

# HM-6208-UL



## 基础参数 Specification

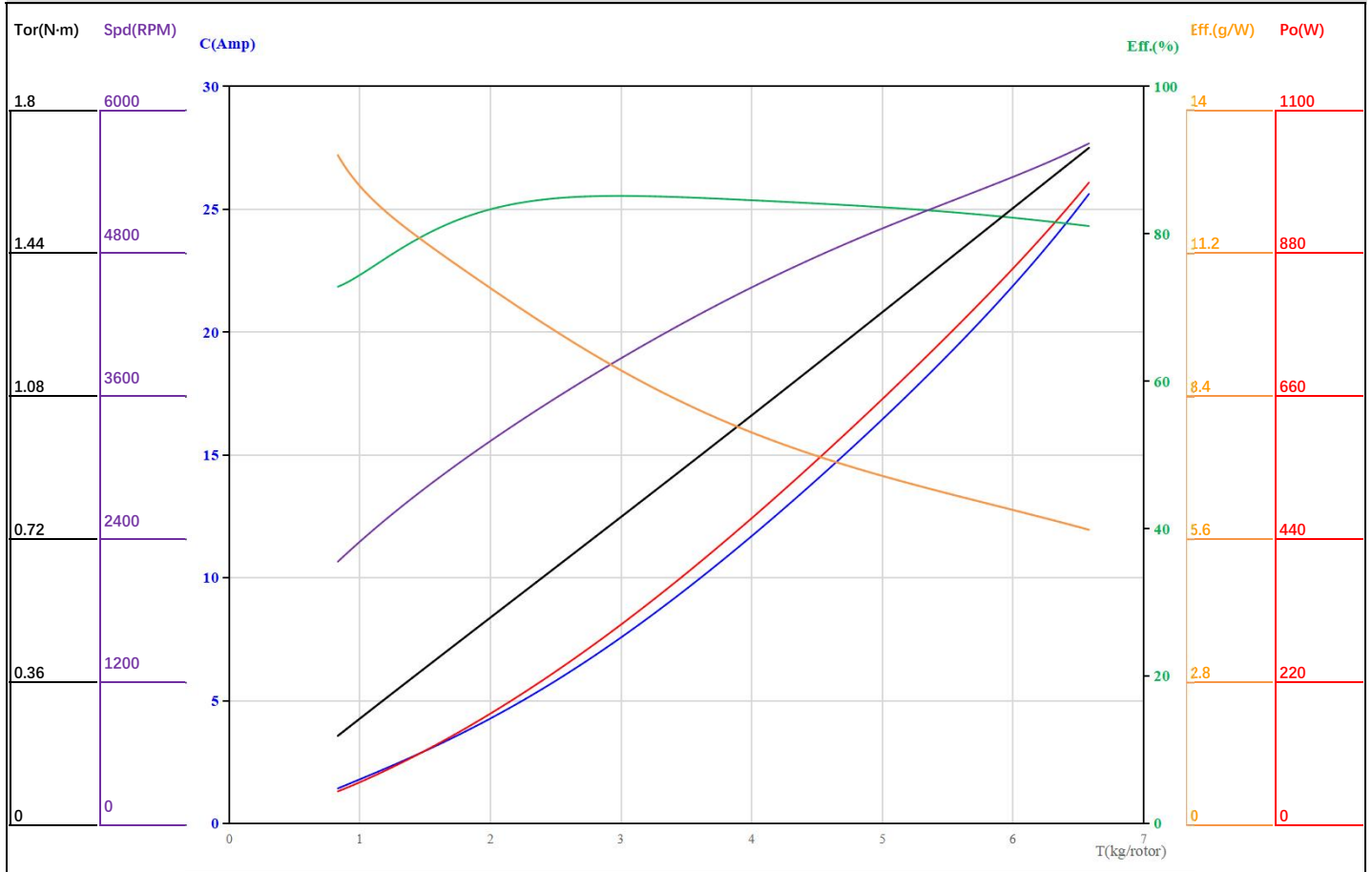
产品型号 Model	HM-6208-UL	防尘防水等级 Protection level	IPX5
电机尺寸 Motor Size	Φ68.7mm*H25.8mm	槽极数 Slot& Pole	24槽28极 24N 28P
定子尺寸 Stator Size	Φ61.5mm	电机整体动平衡标准 Dynamic balance	≤8mg
定子工艺 Stator process	高品质矽钢片, 防锈处理, 耐180°C高温涂覆 High standard silicon steel sheet, rust proof, 180°C high temperature resistance paint-coat	轴承型号 Bearing	高品质防水轴承 Water proof bearing
漆包线等级 Enamelled wire	200°C	出轴轴径 Motor axle diameter	Φ4mm
磁铁等级 Magnet	150°C	桨叶安装孔尺寸 Props mounting dimensions	4×M3@D12mm, 4×M4@D18mm
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@D32mm

## 技术参数 Specification

KV值 KV	155	310
额定电压 Battery(LiPo)	LiPo-12S	LiPo-6S
空载电流 No-load current	0.92A	1.65A
最大电流/A(非密闭环境温度 ≤25 °C) Maximum current (Non-hermetic Ambient Temperature ≤ 25°C)	28.5A	60A
最大功率 Max power	1038W	1050W
最大拉力 Max thrust	7 kg	7kg
相间内阻 Resistance	161.4mΩ	42.3mΩ
出线规格 Wire Size	漆包线直出 enamelled wire outlet	漆包线直出 enamelled wire outlet
出线长度 Wire length	50mm	50mm
电机重量(含线) Weight (With wire)	165g	169g

# 155KV+21\*6.3 "负载性能参数 Load performance parameters

## 曲线图 Graph



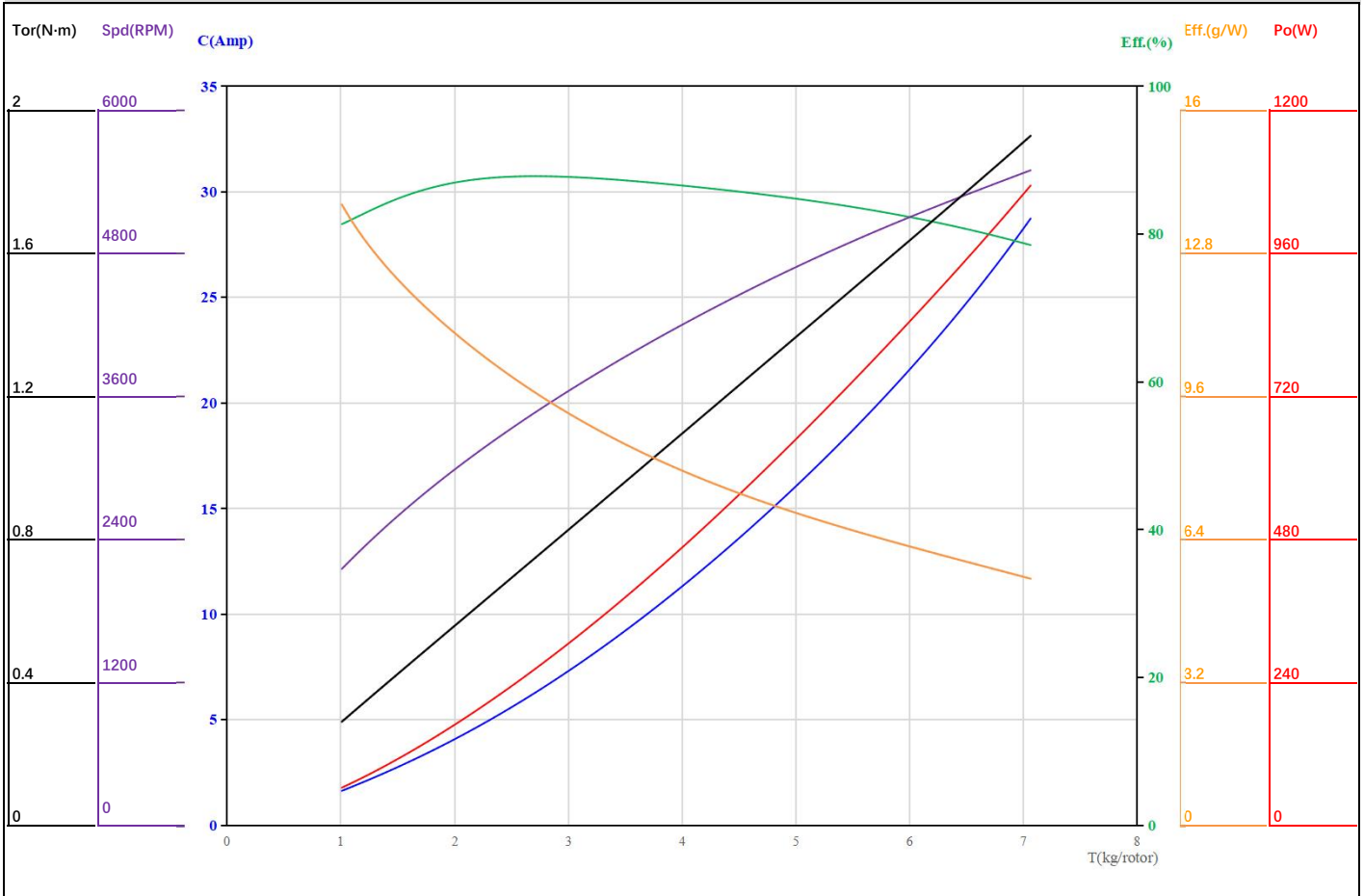
## 拉力数据表 Motor Propeller Pull Test Data

Voltage(V) 工作电压	Propeller 螺旋桨	Throttle(%) 油门	Thrust(g) 拉力	Current(A) 电流	Power(W) 输入功率	Speed(RPM) 转速	Efficiency(g/W) 力效	Torque(N-m) 扭矩	Temperature(°C) 电机温度
46V (12S LiPo)	21*6.3 "	33%	853	1.5	67.7	2152	12.6	0.22	58.0
		35%	953	1.7	77.8	2249	12.2	0.24	
		37%	1075	2.0	90.2	2363	11.9	0.27	
		39%	1212	2.3	104.6	2487	11.6	0.31	
		42%	1440	2.8	129.2	2680	11.1	0.37	
		45%	1683	3.4	157.2	2875	10.7	0.42	
		48%	1934	4.1	188.1	3065	10.3	0.49	
		51%	2185	4.8	221.7	3246	9.9	0.55	
		54%	2436	5.6	257.7	3420	9.5	0.61	
		57%	2684	6.4	296.1	3585	9.1	0.67	
		60%	2931	7.3	336.7	3743	8.7	0.73	
		63%	3178	8.2	379.8	3896	8.4	0.79	
		66%	3428	9.2	425.8	4046	8.1	0.85	
		69%	3684	10.3	475.0	4192	7.8	0.92	
		72%	3949	11.5	528.1	4337	7.5	0.98	
		75%	4225	12.7	585.5	4480	7.2	1.05	
		78%	4512	14.1	647.4	4621	7.0	1.13	
		81%	4812	15.5	714.2	4760	6.7	1.20	
		84%	5121	17.1	785.7	4896	6.5	1.28	
87%	5435	18.7	861.4	5028	6.3	1.36			
90%	5748	20.4	940.3	5157	6.1	1.44			
100%	6582	25.6	1180.0	5536	5.6	1.65			

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。  
The above data is measured by HobbyWing laboratory at room temperature 25°C, sea level, change the throttle input adjustment, the motor temperature is 65% and the throttle runs for 10 minutes, for reference only.

## 155KV+22\*7.8 " 负载性能参数 Load performance parameters

曲线图 Graph



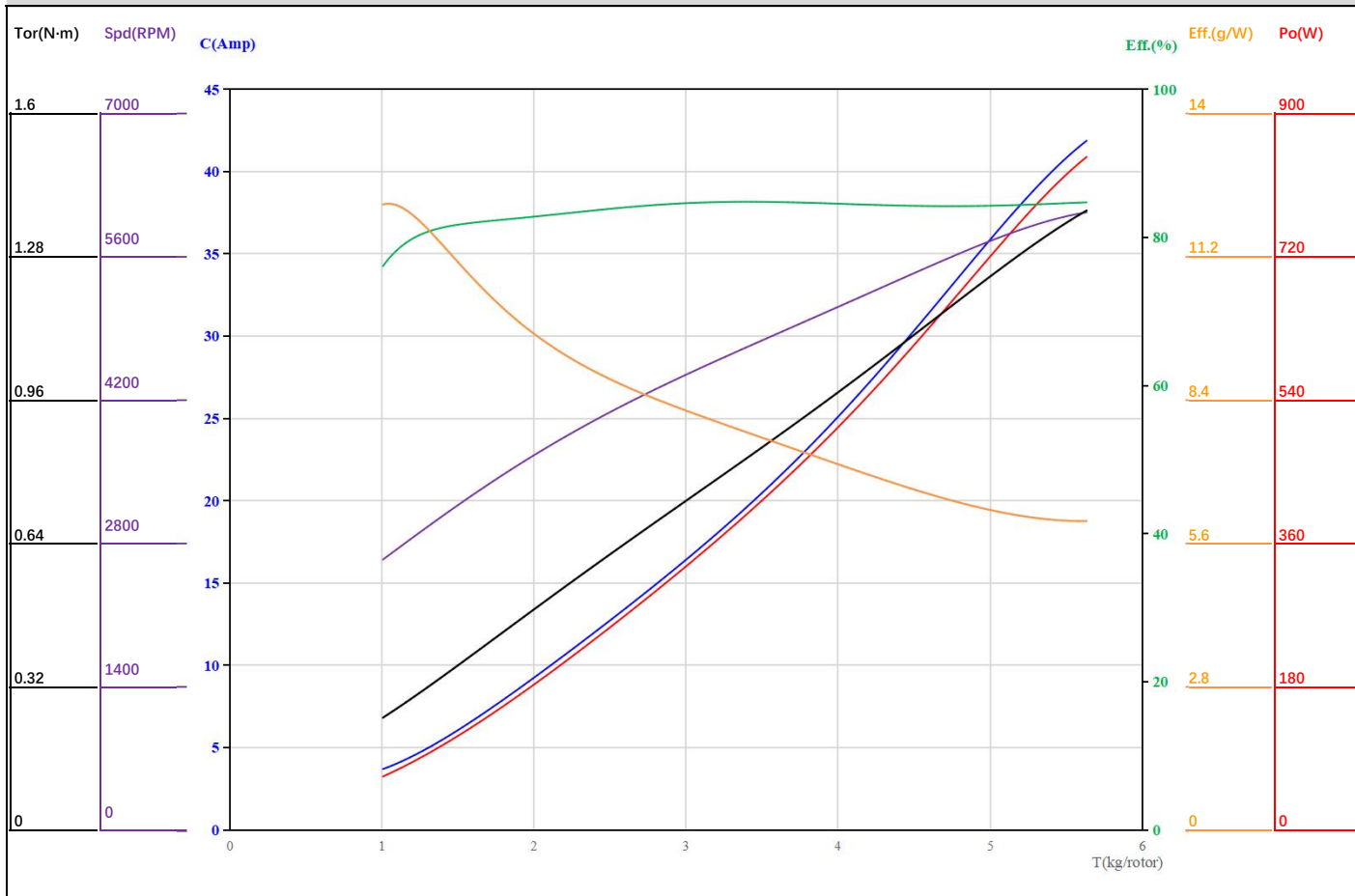
拉力数据表 Motor Propeller Pull Test Data

Voltage(V) 工作电压	Propeller 螺旋桨	Throttle(%) 油门	Thrust(g) 拉力	Current(A) 电流	Power(W) 输入功率	Speed(RPM) 转速	Efficiency(g/W) 力效	Torque(N-m) 扭矩	Temperature(°C) 电机温度
46V (12S LiPo)	22*7.8 "	33%	1030	1.7	77.2	2101	13.3	0.29	79.0
		35%	1132	1.9	87.5	2195	12.9	0.31	
		37%	1258	2.2	100.5	2307	12.5	0.35	
		39%	1402	2.5	116.0	2429	12.1	0.38	
		42%	1641	3.1	143.2	2622	11.5	0.45	
		45%	1900	3.8	174.8	2816	10.9	0.51	
		48%	2168	4.6	210.1	3004	10.3	0.58	
		51%	2440	5.4	248.5	3184	9.8	0.65	
		54%	2712	6.3	289.7	3353	9.4	0.72	
		57%	2981	7.2	333.2	3514	8.9	0.79	
		60%	3249	8.2	379.1	3666	8.6	0.86	
		63%	3516	9.3	427.3	3812	8.2	0.93	
		66%	3784	10.4	478.3	3953	7.9	1.00	
		69%	4056	11.6	532.4	4091	7.6	1.07	
		72%	4334	12.8	590.2	4226	7.3	1.15	
		75%	4619	14.2	652.4	4361	7.1	1.22	
		78%	4915	15.6	719.5	4494	6.8	1.30	
		81%	5220	17.2	792.0	4625	6.6	1.38	
		84%	5534	18.9	870.2	4755	6.4	1.46	
		87%	5852	20.7	953.8	4880	6.1	1.54	
90%	6171	22.6	1042.2	5000	5.9	1.63			
100%	7062	28.7	1323.1	5317	5.3	1.87			

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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## 310KV+21\*6.3 " 负载性能参数 Load performance parameters

### 曲线图 Graph



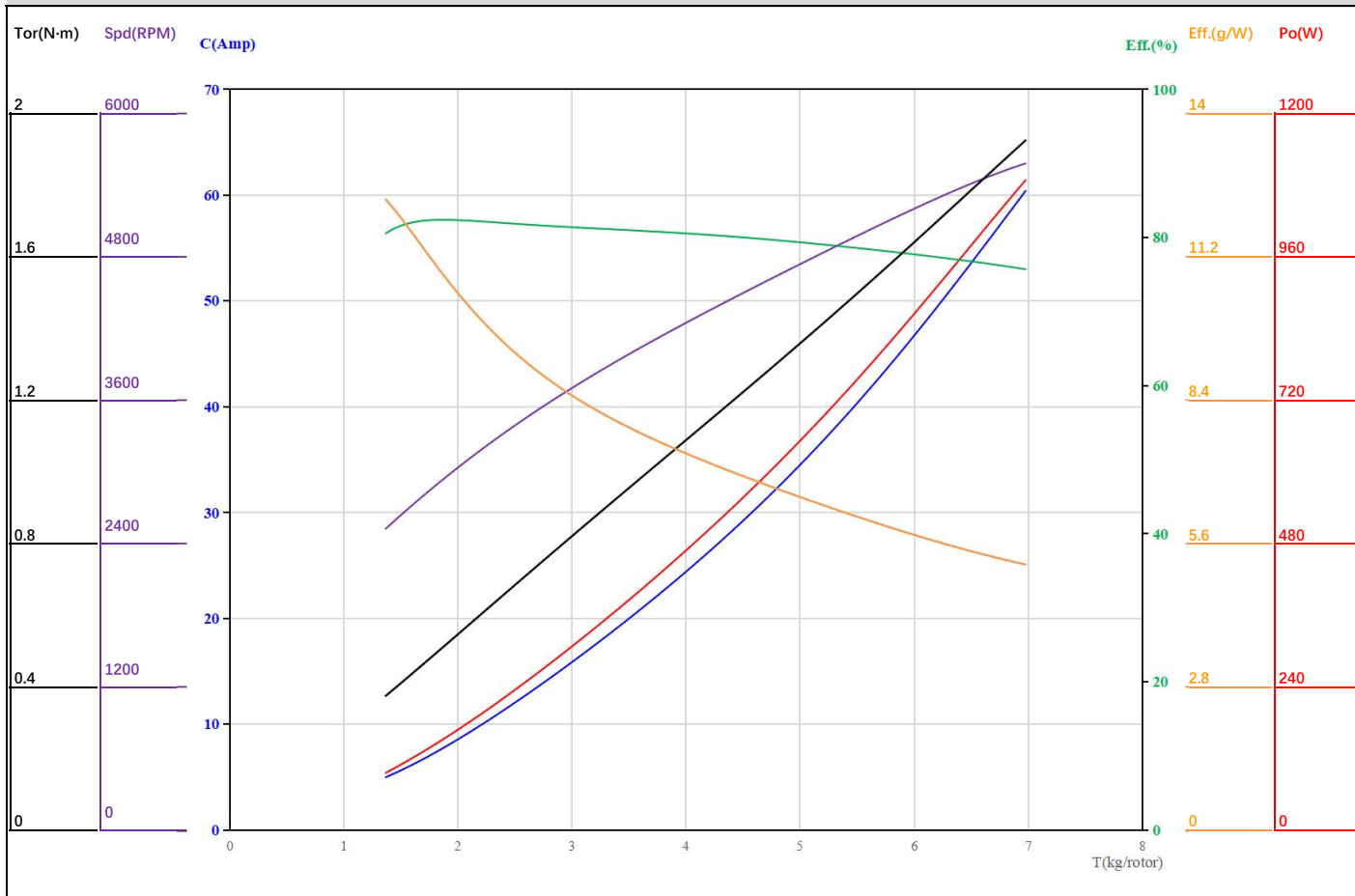
### 拉力数据表 Motor Propeller Pull Test Data

Voltage(V) 工作电压	Propeller 螺旋桨	Throttle(%) 油门	Thrust(g) 拉力	Current(A) 电流	Power(W) 输入功率	Speed(RPM) 转速	Efficiency(g/W) 力效	Torque(N·m) 扭矩	Temperature(°C) 电机温度
23V (6S LiPo)	21*6.3 "	33%	1038	3.8	87.7	2588	11.8	0.25	55.0
		35%	1157	4.3	98.7	2714	11.7	0.28	
		37%	1273	4.8	111.3	2836	11.4	0.30	
		39%	1388	5.4	125.2	2955	11.1	0.33	
		42%	1560	6.4	147.9	3128	10.5	0.37	
		45%	1732	7.5	172.5	3295	10.0	0.41	
		48%	1906	8.6	198.8	3457	9.6	0.45	
		51%	2084	9.8	226.3	3613	9.2	0.50	
		54%	2265	11.1	255.1	3764	8.9	0.54	
		57%	2449	12.4	285.1	3909	8.6	0.58	
		60%	2638	13.7	316.3	4050	8.3	0.63	
		63%	2830	15.1	348.9	4186	8.1	0.67	
		66%	3026	16.6	383.1	4319	7.9	0.72	
		69%	3226	18.2	419.3	4450	7.7	0.76	
		72%	3428	19.9	457.9	4580	7.5	0.81	
		75%	3635	21.7	499.3	4711	7.3	0.86	
		78%	3845	23.6	544.1	4844	7.1	0.91	
		81%	4060	25.7	592.6	4981	6.9	0.96	
		84%	4282	28.0	645.3	5123	6.6	1.01	
87%	4512	30.5	702.5	5270	6.4	1.07			
90%	4754	33.1	764.0	5420	6.2	1.13			
100%	5634	41.9	965.1	5837	5.8	1.34			

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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## 310KV+22\*7.8 "负载性能参数 Load performance parameters

### 曲线图 Graph

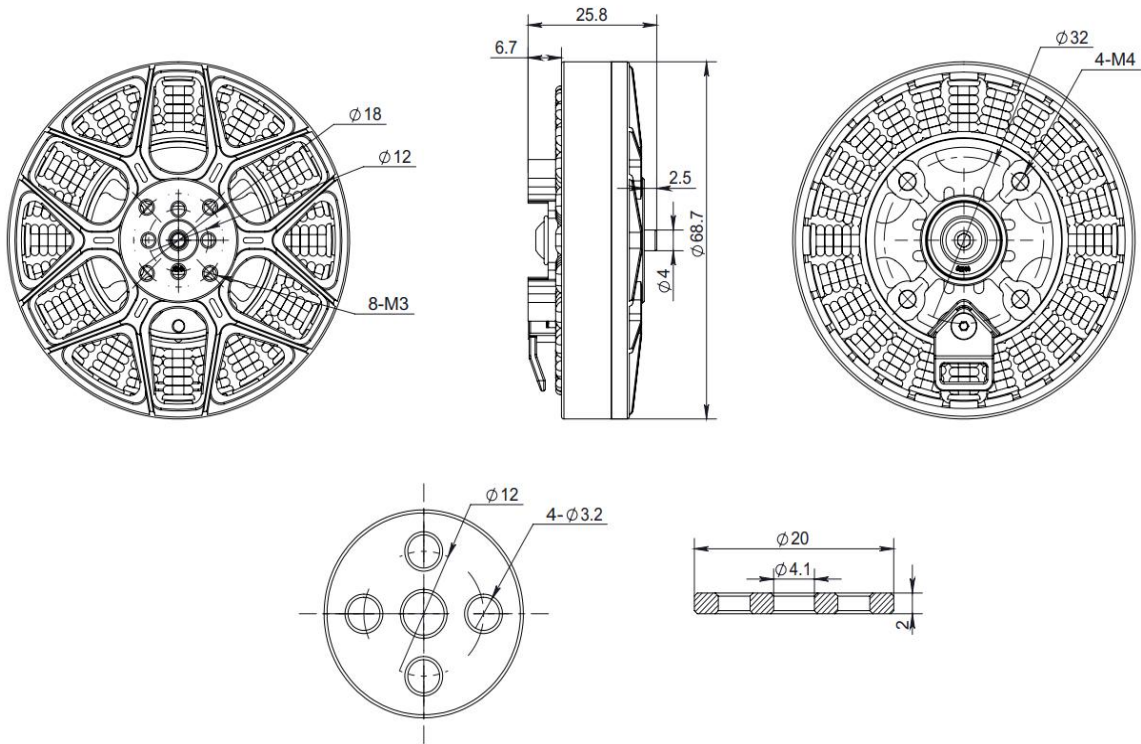


### 拉力数据表 Motor Propeller Pull Test Data

Voltage(V) 工作电压	Propeller 螺旋桨	Throttle(%) 油门	Thrust(g) 拉力	Current(A) 电流	Power(W) 输入功率	Speed(RPM) 转速	Efficiency(g/W) 力效	Torque(N·m) 扭矩	Temperature(°C) 电机温度
23V (6S LiPo)	22*7.8 "	33%	1399	5.1	118.1	2465	11.8	0.37	83.0
		35%	1528	5.8	133.0	2572	11.5	0.40	
		37%	1666	6.5	150.2	2682	11.1	0.44	
		39%	1809	7.4	169.5	2793	10.7	0.48	
		42%	2031	8.8	201.8	2957	10.1	0.54	
		45%	2259	10.3	237.3	3116	9.5	0.60	
		48%	2488	11.9	275.0	3268	9.0	0.66	
		51%	2716	13.6	314.3	3411	8.6	0.72	
		54%	2943	15.4	354.8	3546	8.3	0.78	
		57%	3167	17.2	396.2	3674	8.0	0.84	
		60%	3390	19.0	438.7	3795	7.7	0.89	
		63%	3613	20.9	482.4	3912	7.5	0.95	
		66%	3837	22.9	527.9	4026	7.3	1.01	
		69%	4064	25.0	575.8	4139	7.1	1.07	
		72%	4297	27.2	626.7	4252	6.9	1.13	
		75%	4537	29.6	681.5	4366	6.7	1.19	
		78%	4787	32.2	741.4	4484	6.5	1.26	
		81%	5049	35.0	807.2	4605	6.3	1.33	
84%	5324	38.2	880.2	4732	6.0	1.40			
87%	5614	41.7	961.3	4863	5.8	1.48			
90%	5919	45.6	1051.2	4997	5.6	1.56			
100%	6977	60.4	1390.7	5399	5.0	1.86			

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## 尺寸图 Dimension figure



## 应用搭配推荐 Recommended application combinations

旋翼电机 Motor	HM-6208-UL
旋翼桨叶 Propeller	MP21*6.3/ML22*7.8
搭配电调 ESC	XRotor Pro-H60A-6S / 14S
电池电压 Battery	12S / 6S LiPo
单轴应用拉力区间 Takeoff weight / rotor	2~2.5kg
四轴最大起飞重量 Takeoff weight of quadrotor	8~10kg