



Model FK-180SH-12260

TKS-71-V832

## 1. Application

- 1) This specification applies to the motor FK-180SH which is to be delivered by MABUCHI MOTOR CO., LTD.

## 2. Standard Operating Conditions

- 1) Standard Operating Condition means the range in which the motor could move, and does not guarantee the characteristics.
- 2) Concerning the quality assurance for the electric characteristics and the life test are to be based upon item 4, 6.

2-1 Direction of Rotation CCW &amp; CW when viewed from output shaft side.

## 3. Measuring Conditions

3-1	Rated Voltage	12.0 V DC CONSTANT between motor terminals.
3-2	Rated Load	1.98 mNm by pulley load.
3-3	Motor Position	Motor to be held, with shaft horizontally.
3-4	Power Supply	Regulated DC constant power supply.
3-5	Environmental Temperature and Humidity	The test is made in principle at a temperature between +10 degC and +30 degC, and at relative humidity between 30 % and 95 %. If the result is questionable, it shall be judged from the test made by JIS Standard Testing Condition (+20 degC +/- 2 degC, 65 %RH +/- 5 %RH).
3-6	Direction of Rotation	CCW when viewed from output shaft side.

## 4. Electrical Characteristics (at initial stage)

4-1	No Load Current	70 mA (max.)
4-2	No Load Speed	8000 +/- 1000 r/min
4-3	Rated Load Current	240 mA (max.)
4-4	Rated Load Speed	6500 +/- 800 r/min
4-5	Insulation Resistance	1.0 M ohm (min.) (DC 100 V)
4-6	Dielectric Strength	AC 100 V (50Hz to 60Hz) for one minute, between motor terminal and motor metal housing.
4-7	Reference Characteristic Curve	See spec. No. FK180-0135 attached.

## 5. Mechanical Characteristics

5-1	External Appearance	As per our Drawing No. K-023105-00.
5-2	Shaft End Play	0.05 to 0.5 mm

