Scorpion SII-3026-710 Motor Propeller Data

Motor Wind	Motor Kv	No-Load Current	Motor Resistance	I Max	P Max (3S)
9-Turn Delta	710 RPM/Volt	Io = 1.56 Amps @ 10v	Rm = 0.022 Ohms	60 Amps	1000 W

Outside Diameter	Body Length	Total Shaft Length	Shaft Diameter	Motor Weight
37.5 mm, 1.476in.	51.7 mm, 2.035 in.	80.5 mm, 3.169 in.	4.98 mm, 0.197 in.	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	11x4.7-SF	11.1	20.76	230.5	7,306	32.5	1429.8	50.43	6.20
APC	11x7-SF	11.1	30.26	335.9	6,893	45.7	1713.2	60.43	5.10
APC	11x10-E	11.1	27.53	305.6	7,010	66.4	1207.2	42.58	3.95
APC	12x3.8-SF	11.1	26.91	298.6	7,034	25.3	1795.4	63.33	6.01
APC	12x6-SF	11.1	36.25	402.3	6,655	37.8	2075.2	73.20	5.16
APC	12x8-E	11.1	27.66	307.1	7,011	53.1	1415.4	49.93	4.61
APC	12x8-SF	11.1	42.78	474.8	6,342	48.0	2105.7	74.28	4.43
APC	12x10-E	11.1	32.48	360.6	6,813	64.5	1553.9	54.81	4.31
APC	12x12-E	11.1	38.00	421.8	6,541	43.4	1397.5	49.29	3.31
APC	13x4.7-SF	11.1	33.81	375.3	6,658	29.6	2149.4	75.82	5.73
APC	13x6.5-E	11.1	29.78	330.5	6,924	42.6	1920.8	67.75	5.81
APC	13x8-E	11.1	32.75	363.5	6,802	51.5	1957.6	69.05	5.39
APC	13x10-E	11.1	41.44	459.9	6,317	59.8	1743.6	61.50	3.79
APC	14x7-E	11.1	36.88	409.4	6,618	43.9	2281.9	80.49	5.57
APC	14x8.5-E	11.1	38.27	424.8	6,442	51.9	2282.6	80.52	5.37
APC	14x10-E	11.1	39.20	435.1	6,504	61.6	2261.3	79.76	5.20
APC	14x12-E	11.1	53.66	595.7	5,784	38.3	1805.9	63.70	3.03
APC	15x4-E	11.1	29.68	329.4	6,907	26.2	2225.7	78.51	6.76
APC	15x6-E	11.1	38.23	424.4	6,548	37.2	2515.5	88.73	5.93
APC	15x8-E	11.1	41.46	460.2	6,384	48.4	2526.3	89.11	5.49
APC	15x10-E	11.1	53.36	592.3	5,843	55.3	2608.6	92.01	4.40
GEM	12x4.5-C	11.1	23.78	264.0	7,118	30.3	1516.3	53.49	5.74
GWS	12x8-DD	11.1	25.81	286.5	7,079	53.6	1623.4	57.26	5.67
MAS	12x6x3	11.1	24.56	272.6	7,133	40.5	1627.1	57.39	5.97
MAS	12x8x3	11.1	34.37	381.5	6,701	50.8	2044.9	72.13	5.36
MAS	13x8x3	11.1	37.78	419.3	6,578	49.8	2235.1	78.84	5.33
MAS	14x7x3	11.1	43.15	479.0	6,308	41.8	2569.7	90.64	5.37
MAS	14x9x3	11.1	50.04	555.4	5,997	51.1	2762.8	97.45	4.97
MAS	15x7x3	11.1	51.37	570.2	5,932	39.3	2910.2	102.65	5.10
MAS	16x8x3	11.1	57.39	637.0	5,624	42.6	3160.1	111.47	4.96
MAS	16x10x3	11.1	67.13	745.1	5,086	48.2	3298.2	116.34	4.43

Prop Manf.	Prop Size	Input Voltage	Motor Amps	Watts Input	Prop RPM	Pitch Speed	Thrust Grams	Thrust Ounces	Thrust Eff. Grams/W
APC	10x10-E	14.8	37.47	554.5	9,030	85.5	1446.1	51.01	2.61
APC	11x5.5-E	14.8	27.43	405.9	9,573	49.9	2033.4	71.73	5.01
APC	11x7-E	14.8	32.18	476.3	9,271	61.5	2140.3	75.50	4.49
APC	11x8-E	14.8	35.86	530.7	9,189	69.6	2072.9	73.12	3.91
APC	11x8.5-E	14.8	38.32	567.1	8,994	72.4	2096.3	73.94	3.70
APC	11x10-E	14.8	44.53	659.1	8,796	83.3	1904.2	67.17	2.89
APC	12x6-E	14.8	36.50	540.2	9,160	52.0	2596.5	91.59	4.81
APC	12x8-E	14.8	45.16	668.4	8,769	66.4	2315.6	81.68	3.46
APC	12x10-E	14.8	52.52	777.3	8,335	78.9	2389.6	84.29	3.07
APC	12x12-E	14.8	58.60	867.2	8,085	91.9	2193.3	77.37	2.53
APC	13x4-E	14.8	31.10	460.2	9,408	35.6	2544.9	89.77	5.53
APC	13x6.5-E	14.8	49.23	728.5	8,545	52.6	3095.6	109.19	4.25
APC	13x8-E	14.8	53.12	786.1	8,358	63.3	3005.6	106.02	3.82
APC	13x10-E	14.8	65.34	967.0	7,582	71.8	2629.9	92.77	2.72
APC	14x7-E	14.8	59.47	880.1	8,026	53.2	3456.5	121.92	3.93
APC	15x4-E	14.8	49.03	725.6	8,528	32.3	3666.7	129.34	5.05

Prop Manf.	Prop Size	Input Voltage	Motor Amps	Watts Input	Prop RPM	Pitch Speed	Thrust Grams	Thrust Ounces	Thrust Eff. Grams/W
APC	8x8-E	18.5	29.09	538.1	12,021	91.1	1299.8	45.85	2.42
APC	9x7.5-E	18.5	37.38	691.6	11,641	82.7	1834.2	64.70	2.65
APC	9x9-E	18.5	41.23	762.7	11,431	97.4	1843.5	65.03	2.42
APC	10x5-E	18.5	28.45	526.3	12,070	57.1	2127.6	75.05	4.04
APC	10x6-E	18.5	32.35	598.5	11,871	67.4	2193.8	77.38	3.67
APC	10x7-E	18.5	37.70	697.5	11,622	77.0	2331.6	82.24	3.34
APC	10x10-E	18.5	54.42	1006.7	10,782	102.1	2104.6	74.24	2.09
APC	11x5.5-E	18.5	41.43	766.5	11,418	59.5	3041.3	107.28	3.97
APC	11x7-E	18.5	49.17	909.6	11,055	73.3	3137.4	110.67	3.45
APC	11x8-E	18.5	54.20	1002.6	10,839	82.1	2860.4	100.90	2.85
APC	11x8.5-E	18.5	57.78	1068.9	10,619	85.5	2925.5	103.19	2.74
APC	11x10-E	18.5	63.93	1182.8	10,260	97.2	2653.2	93.59	2.24
APC	12x6-E	18.5	55.43	1025.4	10,752	61.1	3701.7	130.57	3.61
APC	13x4-E	18.5	46.49	860.0	11,179	42.3	3786.1	133.55	4.40

Propeller Chart Color Code Explanation

The prop is to 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 higer 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.