



The Pilotix A2812 drone motor features a high-torque 12N14P configuration, operating on a power supply of 6 volts to deliver a maximum thrust of 2600 grams. This device is equipped with a KV rating of 900, and it utilizes a no-load current of 1.09A while having a maximum current rating of 40.3A. The A2812 includes a lightweight design, with dimensions of 33.5mm in diameter and 42.9mm in height, maintaining structural integrity through durable materials, and weighs 76.2 grams.

Aviation-Grade CNC Construction
High-Efficiency Thermal Management
High-Torque 12N14P Configuration

Product	
Model	A2812
Motor KV	900 KV
Motor Size	2812
SKU	4251
Specifications	
Maximum Current	40.3 A
Maximum Power	967 W
Maximum Thrust	2600 g
No-Load Current	1.09 A
Power Supply	6 S
Shaft Diameter	5 mm
Silicone Cable	18 AWG 220 mm
Internal Resistance	79 mΩ
Configuration	12 N 14 P
Common	
Size	Ø 33.5 * 42.9 mm
Weight	76.2 g

Throttle	RPM (Optical)	Reversing RPM	Vol V	Current (A)	Pull Force (gf)	Torque (N*m)
20	0	3772	21.96	1.03	-138	0.026
30	0	5444	21.95	2.54	-327	0.061
35	0	6172	21.95	3.55	-439	0.079
40	0	6952	21.94	4.91	-576	0.099
45	0	7784	21.94	6.76	-745	0.126
50	0	8517	21.92	8.75	-914	0.151
55	0	9180	21.90	10.99	-1083	0.176
60	0	9827	21.90	13.57	-1263	0.201
65	0	10424	21.89	16.36	-1445	0.227
70	0	11039	21.87	19.55	-1619	0.254
75	0	11594	21.85	23.03	-1782	0.282
80	0	12151	21.83	26.77	-1937	0.305
85	0	12627	21.81	31.38	-2114	0.334
90	0	13066	21.79	35.47	-2246	0.353
95	0	13392	21.76	39.60	-2832	0.377
100	0	13651	21.74	43.45	-2493	0.395

Motor Temperature End-°C	Total(Electrical) Power (W)	Shaft Power (W)	Motor Efficiency (%)	Propeller Efficiency (gf/W)	System Force Efficiency (gf/W)
135.0	22.6	11.5	50.9	-12.0	-6.1
	55.8	34.8	62.4	-9.4	-5.9
	77.9	51.1	65.6	-8.6	-5.6
	107.7	72.1	66.9	-8.0	-5.4
	148.3	102.7	69.3	-7.3	-5.0
	191.8	134.7	70.2	-6.8	-4.8
	240.7	169.2	70.3	-6.4	-4.5
	297.2	206.8	69.6	-6.1	-4.3
	358.1	247.8	69.2	-5.8	-4.0
	427.6	293.6	68.7	-5.5	-3.8
	503.2	342.4	68.0	-5.2	-3.5
	584.4	388.1	66.4	-5.0	-3.3
	684.4	441.6	64.5	-4.8	-3.1
	772.9	483.0	62.5	-4.6	-2.9
	861.7	528.7	61.4	-4.5	-2.8
944.6	564.7	58.9	-4.4	-2.6	