

Scorpion SII-2212-1850 Motor Propeller Data

Motor Wind 11-Turn Delta		Motor Kv 1850 RPM/Volt		No-Load Current I _o = 1.31 Amps @ 10v		Motor Resistance R _m = 0.032 Ohms		I Max 22 Amps	P Max (3S) 230 W
Outside Diameter 27.9 mm, 1.098in.		Body Length 23.0 mm, 1.181 in.		Total Shaft Length 49.0 mm, 1.929 in.		Shaft Diameter 2.98 mm, 0.117 in.		Motor Weight 58.0 gm, 2.05 oz	
Prop Manf.	Prop Size	Input Voltage	Motor Amps	Watts Input	Prop RPM	Pitch Speed	Thrust Grams	Thrust Ounces	Thrust Eff. Grams/W
APC	6x5.5-E	7.4	10.60	78.4	11,581	60.3	298.9	10.54	3.81
APC	7x4-E	7.4	12.14	89.8	11,247	42.6	509.5	17.97	5.67
APC	7x5-E	7.4	14.97	110.8	10,642	50.4	509.9	17.99	4.60
APC	7x6-E	7.4	15.68	116.1	10,501	59.7	548.8	19.36	4.73
APC	8x4-E	7.4	16.85	124.7	10,268	38.9	668.1	23.57	5.36
APC	8x6-E	7.4	21.75	161.0	9,189	52.2	701.5	24.74	4.36
APC	9x4.5-E	7.4	21.80	161.3	9,231	39.3	847.4	29.89	5.25
APC	9x6-E	7.4	24.39	180.5	8,701	49.4	809.3	28.55	4.48
GWS	7x3.5-DD	7.4	7.74	57.3	12,211	40.5	375.5	13.25	6.55
GWS	7x3.5x3-DD	7.4	9.63	71.2	11,813	39.2	433.2	15.28	6.08
GWS	8x4-DD	7.4	13.65	101.0	10,858	41.1	614.3	21.67	6.08
GWS	8x4x3-DD	7.4	16.26	120.3	10,384	39.3	672	23.70	5.59
GWS	8x6-HD	7.4	20.58	152.3	9,415	53.5	645.3	22.76	4.24
GWS	9x5-DD	7.4	21.18	156.7	9,305	44.1	853.8	30.12	5.45
GWS	9x7.5-HD	7.4	28.92	214.0	7,692	54.6	729.3	25.73	3.41
MAS	7x4x3	7.4	13.84	102.4	10,879	41.2	471	16.61	4.60
MAS	8x6x3	7.4	22.54	166.8	9,029	51.3	704	24.83	4.22
Prop Manf.	Prop Size	Input Voltage	Motor Amps	Watts Input	Prop RPM	Pitch Speed	Thrust Grams	Thrust Ounces	Thrust Eff. Grams/W
APC	4.75x4.75-E	11.1	9.90	109.9	17,984	80.9	290.9	10.26	2.65
APC	4.75x5.5-E	11.1	11.26	125.0	17,615	91.7	276.1	9.74	2.21
APC	5x5-E	11.1	11.37	126.2	17,582	83.2	305.6	10.78	2.42
APC	5.25x4.75-E	11.1	12.48	138.5	17,323	77.9	430.8	15.20	3.11
APC	5.5x4.5-E	11.1	12.97	143.9	17,188	73.2	444.6	15.68	3.09
APC	6x4-E	11.1	14.51	161.1	16,781	63.6	596.7	21.05	3.70
APC	6x5.5-E	11.1	18.11	201.0	15,910	82.9	566.2	19.97	2.82
APC	7x4-E	11.1	21.82	242.2	15,010	56.9	961.3	33.91	3.97
APC	7x5-E	11.1	26.02	288.9	13,998	66.3	912.9	32.20	3.16

Propeller Chart Color Code Explanation

- The prop is too small to get good performance from the motor. (Less than 50% power)
- The prop is sized right to get good power from the motor. (50 to 80% power)
- The prop can be used, but full throttle should be kept to short bursts. (80 to 100% power)
- The prop is too big for the motor and should not be used. (Over 100% power)

PLEASE NOTE:

The data contained in this prop chart is based on actual measurements taken in a controlled test environment. The test voltages used are based on a properly sized Li-Po battery for the current draw of the motor being tested. If you are using a larger than normal capacity battery, or a very high C-Rated battery, your actual voltages will be higher than those shown in this chart, and this will result in higher current draw for each prop used. You should always test your power system with a watt meter whenever a prop is used to ensure that you are not exceeding the recommended rating of the motor being used. The prop recommendations in this chart are based on the motor receiving adequate cooling throughout its operation. If your motor is being used inside a cowl, you must provide adequate cooling to the motor and make sure that the motor is not getting too hot during operation.