

Scorpion SII-3008-1090 Motor Propeller Data

Motor Wind 23-Turn Delta		Motor Kv 1090 RPM/Volt		No-Load Current I _o = 0.79 Amps @ 10v		Motor Resistance R _m = 0.058 Ohms		I Max 26 Amps	P Max (3S) 370 W
Outside Diameter 37.5 mm, 1.476in.		Body Length 33.7 mm, 1.327 in.		Total Shaft Length 62.5 mm, 2.461 in.		Shaft Diameter 4.98 mm, 0.197 in.		Motor Weight 95 gm, 3.33 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-E	11.1	11.24	124.8	11,037	62.7	595.3	21.00	4.77
APC	7x6-SF	11.1	12.91	143.3	10,794	61.3	557.2	19.65	3.89
APC	8x3.8-SF	11.1	14.46	160.5	10,590	38.1	841.4	29.68	5.24
APC	8x4-E	11.1	12.51	138.9	10,839	61.6	745	26.28	5.36
APC	8x6-E	11.1	18.30	203.2	10,049	57.1	854.1	30.13	4.20
APC	8x6-SF	11.1	23.65	262.5	9,278	52.7	901.6	31.80	3.43
APC	8x8-E	11.1	23.55	261.4	9,315	70.6	757.3	26.71	2.90
APC	9x3.8-SF	11.1	19.42	215.6	9,879	35.5	1091.1	38.49	5.06
APC	9x4.5-E	11.1	17.28	191.8	10,182	43.4	1028.9	36.29	5.37
APC	9x4.7-SF	11.1	18.33	203.5	10,039	44.7	1081.2	38.14	5.31
APC	9x6-E	11.1	20.12	223.4	9,772	55.5	1025.7	36.18	4.59
APC	9x7.5-E	11.1	27.40	304.2	8,709	61.9	983	34.67	3.23
APC	10x3.8-SF	11.1	28.24	313.5	8,552	30.8	1395.9	49.24	4.45
APC	10x5-E	11.1	22.86	253.8	9,367	44.4	1233.1	43.50	4.86
APC	10x6-E	11.1	25.10	278.7	9,022	51.3	1245.7	43.94	4.47
APC	10x7-E	11.1	28.14	312.3	8,543	56.6	1215.9	42.89	3.89
GEM	9x4.7	11.1	18.57	206.1	10,007	44.5	1086	38.31	5.27
GEM	9x4.7-C	11.1	18.38	204.0	9,546	42.5	1062.8	37.49	5.21
GEM	10x4.5	11.1	27.36	303.7	8,645	36.8	1376.8	48.56	4.53
GEM	10x4.5-C	11.1	25.45	282.5	8,439	36.0	1316.5	46.44	4.66
GWS	8x4-DD	11.1	9.70	107.6	11,274	42.7	669.2	23.61	6.22
GWS	8x4x3-DD	11.1	11.91	132.1	10,949	41.5	748	26.38	5.66
GWS	9x5-DD	11.1	17.01	188.8	10,220	48.4	1054.8	37.21	5.59
GWS	9x5x3-DD	11.1	20.92	232.2	9,683	45.8	1120.5	39.52	4.83
GWS	10x6x3-DD	11.1	27.07	300.5	8,719	49.5	1396.6	49.26	4.65
MAS	8x6x3	11.1	17.87	198.3	10,073	57.2	899.8	31.74	4.54
MAS	9x7x3	11.1	25.94	287.9	8,919	59.1	1211.1	42.72	4.21
MAS	10x5x3	11.1	23.94	265.7	9,181	43.5	1305.2	46.04	4.91
Prop Manf.	Prop Size	Input Voltage	Motor Amps	Watts Input	Prop RPM	Pitch Speed	Thrust Grams	Thrust Ounces	Thrust Eff. Grams/W
APC	7x4-E	14.8	13.53	200.2	14,593	55.3	893.4	31.51	4.46
APC	7x5-E	14.8	17.22	254.9	14,038	66.5	903.4	31.87	3.54
APC	7x6-E	14.8	18.06	267.2	13,904	79.0	972.4	34.30	3.64
APC	8x4-E	14.8	20.21	299.1	13,581	51.4	1209.5	42.66	4.04
APC	8x6-E	14.8	29.61	438.2	12,080	68.6	1268.4	44.74	2.89
APC	9x4.5-E	14.8	27.28	403.7	12,404	52.9	1620.6	57.16	4.01

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.