

# 广东金力变速科技股份有限公司 GUANGDONG KINGLY GEAR Co., LTD

电机型号(Model):

JL-12FN20-50-06420

样品单号(Sample Code):

XG-2014032803

日期(Date):

2020-05-06

额定电压 V  
Rated Voltage

6

使用环境温度范围 °C  
Operating Condition  
Temperature Range

-10~+60

空载转速 rpm  
No-load speed

420±10%

空载电流 mA  
Free-load Current

≤90

负载转矩 Kgf.cm  
Rated Torque

0.1

负载转速 rpm  
Onload speed

355±10%

负载电流 mA  
Roted Current

≤215

堵转电流 mA  
Stall Current

≤920

堵转力矩 Kgf.cm  
Stall Torque

≥0.4

旋向 CW/CCW  
Direction

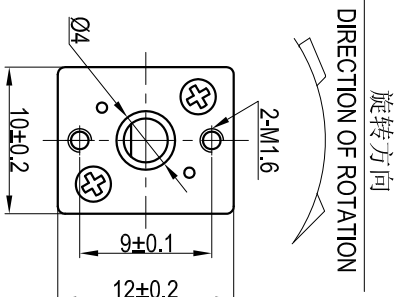
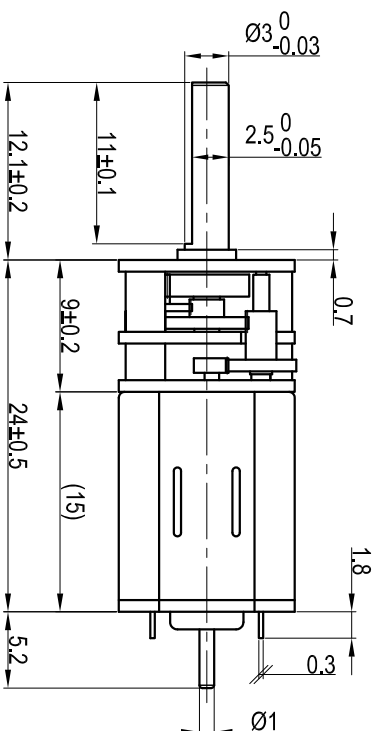
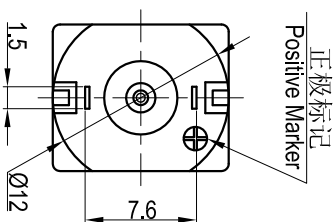
CW

噪音 dBA  
Noise (L=300mm)

55 (Max)

轴向间隙 mm  
Axial gap

0.02~0.3



外形图  
outside drawing

客户确认  
Confirmation Approved

制订:  
Formulate

周晓龙

Unit  
mm

Size  
A4

审核:  
Audit

version  
A0

Scale  
2:1

批准:  
Approved

Phase marker

Page

批准:  
Approved



Page

广东金力变速科技股份有限公司

GUANGDONG KINGLY GEAR Co., LTD

样品测试报告

Sample Test Report

|                       |                         |                                |                   |
|-----------------------|-------------------------|--------------------------------|-------------------|
| 产品型号<br>Product model | 样品数量<br>Sample quantity | 样品单号<br>Sample reportor number | 测试日期<br>Test date |
| JL-12FN20-50-06420    | 1                       | XG-2014032803                  | 2020-05-06        |

1. 电气检查, 确保电源正确设置  
Electrical test, power setting confirmation

| 项目<br>Content                | 标准<br>Standard | 测试电压<br>Measure voltage:6.0VDC |   |   |   | 负载力矩<br>Load torque (Kgf·cm) |   |   |   |   | 0.1 |     |       |
|------------------------------|----------------|--------------------------------|---|---|---|------------------------------|---|---|---|---|-----|-----|-------|
|                              |                | 1                              | 2 | 3 | 4 | 5                            | 6 | 7 | 8 | 9 | 10  | AVG |       |
| 起动电压<br>Start voltage        | ≤1.0V          | 0.5                            |   |   |   |                              |   |   |   |   |     |     | 0.5   |
| 空载电流<br>Noload current       | ≤90mA          | 60                             |   |   |   |                              |   |   |   |   |     |     | 60    |
| 空载转速<br>Noload speed         | 420±10%<br>rpm | 420                            |   |   |   |                              |   |   |   |   |     |     | 420.0 |
| 负载电流<br>Onload current       | ≤215mA         | 166                            |   |   |   |                              |   |   |   |   |     |     | 166   |
| 负载转速<br>Onload speed         | 355±10%<br>rpm | 355.0                          |   |   |   |                              |   |   |   |   |     |     | 355.0 |
| 起动力矩<br>Start torque         | ≥0.4Kgf·cm     | 0.5                            |   |   |   |                              |   |   |   |   |     |     | 0.5   |
| 旋转方向<br>Dirction of rotation | CW             | CW                             |   |   |   |                              |   |   |   |   |     |     | CW    |
| 噪声<br>Noise                  | 55dB Max       | OK                             |   |   |   |                              |   |   |   |   |     |     | OK    |

2. 尺寸测量 Size measurement (mm)

| 项目<br>Content             | 标准<br>Standard    | 量具<br>Measurement tool | 记录<br>Record |   |   |   |   |   |   |   |   |     |  |       |
|---------------------------|-------------------|------------------------|--------------|---|---|---|---|---|---|---|---|-----|--|-------|
|                           |                   |                        | 1            | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | AVG |  |       |
| 轴伸<br>Out length of shaft | 12.1±0.2          | A                      | 12.15        |   |   |   |   |   |   |   |   |     |  | 12.15 |
| 轴向间隙<br>Axial gap         | 0.02~0.3          | G                      | 0.04         |   |   |   |   |   |   |   |   |     |  | 0.04  |
| 扁位长度<br>D-CUT length      | 11±0.1            | A                      | 10.98        |   |   |   |   |   |   |   |   |     |  | 10.98 |
| 扁位厚度<br>D-CUT thickness   | 2.5<br>[0, -0.05] | C                      | 2.49         |   |   |   |   |   |   |   |   |     |  | 2.49  |
| 轴径<br>Shaft diameter      | φ3<br>[0, -0.03]  | C                      | 2.98         |   |   |   |   |   |   |   |   |     |  | 2.98  |
| 齿轮箱长度<br>Gearbox length   | 12±0.2            | A                      | 11.91        |   |   |   |   |   |   |   |   |     |  | 11.91 |
| 齿轮箱宽度<br>Gearbox width    | 10±0.2            | A                      | 9.92         |   |   |   |   |   |   |   |   |     |  | 9.92  |
| 齿轮箱高度<br>Gearbox hight    | 9±0.2             | A                      | 8.98         |   |   |   |   |   |   |   |   |     |  | 8.98  |

3. 外观及包装检查 Inspection of appearance and packaging

| 项目<br>Content                            | 结果<br>Result | 项目<br>Content              | 结果<br>Result |
|--|--------------|----------------------------|--------------|
| 客户安装孔(2-M1.6)<br>Customer mounting hole  | ■ OK □ NG    | 正极标识<br>Positive marking   | ■ OK □ NG    |
| 齿轮箱连接紧固<br>Gear box connection situation | ■ OK □ NG    | 焊线正确<br>Wire welding check | □ OK □ NG    |
| 电机连接位置正确<br>Motor connection location    | ■ OK □ NG    | 整体外观<br>Appearance         | ■ OK □ NG    |
| 铭牌<br>Marking                            | □ OK □ NG    | 包装<br>Packaging            | ■ OK □ NG    |
| 电机后盖铆点<br>Motor endcap crimp             | ■ OK □ NG    | 其它<br>Others               | ■ OK □ NG    |

备注 Remark: 综合判定 Comprehensive determination: ■ OK □ NG

量具代号 Measurement tool code :

A: 游标卡尺 vernier caliper; B: 百分表 dial indicator; C: 千分尺 micrometer; D: 转速计 speed gauge; E: 电流表 ammeter;  
F: 塞规 plug gauge; G: 高度计 altimeter

审核 Approval:

检验 Check:

制表 Design: 周晓龙