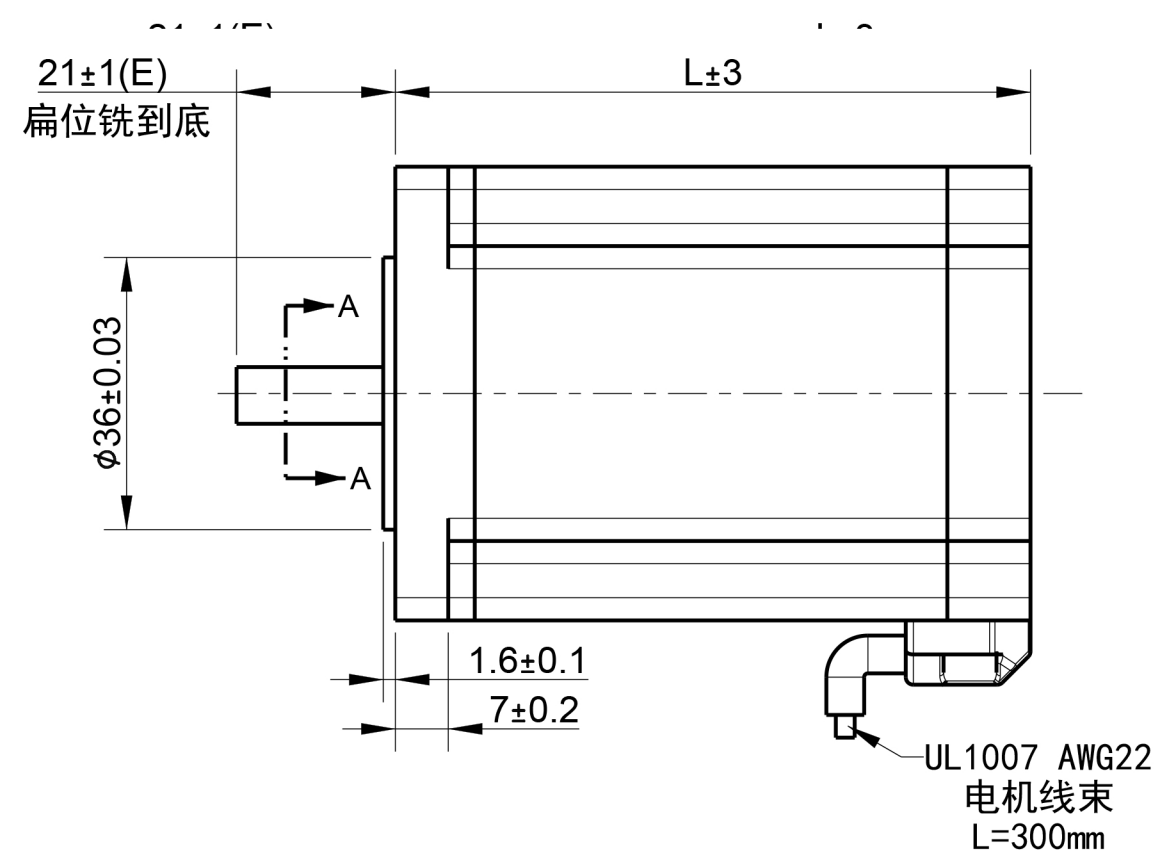


| REVISION HISTORY |         |            |                 |            |
|------------------|---------|------------|-----------------|------------|
| REV版本            | ECN NO. | DATE日期     | DESCRIPTION 描述  | ENGINEER工程 |
| A                | #       | 2020-12-03 | INITIAL RELEASE | TF         |



| 型号<br>Model | 相数<br>Phase | 步距角(°)<br>Step Angle | 保持转矩<br>(N·M)<br>Torque | 额定电流(A)<br>Rated Current | 转动惯量<br>(g·cm <sup>2</sup> )<br>Rotor Inertia | 电机重量<br>(kg)<br>Weight | 机身長(L)<br>Length | 轴径(D)<br>Shaft Dia | 轴长(E)<br>Shaft L | 铣扁位(F)<br>Thickness |
|-------------|-------------|----------------------|-------------------------|--------------------------|-----------------------------------------------|------------------------|------------------|--------------------|------------------|---------------------|
| ML60-88     | 2           | 1.8                  | 3.0                     | 4                        | 840                                           | 1.29                   | 84               | 8                  | 21               | 7.5                 |

| 项目ITEM                                    | 参数PARAMETERS          |
|-------------------------------------------|-----------------------|
| 步距角精度Precision of Step Angle              | ± 5%                  |
| 电阻精度Precision of Resistance               | ± 10%                 |
| 电感精度Precision of Inductance               | ± 20%                 |
| 温升Temperature                             | 80 °C MAX             |
| 环境温度/湿度Enviroment Temp&Humidity           | -10 ~ +50 °C , 85%    |
| 绝缘电阻Insulation Resistance                 | 100 MΩ Min@500VDC     |
| 耐电压Voltage Resistance                     | 1 minute @ 500VAC-5mA |
| 转轴径向跳动<br>Dynamic Radial Runout Tolerance | 0.02mm Max @ 450g     |
| 转轴轴向跳动<br>Dynamic axial Runout Tolerance  | 0.08mm Max @ 450g     |

|                                                                                                                                                                                                                                                    |                                                                                       |                                                             |           |          |                                                                                                                                           |          |             |     |             |        |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|-------------------------------------------------------------|-----------|----------|-------------------------------------------------------------------------------------------------------------------------------------------|----------|-------------|-----|-------------|--------|
| TOLERANCE UNLESS OTHERWISE SPECIFIED                                                                                                                                                                                                               |                                                                                       | 材料符合RoHS2.0指令要求<br>All Material are to be RoHS2.0 Compliant |           |          | 深圳市鸣雷智能控制有限公司<br>Shenzhen thunder intelligent Control Co.,Ltd<br>公司官网 Company website: <a href="http://www.szmlsf.com">www.szmlsf.com</a> |          |             |     |             |        |
| GB/T1804-m eqv<br>ISO 2768-1 class m<br>$\leq 6 \pm 0.1$<br>$> 6 \sim 30 \pm 0.2$<br>$> 30 \sim 120 \pm 0.3$<br>$> 120 \sim 400 \pm 0.5$<br>$> 400 \sim 1000 \pm 0.8$<br>$> 1000 \sim 2000 \pm 1.2$<br>Angles: $\pm 0.5^\circ$<br>Chamfer: $\pm 5$ |                                                                                       | ALL UNITS ARE IN MM                                         |           |          |                                                                                                                                           |          |             |     |             |        |
|                                                                                                                                                                                                                                                    |                                                                                       | TITEL                                                       | SIGNATURE | DATE     | 名称<br>TITLE                                                                                                                               | 60开环步进电机 |             |     |             |        |
|                                                                                                                                                                                                                                                    |                                                                                       | 设计<br>DESIGN                                                | TF        | 20201027 | 图号<br>DWG.NO.                                                                                                                             | ML60-88  |             |     |             |        |
|                                                                                                                                                                                                                                                    |                                                                                       | 审核<br>CHECK                                                 | TF        | 20201028 | 材料<br>MATERIAL                                                                                                                            | 组合材料     |             |     | SIZE        | A3     |
| 第三视角画法<br>3RD ANGLE<br>PROJECTION                                                                                                                                                                                                                  |  | 批准<br>APPROVE                                               |           |          | 版本<br>REV                                                                                                                                 | A        | 比例<br>SCALE | 1:1 | 页数<br>SHEET | 1 OF 1 |