

Scorpion SII-3014-1040 Motor Propeller Data

Motor Wind 13-Turn Delta		Motor Kv 1040 RPM/Volt		No-Load Current I ₀ = 1.35 Amps @ 10v		Motor Resistance R _m = 0.026 Ohms		I Max 40 Amps	P Max (3S) 600 W
Outside Diameter 37.5 mm, 1.476in.		Body Length 39.7 mm, 1.563 in.		Total Shaft Length 68.5 mm, 2.697 in.		Shaft Diameter 4.98 mm, 0.197 in.		Motor Weight 129 gm, 4.52 oz	
Prop Manf.	Prop Size	Input Voltage	Motor Amps	Watts Input	Prop RPM	Pitch Speed	Thrust Grams	Thrust Ounces	Thrust Eff. Grams/W
APC	7x6-SF	11.1	13.65	151.5	11,023	62.6	597.2	21.07	3.94
APC	8x3.8-SF	11.1	15.47	171.8	10,872	39.1	904.8	31.92	5.27
APC	8x4-E	11.1	20.17	223.9	10,522	59.8	965.3	34.05	4.31
APC	8x6-E	11.1	20.39	226.4	10,531	59.8	961.9	33.93	4.25
APC	8x6-SF	11.1	27.80	308.6	10,014	56.9	1079.3	38.07	3.50
APC	8x8-E	11.1	27.13	301.1	10,019	75.9	893	31.50	2.97
APC	9x3.8-SF	11.1	21.79	241.9	10,434	37.5	1257	44.34	5.20
APC	9x4.5-E	11.1	18.80	208.6	10,618	45.2	1145.3	40.40	5.49
APC	9x4.7-SF	11.1	19.80	219.8	10,563	47.0	1202.8	42.43	5.47
APC	9x6-E	11.1	22.38	248.4	10,356	58.8	1162.5	41.01	4.68
APC	9x6-SF	11.1	39.15	434.6	9,134	51.9	1453.8	51.28	3.35
APC	9x7.5-E	11.1	32.89	365.0	9,581	68.0	1214.5	42.84	3.33
APC	9x7.5-SF	11.1	19.48	216.3	5,912	42.0	721.7	25.46	3.34
APC	9x9-E	11.1	37.82	419.8	9,220	78.6	1194.5	42.13	2.85
APC	10x3.8-SF	11.1	34.65	384.7	9,492	34.2	1794.6	63.30	4.67
APC	10x4.7-SF	11.1	35.80	397.3	9,410	41.9	1797.3	63.40	4.52
APC	10x5-E	11.1	26.35	292.4	10,079	47.7	1474.7	52.02	5.04
APC	10x6-E	11.1	29.77	330.4	9,827	55.8	1523.2	53.73	4.61
APC	10x7-E	11.1	34.20	379.6	9,516	63.1	1536.6	54.20	4.05
APC	10x7-SF	11.1	49.17	545.7	8,359	55.4	1817.4	64.11	3.33
APC	11x3.8-SF	11.1	38.31	425.3	9,169	33.0	2024.1	71.40	4.76
APC	11x4.7-SF	11.1	43.22	479.7	8,812	39.2	2144.4	75.64	4.47
APC	11x5.5-E	11.1	36.66	406.9	9,330	48.6	1939.9	68.43	4.77
APC	11x7-E	11.1	42.03	466.6	8,913	59.1	1966.1	69.35	4.21
APC	13x4-E	11.1	40.36	448.0	9,053	51.4	2311.9	81.55	5.16
GEM	9x4.7	11.1	20.38	226.2	10,533	46.9	1231.5	43.44	5.44
GEM	9x4.7-C	11.1	20.06	222.7	10,096	44.9	1194.5	42.13	5.36
GEM	10x4.5	11.1	33.34	370.1	9,590	40.9	1757.4	61.99	4.75
GEM	10x4.5-C	11.1	30.31	336.4	9,330	39.8	1629	57.46	4.84
GEM	11x4.7-C	11.1	38.87	431.4	8,677	38.6	2014.4	71.06	4.67
GEM	12x4.5-C	11.1	48.34	536.6	8,429	35.9	2207.8	77.88	4.11
GWS	8x4x3-DD	11.1	12.16	135.0	11,136	42.2	772.3	27.24	5.72
GWS	9x5-DD	11.1	18.38	204.0	10,681	50.6	1157.6	40.83	5.67
GWS	9x5x3-DD	11.1	23.71	263.2	10,289	48.7	1300	45.86	4.94
GWS	10x6-DD	11.1	25.12	278.8	10,185	57.9	1442.3	50.88	5.17
GWS	10x6x3-DD	11.1	32.26	358.0	9,669	54.9	1757.3	61.99	4.91
GWS	11x7-DD	11.1	37.41	415.2	9,276	61.5	1948.9	68.74	4.69
MAS	8x6x3	11.1	19.58	217.4	10,585	60.1	1033.2	36.44	4.75
MAS	9x7x3	11.1	30.48	338.3	9,800	65.0	1517.5	53.53	4.49
MAS	10x5x3	11.1	27.34	303.5	10,031	47.5	1549.2	54.65	5.10
MAS	10x7x3	11.1	38.32	425.4	9,212	61.1	1867.7	65.88	4.39
MAS	11x7x3	11.1	44.72	496.4	8,719	57.8	2104.4	74.23	4.24
APC	7x6-E	14.8	19.13	283.1	14,393	81.8	1037.4	36.59	3.66
APC	8x4-E	14.8	22.02	325.9	14,161	53.6	1330.7	46.94	4.08
APC	8x6-E	14.8	35.62	527.2	13,106	74.5	1516.7	53.50	2.88
APC	8x8-E	14.8	44.65	660.7	12,374	93.7	1374.5	48.48	2.08
APC	9x4.5-E	14.8	31.60	467.7	13,401	57.1	1942.7	68.53	4.15
APC	9x6-E	14.8	37.02	547.9	12,983	73.8	1840.5	64.92	3.36

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.