



M13 EEE 90KV Brushless DC Motor Drone DD 118 x34.3 mm

Our Product Introduction

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Basic Information

- Place of Origin: Guangdong, China
- Brand Name: GS
- Model Number: M13 EEE 90KV
- Price: Negotiable
- Delivery Time: 6-8
- Payment Terms: T/T
- Supply Ability: 100

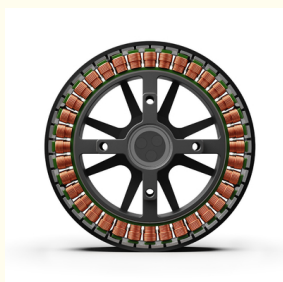


Product Specification

- Motor Model: M13 EEE V1.0
- Motor Size: D:116 X 35 Mm
- Propeller Mounting Holes: D:20 M3x4, D:23 M4x4
- Shaft Diameter: IN: 15 Mm
- Bearing: 6802ZZ*2
- Cable Length: 150 Mm(extended Enameled Wires)
- Rotor Balance: ≤ 10 Mg
- Motor Balance: ≤ 20 Mg
- Motor Mounting Holes: D:50 M5x4
- Disruptive Test: 500 V
- Highlight: Drone Brushless DC Motor,
90KV Brushless DC Motor,
M13 Brushless DC Motor



More Images



Product Description

M13 EEE 90KV Brushless DC Motor Drone

M Series motors are the flagship motors designed specifically for large multi-rotor electric paragliders, large agricultural tethered VTOLs, UAVs. Used for aerial photography, mapping, electric paragliding, agricultural spraying, surveying or anything in between where professional industrial grade propulsion systems are required. This type of motor is made with industrial grade components, it is for the long flight time multirotor hexacopter octocopter for the long flight time tethered drone.

Specifications

RPM/V	90 KV	Nominal Voltage	12s lipo battery
No Load Current	2.0A/20V	Internal resistance	35mΩ
Motor Weight	615 g	Product Boxed Weight	9658(200x150 x70 mm)
Maximum Current	88 A	Maximum Power	4189W
Maximum thrust	20.5 kg	Maximum Torque	8.8 Nm
Recommended ESC	MAD AMPX 120A (5-14S)	Recommended Propellers	36x11.5

Precautions for use

ESC Compatibility: Ensure that the electronic speed controller (ESC) used with this motor can handle low KV ratings and provide smooth throttle control.

Battery choice: Use a battery that can provide the necessary voltage and current to power the motor efficiently.

Propeller selection: Pair this motor with a larger, slower rotating propeller to optimize the intended use, whether lifting heavy loads or achieving longer flight times.

M13EEE

ENERGY EFFICIENT 90KV
ENTHUSIASTS EXTREME EDITION

7.0~9.0kgf

RECOMMENDED
HOVER THRUST

20.5 kgf

MAXIMUM
THRUST

OPTIMIZED
WEIGHT

615g

EFFICIENCY >79%



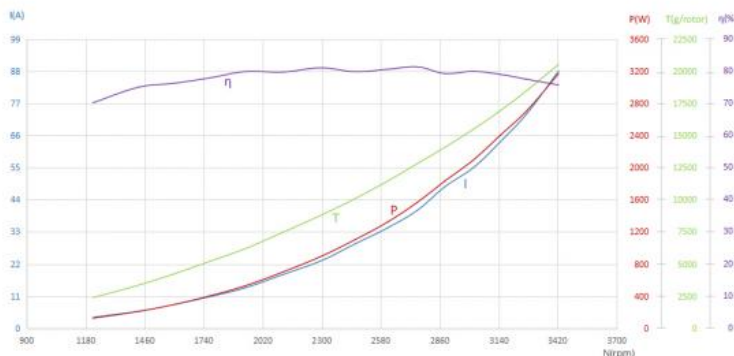
MAD M13 EEE 90KV FLUXER PRO 36x11.5 GLOSSY AMPX 120A (5-14S)

12S MAX
108°C

Analytical Graph of Motor Operation

I - Current, P - Input Power, η - Electrical Efficiency, T - Thrust, N - Rotational Speed

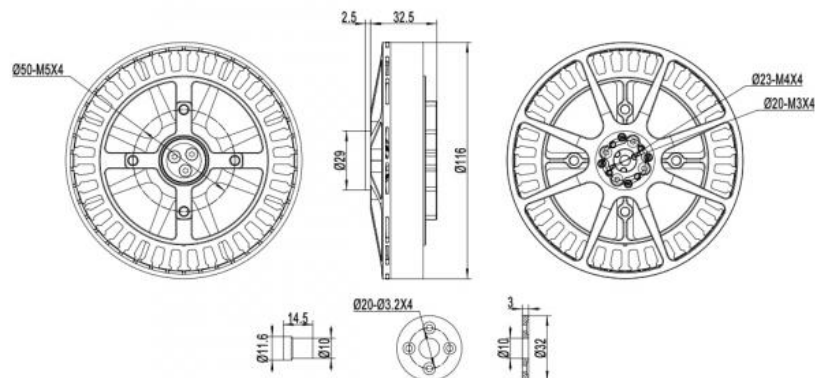
The data above was measured with an input voltage of 48 V, at a temperature of 25°C and sea level. The rotational speed was adjusted by the throttle.



Motor Data

Motor Model	MAD M13 EEE V1.0	Number of pole pairs	21
Stator	TAIWAN / Anticorrosive	Varnished wire Degree	220°C
Motor Size	D:116 × 35 mm	Magnet Degree	180°C

Degree of Protection	Rain protection	Cable Length	150 mm (extended Enameled wires)
Centrifugal Heat Dissipation	Independent	Rotor Balance	±10 mg
Propeller Mounting Holes	D:20 M3×4, D:23 M4×4	Motor Balance	±20 mg
Shaft Diameter	IN: 15 mm	Motor Mounting Holes	D:50 M5×4
Bearing	EZO 6802ZZ *2	Disruptive test	500 V
Additional Accessories	Propeller Plate *1, Locate Pin *1, 4.0mm Bullet Connector*3, Heat Shrinkable Tube*3, M5*12mm *4 Motor Screws, M3*16mm *4 Propeller Screws, Sticker*2		
Specifications			
RPM/V	90 KV	Nominal Voltage	12S lipo battery
No Load Current	2.0A/20V	Internal resistance	35mΩ
Motor Weight	615 g	Product Boxed Weight	965g (200 x 150 x 70 mm)
Maximum Current	88 A	Maximum Power	4189W
Maximum thrust	20.5 kg	Maximum Torque	8.8 Nm
Recommended ESC	MAD AMPX 120A (5-14S)	Recommended Propellers	36x11.5
UAV take-off weight	12S-36"/ 28kg--Quadcopter 42kg--Hexacopter 56kg--Octocopter	Single rotor take-off weight	7kg ~ 9kg



MAD M13 EEE 90KV FLUXER PRO 36x11.5 GLOSSY AMPX 120A (5-14S)								12S	MAX 108°C
Throttle [%]	Voltage [V]	Current [A]	Input Power [W]	Output Power [W]	Torque [N·m]	RPM	Thrust [gf]	Efficiency [%]	Efficiency [g/W]
30	47.68	3.72	178.3	124.9	0.982	1214	2381	70.15	13.4
35	47.87	5.88	281.6	211.2	1.405	1435	3374	75.06	12.0
40	47.84	8.15	389.9	297.3	1.771	1603	4246	76.27	10.9
45	47.85	10.81	517.1	402.6	2.173	1769	5204	77.9	10.1
50	47.85	13.81	660.6	527.4	2.602	1936	6181	79.85	9.4
55	47.81	18.41	880.0	701.6	3.165	2117	7478	79.72	8.5
60	47.82	23.09	1104.1	894.8	3.721	2297	8792	81.03	8.0
65	47.81	28.95	1384.0	1105.2	4.290	2460	10102	79.84	7.3
70	47.77	34.42	1644.1	1324.6	4.838	2614	11465	80.59	7.0
75	47.73	40.36	1926.2	1566.8	5.435	2753	12801	81.35	6.6
80	47.7	48.43	2310.5	1831.6	6.064	2884	14075	79.28	6.1
85	47.67	55.02	2623.0	2096.7	6.629	3020	15496	79.93	5.9
90	47.63	63.89	3043.2	2404.1	7.294	3148	16933	78.99	5.6
95	47.59	73.39	3492.3	2706.0	7.896	3272	18493	77.48	5.3
100	47.54	88.1	4188.5	3171.3	8.846	3424	20522	75.7	4.9

The above data are the theoretical values when the input voltage is 48V, for reference only. In the case of room temperature of 25°C and no additional cooling device, the current over 88A is non-working zone. 29-88A is short-term (about 10-30s), working zone, and below 29A is sustainable working zone. In actual use, please control the motor running time according to the working environment temperature and heat dissipation conditions.

Our Services

1. We provide 1 Year Warranty. Buy with confidence.
2. If you are not satisfied when you receive your item, please return it within 14 days for a replacement or money back. Please contact me before you return it.
3. If item is defective in 3 months, We will send you a replacement without extra charger, or offer refund after we receive the defective item.
4. If item is defective after 3 months, you can still send it back to us. We will send you a new one after receiving the defective item. But you have to pay the extra shipping fee.



FAQ

Q1: Do you support OEM/ODM?

A1: Yes. We can print your logo on the product.

Q2: About samples.

A2: Under normal circumstances, samples will be ready within 7 days, and 10-20 days for OEM/ODM orders. Sample fee and shipping will be charged.

Q3: What is the delivery time?

A3: For regular orders, we can ship within 15 days, for OEM/ODM, we can ship within 25-45 days (depending on the quantity). In the event of delays, we will notify you in advance of the status and resolution.

Q4: What is the minimum order quantity?

A4: There is no MOQ for wholesale (1 piece accepted), including OEM/ODM.

Q5: What are your payment terms?

A5: L/C.TT100%.

Q6: Can you reduce the shipping cost?

A6: When calculating the shipping cost for you, we always choose the cheapest and safest express. Although we have partnerships with shipping companies, we can't keep costs down because it's not us who get paid. If you think it's expensive for you. You can always make your own choice.

Q7: Return policy.

A7: If you want to replace the received item, you must contact us within 7 days after receiving the item. Returned items should be in their original condition and you should pay for additional shipping.



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