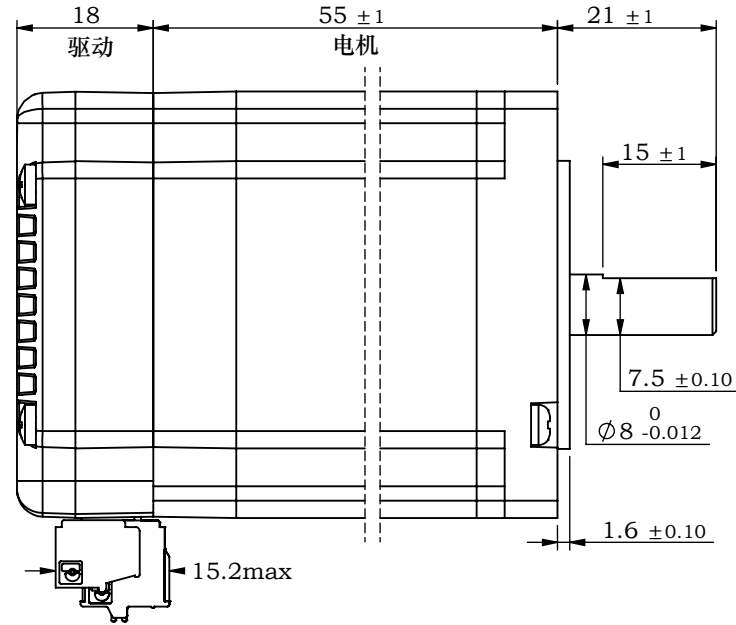
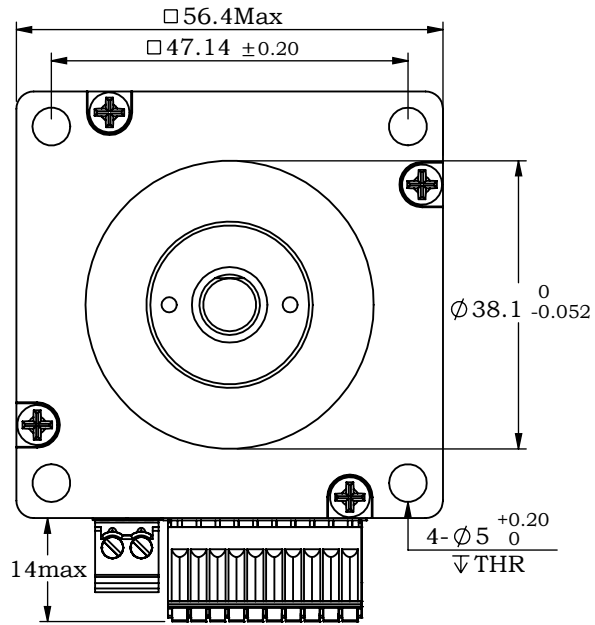
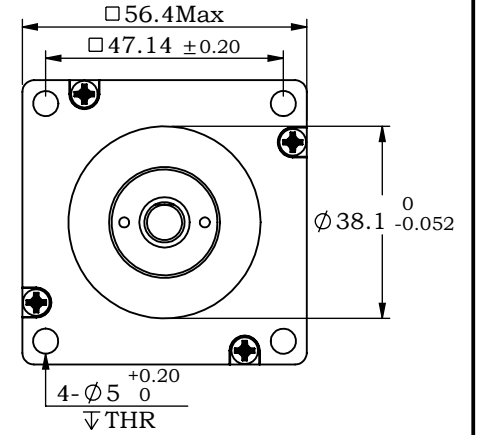
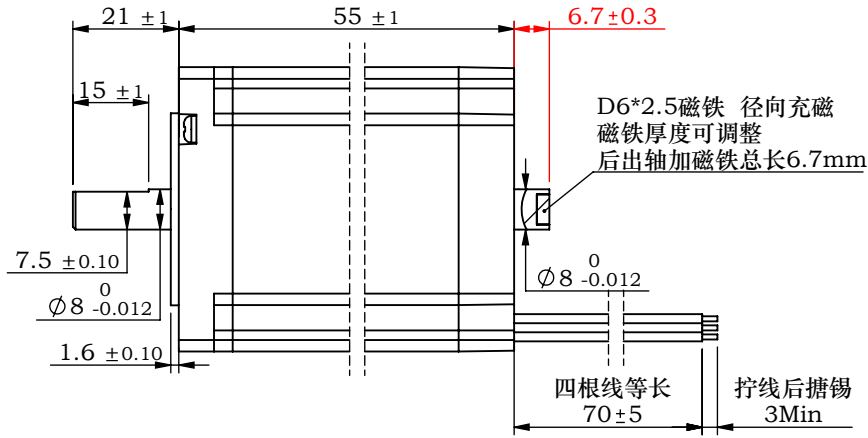
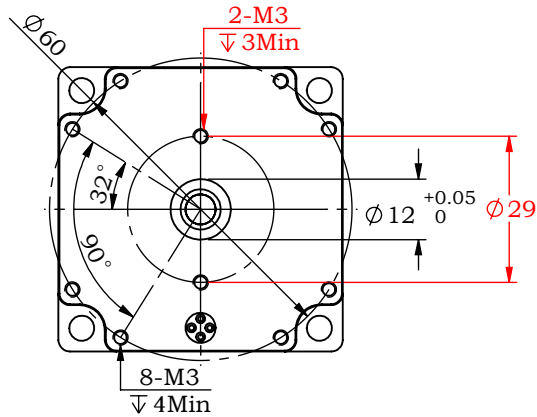


※ 尺寸/Dimensions 单位/Unit: (mm)



| ※ 规格/ Specification | | ※ 端口功能/Port Function | | ※ 端子定义/Terminal definitions | | ※ 铭牌内容/Label discription | | | | | | | | | | | | | |
|---------------------|---------------------------------|-----------------------------------|-----|---|------|--|------|----------------------------------|-------|-------|------|------|------|------|------|-------|-------|-------|----|
| 输入电压范围 | 24~60vdc | 序号 | 名称 | 功能 | | <div style="border: 1px solid black; padding: 5px; margin-top: 10px;"> Type: IG57E12 1.8DEG 4.0A 24~60 VDC INPUT www.lesn.com Pro. Date:2022/10/27 </div> | | | | | | | | | | | | | |
| 输出力矩范围 | 最大1.2N.m | 1 | V+ | 电源正 (24~60vdc) | | | | | | | | | | | | | | | |
| 功率放大类型 | 双 H-桥, 4 象限 | 2 | V- | 电源地 (GND) | | | | | | | | | | | | | | | |
| 保护 | 过压、欠压、过流、绕组开路、位置偏差 | 3 | PU+ | 光电隔离, 差分, 兼容5~24VDC, 默认脉冲输入口, 滤波频率300KHz; 可通过上位机定义端口功能, 滤波频率。 | | | | | | | | | | | | | | | |
| 电流设置 | 软件可调, 0.5~6.5可调, 出厂适配电机 | 4 | PU- | | | | | | | | | | | | | | | | |
| 细分设置 | 拨码16档可调; 软件200-1000000整数可调 | 5 | DR+ | 光电隔离, 差分, 兼容5~24VDC, 默认方向输入口, 滤波频率300KHz; 可通过上位机定义端口功能, 滤波频率。 | | | | | | | | | | | | | | | |
| 速度范围 | 最高可达3000rpm | 6 | DR- | | | | | | | | | | | | | | | | |
| 距离范围 | 超过 10,000,000 圈 (200 steps/rev) | 7 | EN+ | 光电隔离, 差分, 兼容5~24VDC, 默认使能输入口, 滤波频率10KHz; 可通过上位机定义端口功能, 滤波频率。 | | | | | | | | | | | | | | | |
| 滤波频率 | 出厂默认300KHZ, 可通过软件设置 | 8 | EN- | | | | | | | | | | | | | | | | |
| 控制方式 | 脉冲+方向; 双脉冲 | 9 | AL+ | 报警状态输出端口, 可检测电机报警状态, 默认常闭, 正常时输出。可通过软件取反或设置成其他功能。 | | | | | | | | | | | | | | | |
| 编码器反馈 | 1000线(4000 Counts)编码器反馈 | 10 | AL- | | | | | | | | | | | | | | | | |
| 非易失性存储 | 配置参数存储在MCU内部的FLASH中 | 11 | EX+ | 到位状态输出端口, 可检测电机到位状态, 到位时输出。可通过软件取反或设置成其他功能。 | | | | | | | | | | | | | | | |
| 重量 | ≈ 0.8 Kg | 12 | EX- | | | | | | | | | | | | | | | | |
| 转子惯量 | ≈ 280 g.cm ² | ※ 拨码设置/Serial port Settings | | | | | | | | | | | | | | | | | |
| 使用温度范围 | 0° C~+40° C | 细分 | 400 | 800 | 1600 | 3200 | 6400 | 12800 | 25600 | 51200 | 1000 | 2000 | 4000 | 5000 | 8000 | 10000 | 20000 | 40000 | |
| 使用湿度范围 | 20%RH~90%RH | SW1 | ON | OFF | ON | OFF | ON | OFF | ON | OFF | ON | OFF | ON | OFF | ON | OFF | ON | OFF | ON |
| 通讯方式 | TTL | SW2 | ON | ON | OFF | OFF | ON | ON | OFF | OFF | ON | ON | OFF | OFF | ON | ON | OFF | OFF | ON |
| 波特率 | 115200 | SW3 | ON | ON | ON | ON | OFF | OFF | OFF | OFF | ON | ON | ON | ON | OFF | OFF | OFF | OFF | ON |
| 数据位 | 8 | SW4 | ON | ON | ON | ON | ON | ON | ON | OFF | OFF | OFF | OFF | OFF | OFF | OFF | OFF | OFF | ON |
| 停止位 | 1 | SW5:用于设定单双脉冲, OFF时为脉冲+方向, ON时为双脉冲 | | | | | | | | | | | | | | | | | |
| 校验位 | 无 | SW6:用于设定运动方向, OFF时为CW, ON时为CCW | | | | | | | | | | | | | | | | | |
| | | | | 第一角画法 Frist Angel View | | 型号/Model | | IG57E12 | | | | | | | | | | | |
| | | | | | | 品号/Product No. | | | | | | | | | | | | | |
| | | | | 公差 Tolerance | | 比例 Scale | | 页码 Sheet | | | | | | | | | | | |
| | | | | ±0.3 | | 1:1 | | 1/1 | | | | | | | | | | | |
| | | | | | | 名称/Name | | 集成式步进伺服 Integrated step servo | | | | | | | | | | | |

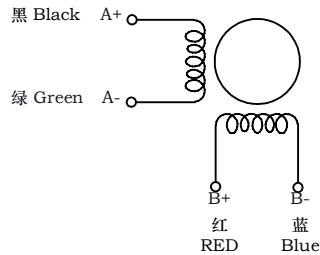
※ 尺寸/Dimensions 单位/Unit: (mm)



※ 电机规格/Motor Specification

| | |
|---------------------------------------|-------------------------|
| 相数/No. of phase | 2 相/phase |
| 步距角/Basic step angle | 1.8° |
| 步距角误差(空载)Positional accuracy(no-load) | ±0.09° 以下/Max |
| 额定电流/Rated current | 4.0 A |
| 保持扭矩/Holding torque | 1.2 N.m |
| 相电阻/Phase resistance | 0.44 ± 10% ohm(20°C) |
| 相电感/Phase inductance | 1.4 ± 20% mH(1KHz) |
| 转子惯量/Rotor inertia | ≈ 280 g.cm ² |
| 重量/Weight | ≈ 0.8 Kg |
| 绝缘耐压/Dielectric strength | 500V A.C |
| 绝缘电阻/Insulation resistance | 100MΩ以上/MIN |
| 绝缘等级/Insulation class | B |
| 使用温度范围/Operation ambient temperature | 0° C~+50° C |
| 使用湿度范围/Operation ambient humidity | 20%RH~90%RH |
| 保存温度范围/Storage ambient temperature | -20° C~+70° C |
| 保存湿度范围/Storage ambient humidity | 15%RH~95%RH |

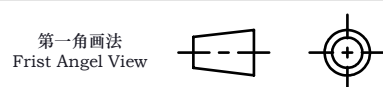
※ 接线图/Wiring diagram



※ 励磁顺序 (2相励磁)
Phase sequence(2 phase exciting)

| | | | | | | |
|---------|------|---|----|---|----|----------|
| CW ↓ | Step | A | A- | B | B- | ↑ CCW |
| | 1 | + | + | - | - | |
| | 2 | - | + | + | - | |
| | 3 | - | - | + | + | |
| | 4 | + | - | - | + | |

※ 铭牌内容
Label discription



名称/Name
两相步进电机
2 phase stepping motor

| | |
|------------------------------|------------------|
| 型号/Model | IC57A12-D2B50D07 |
| 品号/Product No. | |
| 客户型号 Customer model | |
| 客户品号 Customer Product No. | |

| | | | | | |
|---------------|---------|----------------------|-----------------|-------------|-------------|
| B | | 后端盖增加两个螺纹孔, 后出轴调整尺寸 | 公差 Tolerance | 比例 Scale | 页码 Sheet |
| A | | 初版 | ±0.3 | 1:1.5 | 1/1 |
| 版本.Rev | 日期/Date | 变更内容/Revision record | | | |
| 制图 Drawn | Name | Date | 设计 Design | Name | Date |
| 审核 Checked | | | 批准 Approved | | |

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立三机电 Shenzhen Lisan Machinery & Electric Co., Ltd