

M4006 HighProt

Specification I

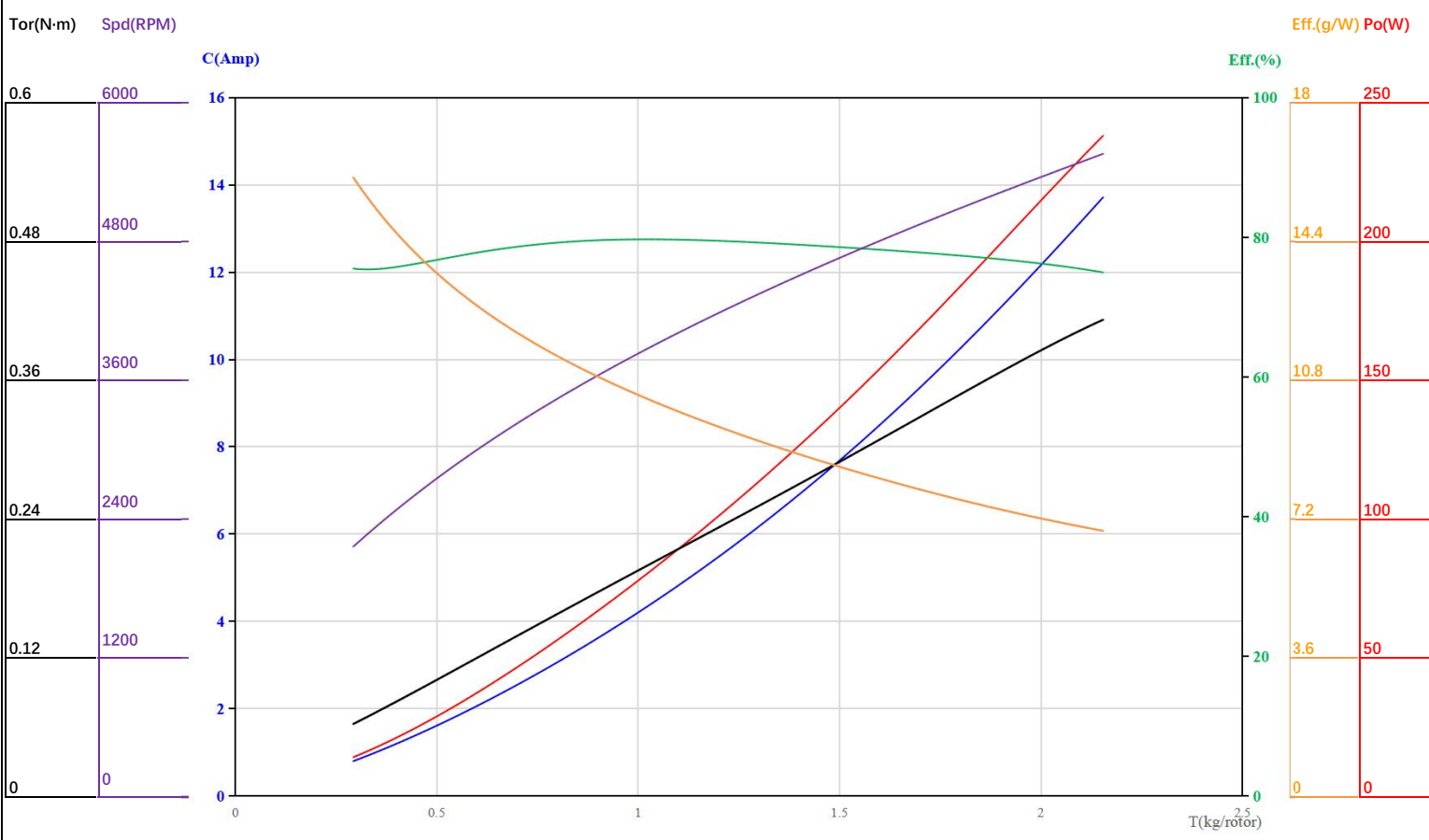
Model	M4006 HighProt-330KV	Protection level	IP45
Motor Size	Φ44.4*H19.7mm	Slot& Pole	18N24P
Stator Size	Φ40*H6mm	Dynamic balance	≤5mg
Stator process	High standard silicon steel sheet, rust proof, 180°C high temperature resistance paint-coat	Bearing	Water proof bearing
Enamelled wire	220°C	Motor axle diameter	Φ4mm
Magnet	180°C	Props mounting dimensions	4*M3@D12mm
Isolation test	500V AC high voltage resistance test	Motor mounting dimensions	4*M3@D25mm
Rated power input	93W	Rated power output	79W

Specification II

KV	330
Battery(LiPo)	LiPo-6S
No-load current	0.58A
Maximum current (Non-hermetic Ambient Temperature ≤ 25°C)	15.8A
Max power	363W
Max thrust	2.3kg
Resistance	218.5mΩ
Wire Size	enamelled wire outlet
Wire length	50mm
Weight (With wire)	72g

330KV+MSC 16x5.4 Load performance parameters

Graph



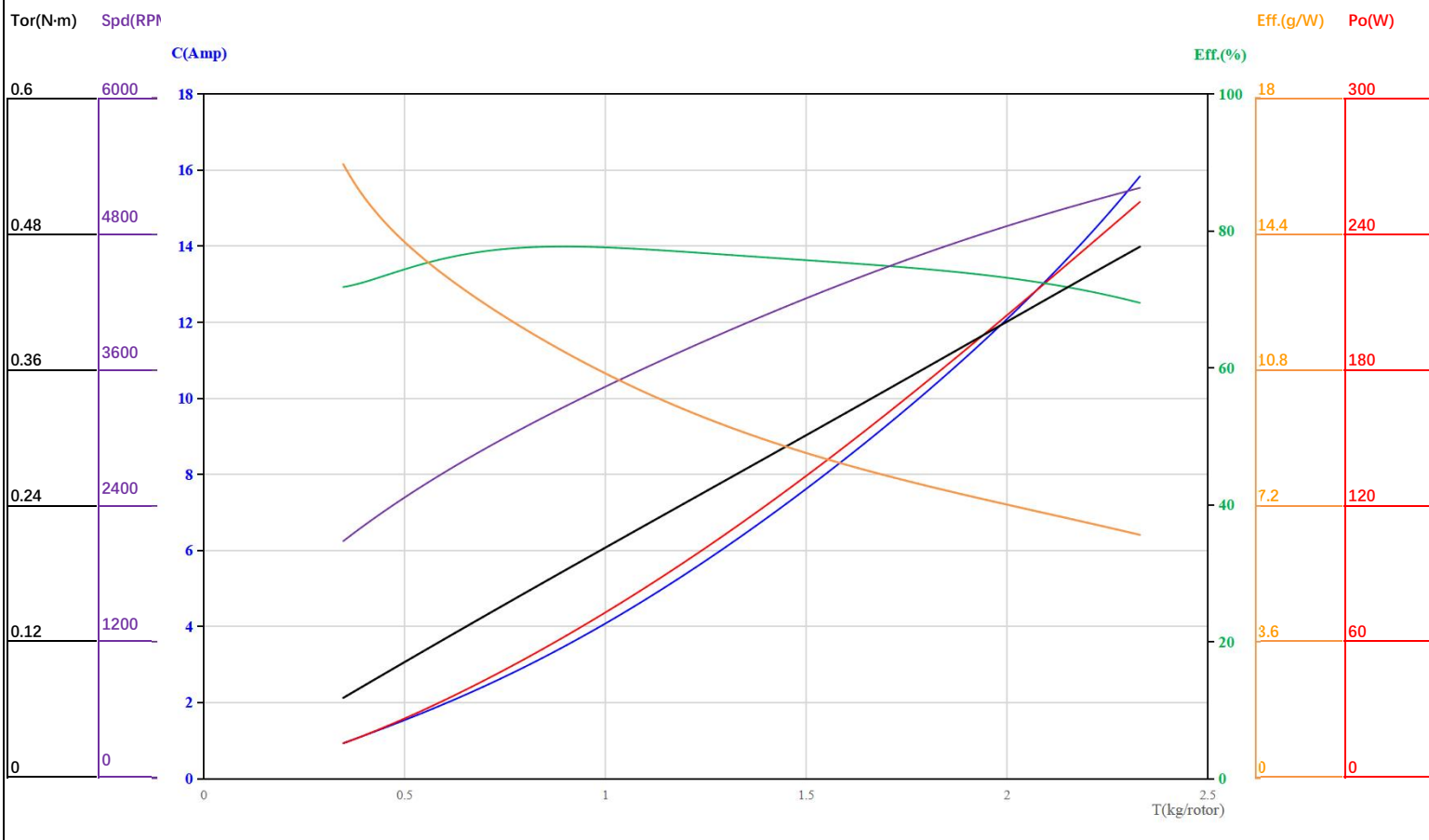
Motor Propeller Pull Test Data

Voltage(V)	Propeller	Throttle(%)	Thrust(g)	Current(A)	Power Input(W)	Speed(RPM)	Efficiency(g/W)	Torque(N-m)	Power Output(W)	Temperature (°C)
23V (6S LiPo)	MSC 16x5.4	33%	300	0.8	18.9	2163	15.8	0.06	14.30	57.0
		35%	329	0.9	21.3	2252	15.4	0.07	16.08	
		37%	361	1.0	24.1	2348	15.0	0.07	18.21	
		39%	398	1.2	27.4	2452	14.5	0.08	20.71	
		42%	458	1.4	33.0	2618	13.9	0.09	25.20	
		45%	527	1.7	39.8	2794	13.2	0.10	30.64	
		48%	601	2.1	47.6	2976	12.6	0.12	37.03	
		51%	681	2.5	56.5	3159	12.1	0.13	44.33	
		54%	766	2.9	66.4	3342	11.5	0.15	52.48	
		57%	853	3.4	77.3	3521	11.0	0.17	61.37	
		60%	944	3.9	89.0	3696	10.6	0.18	70.92	
		63%	1035	4.4	101.6	3864	10.2	0.20	81.00	
		66%	1127	5.0	115.0	4025	9.8	0.22	91.53	
		69%	1218	5.6	128.9	4179	9.4	0.23	102.43	
		72%	1308	6.2	143.5	4326	9.1	0.25	113.63	
		75%	1397	6.9	158.5	4466	8.8	0.27	125.08	
		78%	1484	7.6	173.9	4599	8.5	0.28	136.78	
		81%	1571	8.3	189.9	4726	8.3	0.30	148.75	
		84%	1656	9.0	206.5	4849	8.0	0.32	161.05	
		87%	1743	9.7	223.9	4971	7.8	0.33	173.79	
		90%	1831	10.5	242.4	5092	7.6	0.35	187.18	
		100%	2154	13.7	315.2	5516	6.8	0.41	236.29	

*The above data was measured by HOBBYWING Laboratory at room temperature 25°C, at sea level, with varying throttle input. The motor housing temperature is measured after running for 10 minutes at 65% throttle , for reference only.

330KV+MSC 17x5.8 Load performance parameters

Graph

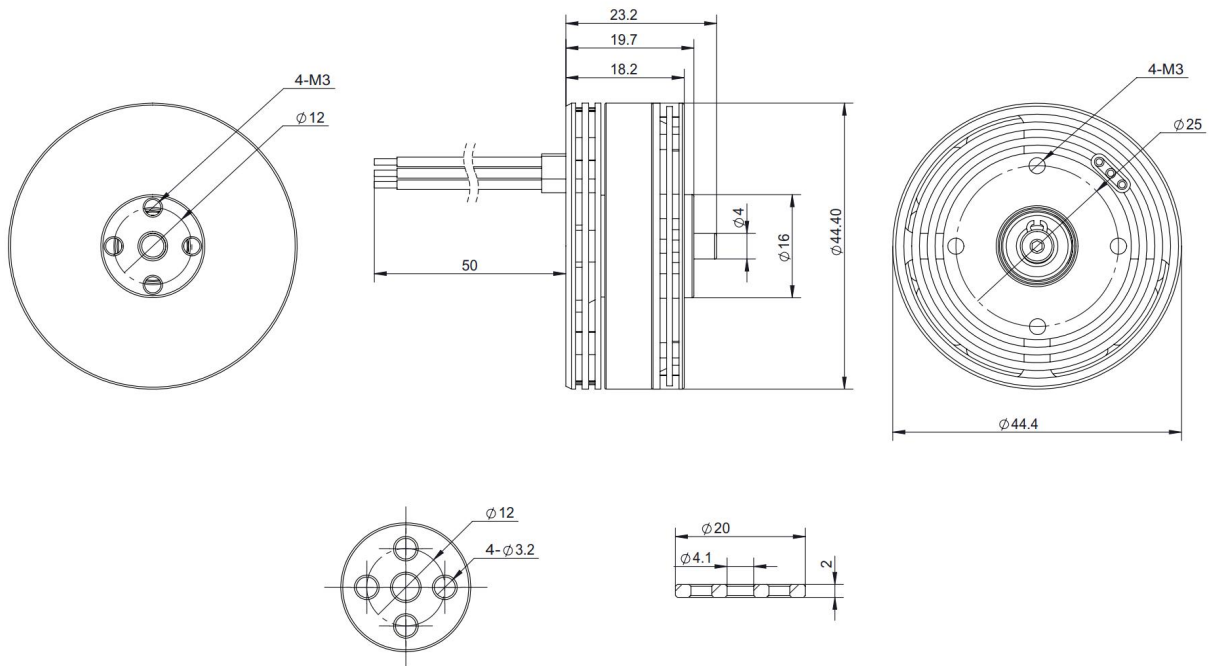


Motor Propeller Pull Test Data

Voltage(V)	Propeller	Throttle(%)	Thrust(g)	Current(A)	Power Input(W)	Speed(RPM)	Efficiency(g/W)	Torque(N-m)	Power Output(W)	Temperature(°C)
23V (6S LiPo)	MSC 17x5.8	33%	356	1.0	22.3	2105	16.0	0.07	16.00	70.0
		35%	394	1.1	25.6	2205	15.4	0.08	18.56	
		37%	436	1.3	29.5	2311	14.8	0.09	21.56	
		39%	482	1.5	33.8	2423	14.3	0.10	25.00	
		42%	557	1.8	41.1	2594	13.6	0.11	30.94	
		45%	639	2.1	49.4	2767	12.9	0.13	37.77	
		48%	724	2.6	58.8	2938	12.3	0.15	45.39	
		51%	813	3.0	69.2	3105	11.7	0.17	53.74	
		54%	903	3.5	80.7	3268	11.2	0.18	62.72	
		57%	995	4.0	93.1	3426	10.7	0.20	72.26	
		60%	1086	4.6	106.4	3579	10.2	0.22	82.28	
		63%	1178	5.2	120.4	3726	9.8	0.24	92.72	
		66%	1269	5.9	135.1	3869	9.4	0.26	103.53	
		69%	1360	6.5	150.3	4006	9.0	0.27	114.68	
		72%	1450	7.2	166.1	4138	8.7	0.29	126.14	
		75%	1539	7.9	182.5	4265	8.4	0.31	137.91	
		78%	1629	8.7	199.5	4388	8.2	0.33	150.00	
		81%	1719	9.4	217.2	4506	7.9	0.34	162.44	
		84%	1809	10.3	235.8	4620	7.7	0.36	175.31	
		87%	1902	11.1	255.6	4731	7.4	0.38	188.68	
		90%	1997	12.1	277.0	4840	7.2	0.40	202.67	
		100%	2331	15.8	363.6	5177	6.4	0.47	252.70	

*The above data was measured by HOBBYWING Laboratory at room temperature 25°C, at sea level, with varying throttle input. The motor housing temperature is measured after running for 10 minutes at 65% throttle, for reference only.

Dimension figure



Recommended application combinations

Motor	M4006 HighProt
Propeller	MSC 16x5.4 / MSC 17x5.8
ESC	XRotor Pro 40A 6S BLDC / XRotor Pro H60A 6S
Battery	6S LiPo
Takeoff weight / rotor	0.6~1.0kg
Takeoff weight of quadrotor	2.4~4.0kg