

P65M 动力套技术参数

P65M Propulsion System Specification

动力套参数 All-in-one thrust system specification

产品型号	P65M	最大拉力	138 kg
Model		Max Thrust	
单轴推荐拉力	65 kg	推荐拉力力效	7.4g/W / 6.3 g/W
Recommended takeoff weight per axis		Efficiency of recommended takeoff weight	
电压范围	280~450 V	额定电压	335 V
Input voltage		Rated voltage	
适配锂电池	96~107S (LiPo)	适用碳管直径	Φ60 mm
Lithium compatible		Tube outer diameter	
动力套重量 (含线、含桨)	7450 g* / 7180 g*	线材规格	电源线: 10AWG 400 mm* 信号线: 800 mm*
Weight (with cable and Prop)		Cable specification	Power cable: 10AWG 400 mm* Signal cable: 800 mm*
适用环境温度	-35~55°C	防尘防水等级	IP35
Operating temperature		Ingress Protection	
额定输入功率	10.3 kW	额定输出功率	8.8 kW
Rated power input		Rated power output	

电调技术参数 ESC specification

额定电压	335 V	通讯方式	UAVCAN / RS485
Rated voltage		Communication protocol	
电调尺寸	225.6*98*60 mm (带插头)	重量 (含线)	1200 g*
ESC size	225.6*98*60 mm (With connector)	Weight (with cable)	
最大电流 (3s)	100 A	持续电流	40 A
Peak current (3s)		Continuous current	
防尘防水等级	IP67	双油门	CAN+RS485 / CAN+PWM / RS485+PWM
Ingress Protection		Throttle Source	
PWM脉宽 (不支持校准)	1100~1940 μs	黑匣子	2~48h 实时数据
Operating pulse width(calibration not supported)		Black box	2~48h log

电机技术参数 Motor specification

KV值	9.5KV / 11KV	槽极数	36槽42极
KV		Slot& Pole	36N42P
电机尺寸	Φ167.1*H110.5 mm	定子尺寸	Φ156*H45 mm
Motor size		Stator size	
防尘防水等级	IPX5	电机重量(含线)	5115 g*
Ingress Protection		Weight (with cable)	

桨叶参数 Propeller specification

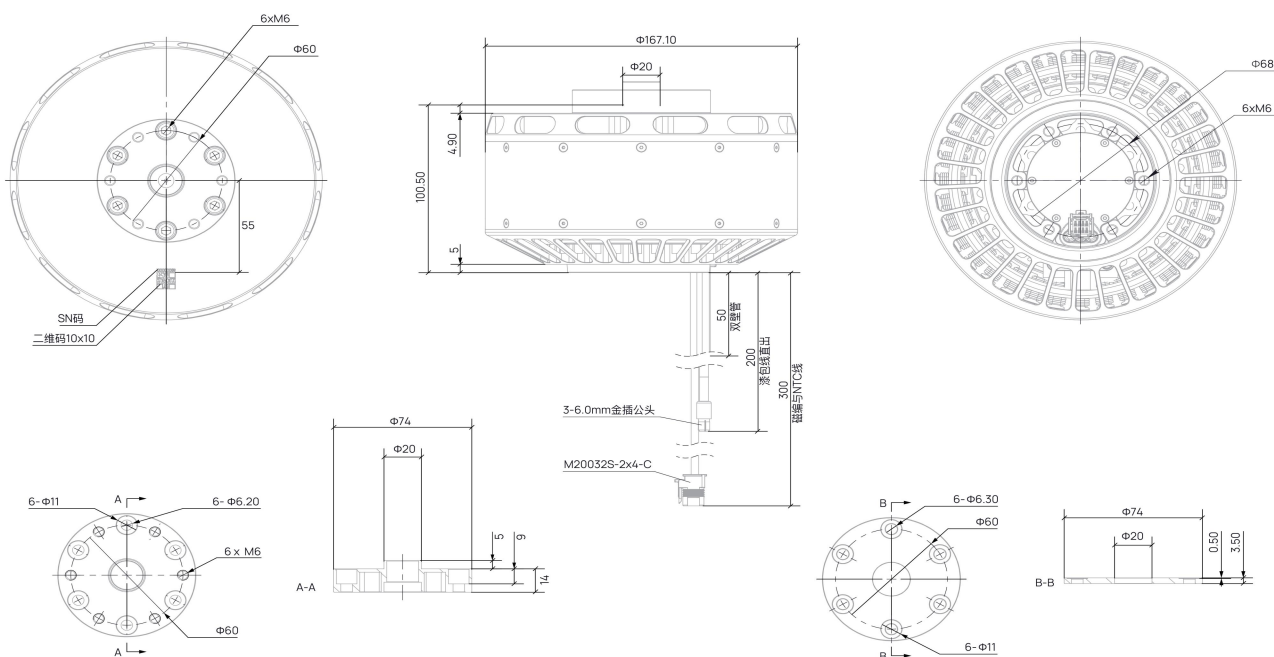
产品型号	MSC 72x25 / MSC 64x20	单支重量	1150 g* / 870 g*
Model		Weight	
主要材质	碳纤维复合材料	安装尺寸	D60-6*M6, 中心孔 D20
Material of propeller	Carbon fiber composite material	Mounting dimensions	D60-6*M6, centre hole D20

*存在误差, 以实物为准。

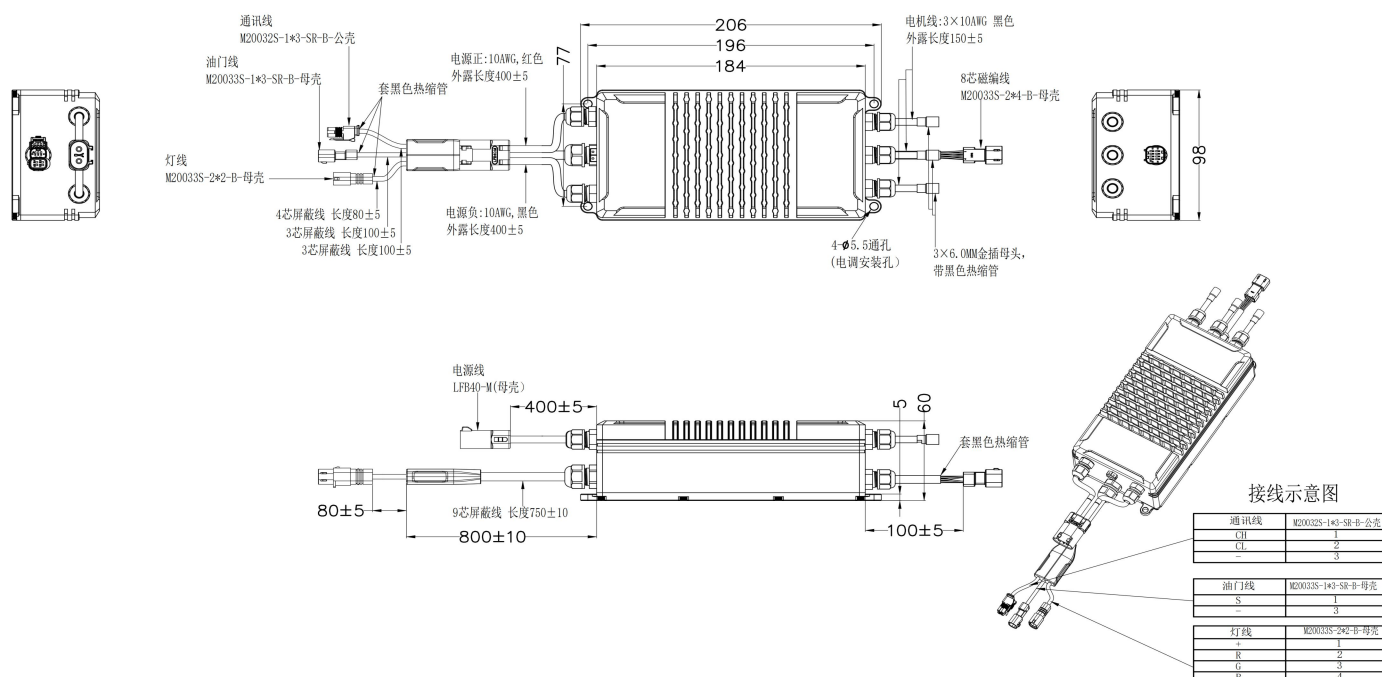
*Subject to the actual product.

尺寸图 Dimension figure

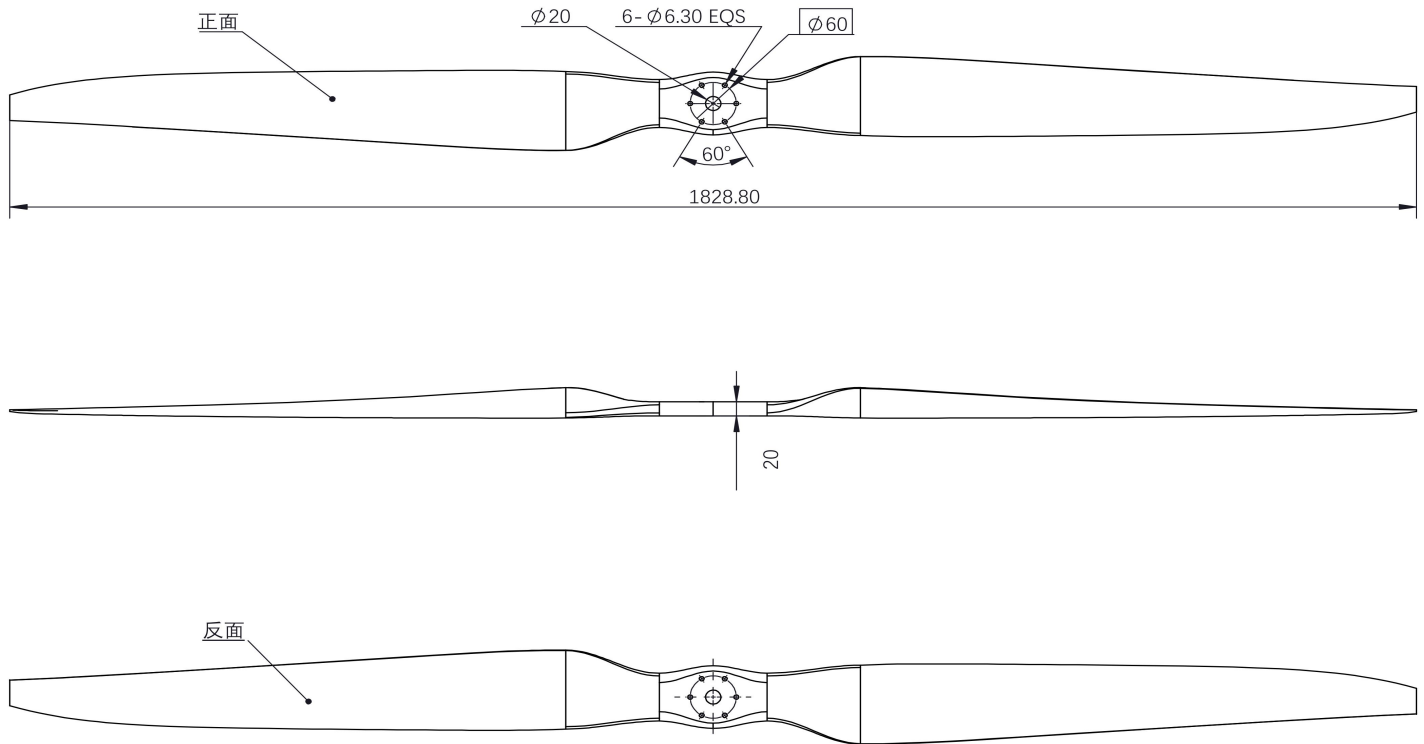
电机 Motor



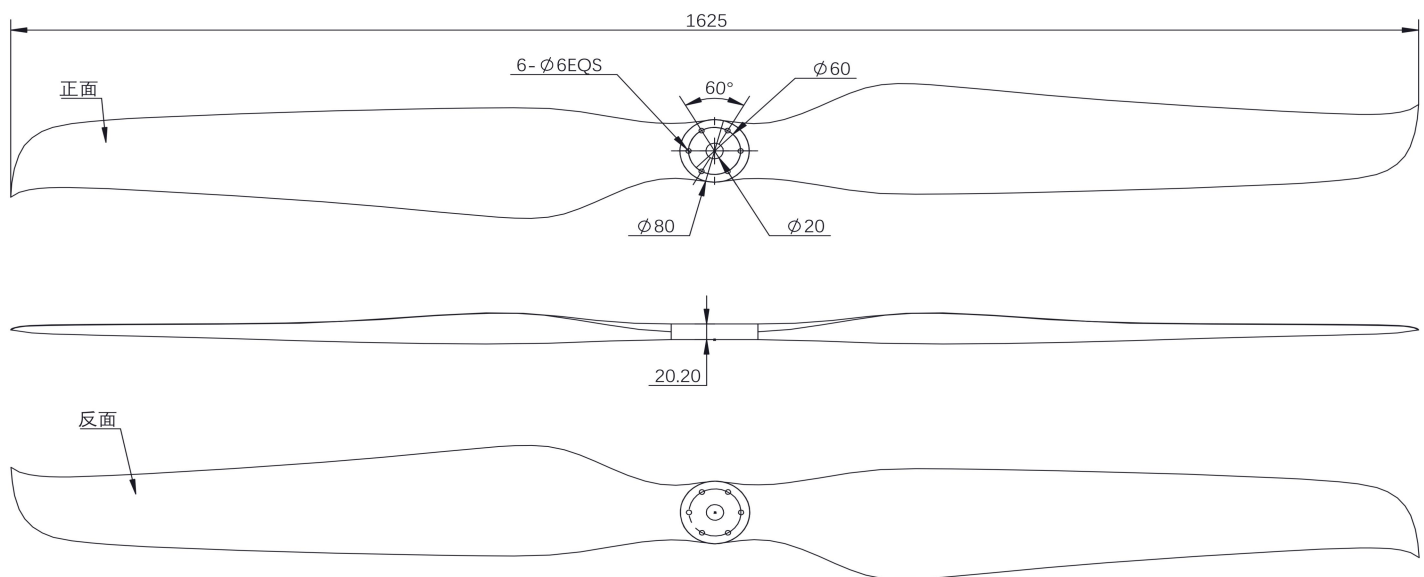
电调 ESC



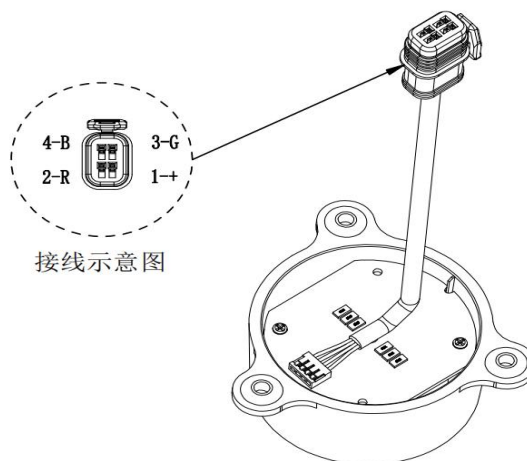
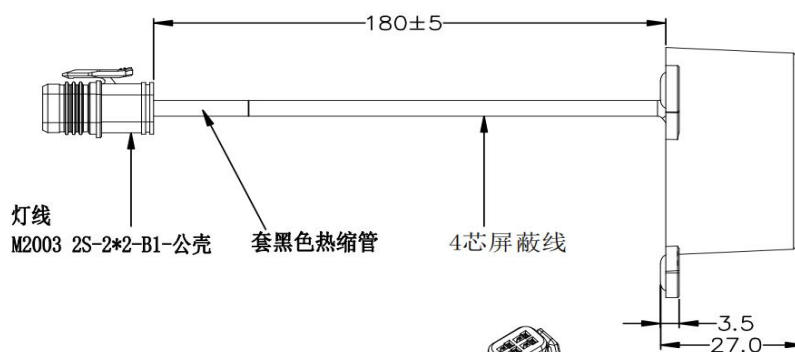
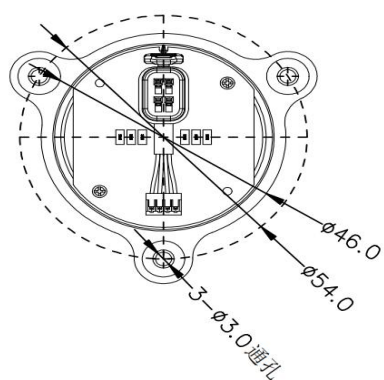
桨叶 Propeller MSC 72x25



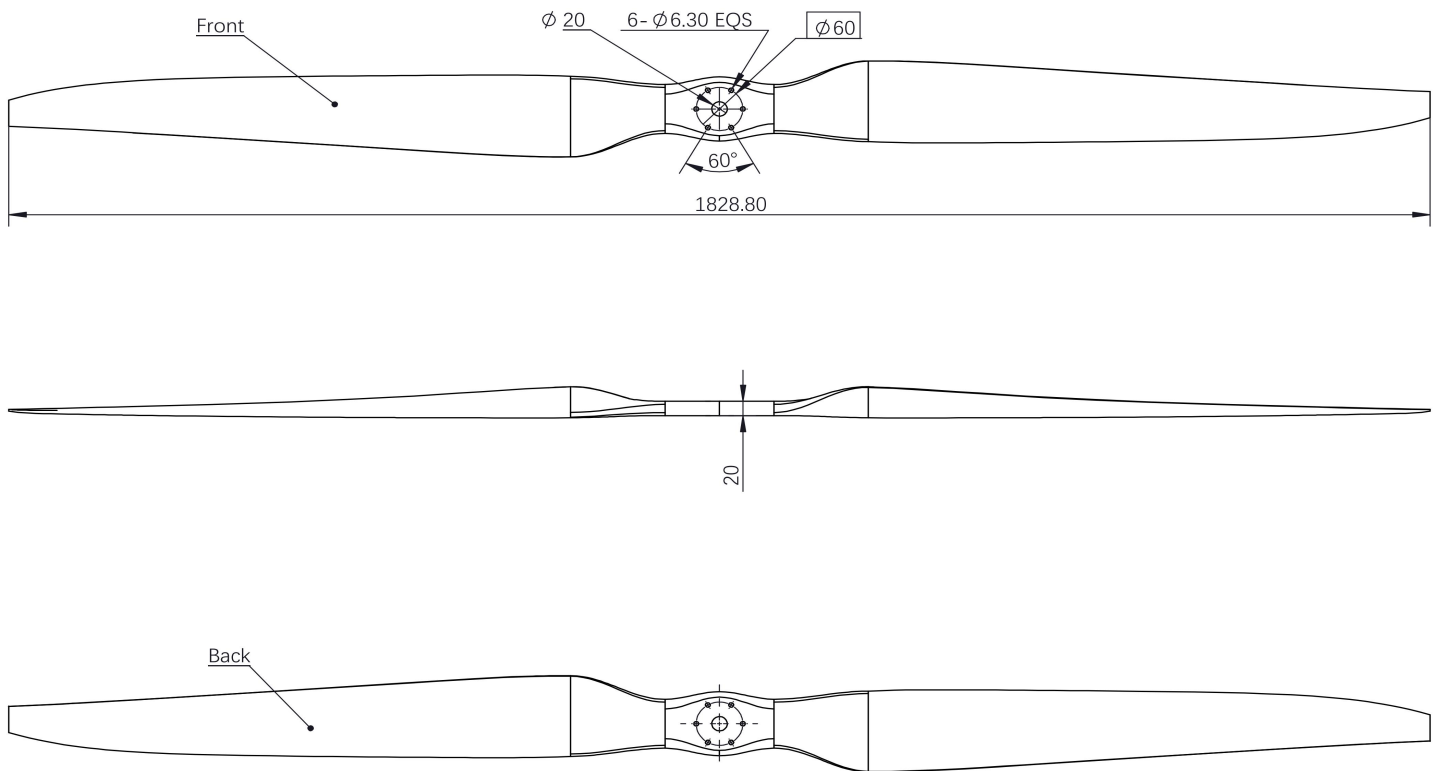
桨叶 Propeller MSC 64x20



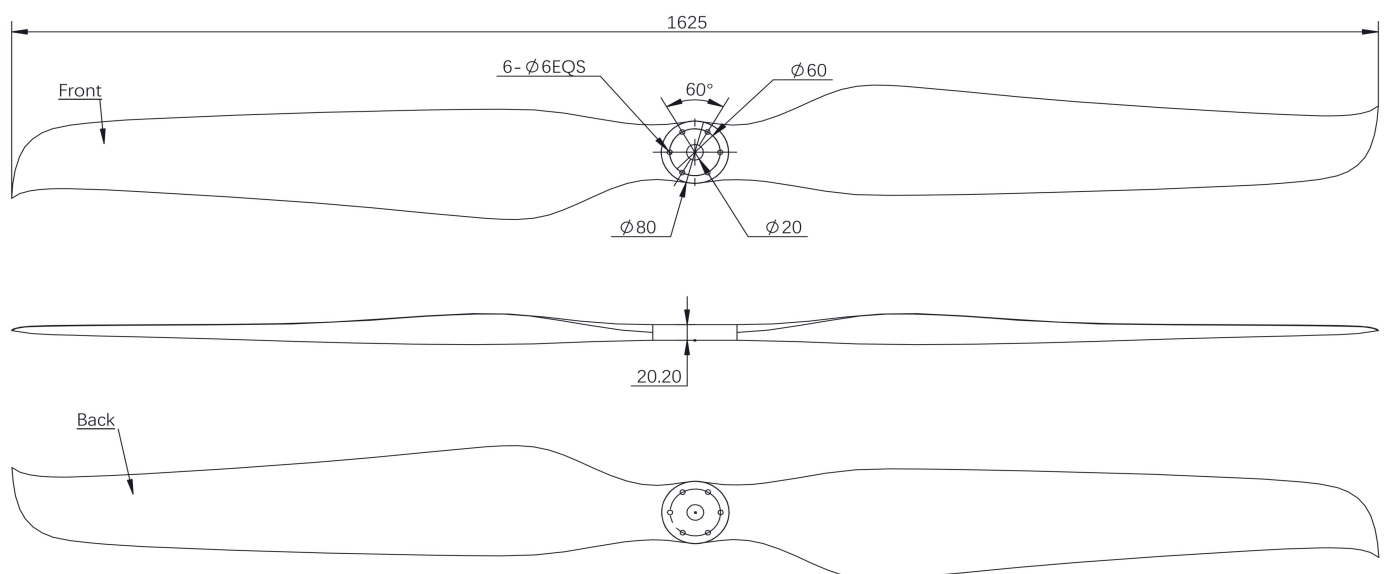
航灯 Navigation light



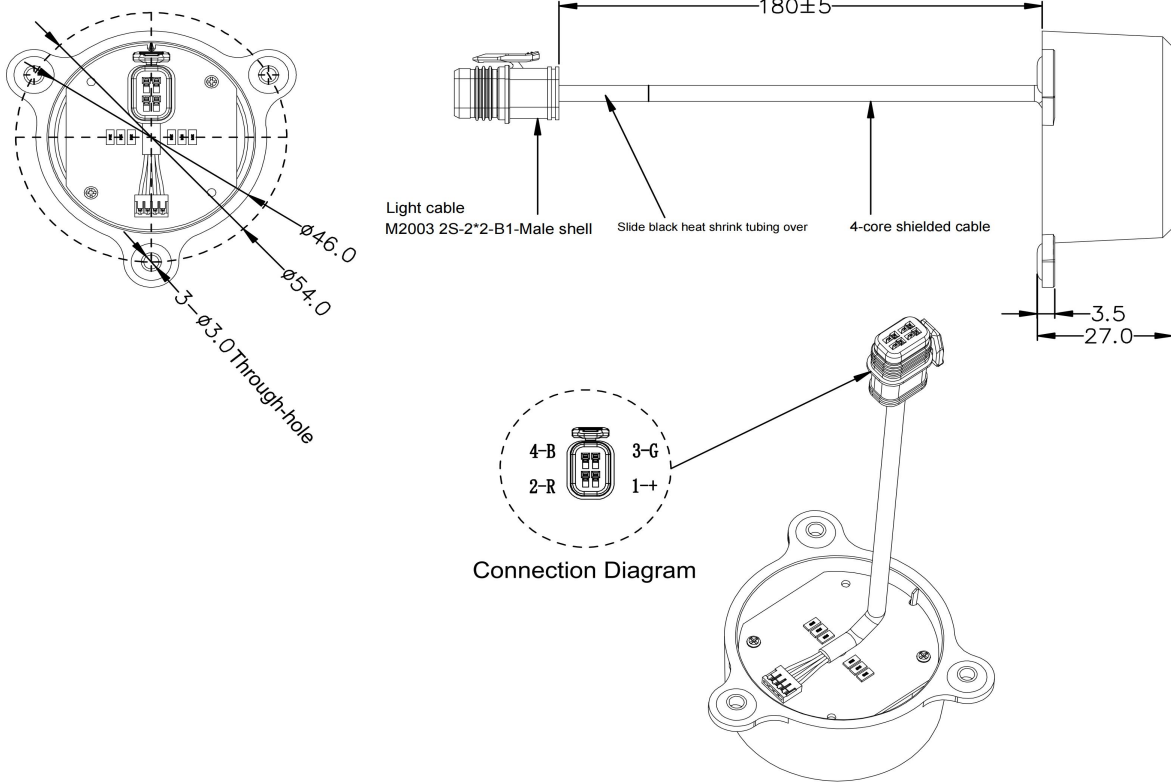
Propeller MSC 72x25



Propeller MSC 64x20

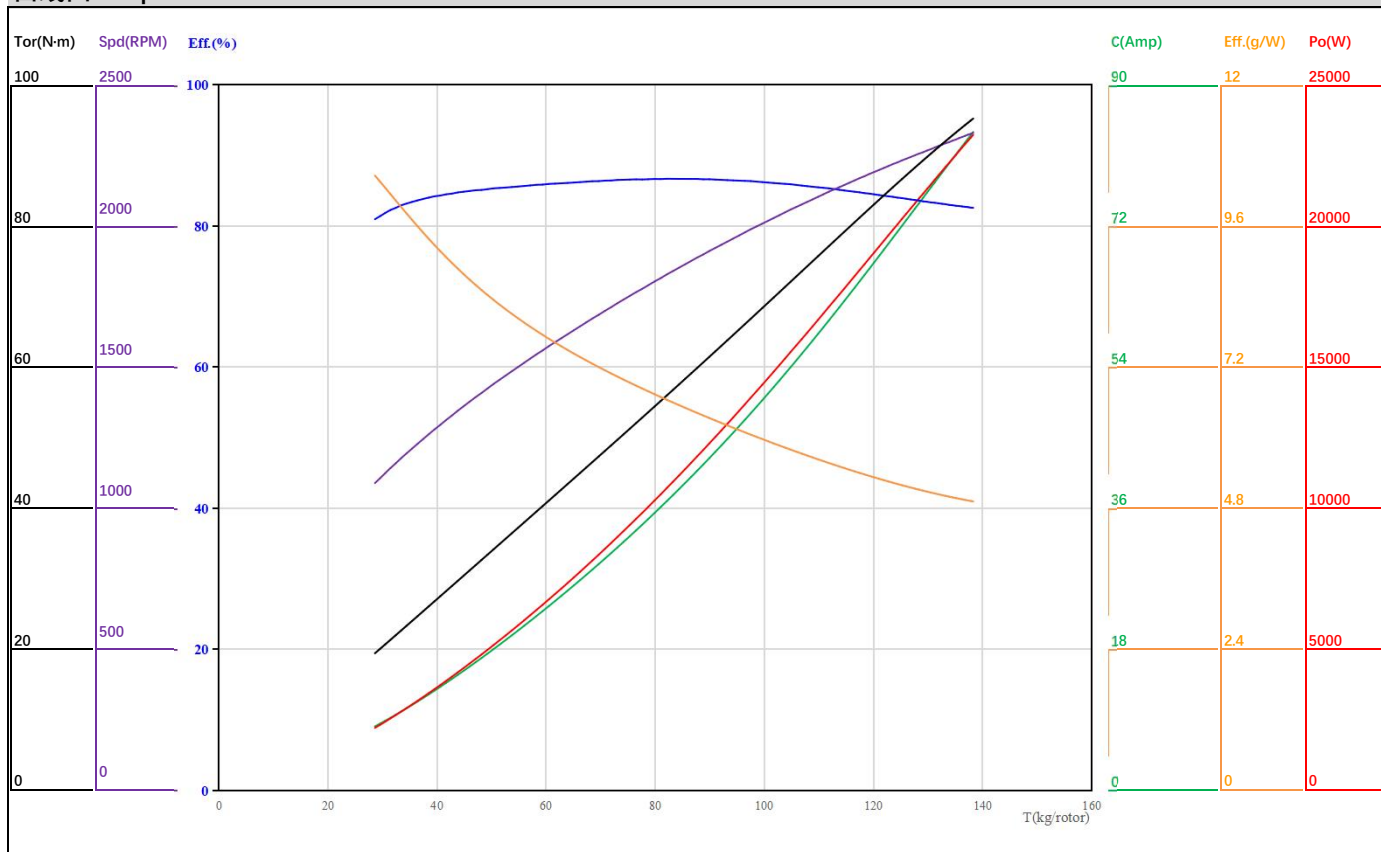


航灯 Navigation light



MSC 72x25- 负载性能参数(335V) Load performance parameters(335V)

曲线图 Graph



拉力数据表 Thrust Test Data

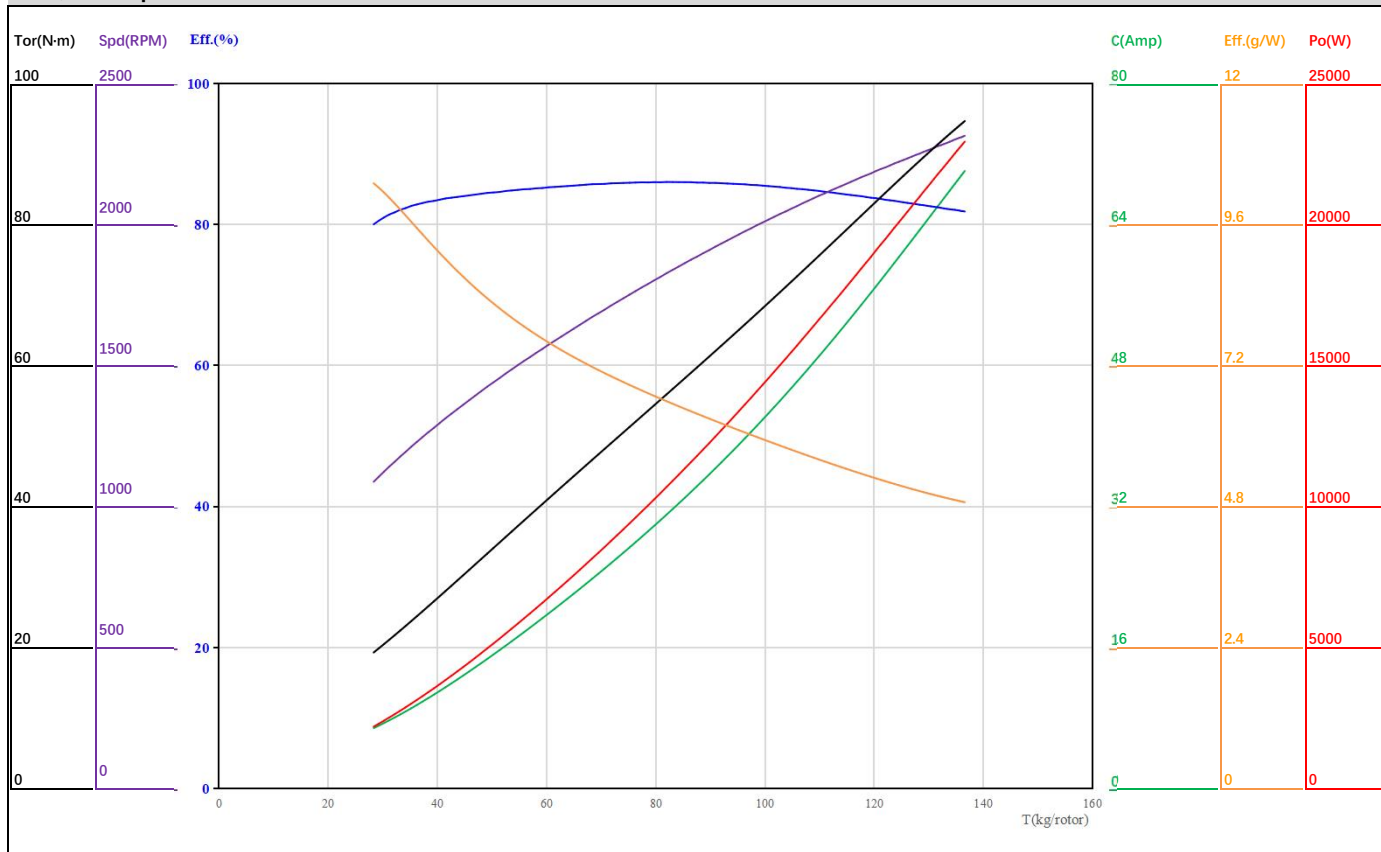
Voltage(V) 工作电压	Propeller 螺旋桨	Throttle(%) 油门	Thrust(g) 拉力	Current(A) 电流	Power Input(W) 输入功率	Speed(RPM) 转速	Efficiency(g/W) 力效	Torque (N-m) 扭矩	Power Output(W) 输出功率	Motor Temperature(°C) 电机温度
335V	MSC 72x25	33%	30509	8.9	2977.0	1124	10.2	20.70	2436.1	90.6°C
		35%	34417	10.5	3507.5	1194	9.8	23.33	2917.0	
		37%	38496	12.3	4104.4	1262	9.4	26.09	3448.1	
		39%	42717	14.2	4761.5	1328	9.0	28.96	4027.0	
		42%	49254	17.5	5846.3	1424	8.4	33.41	4981.4	
		45%	55964	21.0	7034.1	1515	8.0	37.98	6025.0	
		49%	65058	26.1	8755.8	1630	7.4	44.19	7542.6	
		51%	69627	28.9	9670.6	1685	7.2	47.33	8350.0	
		54%	76464	33.2	11106.8	1765	6.9	52.04	9618.1	
		57%	83239	37.7	12617.1	1840	6.6	56.76	10935.1	
		60%	89906	42.4	14196.4	1911	6.3	61.44	12295.3	
		63%	96424	47.3	15835.4	1977	6.1	66.08	13678.7	
		66%	102751	52.3	17518.4	2038	5.9	70.61	15068.4	
		69%	108843	57.4	19222.2	2094	5.7	75.00	16444.2	
		72%	114651	62.4	20916.0	2145	5.5	79.17	17782.8	
		75%	120124	67.4	22562.7	2191	5.3	83.07	19059.1	
		78%	125200	72.0	24120.4	2232	5.2	86.63	20246.6	
		81%	129809	76.3	25546.1	2267	5.1	89.77	21310.4	
		84%	133869	80.0	26798.1	2297	5.0	92.45	22235.8	
		87%	137287	83.1	27838.9	2323	4.9	94.61	23013.2	
		100%	138264	84.0	28133.1	2330	4.9	95.21	23229.1	

*以上数据为好盈实验室于室温 25°C、海平面高度，变化油门输入调节测得，电机温度为推荐拉力下持续运行10分钟数据，仅供参考。

*The above data was measured by HOBBYWING Laboratory at room temperature 25°C, at sea level, with varying throttle input. The motor temperature is measured after running for 10 minutes at rated thrust, for reference only.

MSC 72x25- 负载性能参数(400V) Load performance parameters(400V)

曲线图 Graph



拉力数据表 Thrust Test Data

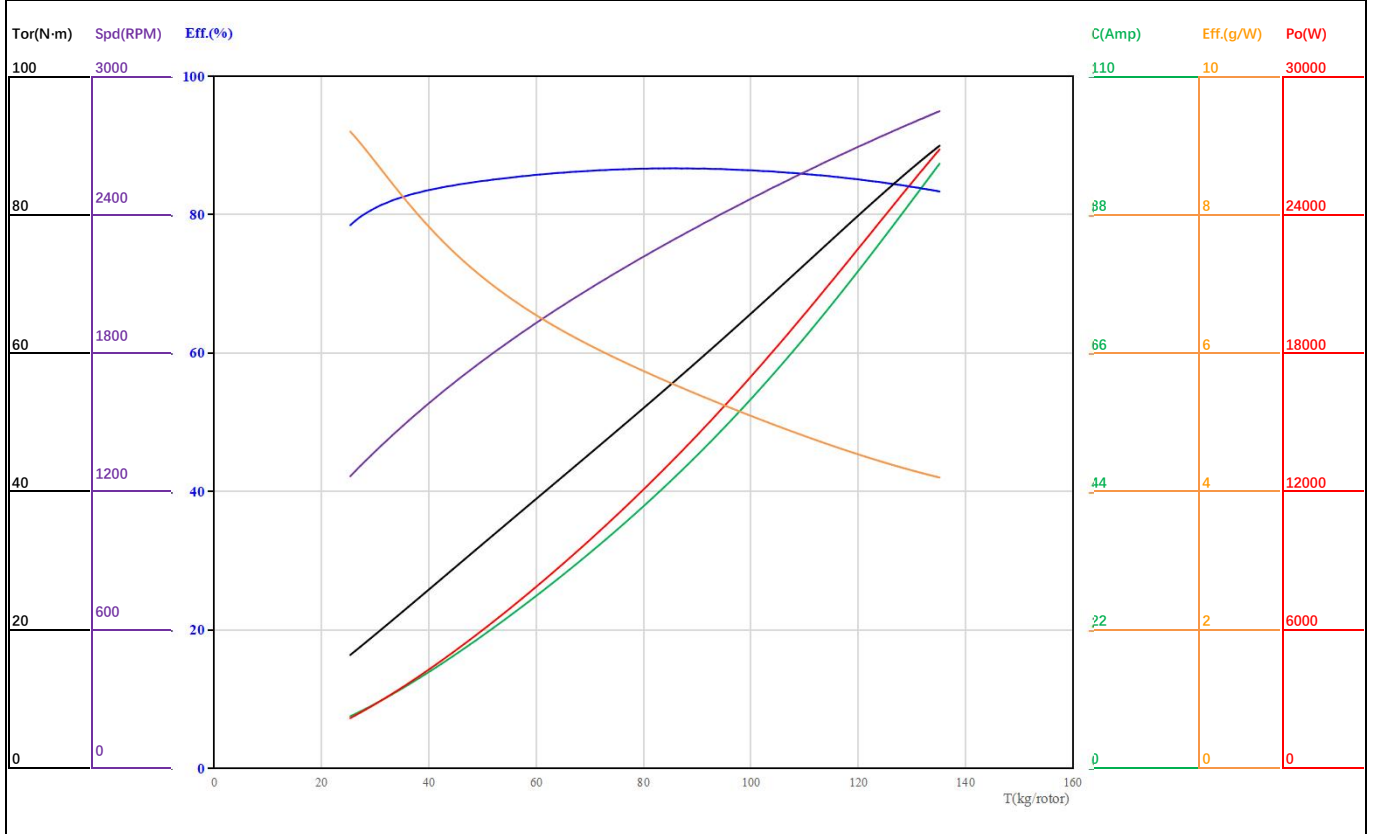
Voltage(V) 工作电压	Propeller 螺旋桨	Throttle(%) 油门	Thrust(g) 拉力	Current(A) 电流	Power Input(W) 输入功率	Speed(RPM) 转速	Efficiency(g/W) 力效	Torque (N-m) 扭矩	Power Output(W) 输出功率	Motor Temperature(°C) 电机温度
400V	MSC 72x25	33%	30231	7.5	2980.8	1124	10.1	20.51	2414.2	91.2°C
		35%	34184	8.8	3505.3	1194	9.8	23.08	2885.5	
		37%	38305	10.3	4107.8	1263	9.3	25.85	3418.4	
		39%	42560	11.9	4778.0	1329	8.9	28.77	4003.4	
		42%	49129	14.7	5888.8	1425	8.3	33.33	4974.0	
		45%	55849	17.8	7100.7	1516	7.9	38.01	6034.5	
		48%	62655	21.0	8393.5	1602	7.5	42.72	7166.1	
		51%	69493	24.4	9756.8	1685	7.1	47.40	8363.9	
		54%	76320	28.0	11187.9	1764	6.8	52.05	9614.8	
		57%	83097	31.7	12688.4	1839	6.5	56.67	10913.0	
		60%	89788	35.7	14260.2	1909	6.3	61.27	12247.4	
		63%	96354	39.8	15901.2	1976	6.1	65.85	13624.7	
		66%	102750	44.0	17601.4	2037	5.8	70.39	15014.4	
		69%	108922	48.3	19339.6	2093	5.6	74.85	16405.1	
		72%	114801	52.7	21081.6	2143	5.4	79.16	17763.1	
		75%	120302	56.9	22779.0	2189	5.3	83.20	19071.0	
		78%	125316	60.9	24372.0	2228	5.1	86.86	20263.4	
		81%	129712	64.5	25791.9	2262	5.0	89.99	21315.2	
		84%	133328	67.4	26966.4	2289	4.9	92.49	22167.8	
		87%	135969	69.6	27822.4	2309	4.9	94.24	22786.0	
		100%	136594	70.1	28024.2	2314	4.9	94.65	22933.6	

以上数据为好盈实验室于室温 25°C、海平面高度，变化油门输入调节测得。电机温度是在额定拉力下，持续工作10分钟测得。

The above data was measured by HOBBYWING Laboratory at room temperature 25°C, at sea level, with varying throttle input. The motor temperature is measured after running for 10 minutes at rated thrust, for reference only.

MSC 64x20- 负载性能参数(335V) Load performance parameters(335V)

曲线图 Graph



拉力数据表 Thrust Test Data

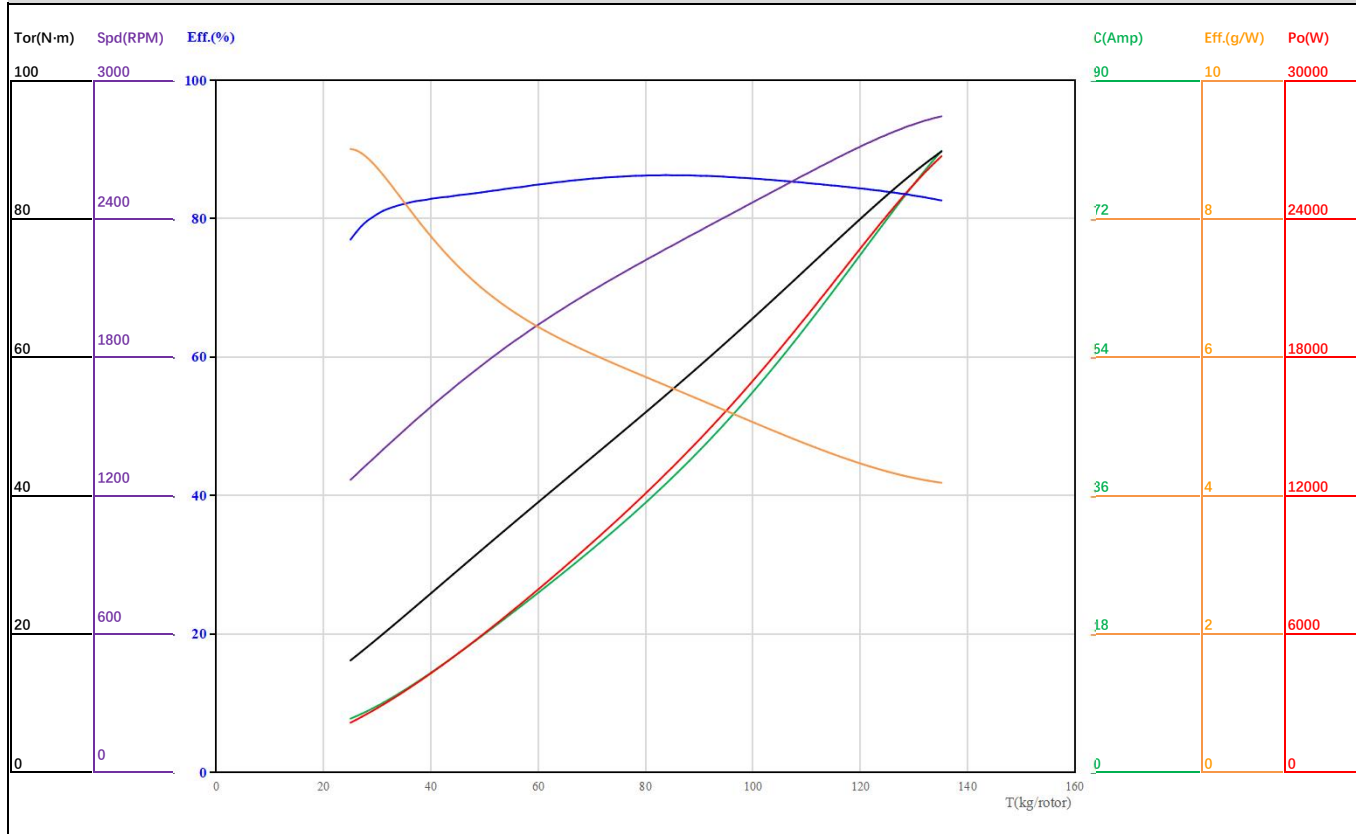
Voltage(V) 工作电压	Propeller 螺旋桨	Throttle(%) 油门	Thrust(g) 拉力	Current(A) 电流	Power Input(W) 输入功率	Speed(RPM) 转速	Efficiency(g/W) 力效	Torque (N-m) 扭矩	Power Output(W) 输出功率	Motor Temperature(°C) 电机温度
335V	MSC 64x20	33%	27303	9.0	3024.5	1311	9.0	17.56	2410.0	92.6°C
		35%	31203	10.8	3609.1	1399	8.6	20.05	2937.5	
		37%	35193	12.7	4262.5	1484	8.3	22.64	3518.2	
		39%	39272	14.9	4978.9	1567	7.9	25.31	4152.5	
		42%	45543	18.4	6159.3	1686	7.4	29.42	5194.6	
		45%	51975	22.2	7452.1	1799	7.0	33.64	6337.4	
		48%	58531	26.4	8844.2	1906	6.6	37.93	7570.0	
		51%	65163	30.8	10326.5	2008	6.3	42.26	8885.6	
		54%	71817	35.5	11893.1	2105	6.0	46.62	10274.9	
		57%	78436	40.4	13538.8	2196	5.8	50.98	11722.6	
		60%	84957	45.5	15256.5	2282	5.6	55.33	13222.0	
		63%	91314	50.8	17034.5	2363	5.4	59.65	14758.7	
		66%	97443	56.3	18853.9	2437	5.2	63.88	16300.6	
		69%	103282	61.8	20687.8	2507	5.0	67.97	17843.7	
		72%	108772	67.2	22502.2	2570	4.8	71.86	19339.5	
		75%	113858	72.4	24258.7	2627	4.7	75.49	20764.7	
		78%	118495	77.4	25918.0	2677	4.6	78.78	22082.1	
		81%	122645	81.9	27443.6	2721	4.5	81.69	23274.0	
		84%	126281	86.0	28806.0	2759	4.4	84.18	24321.1	
		87%	129390	89.5	29984.6	2791	4.3	86.27	25211.8	
		90%	131973	92.4	30969.6	2816	4.3	87.95	25932.8	
		100%	135161	96.1	32188.0	2848	4.2	89.94	26821.9	

以上数据为好盈实验室于室温 25°C、海平面高度，变化油门输入调节测得。电机温度是在额定拉力下，持续工作10分钟测得。

The above data was measured by HOBBYWING Laboratory at room temperature 25°C, at sea level, with varying throttle input. The motor temperature is measured after running for 10 minutes at rated thrust, for reference only.

MSC 64x20- 负载性能参数(400V) Load performance parameters(400V)

曲线图 Graph



拉力数据表 Thrust Test Data

Voltage(V) 工作电压	Propeller 螺旋桨	Throttle(%) 油门	Thrust(g) 拉力	Current(A) 电流	Power Input(W) 输入功率	Speed(RPM) 转速	Efficiency(g/W) 力效	Torque (N-m) 扭矩	Power Output(W) 输出功率	Motor Temperature(°C) 电机温度
400V	MSC 64x20	33%	27109	7.6	3031.6	1312	8.9	17.41	2392.0	92.8°C
		35%	31142	9.0	3609.0	1399	8.6	19.98	2927.1	
		37%	35131	10.7	4270.4	1483	8.2	22.59	3507.2	
		39%	39130	12.5	4999.2	1565	7.8	25.23	4134.4	
		42%	45227	15.5	6196.0	1685	7.3	29.28	5165.9	
		45%	51505	18.7	7496.2	1799	6.9	33.43	6297.4	
		48%	57983	22.2	8884.4	1907	6.5	37.67	7522.8	
		51%	64635	25.9	10353.8	2009	6.2	41.99	8833.5	
		54%	71399	29.8	11906.5	2105	6.0	46.37	10219.7	
		57%	78182	33.9	13549.7	2196	5.8	50.78	11675.9	
		60%	84876	38.2	15287.0	2281	5.6	55.20	13183.3	
		63%	91365	42.8	17108.5	2363	5.3	59.57	14740.9	
		66%	97534	47.5	18983.3	2439	5.1	63.84	16304.9	
		69%	103278	52.1	20859.9	2511	5.0	67.91	17854.6	
		72%	108515	56.7	22674.3	2576	4.8	71.67	19331.2	
		75%	113190	60.9	24364.4	2632	4.6	75.04	20682.3	
		78%	117291	64.7	25885.4	2681	4.5	77.99	21895.3	
		81%	120853	68.1	27220.9	2721	4.4	80.52	22941.7	
		84%	123973	71.0	28387.8	2754	4.4	82.68	23843.6	
		87%	126813	73.6	29436.8	2781	4.3	84.59	24633.7	
		90%	129615	76.1	30448.0	2805	4.3	86.41	25378.7	
		100%	135144	80.8	32321.4	2843	4.2	89.69	26699.6	

以上数据为好盈实验室于室温 25°C、海平面高度，变化油门输入调节测得。电机温度是在额定拉力下，持续工作10分钟测得。

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