

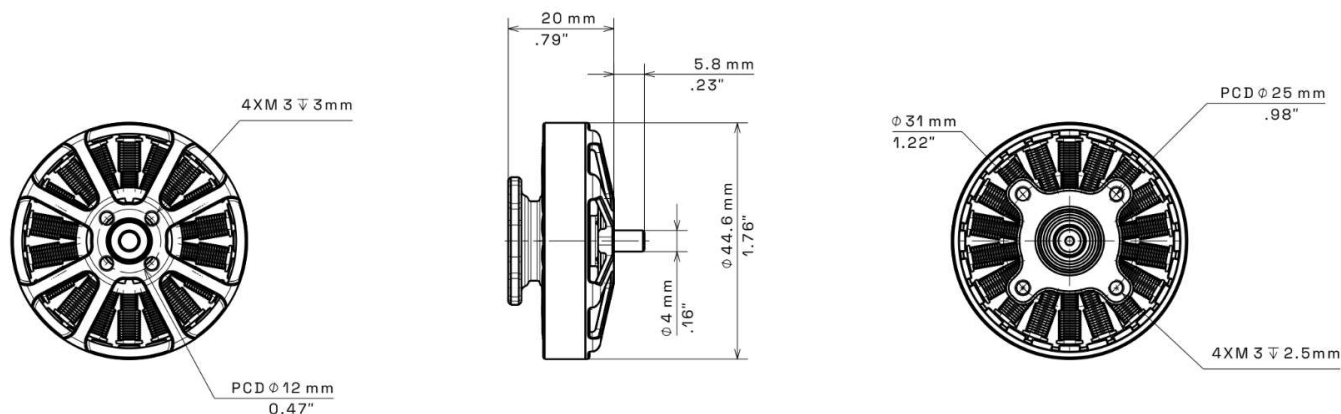
4006 SL

440 KV

MOTOR SPECIFICATIONS

Kv (Motor Velocity Constant)	440 RPM/V
Kt (Motor Torque Constant)	0.0329 Nm/A @ 5100 RPM
Maximum Continuous Current*	12A [180s]
Maximum Continuous Power*	280W [180s]
Power Density	3.14 W/g [Rated], 5.96 W/g [Maximum]
Voltage Range	22V - 25V [6S LiPo]
I _o (XX@V)	0.6A [24@V]
Inductance per phase (Winding Inductance)	0.09 [$\approx$ 0.03] mH
R _{ph} (Wind Resistance per phase)	0.16 [$\approx$ 0.03] Ω
Stator Poles	18S
Magnetic Poles	24P
Bearings	Dual 619/4-2RS Sealed
Stick Out Shaft Diameter	$\varnothing$ 4 mm
Motor Diameter	$\varnothing$ 44.6 mm
Motor Length	20 mm
Motor Weight	67 g $\pm$ 2 g
Motor Mount Pattern @ 90 deg	4 X M3 @ PCD $\varnothing$ 25 mm $\downarrow$ 2.5 mm
Compatible Propeller Size	13 " inch to 16 " inch
Propeller Mount Pattern	4 X M3 @ PCD $\varnothing$ 12 mm $\downarrow$ 3 mm

2D CAD



4006 SL 440 KV - TEST DATA

Note: The test data provided below is subject to environmental and testing conditions, including but not limited to temperature, humidity, altitude, and the equipment used. Results may vary depending on specific testing parameters and conditions.

Propeller	14 x 4.8 CF_FX				
ESC	40A 6S			Power Supply / Battery	TB - 22000mAh 6S
Test Date:	10-08-2024	Humidity:	60 %	Environmental Temp:	29 ° C
				Cross-winds: Mild	

PWM - Throttle%	Voltage	Current (A)	RPM	Thrust (g)	Torque (N*m)	Electrical Power (W)	Efficiency	Temp (Celcius)
1300 - 30	25.2	0.6	2531	186	0.03	15.1	12.3	52 ° C [@70% 10 min Constant]
1400 - 40	25.1	1.3	3398	346	0.06	32.6	10.6	
1500 - 50	25.1	2.6	4361	616	0.11	65.3	9.4	
1600 - 60	25	4.4	5135	885	0.15	110.0	8.0	
1700 - 70	25	6.2	5796	1120	0.19	155.0	7.2	
1800 - 80	24.9	8.7	6452	1439	0.24	216.6	6.6	58 ° C [Maximum]
1900 - 90	24.8	11.7	7091	1742	0.29	290.2	6.0	
1950 - 95	24.8	12.4	7173	1854	0.3	307.5	6.0	
2000 - 100	24.8	12.3	7200	1798	0.3	305.0	5.9	

Propeller	15 x 5.5 CF_FX				
ESC	40A 6S			Power Supply / Battery	TB - 22000mAh 6S
Test Date:	04-04-2025	Humidity:	57 %	Environmental Temp:	33 ° C
				Cross-winds: Mild	

PWM - Throttle%	Voltage	Current (A)	RPM	Thrust (g)	Torque (N*m)	Electrical Power (W)	Efficiency	Temp (Celcius)
1300 - 30	25.1	0.7	2289	248	0.05	17.6	14.1	65 ° C [@70% 10 min Constant]
1400 - 40	25	1.7	3083	462	0.09	42.5	10.9	
1500 - 50	24.9	3.5	3971	765	0.14	87.2	8.8	
1600 - 60	24.8	5.6	4658	1037	0.19	138.9	7.5	
1700 - 70	24.7	8.3	5231	1342	0.25	205.0	6.5	
1800 - 80	24.6	11.5	5736	1642	0.31	282.9	5.8	69 ° C [Maximum]
1900 - 90	24.4	15.4	6239	1962	0.37	375.8	5.2	
1950 - 95	24.4	16	6316	1998	0.37	390.4	5.1	
2000 - 100	24.4	16	6312	1992	0.37	390.4	5.1	

Propeller	16.2 x 5.3 CF_FX				
ESC	40A 6S			Power Supply / Battery	TB - 22000mAh 6S
Test Date:	10-08-2024	Humidity:	60 %	Environmental Temp:	29 ° C
				Cross-winds: Mild	

PWM - Throttle%	Voltage	Current (A)	RPM	Thrust (g)	Torque (N*m)	Electrical Power (W)	Efficiency	Temp (Celcius)
1300 - 30	25	0.8	2268	275	0.06	20.0	13.8	61 ° C [@70% 10 min Constant]
1400 - 40	25	1.8	3033	503	0.1	45.0	11.2	
1500 - 50	24.9	3.6	3911	866	0.16	89.6	9.7	
1600 - 60	24.8	5.9	4618	1192	0.22	146.3	8.1	
1700 - 70	24.8	8.5	5181	1522	0.28	210.8	7.2	
1800 - 80	24.6	11.7	5677	1818	0.34	287.8	6.3	66 ° C [Maximum]
1900 - 90	24.5	15.5	6204	2139	0.39	379.8	5.6	
1950 - 95	24.5	16.5	6240	2203	0.42	404.3	5.4	
2000 - 100	24.5	16.3	6284	2206	0.4	399.4	5.5	