1 motor shaft for B/06 & B/12 & B/18
UF-SFT-018	3.17x47mm v2 motor shaft (back mount) for B/06 & B/12
UF-SFT-019	3.17x53mm v2 motor shaft (back mount) for B/06 & B/12 & B/18
UF-SHC-002	018 shaft w/ bearing 010x2 combo for B/12
UF-BRN-010	3.17x7.94x3.54mm bearing for B 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 (>120 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 B/12 series is 250 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 or contact the distributor in your country.

Distributor List in all countries:

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

United Kingdom: CML Distribution. TEL: 1527-575349

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

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

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

