

Scorpion SII-2208-1280 Motor Propeller Data									
Motor Wind 26-Turn Delta		Motor Kv 1280 RPM/Volt		No-Load Current I ₀ = 0.47 Amps @ 10v		Motor Resistance R _m = 0.150 Ohms		I Max 14 Amps	P Max (3S) 150 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	8x3.8-SF	7.4	6.32	46.7	7,236	26.0	359.2	12.67	7.69
APC	8x4-E	7.4	5.79	42.9	7,428	28.1	333.1	11.75	7.77
APC	8x6-E	7.4	7.85	58.1	6,684	38.0	341.2	12.04	5.88
APC	8x6-SF	7.4	9.18	67.9	6,228	35.4	387.3	13.66	5.70
APC	8x8-E	7.4	9.86	72.9	6,006	45.5	304.5	10.74	4.18
APC	9x3.8-SF	7.4	8.07	59.7	6,629	23.9	443.2	15.63	7.42
APC	9x4.5-E	7.4	7.67	56.8	6,775	28.9	434.7	15.33	7.66
APC	9x4.7-SF	7.4	8.50	62.9	6,480	28.8	459.4	16.20	7.30
APC	9x6-E	7.4	8.69	64.3	6,413	36.4	427.8	15.09	6.65
APC	9x6-SF	7.4	11.41	84.4	5,455	31.0	466.7	16.46	5.53
APC	9x7.5-E	7.4	11.17	82.6	5,538	39.3	385.4	13.59	4.66
APC	9x7.5-SF	7.4	12.51	92.5	5,013	35.6	420	14.81	4.54
APC	9x9-E	7.4	12.56	92.9	4,983	42.5	331.8	11.70	3.57
APC	10x3.8-SF	7.4	10.70	79.2	5,663	20.4	530.8	18.72	6.70
APC	10x4.7-SF	7.4	11.33	83.9	5,432	24.2	537.5	18.96	6.41
APC	10x5-E	7.4	9.53	70.5	6,085	28.8	496.2	17.50	7.04
APC	10x6-E	7.4	10.40	77.0	5,765	32.8	504.3	17.79	6.55
APC	10x7-E	7.4	11.42	84.5	5,414	35.9	474.2	16.73	5.61
APC	10x7-SF	7.4	13.36	98.9	4,670	31.0	511.9	18.06	5.18
APC	10x10-E	7.4	14.02	103.7	4,433	42.0	335	11.82	3.23
APC	11x3.8-SF	7.4	11.37	84.1	5,373	19.3	567.3	20.01	6.74
APC	11x4.7-SF	7.4	12.72	94.2	4,849	21.6	578.7	20.41	6.15
APC	11x5.5-E	7.4	11.47	84.8	5,336	27.8	566.4	19.98	6.68
APC	11x7-E	7.4	12.63	93.5	4,909	32.5	553.1	19.51	5.92
APC	11x7-SF	7.4	14.65	108.4	4,117	27.3	555.5	19.59	5.12
APC	11x8-E	7.4	13.34	98.7	4,611	34.9	460.3	16.24	4.66
APC	11x8.5-E	7.4	13.56	100.3	4,506	36.3	497.7	17.56	4.96
APC	11x10-E	7.4	15.11	111.8	4,056	38.4	375.1	13.23	3.35
GEM	8x4.5-C	7.4	7.65	56.6	6,580	28.0	395.6	13.95	6.99
GEM	9x4.7	7.4	8.93	66.1	6,316	28.1	467.1	16.48	7.07
GEM	9x4.7-C	7.4	8.64	64.0	6,265	27.9	458.8	16.18	7.17
GEM	10x4.5	7.4	11.22	83.0	5,505	23.5	527.8	18.62	6.36
GEM	10x4.5-C	7.4	10.91	80.7	5,460	23.3	519.8	18.34	6.44
GEM	11x4.7-C	7.4	12.78	94.5	4,871	21.7	577.5	20.37	6.11
GEM	12x4.5-C	7.4	13.83	102.4	4,399	18.7	549.4	19.38	5.37
GWS	8x4-DD	7.4	4.84	35.8	7,776	29.5	309.5	10.92	8.65
GWS	8x4x3-DD	7.4	5.68	42.0	7,474	28.3	332.6	11.73	7.92
GWS	8x4.3-SF	7.4	6.28	46.5	7,240	29.5	348.1	12.28	7.49
GWS	8x6-HD	7.4	7.36	54.5	6,886	39.1	340	11.99	6.24
GWS	8x6-SF	7.4	7.96	58.9	6,659	37.8	385.8	13.61	6.55
GWS	9x4.7-SF	7.4	8.86	65.6	6,342	28.2	469.3	16.55	7.16
GWS	9x5-DD	7.4	7.61	56.3	6,783	32.1	442.8	15.62	7.86
GWS	9x5x3-DD	7.4	8.94	66.1	6,315	29.9	461.1	16.26	6.97
GWS	9x7.5-HD	7.4	10.55	78.1	5,758	40.9	398.5	14.06	5.10
GWS	10x6-DD	7.4	9.41	69.6	6,135	34.9	497.1	17.53	7.14
GWS	10x6x3-DD	7.4	11.17	82.7	5,485	31.2	535.2	18.88	6.47
GWS	10x8-HD	7.4	12.58	93.1	5,017	38.0	443.9	15.66	4.77
GWS	11x7-DD	7.4	12.11	89.6	5,156	34.2	582.7	20.55	6.50
GWS	12x8-DD	7.4	14.09	104.3	4,285	32.5	567.2	20.01	5.44
MAS	7x4x3	7.4	5.00	37.0	7,711	29.2	205.5	7.25	5.55
MAS	8x6x3	7.4	8.47	62.7	6,480	36.8	323.5	11.41	5.16
MAS	9x7x3	7.4	11.07	81.9	5,505	36.5	393.5	13.88	4.80
MAS	10x5x3	7.4	10.20	75.5	5,839	27.6	491.8	17.35	6.52
MAS	10x7x3	7.4	12.40	91.8	4,966	32.9	458.3	16.17	4.99
MAS	11x7x3	7.4	13.39	99.1	4,559	30.2	541.3	19.09	5.46
MAS	11x8x3	7.4	14.12	104.5	4,391	29.1	542.9	19.15	5.19
APC	6x5.5-E	11.1	6.74	74.8	11,462	59.7	289	10.19	3.86
APC	7x4-E	11.1	7.84	87.0	11,034	41.8	484.9	17.10	5.57
APC	7x4-SF	11.1	7.78	86.3	11,052	41.9	464.4	16.38	5.38
APC	7x5-E	11.1	9.43	104.7	10,421	49.3	477.9	16.86	4.56
APC	7x5-SF	11.1	9.39	104.2	10,443	49.4	502	17.71	4.82
APC	7x6-E	11.1	9.89	109.8	10,226	58.1	522.7	18.44	4.76
APC	7x6-SF	11.1	10.93	121.3	9,851	56.0	475.9	16.79	3.92
APC	8x3.8-SF	11.1	11.67	129.5	9,549	34.4	667.8	23.56	5.16
APC	8x4-E	11.1	10.68	118.5	9,957	37.7	622	21.94	5.25
APC	8x6-E	11.1	13.45	149.3	8,817	50.1	641.7	22.64	4.30
APC	8x6-SF	11.1	15.59	173.0	7,705	43.8	621.7	21.93	3.59
APC	8x8-E	11.1	15.95	177.1	7,568	57.3	508.9	17.95	2.87
APC	9x3.8-SF	11.1	14.04	155.8	8,440	30.4	765.8	27.01	4.92
APC	9x4.7-SF	11.1	13.98	155.2	8,439	37.6	778.1	27.45	5.01
GEM	8x4.5	11.1	13.37	148.4	8,799	37.5	704.6	24.85	4.75
GEM	8x4.5-C	11.1	12.91	143.3	8,562	36.5	691.7	24.40	4.83
GEM	9x4.7-C	11.1	14.74	163.6	8,133	36.2	780.9	27.55	4.77
GWS	7x3.5-DD	11.1	4.87	54.1	12,161	40.3	370.5	13.07	6.85
GWS	7x3.5x3-DD	11.1	6.11	67.8	11,703	38.8	421.3	14.86	6.21
GWS	8x4-DD	11.1	8.74	97.0	10,699	40.5	602.9	21.27	6.22
GWS	8x4x3-DD	11.1	10.32	114.6	10,086	38.2	641.5	22.63	5.60
GWS	8x4.3-SF	11.1	11.04	122.5	9,766	39.8	628.9	22.18	5.13
GWS	8x6-DD	11.1	12.97	144.0	9,037	51.3	607.8	21.44	4.22
GWS	9x5-DD	11.1	13.32	147.8	8,916	42.2	780.1	27.52	5.28
GWS	9x5x3-DD	11.1	14.94	165.8	8,072	38.2	780.5	27.53	4.71
MAS	7x4x3	11.1	8.76	97.2	10,638	40.3	444.6	15.68	4.57
MAS	8x6x3	11.1	13.95	154.9	8,571	48.7	618.8	21.83	4.00
MAS	9x7x3	11.1	16.86	187.1	6,905	45.8	675.7	23.83	3.61

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.