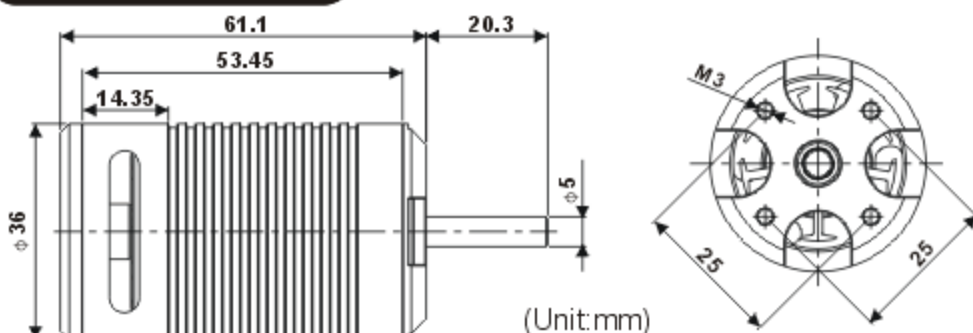


RCM-BL500L Brushless Motor

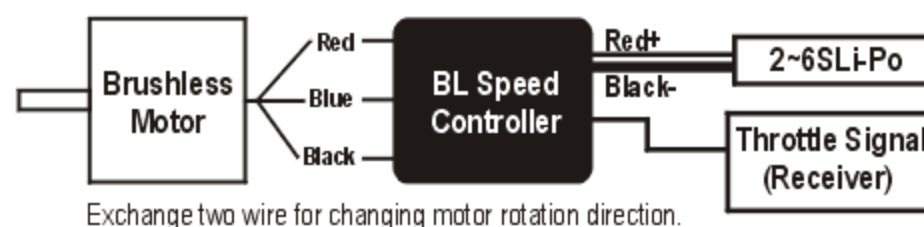


This new Brushless motor developed by the ALIGN POWER R&D TEAM, is packed with the latest, cutting edge technology available today. It features exceptional levels of high-torque power. The 500L utilizes an 6-pole outrunner stator-rotor and unrivaled Ndfeb extra strong magnets that traditional magnets cannot compare to. Also included is a high temperature, wear-resisting, low friction, double ZZ high efficiency bearing. The 500L will be the most revolutionary motor operating on low current amperage, and delivering high torque to RC models.

Specification



Illustration



Model	Input voltage	Dimension	Weight	KV	Max. Current	Max. Output Power
RCM-BL500L	DC14.8V-22.2V 3-6cell Li-Po	Shaft 5x ϕ 36x61.1mm	Approx. 200g	1600KV	4S 45A/55A(30sec) 6S 35A/45A(30sec)	650W/800W(30sec)

Features

These high-torque, high-speed, brushless motors, RCM-BL500L, are suitable for RC electronic products. The features of high efficiency output, low amperage, and light weight are suitable for electronic helicopters which require high-torque and high-speed power systems. We recommend using one of our perfectly mated Brushless Speed Controllers, such ALIGN or other brushless electronic speed controllers available on the market.

Rotor is constructed with very powerful Ndfeb Magnets. The stator is coiled by our NC auto winding machine, formed and protected with high strength resin for heat resistance and low vibration. The spindle is designed with Hardened Stainless Steel and a double ZZ high speed bearing. Additionally, 500 brushless AC motor is custom developed by ALIGN R&D technology specifically for RC model use. These motors provide long lasting, high efficiency, impact-resistance, low magnetic loss. These new product have passed various thorough inspections made by our technical department, including motive testing, static testing, magnetic field testing, heat resistance and magnetic loss testing, running balance and vibration testing, noise testing, and many hours of actual loading and flying testing, etc. Align is proud to provide the latest innovations in RC Modeling to its consumers. Please enjoy your Align products safely.

CONSTANT VOLTAGE TESTING REFERENCE(USING T-REX 500)

Motor Gear	Li-Po	Main Rotor Blade	Pitch	Current(A) approx.	Throttle Curve	RPM approx.	
12T Suitable for elementary/ intermediate hovering, general/3D flight.	6S 22.2V	425 Carbon Fiber Blades	Hover	+5°	11	0/50/70/85/100%	2135
			Idle 1	+12°	30	80/70/100%	2450
				+5°	10		2020
			Idle 2	-5°	13.3	85% Middle	2260
				0°	11.8		2500
				0°	15.2		2690
+12°	30	2450					
13T Suitable for Advanced 3D flight.	6S 22.2V	425 Carbon Fiber Blades	Hover	+5°	11.6	0/50/70/85/100%	2220
			Idle 1	+12°	34	80/70/100%	2550
				+5°	11		2080
			Idle 2	-5°	14.5	85% Middle	2330
				0°	14.7		2630
				0°	17.1		2840
+12°	34	2550					
14T	5S 18.5V	425 Carbon Fiber Blades	Hover	+5°	14	0/60/80/90/100%	2400
			Idle 1	+12°	34.6	80/70/100%	2380
				+5°	10.2		1945
			Idle 2	-5°	14.1	85% Middle	2208
				0°	12.7		2424
				0°	14.8		2650
+12°	34.6	2380					
15T	5S 18.5V	425 Carbon Fiber Blades	Hover	+5°	15.6	100/60/80/90/100%	2400
			Idle 1	+12°	40	80/70/100%	2440
				+5°	11.7		2020
			Idle 2	-5°	15.8	85% Middle	2295
				0°	14.5		2561
				0°	18.5		2760
+12°	40	2440					
16T	4S 14.8V	425 Carbon Fiber Blades	Hover	+6°	13.7	0/50/75/85/100%	1940
			Idle 1	+12°	35.6	80/70/100%	2110
				+6°	11.5		1717
			Idle 2	-6°	15.6	85% Middle	1940
				0°	11.7		2200
				0°	14.7		2410
+12°	35.6	2110					
17T	4S 14.8V	425 Carbon Fiber Blades	Hover	+6°	14.7	0/50/75/85/100%	1940
			Idle 1	+12°	36.1	80/70/100%	2080
				+6°	12.8		1770
			Idle 2	-6°	16.6	85% Middle	1998
				0°	12.6		2260
				0°	15.6		2450
+12°	36.1	2080					
18T	4S 14.8V	425 Carbon Fiber Blades	Hover	+6°	14.2	0/50/75/85/100%	1880
			Idle 1	+12°	38.9	80/70/100%	2100
				+6°	13.7		1804
			Idle 2	-6°	18	85% Middle	2040
				0°	13.8		2330
				0°	16.6		2500
+12°	38.9	2100					

Note: Please use the pitch gauge to adjust the pitch value. Incorrect excess pitch setting may affect the helicopter performance and reduce ESC's life and battery's life.