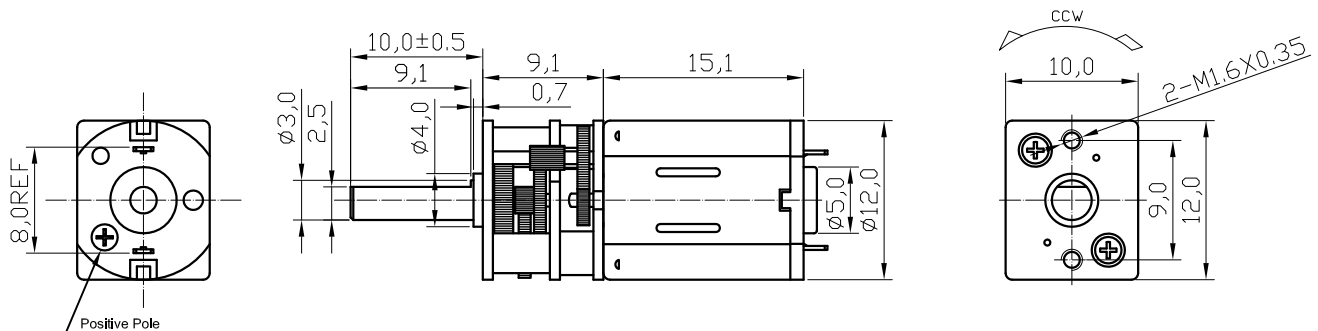


12FN20-100-06120

OUTLINE



1.STANDARD OPERATING CONDITIONS:

- 1.1 Operating Voltage: DC 2.0~6.0V
- 1.2 Operating Temperature: -10~+60° C
- 1.3 Operating Humidity: 5~95%RH
- 1.4 Direction of Rotation:

Counter-clockwise when viewing motor output side with positive voltage applied to positive(red)terminal.

2.MEASURING CONDITIONS:

- 2.1 Voltage: DC 6V
- 2.2 Enviromental temperature: 5° C~35° C
- 2.3 Enviromental humidity: 40%~85%RH
- 2.4 Motor Position: Motor to be held with shaft horizontally .

3.ELECTRICAL CHARACTERISTICS

(At initial stage after 30 seconds run-in)

3.1 Rated

- 3.1.1 Rated Voltage:DC 6V
- 3.1.2 Rated Load: 150g.cm

3.2 No Load

- 3.2.1 No Load Speed: $120 \pm 10\%$ rpm
- 3.2.2 No load Current: ≤ 30 mA

3.3 On Load

- 3.3.1 Rated Current: ≤ 135 mA
- 3.3.2 Rated Speed: $95 \pm 10\%$ rpm

3.4 Start

- 3.4.1 Start Torque: ≥ 550 g.cm
- 3.4.2 Start Voltage: ≤ 1.2 V

3.5 Stall

Stall Current: ≤ 420 mA Insulation Resistance $\geq 1M\Omega$ with DC100V

4.MECHANICAL CHARACTERISTICS:

- 4.1 End Play: 0.05~0.45mm
- 4.2 Shaft radial runout:less than 0.02mm, 3.00mm away from the end
- 4.3 Weight:~10g
- 4.4 Noise: ≤ 50 dB (Distance:10cm,Background noise ≤ 26 dB)
- 4.5 Axial thrust ≤ 3 kgf
- 4.6 Perpendicularity $90 \pm 1^\circ$
- 4.7 Dimension drawing:See<OUTLINE>

5.LIFETIME TEST:

After operating continuously for 50 hours on the condition of 150g.cm with rated voltage, RPM :within $\pm 30\%$ of initial value, Current :within $\pm 30\%$ of initial value and the motor with no obvious anomaly.