



HB40 64X20 drone arm set Motor

Our Product Introduction

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Basic Information

- Place of Origin: Guangdong, China
- Brand Name: GS
- Model Number: HB40-64X20
- Price: Negotiable
- Delivery Time: 6-8
- Payment Terms: T/T
- Supply Ability: 100



Product Specification

- Motor Model: M50C35 EEE V2.0
- Motor Size: D:191 X 94 Mm
- Internal Resistance: 174.5 MΩ
- No Load Current: 0.92A/30V
- Motor Weight: 4200 G
- Recommended Continue Thrust: 40 Kg
- Nominal Voltage: 354V-400V
- Maximum Current: 52.1 A
- Maximum Power: 19136 W
- Maximum Thrust: 95.3 Kg
- Highlight: HB40 64X20 drone arm set, drone arm set Motor



More Images



Product Description

HB40 64X20 drone arm set Motor

The drone arm set (motor, ESC, propeller) is not sold separately as it is an integrated combo with the FOC ESC included. Each rotor provides a continuous thrust of 40kg(88.1BL) and has a maximum power output of 19 KW, equivalent to 25 hp. It is designed for large multi-rotor/e-VTOL drones capable of carrying heavy loads, flying car, delivery drone, urban mobility.

ESC Model	SineSic Pro 80A 16KW(150V-435V)	Weight	1400g
Size(L*W*H)	197.0*88.0*59.5 mm	Continuous Current	80A (under good cooling)
Protection Level	IP67	Instant Current	150A (under good cooling)
Recommended Battery	96~100S LiPO	PWM Input signal Voltage	3.3V/5V
Cable Length(input)	690 mm (10AwG Silicone Flexible Wire)	Cable Length(signal)	1250 mm (9-Core Pvc Flexible Wire)
Cable Length(output)	600 mm(10AWG silicone Flexible Wire)	Cable Length(LED wire)	155 mm (4-Core Pvc Flexible Wire with Waterproof Connector)

Integrated arm and motor design: The kit includes the motor and arm, ensuring they are perfectly matched for optimal performance and stability. This integrated design helps keep the drone balanced and improve its aerodynamic efficiency.

Brushless motor technology: The motor is a brushless DC motor, which has the advantages of higher efficiency, lower maintenance cost and longer service life. Brushless motors are ideal for drones because they can provide smooth and reliable power output.

High thrust and efficiency: The engine is designed to provide a high thrust to weight ratio that can handle a variety of payloads and perform well in different flight conditions, making it suitable for vertical takeoff and sustained horizontal flight.

Durable arm construction: Arms are typically made of lightweight, robust materials, such as carbon fiber or aluminum, that have the necessary strength to withstand forces during flight without adding too much weight.



- The drone arm set with great weight to power ratio is specially designed for high-capacity multi-rotor,e-VTOL application,very suitable for heavy payload lifting drones.
- The recommended operating voltage range 100-600V.
- This propulsion system unit with motor,ESC,propeller and its compatibility to serve well in large-scale aircraft with optimal power.
- Utilizing high-quality aviation-grade aluminum enhances both safety measures and utilization of durability.
- Stable rotation and anti-fall properties guaranteed by Japanese bearing.
- Moreover, the incorporation of high-performance curved magnets and resistant to elevated temperatures which resulting in a remarkable performance increase by 5%.

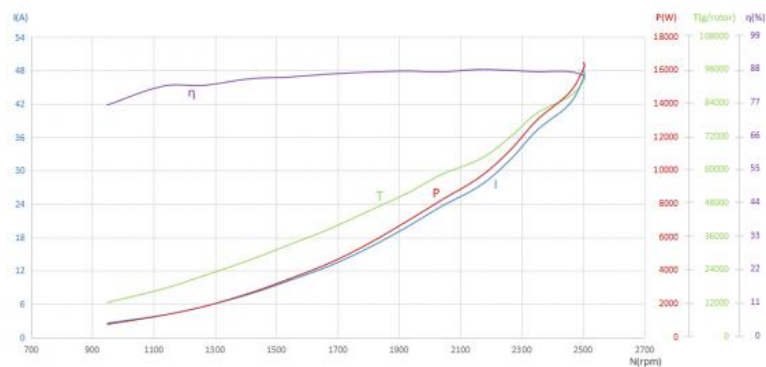
Hummingbird **HB40** **CB2** PROP 64x20 MATT **SineSic Pro** 80A 16KW (150V-435V)

400V

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 400 V, at a temperature of 25°C and sea level. The rotational speed was adjusted by the throttle.



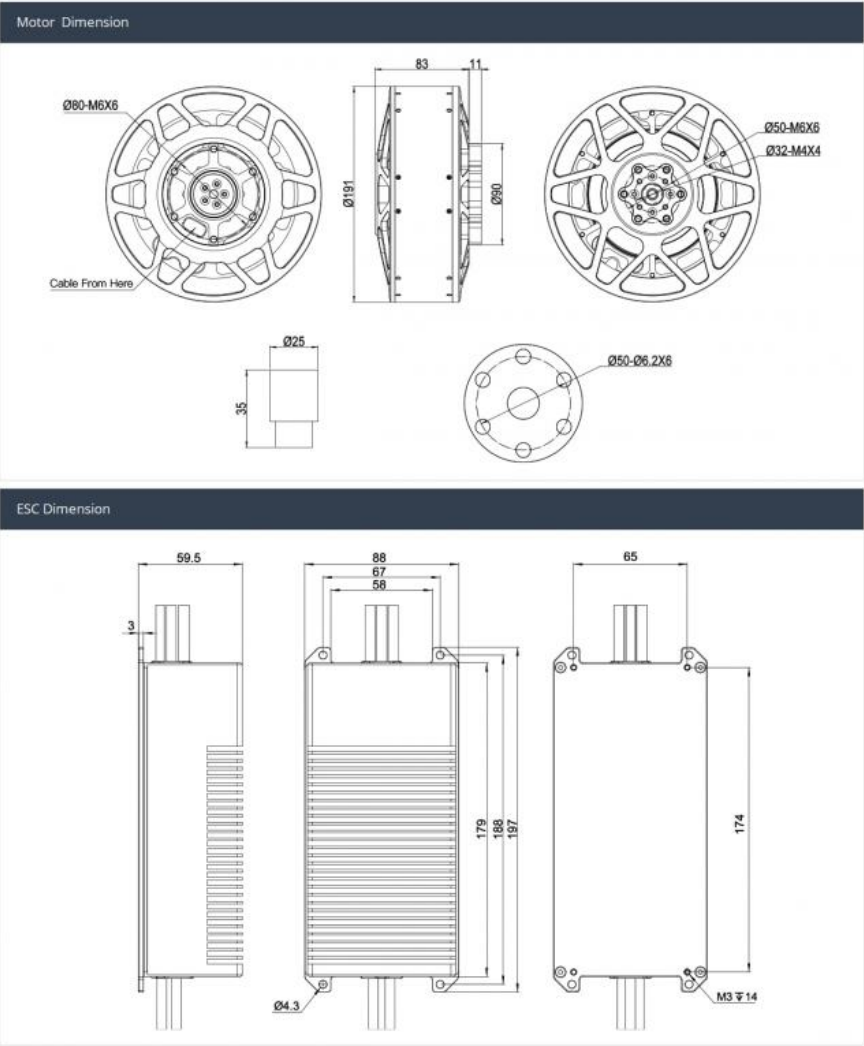
BASIC PARAMATER

Motor Data			
Motor Model	MAD M50C35 EEE V2.0	Nominal Voltage	354V-400V
RPM/V	9 KV	Cable Length	150 mm (extended Enameled wires)
Motor Size	D:191 × 94 mm	Maximum Current	53.2 A
Internal resistance	174.5 mΩ	Maximum Power	19136 W
No Load Current	0.92A / 30V	Maximum thrust	95.3 kg
Motor Weight	4200 g	Shaft Diameter	IN: 25 mm
Recommended Continue thrust	40 kg	Stator	TAIWAN / Anticorrosive

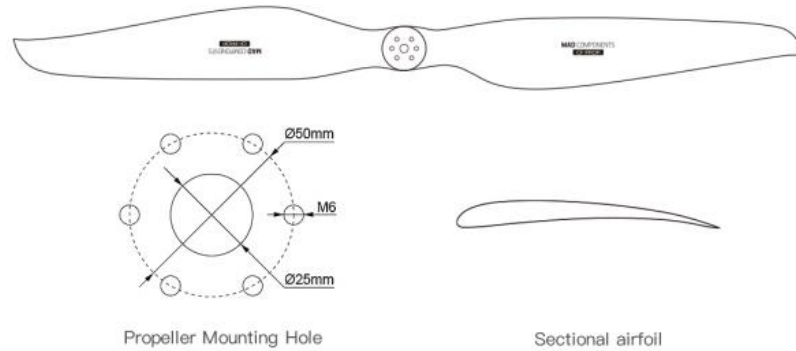
ESC Data			
ESC Model	SineSic Pro 80A 16KW (150V~435V)	Weight	1400g
Size(L*W*H)	197.0*88.0*59.5 mm	Continuous Current	80A (under good cooling)
Protection Level	IP67	Instant Current	150A (under good cooling)
Recommended Battery	96~ 100S LiPo	PWM Input Signal Voltage	3.3V/5V
Cable Length(input)	685mm	Cable Length(Signal)	1175mm
Cable Length(output)	A:265mm / B:295mm / C:315mm	Cable Length(LED wire)	145 mm

Propellers Data			
Propellers Model	CB2 64X20 MATT (1625.6 x 508mm)	Single Weight	885 g
Material	High quality carbon fiber + Resin	Type	fixed

PRODUCT DRAWING



Propellers Dimension



TEST DATA

Hummingbird **HB40** **CB2** PROP 64x20 MATT **SineSic Pro** 80A 16KW (150V~435V)

354V

Throttle [%]	Voltage [V]	Current [A]	Input Power [W]	Output Power [W]	Torque [N·m]	RPM	Thrust [gf]	Efficiency [%]	Efficiency [gf/W]
30	353.71	2.78	983.3	792.1	7.774	973	12111	80.6	12.3
35	353.71	4.49	1588.2	1326.2	11.307	1120	17875	83.5	11.3
40	353.71	6.19	2189.5	1880.2	14.082	1275	22172	85.9	10.1
45	353.73	8.95	3165.9	2770.6	18.632	1420	29165	87.5	9.2
50	353.7	11.21	3965.0	3469.9	21.405	1548	34221	87.5	8.6
55	353.66	14.67	5188.2	4587.0	26.073	1680	40026	88.4	7.7
60	353.71	18.3	6472.9	5773.9	30.496	1808	47330	89.2	7.3
65	353.7	22.14	7830.9	6972.4	34.678	1920	53635	89	6.8
70	353.67	26.25	9283.8	8291.1	38.811	2040	60524	89.3	6.5
75	353.65	30.6	10821.7	9602.9	42.851	2140	65769	88.7	6.1
80	353.58	35.85	12675.8	11296.1	47.730	2260	73533	89.1	5.8
85	353.59	40.99	14493.7	12807.8	52.067	2349	80450	88.4	5.6
90	353.61	47.39	16757.6	14826.2	57.623	2457	88258	88.5	5.3
95	353.56	52.52	18569.0	16199.6	61.656	2509	94465	87.2	5.1
100	353.54	52.29	18486.6	16120.0	61.402	2507	92769	87.2	5.0

Hummingbird **HB40** **CB2** PROP 64x20 MATT **SineSic Pro** 80A 16KW (150V~435V)

400V

Throttle [%]	Voltage [V]	Current [A]	Input Power [W]	Output Power [W]	Torque [N·m]	RPM	Thrust [gf]	Efficiency [%]	Efficiency [gf/W]
30	399.41	2.53	1010.5	774.3	7.791	949	12460	76.6	12.3
35	399.43	4.03	1609.7	1335.1	11.223	1136	17548	82.9	10.9
40	399.42	5.56	2220.8	1846.2	13.937	1265	22163	83.1	10.0
45	399.43	7.75	3095.6	2637.0	17.834	1412	27725	85.2	9.0
50	399.45	10.12	4042.4	3470.2	21.532	1539	33120	85.8	8.2
55	399.4	12.89	5148.3	4468.7	25.461	1676	39068	86.8	7.6
60	399.4	16.02	6398.4	5591.6	29.681	1799	45312	87.4	7.1
65	399.38	19.83	7919.7	6951.5	34.466	1926	51759	87.8	6.5
70	399.39	23.46	9369.7	8194.1	38.432	2036	58390	87.5	6.2
75	399.39	27.22	10871.4	9597.9	42.373	2163	64031	88.3	5.9
80	399.35	31.79	12695.3	11168.1	47.189	2260	71722	88	5.6
85	399.33	37.28	14887.0	13035.8	52.949	2351	80688	87.6	5.4
90	399.32	41.96	16755.5	14677.2	57.067	2456	86640	87.6	5.2
95	399.31	47.01	18771.6	16201.2	61.785	2504	92543	86.3	4.9
100	399.29	47.92	19134.0	16489.3	62.909	2503	95320	86.2	5.0

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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