

**Model No.****NFP-1215-712-100**

1. General

This specification applies to NFP-1215-712-100 Brushless DC Motors.

2. Operating Condition

No.	Items	Specification
2-1	Rated voltage	3.7V DC
2-2	No. of phase	3 Phase
2-3	KV value	5500RPM
2-4	Rated load	Weights 5.g.cm
2-5	Operating voltage	3.5~4.2V DC
2-6	Temperature Range	Working Temperature: -10°C~50°C
2-7	Installation method and location	The length of the screw into the threaded hole is less than 1.2mm, and the output shaft is in any direction.

3. Performance Test Conditions

No.	Items	Specification
3-1	Motor placement	Output shaft horizontal
3-2	Driving mode	Special DC brushless motor drive controller
3-2	Rotation	CW (As seen from shaft)
3-3	Testing environment	If there is any doubt about the test results, the test data at 20 ± 3 °C and $65 \pm 20\%$ relative humidity shall prevail.

4. Electrical Characteristics

No.	Item	Specification	Type	Condition-Remark
4-1	No load speed	20000rpm $\pm$ 15%	20000rpm	At rated voltage and no load
4-2	No load current	260mA Max	200mA	
4-3	Rated speed	14500rpm $\pm$ 15%	14500rpm	At rated voltage and rated load (The blade of the fan provided by customer)
4-4	Rated current	530mA Max	480mA	
4-5	Stall current	2.0A Max	1.5A	

No.	Item	Specification	Type	Condition-Remark
4-6	Starting voltage	3.5V DC Max	3.5VDC	Special motor drive
4-7	Terminal resistance	2.2Ω±15%	2.2Ω	Measure between terminals
4-8	Insulation resistance	10MΩ Min	\	At 100V DC between motor terminal and case
4-9	Locked rotor torque	≥15g.cm	\	\
4-10	Motor performance curve	Refer to the graph	\	\

5. Mechanical Properties

No.	Item	Specification
5-1	Configuration	As specified in outline drawing
5-2	Axial clearance	0~0.35mm
5-3	Radial runout	3.0mm from the end of the shaft test should not be greater than 0.02mm
5-4	Single weight	About 7.5g
5-5	Mechanical Noise	At rated voltage and no load Back ground noise: 28dB(A)MAX Lock the motor in a test fixture of 100g
5-5	Noise	Motor fixed test, less than 60db (A) dose not affect the function and life.

6. Reliability

No.	Item	Test condition	Requirements
6-1	Life	/	After the test, motors shall be approved as specified in item 7-1

7. Requirements

No.	Items	Requirements
7-1	TABLE A	1)Rated speed: Initial data ±50%Max 2)Rated current: Initial data ±50%Max 3)Insulation resistance: 1MΩ Min 4)Starting voltage: 1.0V DC Max
7-2	TABLE B	1)Rated speed: Initial data ±30%Max 2)Rated current: Initial data ±30%Max
7-3	TABLE C	1)Rated speed: Initial data ±35%Max 2)Rated current: Initial data ±35%Max

8. Storage Method

No.	Requirements
8-1	Storage temperature -20 °C ~ 70 °C
8-2	Storage humidity 5% ~ 90%RH
8-3	Keep it dry and sealed, avoid being placed in the environment of high temperature, humidity and corrosive gas

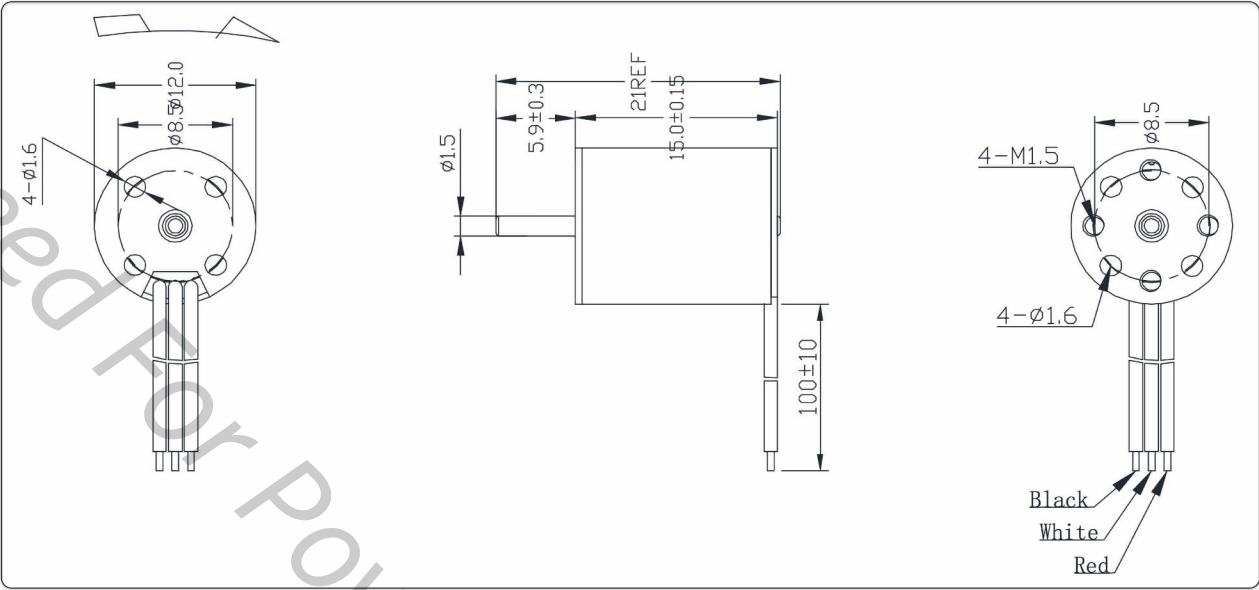
9. Matters Needing Attention

No.	Requirements
9-1	The ambient temperature condition has a great influence on the motor surface, please use the motor within the scope of this technical index
9-2	Avoid high temperature, high humidity and contact with corrosive liquid and gas
9-3	Please do not lock the motor shaft when the motor is running. If the motor is locked continuously for more than 1 minute, the motor will heat up or even burn.
9-4	Direct impact on the motor should be avoided

10. Remarks

No.	Requirements
10-1	When the use is beyond the scope of this specification, the product performance cannot be guaranteed
10-2	This specification can be adjusted and added after negotiation between both parties. After your confirmation, if there is any dispute between both parties, the confirmed sample shall prevail
10-3	In order to avoid the return of combined products to our company, our company does not provide backup for customers
10-4	If you find any defective products during IQC inspection, please indicate the reason and return them. We will not accept products without any identification
10-5	If you have any new requirements in the process of testing our products, please inform us immediately. We will provide high-quality and efficient services to meet your requirements
10-6	The packing case or box shall be handled carefully during transportation to avoid collision and knocking

11. Outline Drawing



12. Performance Curve

