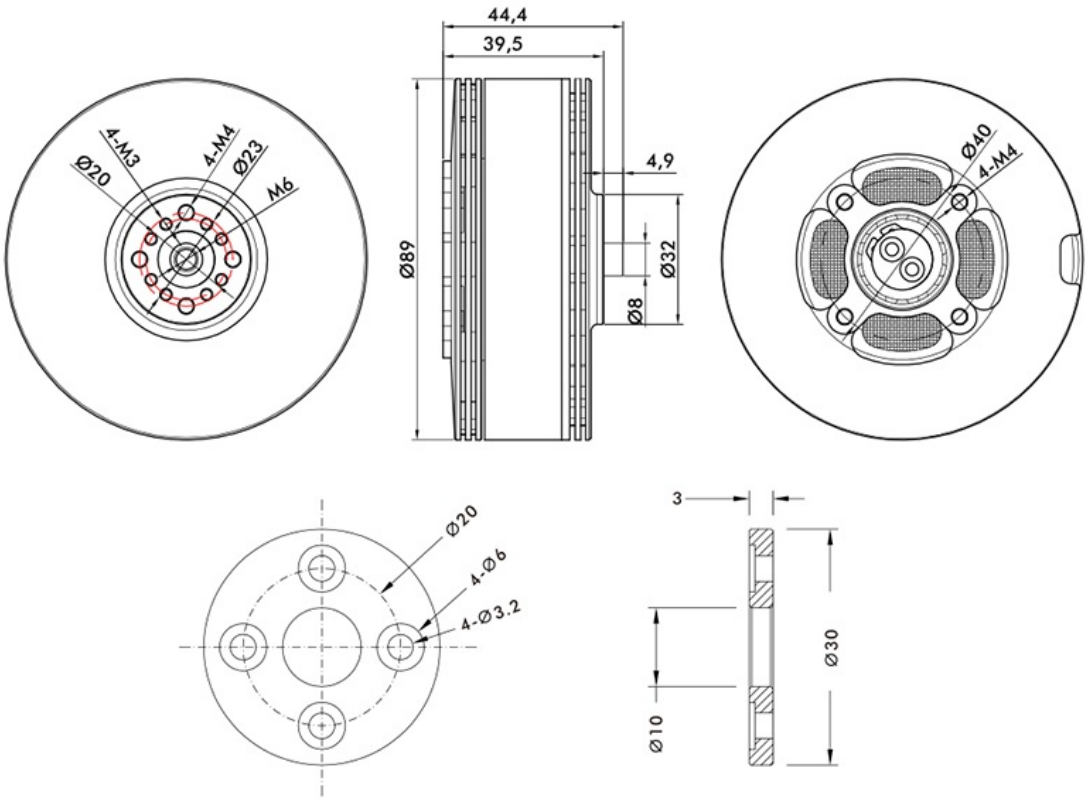
Technical Drawing



Specification

Motor Size	Φ89*39.4mm	Copper Wire	220°C high temperature resistance: Level C
Stator	Imported silicon steel sheet; Anti-rust treatment; 150°Chigh temperature-resisting coatings	Coil Insulation Test	500V
Configuration	24N28P	Centrifugal Cooling Design	YES
Shaft Diameter	IN：12mm，OUT：8mm	Rotor Dynamic Balance Standard	≤5Mg
Bearing	Imported 6901ZZ	Motor Dynamic Balance Standard	≤10Mg
Magnet Level	180°C high temperature resistance	IP	IP45
Lead Cable	14AWG*150mm		

KV	120	Rated Voltage (Lipo)	6-12S
Idle Current (18V)	1.1A	ESC Recommendation	FLAME 60A 12S
Peak Current (180s)	45A	Propeller Recommendation	28-29"
Max.Power (180s)	2200W	Motor Weight (indl. Cable)	470g
Internal Resistance	80mΩ	Package Weight	600g

KV	150	Rated Voltage (Lipo)	6-12S
Idle Current (15V)	1.4A	ESC Recommendation	FLAME 60A 12S FLAME 80A 12S V2.0

Peak Current (180s)	60A	Propeller Recommendation	26-27"
Max.Power (180s)	2800W	Motor Weight (indl. Cable)	480g
Internal Resistance	50mΩ	Package Weight	600g

Test Data

Type	Propeller	Throttle	Voltage (V)	Thrust (g)	Torque (N*m)	Current (A)	RPM	Power (W)	Effciency (g/W)	Operating Temperature (°C)
MN801S KV120	LIGPOWER G28*9.2	40%	47.81	3083	0.85	5.42	1930	259	11.90	78.5 (Ambient Temperature :0°C)
		42%	47.81	3259	0.91	5.84	1984	279	11.67	
		44%	47.83	3506	0.98	6.45	2076	309	11.36	
		46%	47.83	3724	1.04	7.05	2174	337	11.04	
		48%	47.84	3985	1.11	7.74	2264	370	10.76	
		50%	47.84	4247	1.19	8.48	2356	406	10.47	
		52%	47.82	4477	1.28	9.12	2432	436	10.26	
		54%	47.82	4746	1.35	9.91	2512	474	10.01	
		56%	47.82	5010	1.43	10.74	2597	514	9.75	
		58%	47.82	5299	1.51	11.62	2676	556	9.53	
		60%	47.82	5566	1.58	12.47	2775	596	9.33	
		62%	47.83	5816	1.66	13.36	2857	639	9.10	
		64%	47.83	6085	1.74	14.30	2942	684	8.89	
		66%	47.85	6329	1.81	15.24	3020	729	8.68	
		68%	47.85	6769	1.94	16.90	3138	809	8.37	
		70%	47.80	7059	2.03	17.92	3204	857	8.24	
		75%	47.79	7721	2.24	20.63	3396	986	7.83	
		80%	47.80	8402	2.45	23.59	3567	1128	7.45	
		90%	47.81	9924	2.90	30.65	3903	1465	6.77	
		100%	47.83	10472	3.44	40.28	4277	1927	5.43	
MN801S KV120	LIGPOWER G29*9.5	40%	47.91	3662	1.25	6.14	1900	294	12.44	109.5 (Ambient Temperature: 0°C)
		42%	47.91	3880	1.31	6.67	1956	320	12.13	
		44%	47.91	4154	1.40	7.35	2054	352	11.79	
		46%	47.91	4397	1.48	8.05	2130	386	11.39	
		48%	47.91	4694	1.57	8.79	2208	421	11.15	
		50%	47.92	4976	1.66	9.61	2293	460	10.81	
		52%	47.91	5284	1.75	10.48	2376	502	10.52	
		54%	47.91	5557	1.84	11.27	2451	540	10.30	
		56%	47.93	5891	1.94	12.23	2530	586	10.04	
		58%	47.93	6247	2.05	13.33	2610	639	9.78	
		60%	47.93	6596	2.15	14.36	2684	688	9.58	
		62%	47.93	6930	2.26	15.46	2777	741	9.35	
		64%	47.93	7205	2.35	16.54	2854	793	9.09	

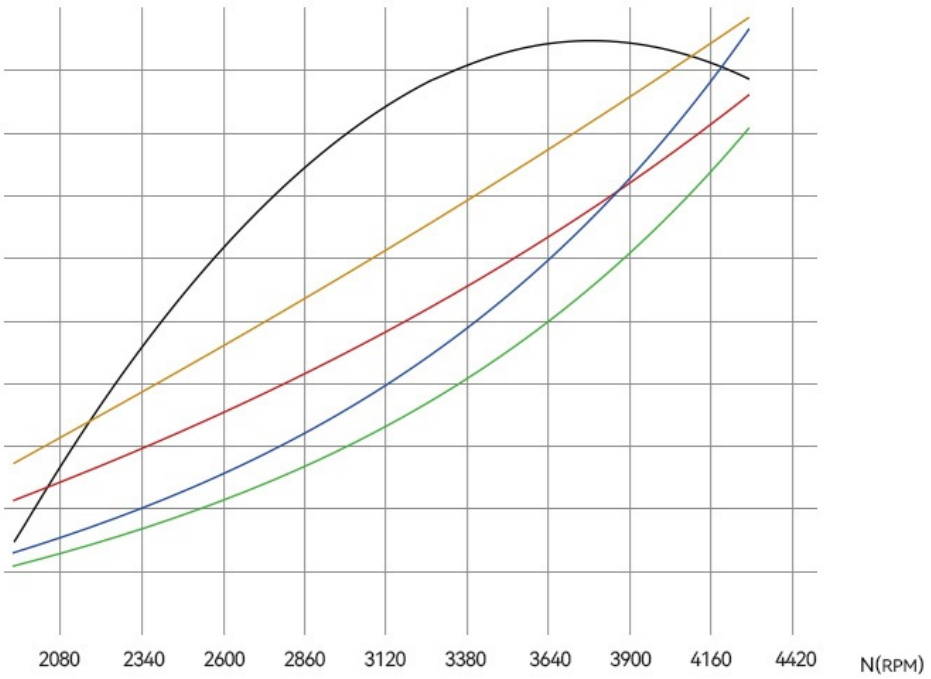
		66%	47.93	7515	2.45	17.64	2930	845	8.89	
		68%	47.93	7796	2.55	18.77	3108	899	8.67	
		70%	47.93	8277	2.70	20.72	3178	993	8.33	
		75%	47.92	9108	2.94	23.77	3372	1139	7.99	
		80%	47.92	9793	3.19	27.35	3437	1310	7.47	
		90%	47.92	10426	3.73	37.77	3774	1810	5.76	
		100%	47.92	11683	4.16	48.79	4045	2338	4.99	
MN801S KV150	LIGPOWER G26*8.5	40%	47.91	3509	0.83	7.03	2616	337	10.41	86.5 (Ambient Temperature: 0°C)
		42%	47.91	3735	0.90	7.72	2702	370	10.10	
		44%	47.91	4028	0.98	8.54	2826	409	9.84	
		46%	47.91	4317	1.05	9.39	2928	450	9.59	
		48%	47.90	4604	1.13	10.28	3070	492	9.34	
		50%	47.92	5057	1.27	11.91	3174	571	8.86	
		52%	47.90	5275	1.33	12.64	3302	606	8.71	
		54%	47.90	5574	1.42	13.76	3438	659	8.45	
		56%	47.91	5878	1.51	14.79	3584	709	8.29	
		58%	47.90	6219	1.59	15.88	3697	761	8.17	
		60%	47.90	6383	1.69	17.07	3798	817	7.81	
		62%	47.91	6770	1.78	18.29	3912	876	7.73	
		64%	47.91	7033	1.86	19.40	4029	929	7.57	
		66%	47.90	7360	1.95	20.76	4148	994	7.40	
		68%	47.90	7710	2.04	22.09	4278	1058	7.28	
		70%	47.90	8005	2.13	23.45	4369	1123	7.12	
		75%	47.89	8754	2.35	27.02	4496	1294	6.76	
		80%	47.85	9604	2.59	30.86	4525	1476	6.50	
		90%	47.79	10724	3.10	40.20	4806	1921	5.58	
		100%	47.76	12076	3.75	57.34	5247	2738	4.41	

Note: Motor temperature is motor surface temperature at 100% throttle running 10mins.
(Date above based on benchtest are for reference only,comparion with that of other motor types is not recommended.)

Analysis Chart

MN801S-KV120 . G28×9.2 . 12S(48V)

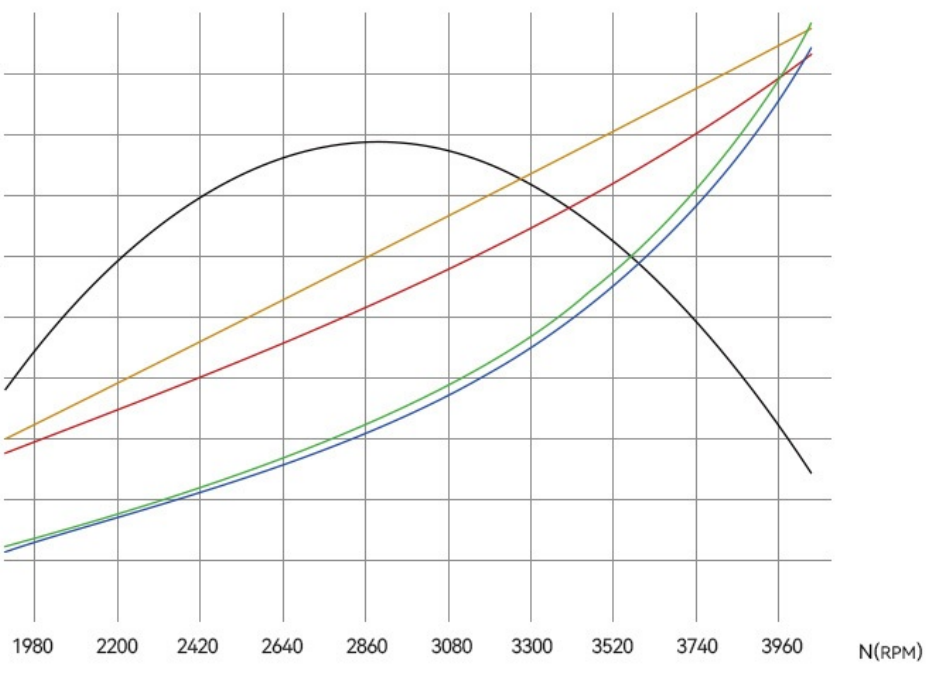
I(A)	P1(W)	T(N*m)	F(g)	Eff(%)
50	2000	4.00	11000	80
45	1800	3.60	9900	78
40	1600	3.20	8800	76
35	1400	2.80	7700	74
30	1200	2.40	6600	72
25	1000	2.00	5500	70
20	800	1.60	4400	68
15	600	1.20	3300	66
10	400	0.80	2200	64
5	200	0.40	1100	62
0	0	0.00	0	60



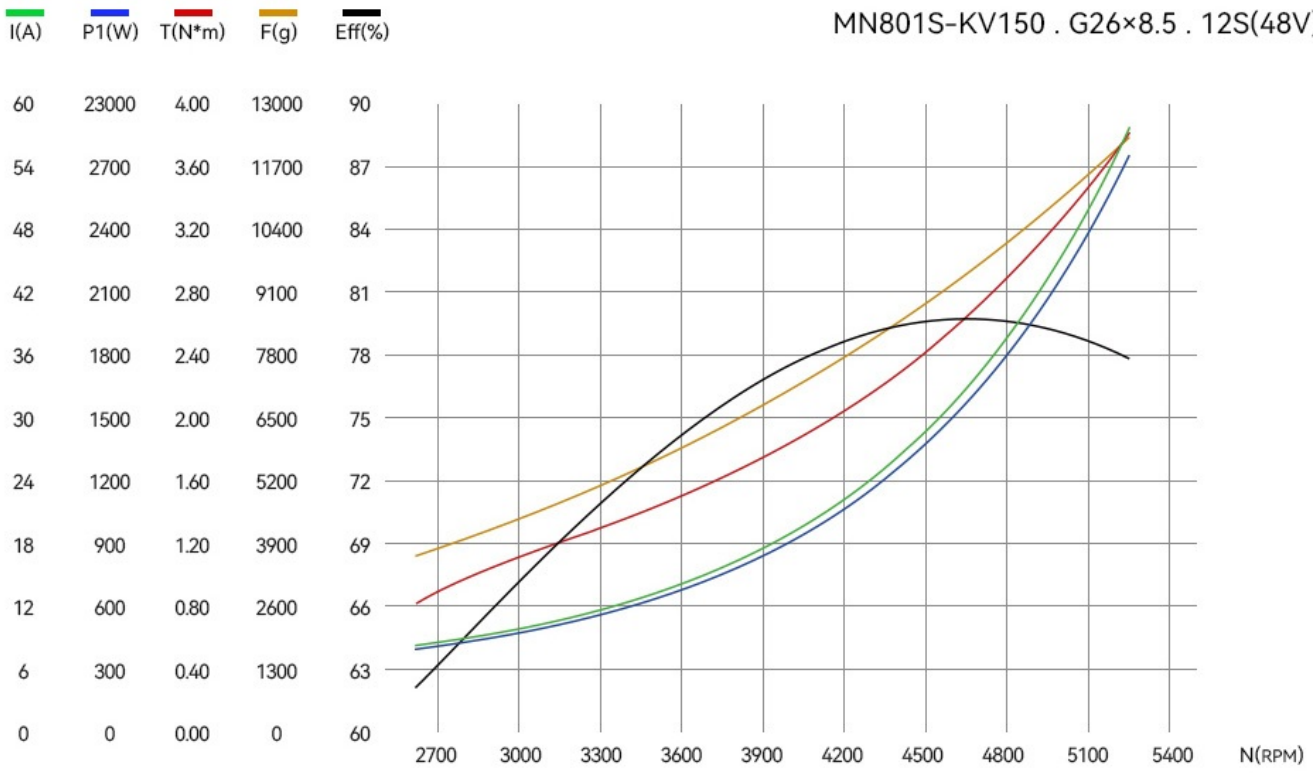
Thrust、Efficiency、Torque、Power、Current & RPM Graph

MN801S-KV120 . G29×9.5 . 12S(48V)

I(A)	P1(W)	T(N*m)	F(g)	Eff(%)
50	2500	4.50	12000	90
45	2250	4.05	10800	88
40	2000	3.60	9600	86
35	1750	3.15	8400	84
30	1500	2.70	7200	82
25	1250	2.25	6000	80
20	1000	1.80	4800	78
15	750	1.35	3600	76
10	500	0.90	2400	74
5	250	0.45	1200	72
0	0	0.00	0	70



Thrust、Efficiency、Torque、Power、Current & RPM Graph



Thrust、Efficiency、Torque、Power、Current & RPM Graph

Packing List

Before using this product, please check if all the items listed above are included in the packaging. If there are any missing items, please contact our online customer service or leave message to " onlinesales@ligpower.com " in time.