

22mm S-Series Brushless Motors



The Scorpion S-Series 22mm brushless motors are designed to provide reliable power for your smaller RC aircraft. These motors feature replaceable 3mm prop shafts with dual ball bearings. All Scorpion S-Series motors come with 3.5mm bullet style connectors already installed, and include a complete hardware package containing 3 matching female bullet connectors for your Speed Controller, a cross style back plate mount with screws, and a prop adapter, all in an attractive metal can package. All of the Scorpion S-Series 22mm motors are built with a 12 tooth stator assembly, with 14 magnets in the rotor housing.

Model Number	Kv RPM/V	Io@10v Amps	Rm Ohms	Max Current	Max Power	Weight Ounces	Weight Grams	Body Diameter	Body Length	2-Cell Prop	3-Cell Prop
S-2205-32	1980	0.76	0.168	12 A	130 W	1.13	32.0	27.9 mm	17.6 mm	8x4	7x3.5
S-2205-36	1670	0.52	0.164	11 A	110 W	1.13	32.0	27.9 mm	17.6 mm	9x5	7x4
S-2205-40	1551	0.56	0.217	10 A	110 W	1.13	32.0	27.9 mm	17.6 mm	9x5	8x4
S-2208-30	1293	0.55	0.185	14 A	150 W	1.42	40.2	27.9 mm	20.6 mm	11x7	9x5
S-2208-34	1150	0.45	0.168	12 A	130 W	1.41	40.0	27.9 mm	20.6 mm	12x6	9x6
S-2212-22	1157	0.60	0.119	15 A	160 W	1.84	52.3	27.9 mm	24.6 mm	11x7	9x5
S-2212-26	939	0.52	0.161	13 A	140 W	1.79	50.7	27.9 mm	24.6 mm	12x6	10x6
S-2215-18	1131	0.68	0.097	20 A	210 W	2.18	61.9	27.9 mm	27.6 mm	12x6	10x6
S-2215-22	940	0.52	0.132	16 A	180 W	2.16	61.3	27.9 mm	27.6 mm	12x8	11x5.5

22mm HK-Series Brushless Motors



The Scorpion HK-Series 22mm brushless motors are designed for RC Helicopters in the 300-480 size range. They also work great in aircraft needing a High-Kv motor such as Pylon Racers and Hotliners. The high efficiency and cool running properties of these motors make them an excellent choice for any smaller RC helicopter. The HK-Series motors have replaceable shafts with a 3.17mm diameter, and come packaged with 3.5mm bullet connectors installed. Also included is a matching set of female bullet connectors and a cross style back plate mount. These motors feature a 9-tooth stator, with 6 magnets in the rotor housing.

Model Number	Kv RPM/V	Io@10v Amps	Rm Ohms	Max Current	Max Power	Weight Ounces	Weight Grams	Body Diameter	Body Length	2-Cell Prop	3-Cell Prop
HK-2208-24	3590	1.21	0.061	21 A	220 W	1.38	39.0	27.9 mm	20.5 mm	6x4	4.1x4.1
HK-2208-28	3125	1.15	0.081	18 A	200 W	1.38	39.0	27.9 mm	20.5 mm	6x4	4.7x4.2
HK-2208-34	2600	0.85	0.126	15 A	160 W	1.38	39.0	27.9 mm	20.5 mm	6x5.5	5x5
HK-2213-14	3585	1.74	0.038	32 A	330 W	1.90	54.0	27.9 mm	25.6 mm	6x5.5	4.75x4.5
HK-2213-16	3200	1.60	0.040	30 A	310 W	1.90	54.0	27.9 mm	25.6 mm	6x5.5	5.1x4.5
HK-2213-20	2640	1.10	0.063	26 A	280 W	1.90	54.0	27.9 mm	25.6 mm	7x5	6x4
HK-2216-12	3350	1.87	0.033	35 A	375 W	2.26	64.0	27.9 mm	28.6 mm	6x5.5	5.1x4.5
HK-2216-14	2920	1.35	0.040	32 A	340 W	2.26	64.0	27.9 mm	28.6 mm	7x5	5.5x4.5
HK-2216-16	2608	1.19	0.048	30 A	320 W	2.26	64.0	27.9 mm	28.6 mm	8x4	6x4
HK-2221-6	4400	2.83	0.017	50 A	525 W	2.79	79.0	27.9 mm	33.6 mm	6x4	4.75x4.5
HK-2221-8	3595	2.31	0.024	45 A	475 W	2.79	79.0	27.9 mm	33.6 mm	6x5.5	5.1x4.5
HK-2221-10	3000	1.79	0.031	42 A	440 W	2.79	79.0	27.9 mm	33.6 mm	7x5	6x4
HK-2221-12	2580	1.50	0.038	38 A	400 W	2.79	79.0	27.9 mm	33.6 mm	8x4	6x5.5