

Scorpion SII-3026-890 Motor Propeller Data

Motor Wind 7-Turn Delta		Motor Kv 890 RPM/Volt		No-Load Current I _o = 2.25 Amps @ 10v		Motor Resistance R _m = 0.014 Ohms		I Max 70 Amps	P Max (3S) 1025 W
Outside Diameter 37.5 mm, 1.476in.		Body Length 51.7 mm, 2.035 in.		Total Shaft Length 80.5 mm, 3.169 in.		Shaft Diameter 4.98 mm, 0.197 in.		Motor Weight 205 gm, 7.18 oz	
Prop Manf.	Prop Size	Input Voltage	Motor Amps	Watts Input	Prop RPM	Pitch Speed	Thrust Grams	Thrust Ounces	Thrust Eff. Grams/W
APC	9x7.5-E	11.1	31.70	351.8	9,594	68.1	1231.5	43.44	3.50
APC	9x9-E	11.1	39.83	442.1	9,636	82.1	1293	45.61	2.92
APC	10x7-E	11.1	35.32	392.1	9,834	65.2	1624.4	57.30	4.14
APC	10x7-SF	11.1	56.75	629.9	9,019	59.8	2138.3	75.43	3.39
APC	10x10-E	11.1	52.85	586.6	9,134	86.5	1477.1	52.10	2.52
APC	11x3.8-SF	11.1	40.41	448.5	9,531	34.3	2206	77.81	4.92
APC	11x4.7-SF	11.1	46.63	517.6	9,422	41.9	2410.4	85.02	4.66
APC	11x5.5-E	11.1	38.86	431.3	9,703	50.5	2092.7	73.82	4.85
APC	11x7-E	11.1	45.79	508.3	9,389	62.2	2201.5	77.65	4.33
APC	11x7-SF	11.1	67.58	750.1	8,598	57.0	2740.8	96.68	3.65
APC	11x8-E	11.1	50.02	555.2	9,241	70.0	2107.8	74.35	3.80
APC	11x8.5-E	11.1	54.21	601.7	9,086	73.1	2129	75.10	3.54
APC	11x10-E	11.1	62.02	688.4	8,783	83.2	1931.5	68.13	2.81
APC	12x3.8-SF	11.1	61.90	687.1	8,703	31.3	2843.1	100.29	4.14
APC	12x6-E	11.1	51.21	568.4	9,184	52.2	2609.4	92.04	4.59
APC	12x8-E	11.1	62.77	696.8	8,764	66.4	2283.8	80.56	3.28
APC	12x10-E	11.1	71.70	795.8	8,283	78.4	2335	82.36	2.93
APC	13x4-E	11.1	43.71	485.2	9,482	35.9	2585.9	91.21	5.33
APC	13x4.7-SF	11.1	76.40	848.0	8,235	36.7	3453.5	121.82	4.07
APC	13x6.5-E	11.1	68.08	755.7	8,552	52.6	3084.8	108.81	4.08
APC	15x4-E	11.1	68.31	758.3	8,564	32.4	3670.2	129.46	4.84
GEM	10x4.5-C	11.1	31.00	344.1	9,538	40.6	1715.5	60.51	4.98
GEM	11x4.7-C	11.1	45.66	506.8	9,442	42.0	2401.9	84.72	4.74
GEM	12x4.5-C	11.1	54.48	604.7	9,088	38.7	2600.1	91.71	4.30
GWS	10x6-DD	11.1	24.76	274.8	10,283	58.4	1442.9	50.90	5.25
GWS	11x7-DD	11.1	39.65	440.1	9,684	64.2	2128.9	75.09	4.84
MAS	10x5x3	11.1	27.48	305.1	10,143	48.0	1580.4	55.75	5.18
MAS	10x7x3	11.1	39.60	439.5	9,553	63.3	1986.7	70.08	4.52
MAS	11x7x3	11.1	48.59	539.3	9,324	61.8	2392.7	84.40	4.44
MAS	12x6x3	11.1	54.47	604.6	9,104	51.7	2714.6	95.75	4.49
MAS	12x8x3	11.1	73.21	812.6	8,372	63.4	3243.3	114.40	3.99
Prop Manf.	Prop Size	Input Voltage	Motor Amps	Watts Input	Prop RPM	Pitch Speed	Thrust Grams	Thrust Ounces	Thrust Eff. Grams/W
APC	8x6-E	14.8	36.39	538.6	13,301	75.6	1564.6	55.19	2.90
APC	8x8-E	14.8	47.27	699.6	12,820	97.1	1467.2	51.75	2.10
APC	9x4.5-E	14.8	31.58	467.4	13,498	57.5	1953.5	68.91	4.18
APC	9x6-E	14.8	38.07	563.5	13,223	75.1	1910.1	67.38	3.39
APC	9x7.5-E	14.8	59.00	873.2	12,307	87.4	2017.5	71.16	2.31
APC	9x9-E	14.8	64.94	961.1	12,101	103.1	2042.8	72.06	2.13
APC	10x5-E	14.8	46.03	681.3	12,878	61.0	2408.5	84.96	3.54
APC	10x6-E	14.8	50.75	751.2	12,548	71.3	2412	85.08	3.21
APC	10x7-E	14.8	58.31	863.0	12,178	80.7	2568.9	90.61	2.98
APC	11x5.5-E	14.8	66.28	981.0	12,044	62.7	3387.8	119.50	3.45
APC	13x4-E	14.8	73.29	1084.7	11,757	44.5	4243.6	149.69	3.91

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.