

符合RoHS指令要求
CONFORM TO RoHS INSTRUCTIONS

◎步进电机规格书

SPECIFICATION FOR STEPPER MOTOR

上海四横电机制造有限公司

◎电气特性参数/ELECTRICAL PARAMETER

60BYGH276-2004A

◎力矩曲线/MOMENT CURVE

驱动方式/DRIVING MODE: 恒流驱动/CONSTANT CURRENT DRIVE
 驱动电压/DRIVING VOLTAGE: 24VDC
 励磁方式/EXCITATION MODE: 2相/PHASES
 备注: 电流峰值等于 $\sqrt{2}$ 倍的有效值
 REMARK: PEAK CURRENT IS EQUAL TO $\sqrt{2}$ TIMES EFFECTIVE VALUE

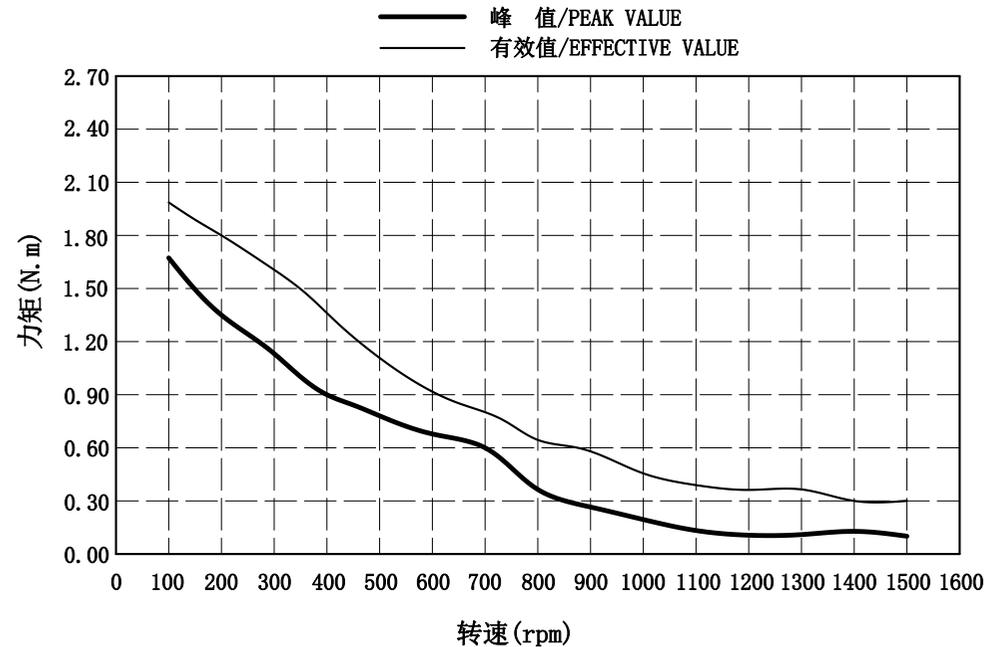
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|----------------------------------------|------------------------|----------|
| 相数 PHASES | 2 | |
| 步进角 STEP ANGLE | 1.8° ±5% | |
| 步进角误差 STEP ANGLE ERRORS | ±0.09° | 注释)3 |
| 额定电压 RATED VOLTAGE | 2.4 V | |
| 额定电流 RATED CURRENT | 2 A | |
| 电阻 RESISTANCE | 1.2 ohm±10% | at 20° C |
| 电感 INDUCTANCE | | 注释)1 |
| 保持力矩 HOLDING TORQUE | 2.5 N.m | 注释)2 |
| 绝缘耐压 DIELECTRIC STRENGTH | 500V A.C 1分钟/MINUTE | 注释)4 |
| 绝缘电阻 INSULATION RESISTANCE | 100 MΩ 以上/MIN. | 注释)5 |
| 绝缘等级 INSULATION CLASS | Class B | |
| 温度上升 TEMPERATURE RISE | 80K MAX. | 注释)6 |
| 转子惯量 ROTOR INERTIA | ≈1600g.cm ² | |
| 重量 WEIGHT | ≈2400g | |
| 最大轴向跳动 MAXIMUM AXIAL RUNOUT TOLERANCE | 0.075mm(负载920g) | |
| 最大径向跳动 MAXIMUM RADIAL RUNOUT TOLERANCE | 0.025mm(负载450g) | |
| 使用环境温度 CONSERVE AMBIENT TEMP. | 0° C——+50° C | |
| 使用环境湿度 CONSERVE AMBIENT HUM. | 20%RH——90%RH | 注释)8 |
| 保存环境温度 CONSERVE AMBIENT TEMP. | -20° C——+70° C | |
| 保存环境湿度 CONSERVE AMBIENT HUM. | 15%RH——95%RH | 注释)8 |
| 使用寿命 SERVICE LIFE | 5000 小时/HOURS | 注释)7 |

注释):

- 在1k Hz 1Vrms条件下测试;
- 在额定电流, 2相励磁下进行测试;
- 不包括励磁误差2相励磁;
- 在电机引线和铁芯之间加50HZ交流电压1分钟无异常, 漏电流小于3mA;
- 在电机引线和铁芯之间加500V. D. C电压;
- 额定电流无负载安装在铝板上使用电阻法测试;
- 额定电流轴承温度低于80°C条件下进行寿命试验;
- 表面无结霜;

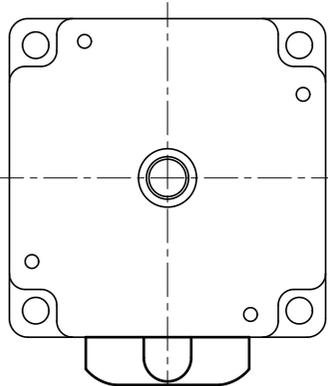
Notes):

- Testing at 1K hz 1 VRMS;
- Test at rated current, 2-phase excitation;
- Excluding excitation error 2 phase excitation;
- Add 50 HZ AC voltage between motor lead and iron core for 1 minute without abnormal, leakage current less than 3 ma;
- Add 500 v. between the motor lead and the iron core. D. C Voltage;
- Rated current no load mounting on aluminum plate using resistance method;
- Rated current bearing temperature below 80 ° C for Life Test;
- No Frost on the surface;

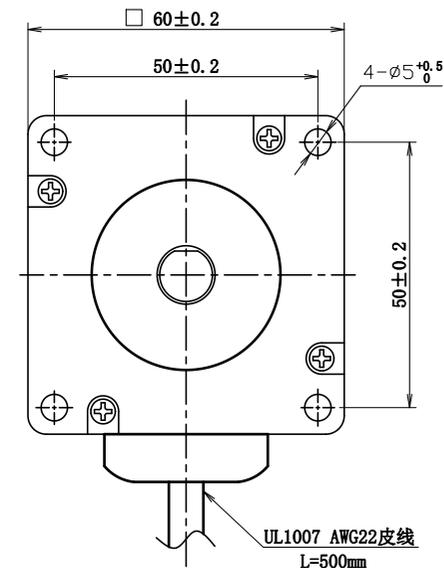
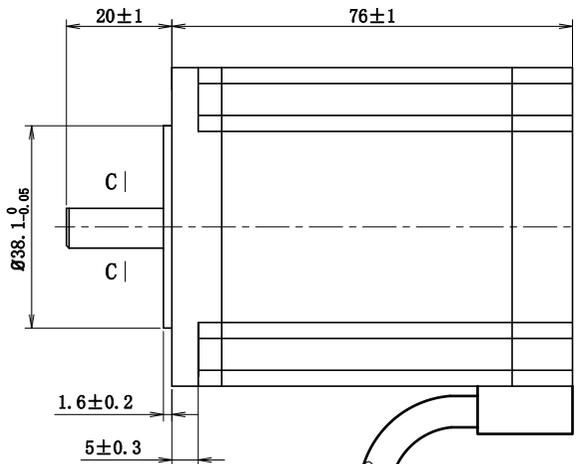
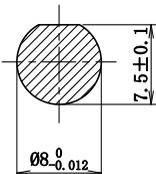


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| CONFIRMED&ACCEPTED BY CUTOMER (客户确认&接受) | | | | 型号/MODEL | |
| COMPANY CHOP&SIGNATURE (盖章&签名) | | | | 60BYGH276-2004A | |
| 一般公差 TOLERANCE | ±0.3/±3° | 版本 REV. | 年月日 DATE | 变更番号 ECO NO. | 变更内容 REVISIONS |
| 设计/DESIGNED | | 比例 SCALE | 1:1 | 品名 TITLE | 步进电机规格书 STEPPING MOTOR SPECIFICATION |
| 审核/CHECKED | | 单位 UNIT | mm | 上海四横电机制造有限公司 | |
| | | | | 设计 BY | 备注 NOTE |
| | | | | REV. | A |
| | | | | 三视图 THIRD ANGLE PROJECTION | |
| | | | | 页 SHEET | 1/1 |

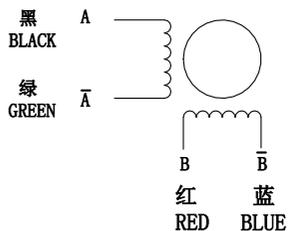
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C-C(2:1)



接线图/Wiring Diagram

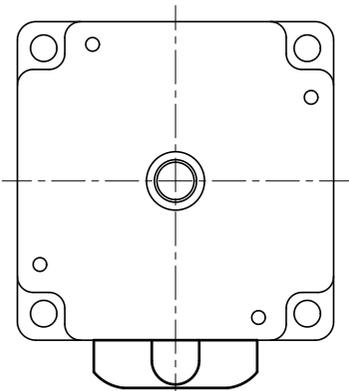


励磁顺序(2相励磁)
EXCITING SEQUENCE (TWO PHASE)

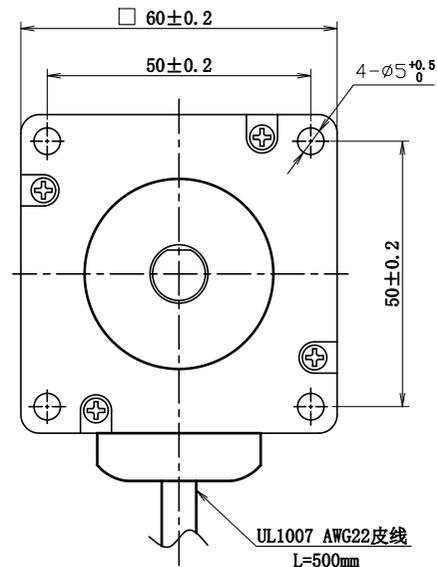
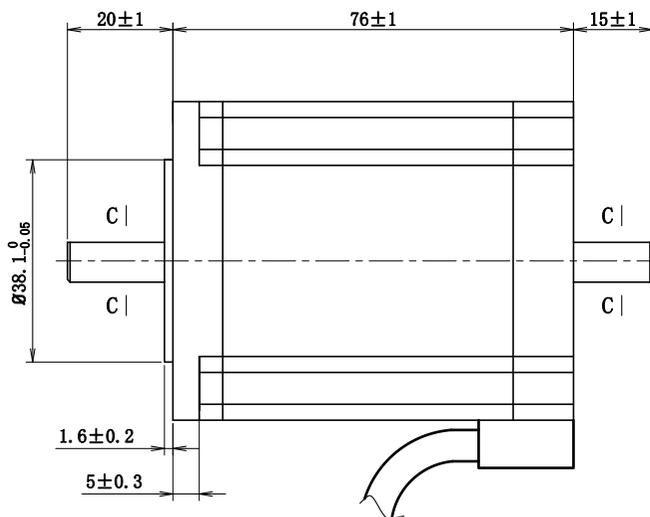
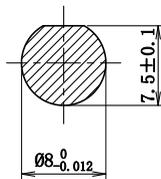
| STEP | A | B | Ā | B̄ | |
|------|---|---|----|----|----------|
| 1 | + | + | - | - | CCW ↑ |
| 2 | - | + | + | - | |
| 3 | - | - | + | + | |
| 4 | + | - | - | + | |

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| A | | 2013-03-08 | — | 初版 | SLong |
| 一般公差 TOLERANCE | | ±0.3/±3° | 版本 REV. | 年月日 DATE | 变更番号 ECO NO. |
| 制图/DRAWN | | 比例 SCALE | | 品名 TITLE | 设计 BY |
| 设计/DESIGNED | | 1:1 | | 步进电机规格书 STEPPING MOTOR SPECIFICATION | 备注 NOTE |
| 审核/CHECKED | | 单位 UNIT | | | mm |
| 承认/APPROVED | | 上海四横电机制造有限公司 | | | 页 SHEET |
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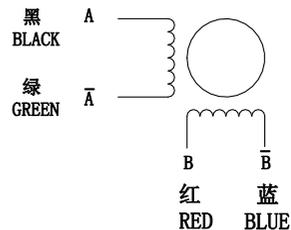
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C-C(2:1)



接线图/Wiring Diagram



励磁顺序(2相励磁)
EXCITING SEQUENCE (TWO PHASE)

| STEP | A | B | Ā | B̄ |
|------|---|---|----|----|
| 1 | + | + | - | - |
| 2 | - | + | + | - |
| 3 | - | - | + | + |
| 4 | + | - | - | + |

CW ↑ CCW ↓

| | | | | | |
|--------------------------------------------|------------|--------------|-------------|-----------------|-----------------------------------------|
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