GM8112 Specifications Standard

Appearance requirements

NO.	Project	Requirement	Remarks
1	Motor diameter (mm)	Φ89.5±0.05mm	/
2	Motor length (mm)	33.4±0.2(with encoder) mm	/
3	Motor slot/pole number	36N/42P	/
4	Axial outer diameter (mm)	Φ25-0.008/-0.012 mm	/
5	Inner diameter of shaft (mm)	Φ22+0.05/+0.1 mm	/
6	wire length (mm)	610mm±3 mm Without Plug	/
7	The color of the line	24#black silicone wire	/
8	weight (g)	446±1g	/
9	plug	2.5 pitch connector	/
10	Axial clearance (virtual position)	0	/

Performance Requirement

NO.	Project		Requirement	Remarks
1	No-load	voltage (V)	22V	KV box
		current (A)	0.3±0.1 A	/
		speed (RPM)	380~420 RPM	/
2	Load	voltage (V)	20	/
		current (A)	2	/
		torsion ($G \bullet cm$)	6000-9000	/
3	Number of windings (T)		0.4*1-33T Y connection method	
4	Wired internal resistance of finished product (mΩ)		4.2Ω±5%(The resistance will change with the ambient temperature. If the resistance exceeds the standard range due to environmental changes, the standard should be signed again)	/
5	high voltage test		DC500V 1mA 2 Seconds	/
6	The rotor housing jumps		≤0.1mm	/
7	Translation (shaft extension view)		Clockwise (unified test wiring)	/
8	High temperature test		60℃ Keep 100 hours, and the motor can work normally after 24 hours at room temperature	/
9	Cold test		-20℃ Keep for 100 hours, and the motor can work normally after 24 hours at room temperature	/
10	maximum power		≤80W	
11	Use voltage range		3-5S (calculated according to lithium battery 3.7-4.2V/S)	Constant power
12	service environment		Temperature: -20~60℃, humidity: 10~90%RH	Normal temperature and humidity