



## Brushless Motor HB40 60X19 drone arm set

### Our Product Introduction

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#### Basic Information

- Place of Origin: Guangdong, China
- Brand Name: GS
- Model Number: HB40 60X19
- 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: 20121W
- Maximum Thrust: 93.8 Kg
- Highlight: **HB40 60X19 drone arm set, drone Brushless Motor**



#### More Images



## Product Description

### Brushless Motor HB40 60X19 drone arm set

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)

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

M50C35 EEE + SineSic Pro 80A + CB2 60X19in  
KV9 16KW (150V~435V) PROP

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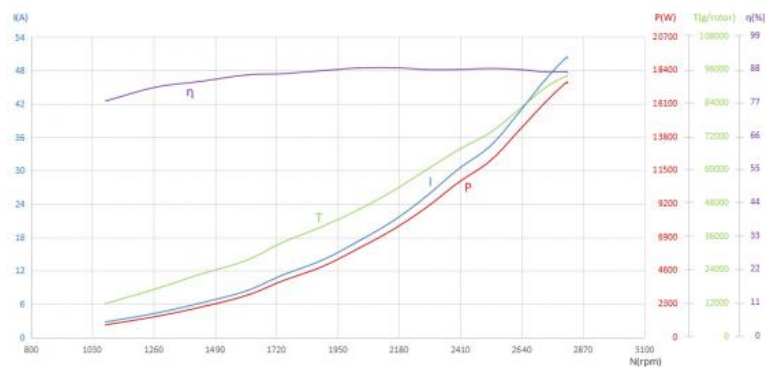
Hummingbird HB40 CB2 PROP 60X19 MATT SineSic Pro 80A 16KW (150V~435V)

400V

## Analytical Graph of Motor Operation

I – Current, P – Input Power,  $\eta$  – 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.

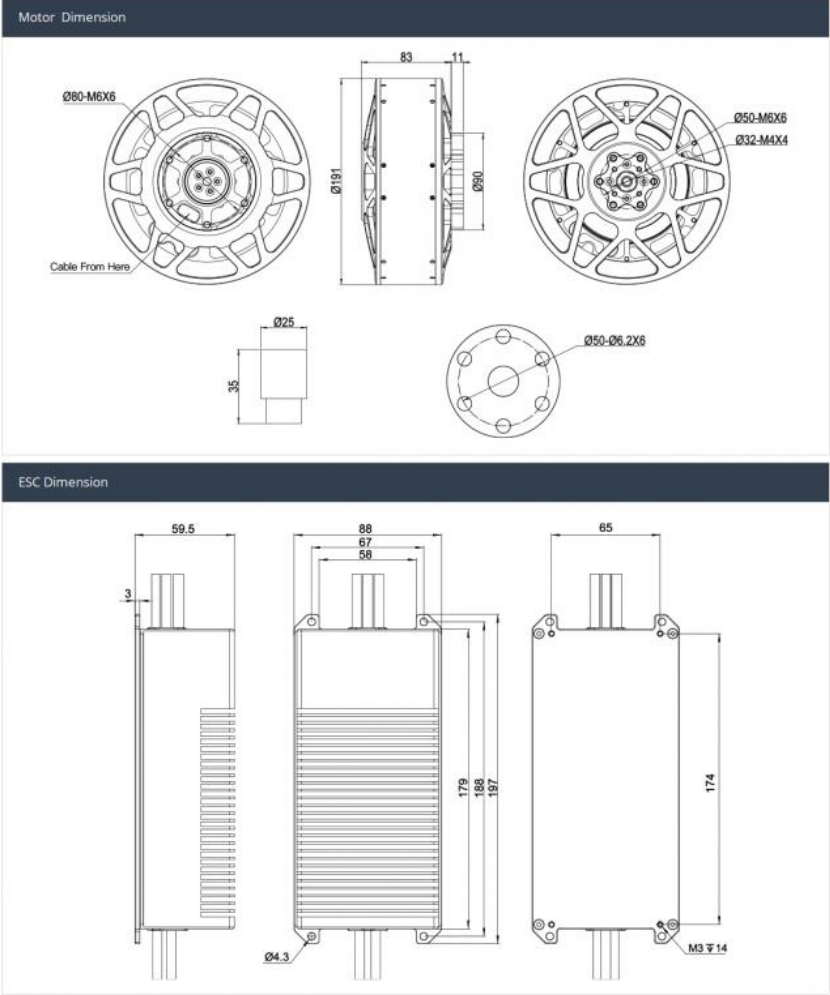


## BASIC PARAMATER

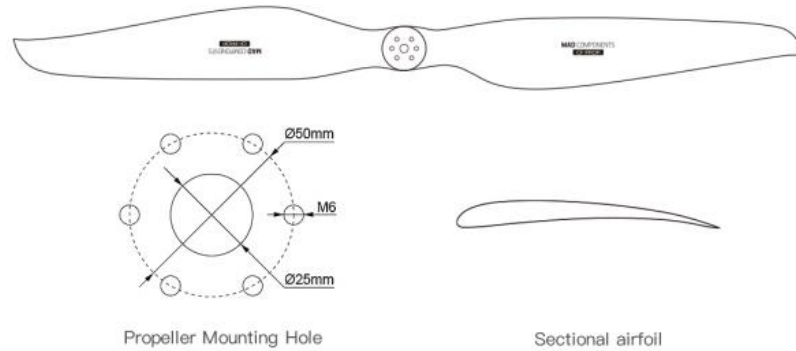
Motor Data			
Motor Model	MAD M50C35 EEE V2.0	Nominal Voltage	354V~400V
RPM/V	9 KV	Cable Length	150 mm (extended Enameled wires)
Motor Size	D:191 × 94 mm	Maximum Current	52.1 A
Internal resistance	174.5 mΩ	Maximum Power	20121W
No Load Current	0.92A / 30V	Maximum thrust	93.8 kg
Motor Weight	4200 g	Shaft 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 60X19 MATT (1524 x 482.6mm)	Single Weight	810 g
Material	High quality carbon fiber + Resin	Type	fixed

PRODUCT DRAWING



## Propellers Dimension



## TEST DATA

Hummingbird **HB40** **CB2** PROP 60x19 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	3.15	1114.2	865.3	7.651	1080	12318	77.7	11.1
35	353.7	4.79	1694.2	1405.6	10.594	1267	17455	83	10.3
40	353.71	6.95	2458.3	2081.2	13.869	1433	23169	84.7	9.4
45	353.72	9.53	3371.0	2935.2	17.562	1596	28960	87.1	8.6
50	353.63	12.3	4349.6	3815.9	20.846	1748	35107	87.7	8.1
55	353.69	15.76	5574.2	4923.5	24.929	1886	41411	88.3	7.4
60	353.64	19.44	6874.8	6052.8	28.699	2014	47601	88	6.9
65	353.65	23.53	8321.4	7334.1	32.727	2140	53243	88.1	6.4
70	353.64	28.41	10046.9	8940.9	37.447	2280	60572	89	6.0
75	353.61	32.9	11633.8	10357.7	41.075	2408	66872	89	5.7
80	353.58	39.45	13948.7	12347.8	46.996	2509	75362	88.5	5.4
85	353.59	44.5	15734.8	13893.9	50.505	2627	80643	88.3	5.1
90	353.56	52.15	18438.2	16125.5	56.509	2725	89613	87.5	4.9
95	353.52	52.28	20003.2	16125.5	59.843	2801	93053	87.4	4.8
100	353.57	52.11	20120.9	16125.5	59.403	2810	92183	87.2	4.7

Hummingbird **HB40** **CB2** PROP 60x19 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	399.44	2.74	1094.5	852.6	7.539	1080	12092	77.9	11.0
35	399.46	4.35	1737.7	1433.4	10.778	1270	17438	82.5	10.0
40	399.42	6.09	2432.5	2050.9	13.686	1431	22516	84.3	9.3
45	399.44	8.37	3343.3	2890.8	17.146	1610	27748	86.5	8.3
50	399.41	11.11	4437.4	3858.2	21.174	1740	33966	86.9	7.7
55	399.37	13.84	5527.3	4860.9	24.547	1891	39766	87.9	7.2
60	399.37	17.35	6929.1	6150.7	28.919	2031	45996	88.8	6.6
65	399.39	20.99	8383.2	7452.0	32.945	2160	52773	88.9	6.3
70	399.37	25.26	10088.1	8912.2	37.327	2280	60032	88.3	6.0
75	399.35	30.13	12032.4	10629.9	42.295	2400	67249	88.3	5.6
80	399.33	34.35	13717.0	12151.3	46.028	2521	73588	88.6	5.4
85	399.33	40.37	16121.0	14231.8	51.694	2629	81846	88.3	5.1
90	399.35	46.36	18513.9	16206.0	56.708	2729	89811	87.5	4.9
95	399.29	50.39	20120.2	17595.6	59.817	2809	94085	87.5	4.7
100	399.29	50.23	20056.3	17491.3	59.399	2812	93757	87.2	4.7

## 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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