

Effect of Prop Selection on Current and Power

Same motor with 3 different prop's

Prop	Min Voltage V	Max Current I	Max rpm	Measured Power P	Calculated Power (V*I)
	Volts	Amps		Watts	Watts
7x4	10.2	5.1	9363	Was	52.02
9x3.8	9.8	9.03	7400	not	88.494
10x3.8	9.55	11.3	6300	recorded	107.915

Notes:

Voltage is at battery, not at motor

KV appears non-constant, probably due to a number of factors:

- motor efficiency
- ESC efficiency
- full DC battery voltage cannot be applied to motor, due to pulse supply
- Wire diameter
- prop resistance (static)