

M8110 HighProt

基础参数 Specification I

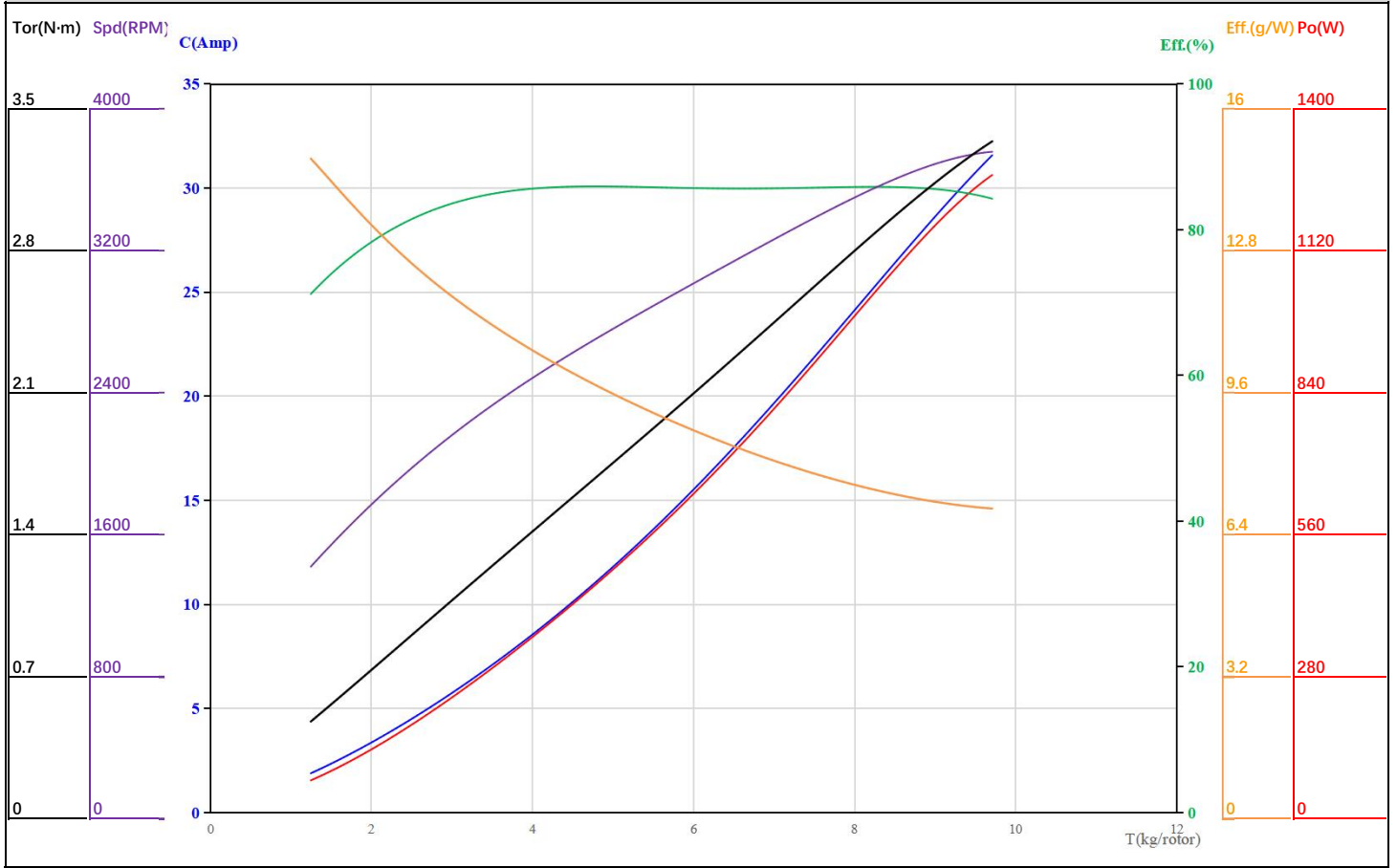
产品型号 Model	M8110 HighProt-95/110KV	防尘防水等级 Protection level	IP45
电机尺寸 Motor Size	Φ87.1*H28.9mm	槽极数 Slot& Pole	36槽42极 36N 42P
定子尺寸 Stator Size	Φ81*H10mm	电机整体动平衡标准 Dynamic balance	≤10mg
定子工艺 Stator process	高品质硅钢片，防锈处理，耐180℃高温涂覆 High standard silicon steel sheet, rust proof, 180℃ high temperature resistance paint-coat	轴承型号 Bearing	高品质防水轴承 Water proof bearing
漆包线等级 Enamelled wire	220℃	出轴轴径 Motor axle diameter	轴套 Φ10mm shaft sleeve Φ10mm
磁铁等级 Magnet	180℃	桨叶安装孔尺寸 Props mounting dimensions	4*M4@D23mm, 4*M3@D20mm
线圈绝缘测试 Isolation test	500V交流耐压测试 500V AC high voltage resistance test	电机安装孔尺寸 Motor mounting dimensions	4*M4@D36mm
额定输入功率 Rated power input	400W	额定输出功率 Rated power output	340W

技术参数 Specification II

KV值 KV	95KV	110KV
额定电压 Battery(LiPo)	LiPo-12S	LiPo-12S
空载电流 No-load current	1.1A	1.27A
最大电流(非密闭环境温度 ≤25 °C) Maximum current (Non-hermetic Ambient Temperature ≤ 25°C)	43.2A	39.2A
最大功率 Max power	1992W	1803W
最大拉力 Max thrust	11.3kg	11kg
相间内阻 Resistance	132.9mΩ	112.3mΩ
出线规格 Wire Size	16AWG	16AWG
出线长度 Wire length	100mm	100mm
电机重量(含线) Weight (With wire)	315g	317g

95KV+MSC 30x9.8 负载性能参数 Load performance parameters

曲线图 Graph



拉力数据表 Motor Propeller Pull Test Data

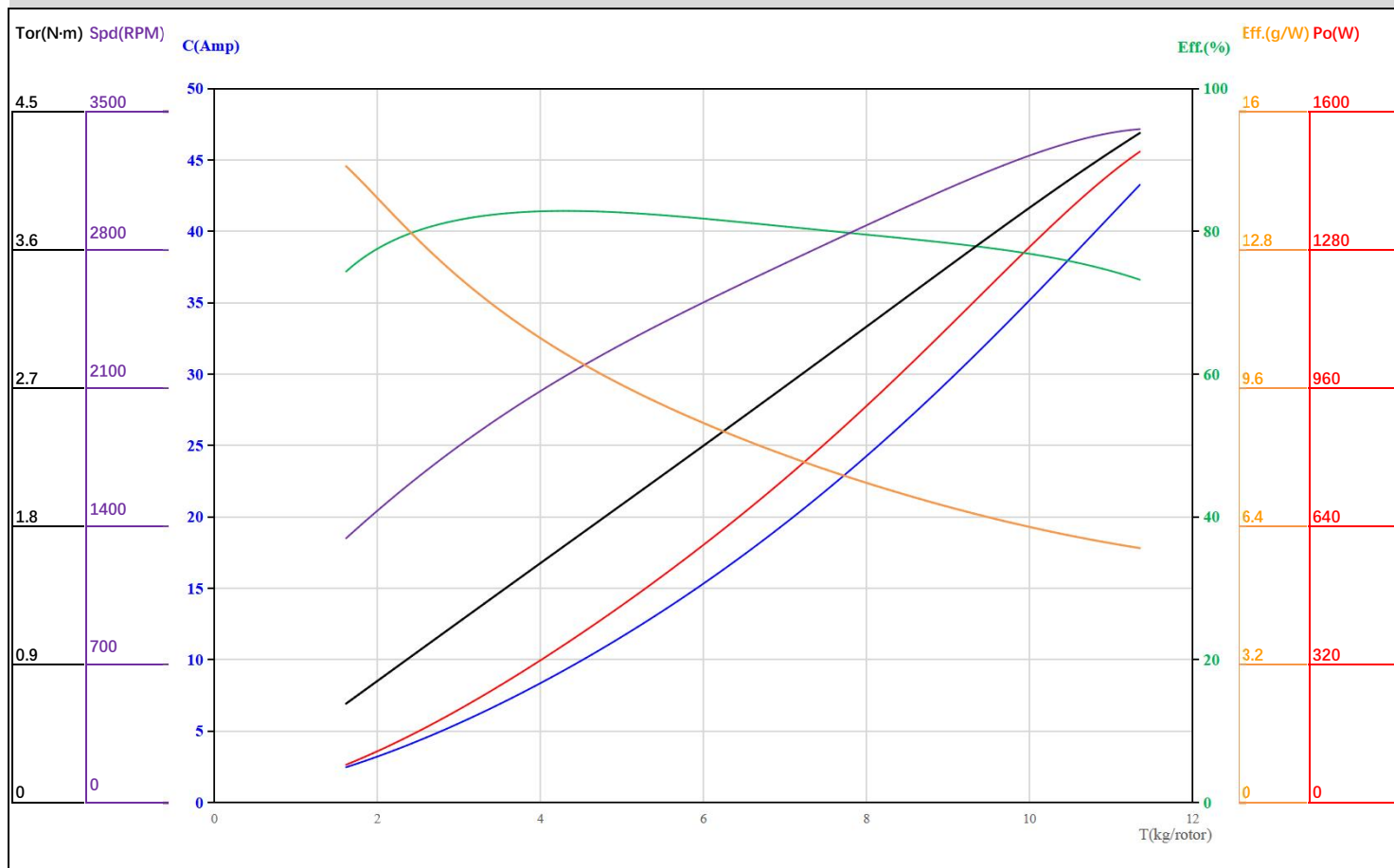
Voltage(V) 工作电压	Propeller 螺旋桨	Throttle(%) 油门	Thrust(g) 拉力	Current(A) 电流	Power Input(W) 输入功率	Speed(RPM) 转速	Efficiency(g/W) 力效	Torque(N-m) 扭矩	Power Output(W) 输出功率	Temperature(°C) 电机温度
46V (12S LiPo)	MSC 30x9.8	33%	1281	1.9	89.6	1366	14.3	0.45	64.1	68.0
		35%	1421	2.2	101.3	1433	14.0	0.49	74.1	
		37%	1575	2.5	114.8	1505	13.7	0.54	85.8	
		39%	1743	2.8	130.1	1580	13.4	0.60	99.2	
		42%	2015	3.4	156.5	1698	12.9	0.69	122.7	
		45%	2311	4.1	186.9	1818	12.4	0.79	150.2	
		48%	2626	4.8	221.2	1939	11.9	0.89	181.6	
		51%	2956	5.6	259.3	2057	11.4	1.00	216.4	
		54%	3298	6.5	301.1	2172	11.0	1.12	254.4	
		57%	3650	7.5	346.4	2282	10.5	1.23	295.2	
		60%	4008	8.6	395.1	2388	10.1	1.35	338.4	
		63%	4371	9.7	447.0	2490	9.8	1.47	383.9	
		66%	4736	10.9	502.2	2588	9.4	1.59	431.7	
		69%	5105	12.2	560.7	2683	9.1	1.71	481.8	
		72%	5477	13.5	622.6	2776	8.8	1.84	534.5	
		75%	5853	14.9	688.3	2870	8.5	1.96	590.2	
		78%	6237	16.5	758.3	2963	8.2	2.09	649.7	
		81%	6631	18.1	833.2	3059	8.0	2.23	713.7	
		84%	7040	19.8	913.9	3157	7.7	2.37	783.1	
		87%	7472	21.8	1001.6	3259	7.5	2.52	859.1	
		90%	7933	23.8	1097.4	3363	7.2	2.68	942.3	
		100%	9708	31.6	1454.1	3628	6.7	3.22	1225.3	

*以上数据为好盈实验室于室温 25℃、海平面高度，变化油门输入调节测得，电机温度为65%油门运行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 65% throttle, for reference only.

95KV+MSC 32x10.5负载性能参数 Load performance parameters

曲线图 Graph



拉力数据表 Motor Propeller Pull Test Data

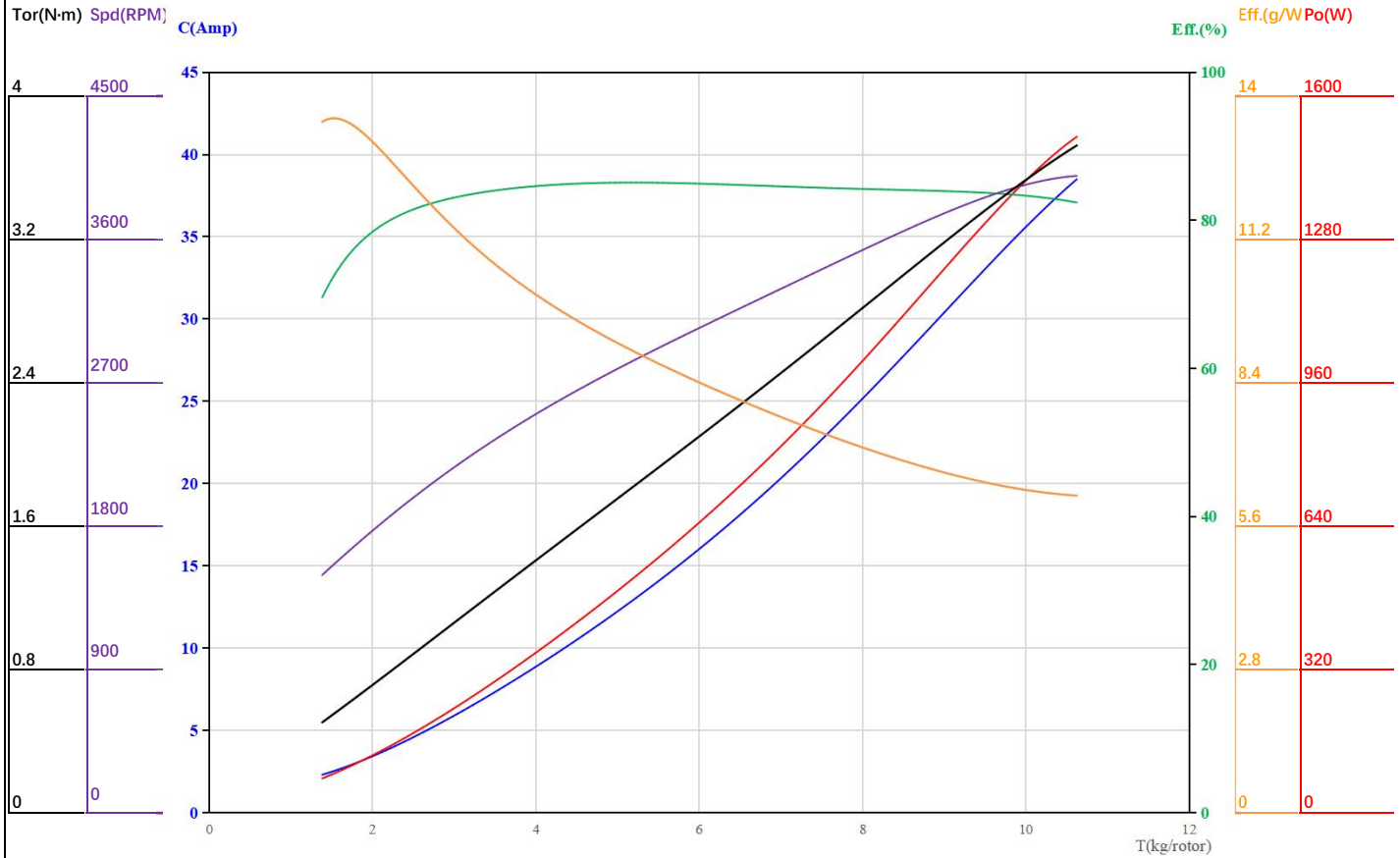
Voltage(V) 工作电压	Propeller 螺旋桨	Throttle(%) 油门	Thrust(g) 拉力	Current(A) 电流	Power Input(W) 输入功率	Speed(RPM) 转速	Efficiency(g/W) 力效	Torque(N-m) 扭矩	Power Output(W) 输出功率	Temperature(°C) 电机温度
46V (12S LiPo)	MSC 32x10.5	33%	1654	2.5	116.5	1307	14.2	0.64	87.0	85.0
		35%	1812	2.8	130.3	1364	13.9	0.69	99.2	
		37%	1996	3.2	147.2	1428	13.6	0.76	114.1	
		39%	2202	3.6	167.3	1498	13.2	0.84	131.7	
		42%	2545	4.4	203.0	1609	12.5	0.97	162.9	
		45%	2918	5.3	245.1	1723	11.9	1.11	199.5	
		48%	3313	6.4	293.1	1836	11.3	1.25	240.8	
		51%	3722	7.5	346.3	1946	10.7	1.40	286.2	
		54%	4141	8.8	404.2	2050	10.2	1.56	334.8	
		57%	4562	10.1	466.2	2150	9.8	1.72	386.1	
		60%	4985	11.6	531.9	2243	9.4	1.87	439.6	
		63%	5406	13.1	601.2	2332	9.0	2.03	495.0	
		66%	5825	14.6	674.0	2417	8.6	2.18	552.4	
		69%	6243	16.3	750.4	2498	8.3	2.34	611.7	
		72%	6661	18.0	830.9	2579	8.0	2.49	673.5	
		75%	7082	19.9	916.2	2658	7.7	2.65	738.2	
		78%	7510	21.9	1007.2	2738	7.5	2.81	806.7	
		81%	7950	24.0	1105.4	2820	7.2	2.98	879.8	
		84%	8408	26.3	1212.5	2904	6.9	3.15	958.7	
		87%	8890	28.9	1330.5	2991	6.7	3.34	1044.4	
		90%	9405	31.7	1461.9	3079	6.4	3.53	1137.6	
		100%	11354	43.3	1992.2	3301	5.7	4.22	1458.6	

*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，电机温度为65%油门运行10分钟数据，仅供参考。

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110KV+MSC 29x9.5负载性能参数 Load performance parameters

曲线图 Graph



拉力数据表 Motor Propeller Pull Test Data

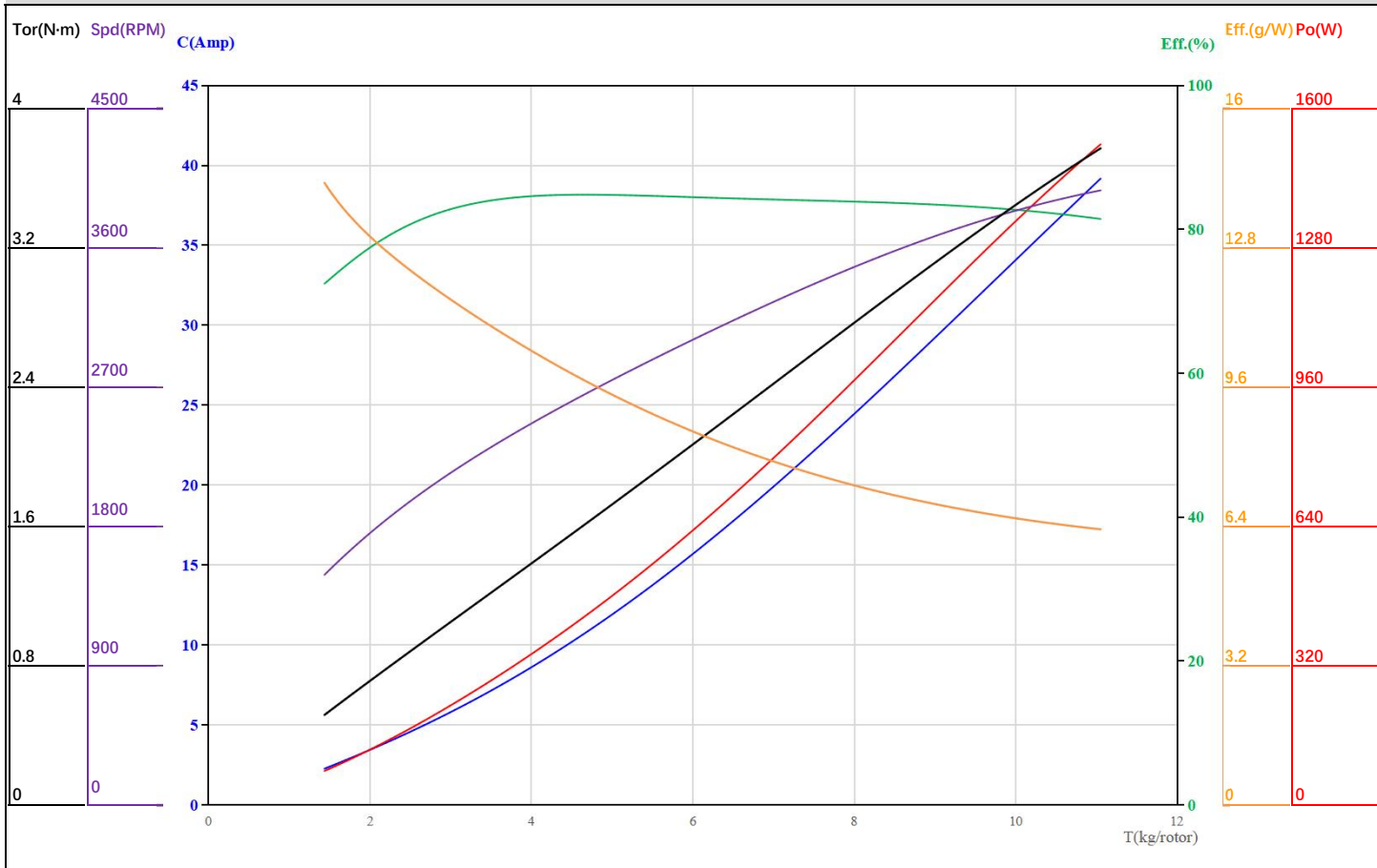
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46V (12S LiPo)	MSC 29x9.5	33%	1420	2.4	108.5	1461	13.1	0.50	76.3	76.0
		35%	1581	2.6	120.5	1533	13.1	0.55	88.5	
		37%	1761	2.9	135.5	1612	13.0	0.61	103.0	
		39%	1957	3.3	153.5	1696	12.7	0.68	119.9	
		42%	2276	4.0	186.1	1827	12.2	0.78	149.6	
		45%	2619	4.9	224.8	1960	11.7	0.90	184.2	
		48%	2980	5.8	268.9	2092	11.1	1.02	223.3	
		51%	3353	6.9	317.7	2220	10.6	1.15	266.2	
		54%	3735	8.0	370.3	2342	10.1	1.27	312.3	
		57%	4122	9.3	426.3	2458	9.7	1.40	361.1	
		60%	4511	10.5	485.2	2567	9.3	1.53	412.2	
		63%	4902	11.9	547.2	2672	9.0	1.66	465.5	
		66%	5294	13.3	612.2	2772	8.6	1.79	520.9	
		69%	5687	14.8	680.8	2869	8.4	1.93	578.9	
		72%	6084	16.4	753.4	2965	8.1	2.06	639.8	
		75%	6487	18.0	831.0	3061	7.8	2.20	704.5	
		78%	6898	19.9	914.5	3159	7.5	2.34	773.8	
		81%	7323	21.8	1005.3	3260	7.3	2.49	849.0	
		84%	7767	24.0	1104.7	3364	7.0	2.64	931.3	
		87%	8235	26.4	1214.2	3474	6.8	2.81	1021.9	
		90%	8735	29.0	1334.9	3586	6.5	2.99	1121.6	
		100%	10624	38.5	1772.7	3870	6.0	3.60	1460.7	

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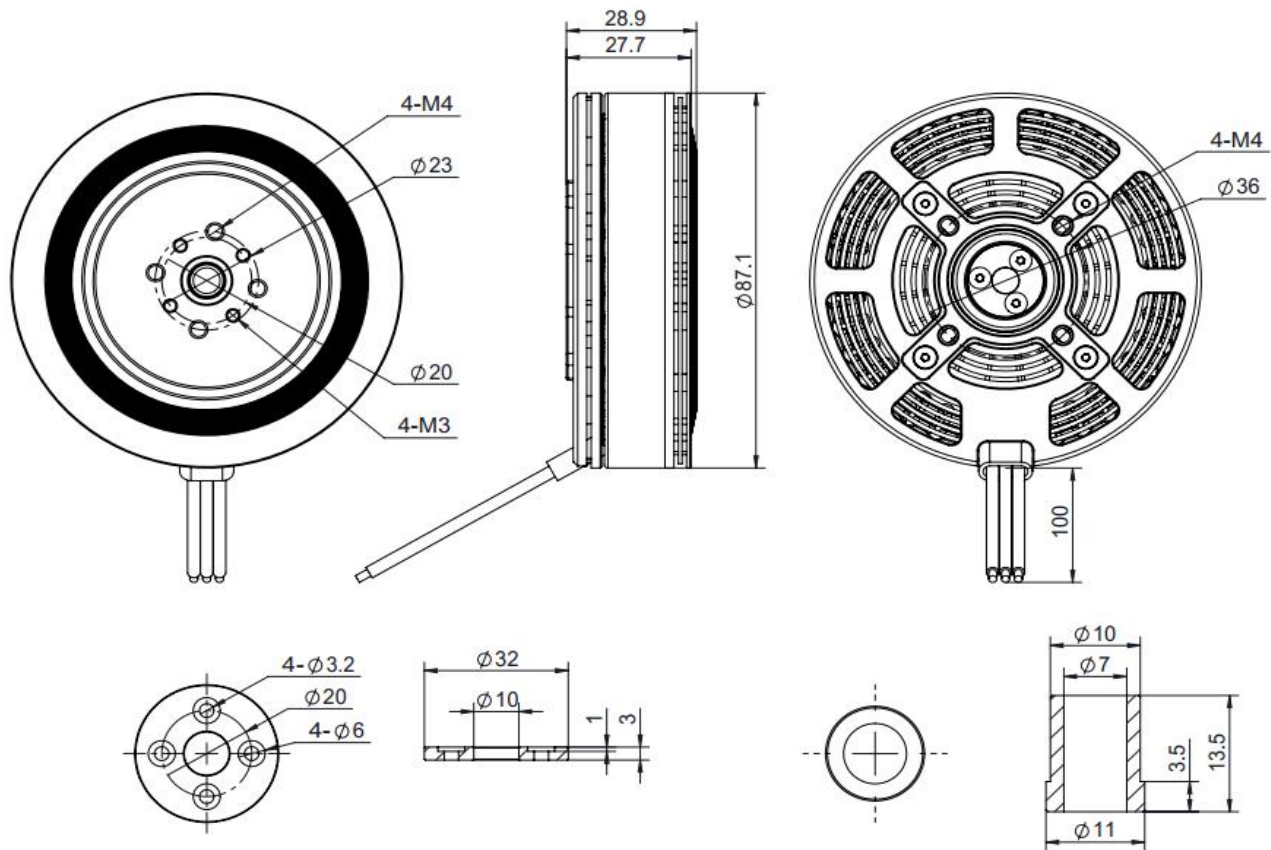
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46V (12S LiPo)	MSC 30x9.8	33%	1468	2.3	106.8	1454	13.7	0.51	77.7	81.0
		35%	1614	2.6	120.5	1525	13.4	0.56	89.4	
		37%	1787	3.0	137.2	1606	13.0	0.62	103.9	
		39%	1984	3.4	156.6	1692	12.7	0.68	121.1	
		42%	2313	4.1	190.4	1827	12.2	0.79	151.6	
		45%	2672	5.0	229.2	1962	11.7	0.91	186.9	
		48%	3051	5.9	273.0	2093	11.2	1.03	226.4	
		51%	3441	7.0	321.2	2219	10.7	1.16	269.5	
		54%	3837	8.1	373.6	2338	10.3	1.29	315.5	
		57%	4236	9.3	429.9	2452	9.9	1.42	364.2	
		60%	4634	10.6	489.8	2560	9.5	1.55	415.4	
		63%	5031	12.0	553.1	2665	9.1	1.68	468.9	
		66%	5427	13.5	620.0	2767	8.8	1.81	524.9	
		69%	5825	15.0	690.5	2866	8.4	1.94	583.7	
		72%	6228	16.6	765.2	2964	8.1	2.08	645.7	
		75%	6639	18.3	844.7	3062	7.9	2.22	711.7	
		78%	7065	20.2	929.8	3161	7.6	2.36	782.2	
		81%	7509	22.2	1021.7	3260	7.3	2.51	858.2	
		84%	7979	24.4	1121.6	3360	7.1	2.67	940.4	
		87%	8480	26.7	1230.6	3461	6.9	2.84	1029.7	
		90%	9019	29.3	1349.9	3561	6.7	3.02	1126.1	
		100%	11051	39.2	1803.9	3843	6.1	3.65	1469.0	

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尺寸图 Dimension figure



应用搭配推荐 Recommended application combinations

旋翼电机 Motor	M8110 HighProt
旋翼桨叶 Propeller	MSC 29x9.5/MSC 30x9.8/MSC 32x10.5
搭配电调 ESC	XRotor Pro H60A 14S
电池电压 Battery	12S LiPo
单轴应用拉力区间 Takeoff weight / rotor	3.0~4.0kg
四轴最大起飞重量 Takeoff weight of quadrotor	12.0~16.0kg