

Scorpion SII-2208-1100 Motor Propeller Data									
Motor Wind 28-Turn Delta		Motor Kv 1100 RPM/Volt		No-Load Current I ₀ = 0.41 Amps @ 10v	Motor Resistance R _m = 0.170 Ohms	I Max 12 Amps	P Max (3S) 130 W		
Outside Diameter 27.9 mm, 1.098in.		Body Length 26.0 mm, 1.024 in.		Total Shaft Length 45.0 mm, 1.772 in.	Shaft Diameter 2.98 mm, 0.117 in.	Motor Weight 45.0 gm, 1.59 oz			
Prop Manf.	Prop Size	Input Voltage	Motor Amps	Watts Input	Prop RPM	Pitch Speed	Thrust Grams	Thrust Ounces	Thrust Eff. Grams/W
APC	8x4-E	7.4	4.45	33.0	6,806	25.8	278.6	9.83	8.45
APC	8x6-E	7.4	6.08	45.0	6,176	35.1	292.5	10.32	6.50
APC	8x6-SF	7.4	7.02	51.9	5,802	33.0	334	11.78	6.43
APC	8x8-E	7.4	7.78	57.6	5,552	42.1	263	9.28	4.57
APC	9x3.8-SF	7.4	6.10	45.1	6,168	22.2	372.8	13.15	8.26
APC	9x4.5-E	7.4	5.89	43.6	6,249	26.6	367.3	12.96	8.43
APC	9x4.7-SF	7.4	6.60	48.8	5,985	26.6	392.1	13.83	8.03
APC	9x6-E	7.4	6.77	50.1	5,927	33.7	366.6	12.93	7.32
APC	9x6-SF	7.4	8.91	65.9	5,134	29.2	411.5	14.52	6.24
APC	9x7.5-E	7.4	8.74	64.7	5,186	36.8	328.5	11.59	5.08
APC	9x7.5-SF	7.4	9.83	72.8	4,745	33.7	371.7	13.11	5.11
APC	9x9-E	7.4	9.88	73.1	4,743	40.4	292.6	10.32	4.00
APC	10x3.8-SF	7.4	8.35	61.8	5,333	19.2	463.1	16.34	7.49
APC	10x4.7-SF	7.4	8.95	66.2	5,107	22.7	478.8	16.89	7.23
APC	10x5-E	7.4	7.37	54.5	5,676	26.9	426.2	15.03	7.82
APC	10x6-E	7.4	8.15	60.3	5,400	30.7	438.9	15.48	7.28
APC	10x7-E	7.4	8.96	66.3	5,092	33.8	416.3	14.68	6.28
APC	10x7-SF	7.4	10.66	78.9	4,435	29.4	456.7	16.11	5.79
APC	10x10-E	7.4	11.18	82.7	4,230	40.1	298.9	10.54	3.61
APC	11x3.8-SF	7.4	8.95	66.2	5,063	18.2	498.6	17.59	7.53
APC	11x4.7-SF	7.4	10.26	75.9	4,611	20.5	521.9	18.41	6.87
APC	11x5.5-E	7.4	9.12	67.5	5,062	26.4	502	17.71	7.44
APC	11x7-E	7.4	10.07	74.5	4,688	31.1	490.8	17.31	6.59
APC	11x7-SF	7.4	11.89	88.0	3,935	26.1	505.5	17.83	5.75
APC	11x8-E	7.4	10.69	79.1	4,392	33.3	412.9	14.56	5.22
APC	11x8.5-E	7.4	10.90	80.6	4,314	34.7	444.5	15.68	5.51
APC	11x10-E	7.4	12.16	90.0	3,818	36.2	328.9	11.60	3.65
APC	12x3.8-SF	7.4	10.86	80.4	4,329	15.6	545.7	19.25	6.79
APC	12x6-E	7.4	10.34	76.5	4,529	25.7	542.7	19.14	7.09
APC	12x6-SF	7.4	12.49	92.4	3,673	20.9	539.8	19.04	5.84
APC	13x4-E	7.4	9.79	72.5	4,765	18.0	583.4	19.52	7.64
GEM	8x4.5-C	7.4	6.15	45.5	6,141	26.2	339.6	11.98	7.47
GEM	9x4.7-C	7.4	6.97	51.6	5,827	25.9	399.6	14.10	7.75
GEM	10x4.5-C	7.4	8.81	65.2	5,145	21.9	460.4	16.24	7.06
GEM	11x4.7-C	7.4	10.12	74.9	4,636	20.6	522.2	18.42	6.97
GEM	12x4.5-C	7.4	11.12	82.3	4,224	18.0	489.4	17.26	5.95
GWS	8x4x3-DD	7.4	4.30	31.8	6,868	26.0	273.9	9.66	8.62
GWS	8x4.3-SF	7.4	4.88	36.1	6,668	27.2	298	10.51	8.25
GWS	8x6-SF	7.4	6.11	45.2	6,149	34.9	329.8	11.63	7.29
GWS	9x4.7-SF	7.4	6.91	51.1	5,846	26.0	402.1	14.18	7.87
GWS	9x5-DD	7.4	5.88	43.5	6,277	29.7	376.1	13.27	8.64
GWS	9x5x3-DD	7.4	6.95	51.5	5,866	27.8	398	14.04	7.73
GWS	9x7-SF	7.4	8.94	66.1	5,110	33.9	383.9	13.54	5.81
GWS	9x7.5-HD	7.4	8.32	61.6	5,389	38.3	349.7	12.34	5.68
GWS	10x6-DD	7.4	7.39	54.7	5,716	32.5	433.4	15.29	7.92
GWS	10x6x3-DD	7.4	8.88	65.7	5,124	29.1	469.9	16.58	7.15
GWS	10x8-HD	7.4	10.05	74.4	4,730	35.8	398.8	14.07	5.36
GWS	11x7-DD	7.4	9.66	71.4	4,867	32.3	516.3	18.21	7.23
GWS	12x8-DD	7.4	11.60	85.8	4,098	31.0	537.1	18.95	6.26
MAS	7x4x3	7.4	3.88	28.7	7,059	26.7	170.7	6.02	5.95
MAS	8x6x3	7.4	6.55	48.4	6,016	34.2	274	9.66	5.66
MAS	9x7x3	7.4	8.64	63.9	5,142	34.1	335.7	11.84	5.25
MAS	10x5x3	7.4	7.99	59.1	5,436	25.7	422.7	14.91	7.15
MAS	10x7x3	7.4	9.94	75.5	4,708	31.2	416.4	14.89	5.66
MAS	11x7x3	7.4	10.86	80.4	4,347	28.8	489.2	17.26	6.09
MAS	11x8x3	7.4	11.33	83.9	4,174	31.6	480.9	16.96	5.73
MAS	12x6x3	7.4	11.42	84.5	4,087	23.2	510	17.99	6.03
MAS	12x8x3	7.4	12.91	95.5	3,423	25.9	504.5	17.80	5.28
APC	7x4-E	11.1	5.92	65.7	10,246	38.8	416.1	14.68	6.33
APC	7x4-SF	11.1	5.92	65.7	10,239	38.8	400.4	14.12	6.10
APC	7x5-E	11.1	7.26	80.6	9,663	45.8	413.3	14.58	5.13
APC	7x5-SF	11.1	7.17	79.6	9,704	45.9	424.8	14.98	5.34
APC	7x6-E	11.1	7.68	85.2	9,505	54.0	444.1	15.67	5.21
APC	7x6-SF	11.1	8.33	92.5	9,212	52.3	406.7	14.35	4.40
APC	8x3.8-SF	11.1	9.13	101.4	8,886	32.0	579.6	20.44	5.72
APC	8x4-E	11.1	8.15	90.5	9,297	35.2	536.1	18.91	5.92
APC	8x6-E	11.1	10.61	117.8	8,227	46.7	543.4	19.17	4.61
APC	8x6-SF	11.1	12.28	136.3	7,341	41.7	559	19.72	4.10
APC	8x8-E	11.1	12.64	140.2	7,202	54.6	450	15.87	3.21
APC	9x3.8-SF	11.1	10.98	121.9	7,988	28.7	684.1	23.43	5.45
APC	9x4.5-E	11.1	10.39	115.3	8,301	35.4	699.4	23.61	5.81
APC	9x4.7-SF	11.1	11.14	123.7	7,930	35.3	697.5	24.60	5.64
APC	9x6-SF	11.1	14.33	159.1	6,246	35.5	634.8	22.39	3.99
GEM	8x4.5	11.1	10.44	115.9	8,294	35.3	618.8	21.83	5.34
GEM	8x4.5-C	11.1	10.16	112.8	8,086	34.5	601.5	21.22	5.33
GEM	9x4.7	11.1	11.71	130.0	7,656	34.1	699.2	24.66	5.38
GEM	9x4.7-C	11.1	11.11	123.3	7,610	33.9	677.6	23.90	5.50
GEM	10x4.5-C	11.1	13.52	150.1	6,377	27.2	719.2	25.37	4.79
GWS	7x3.5x3-DD	11.1	4.69	52.0	10,766	35.7	349.3	12.32	6.71
GWS	8x4-DD	11.1	6.70	74.3	9,905	37.5	505.5	17.83	6.80
GWS	8x4x3-DD	11.1	7.87	87.4	9,398	35.6	534.4	18.85	6.12
GWS	8x6-DD	11.1	9.97	110.7	8,500	48.3	524.4	18.50	4.74
GWS	9x5-DD	11.1	10.21	113.3	8,355	39.6	683.5	24.11	6.03
GWS	9x5x3-DD	11.1	11.78	130.8	7,623	36.1	688	24.27	5.26
GWS	9x7.5-DD	11.1	13.40	148.7	6,812	48.4	559.6	19.74	3.76
GWS	10x6-DD	11.1	12.21	135.6	7,395	42.0	734.8	25.92	5.42
GWS	10x6x3-DD	11.1	13.84	153.6	6,424	36.5	751.9	26.52	4.90
MAS	7x4x3	11.1	6.86	76.2	9,836	37.3	366.3	12.92	4.81
MAS	8x6x3	11.1	11.02	122.3	8,018	45.6	527	18.59	4.31
MAS	9x7x3	11.1	13.71	152.2	6,618	43.9	608.4	21.46	4.00

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 cowling, you must provide adequate cooling to the motor and make sure that the motor is not getting too hot during operation.