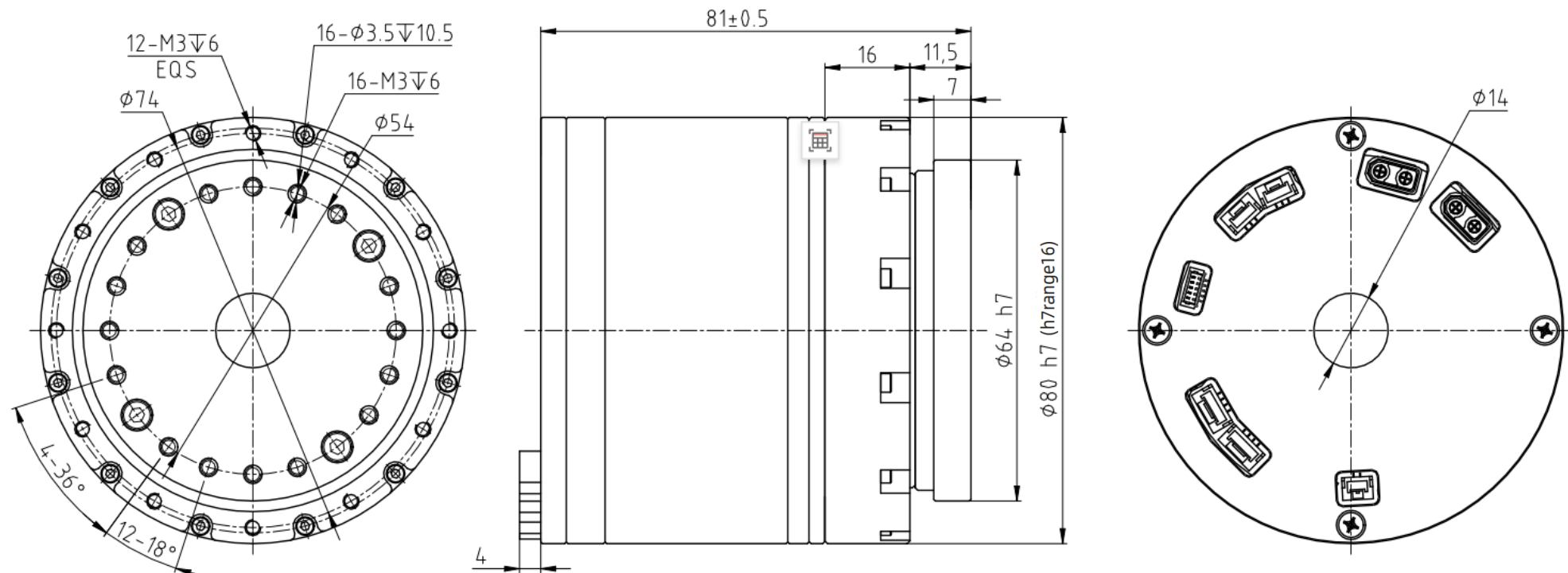
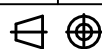
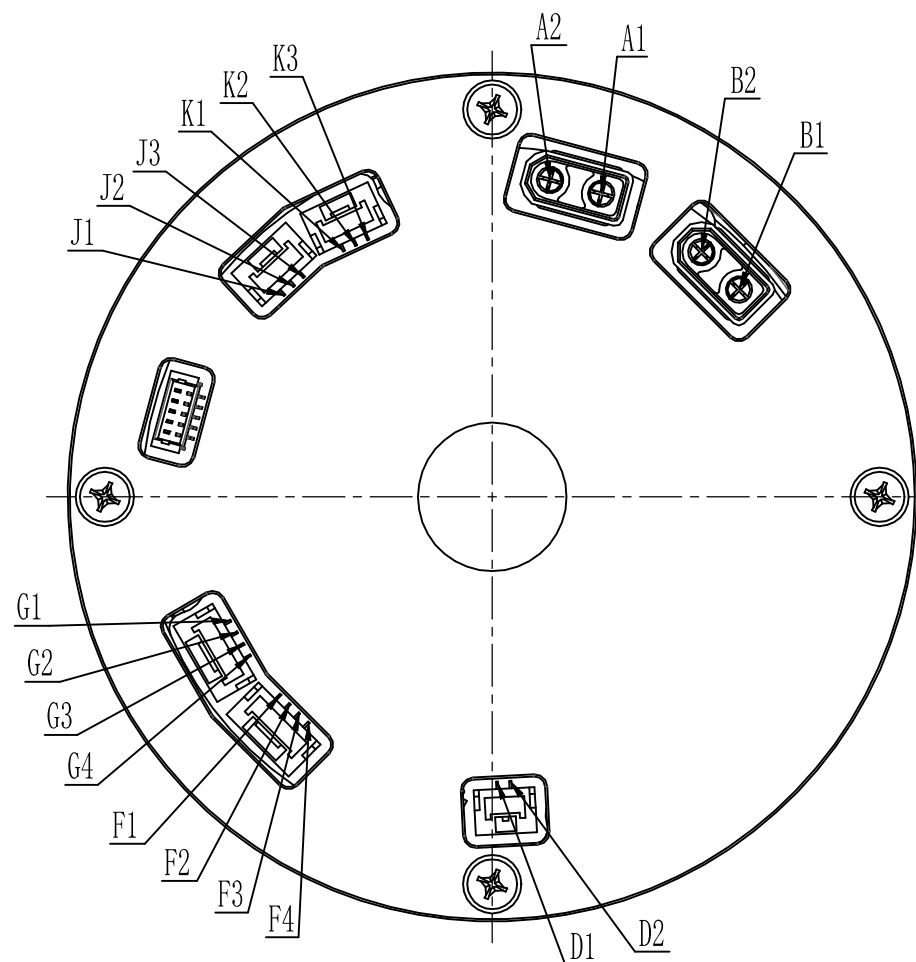




|                                                                                       |    |      |     |     |                 |                                                                                                                              |       |  |
|---------------------------------------------------------------------------------------|----|------|-----|-----|-----------------|------------------------------------------------------------------------------------------------------------------------------|-------|--|
|                                                                                       |    |      |     |     | Rotary Actuator | L80I-E-XXX-BF-C00                                                                                                            |       |  |
|                                                                                       |    |      |     |     |                 | GJ-DW-ME-0052                                                                                                                |       |  |
| 标记                                                                                    | 处数 | 更改内容 | 签 字 | 日 期 |                 | 客户图样标记    重量(kg)    比 例                                                                                                      |       |  |
| 设 计                                                                                   |    |      |     |     |                 |                                                                                                                              |       |  |
| 审 核                                                                                   |    |      |     |     |                 |                                                                                                                              |       |  |
| 批 准                                                                                   |    |      |     |     |                 |  <b>Laitual Drive</b><br>浙江来福谐波传动股份有限公司 |       |  |
| 工艺会签                                                                                  |    |      |     |     |                 |                                                                                                                              |       |  |
|  |    | 版本号  | A4  |     | 共 2 页           |                                                                                                                              | 第 1 页 |  |



## Technical requirements:

1. Insulation resistance (DC500V) > 500MΩ, insulation withstand voltage AC500V (1 minute), less than 5mA;
2. Motor-side encoder resolution: 16-bit multi-turn, 17-bit single-turn;
3. Encoder resolution at reducer end: 17-bit singleturn;
3. Bus protocol: EtherCAT.
4. Appearance without obvious burrs, scratches, bumps and other defects;
5. Operating temperature: -25~55;
6. Unidirectional positioning accuracy: 60Arc sec, repeat positioning accuracy: 20Arc sec.

Module Signal Definition

| Pin No. | Signal Name | Remarks                                                |
|---------|-------------|--------------------------------------------------------|
| A1/B1   | VBUS+       | VBUS+Bus Power Input/Output Positive Terminal          |
| A2/B2   | VBUS-       | VBUS-Bus Power Input/Output Negative Terminal          |
| D1      | BAT+        | BAT+Multiturn Encoder Backup Battery Positive Terminal |
| D2      | BAT-        | BAT-Multiturn Encoder Backup Battery Negative Terminal |
| F1      | E1_RX+      | E1_RX+EtherCAT Output Receive Positive Terminal        |
| F2      | E1_RX-      | E1_RX-EtherCAT Output Receive Negative Terminal        |
| F3      | E1_TX+      | E1_TX+EtherCAT Output Transmit Positive Terminal       |
| F4      | E1_TX-      | E1_TX-EtherCAT Output Transmit Negative Terminal       |
| G1      | E0_RX+      | E0_RX+EtherCAT Input Receive Positive Terminal         |
| G2      | E0_RX-      | E0_RX-EtherCAT Input Receive Negative Terminal         |
| G3      | E0_TX+      | E0_TX+EtherCAT Input Transmit Positive Terminal        |
| G4      | E0_TX-      | E0_TX-EtherCAT Input Transmit Negative Terminal        |
| J1/K1   | RS485_A     | RS485_A RS485 Bus A Terminal                           |
| J2/K2   | RS485_GND   | RS485_GND RS485 Bus Ground                             |
| J3/K3   | RS485_B     | RS485_B RS485 Bus B Terminal                           |

Module Data

| Ratio | Rated Torque (Nm) | Permissible peak torque at start/stop (Nm) | Instantaneous permissible max.torque (Nm) | Rated Speed (rpm) | Max. Speed (rpm) | Rated Current (A) | Max.Current (A) | Tq-Constant (Nm/Arms) | Inertia Moment (kg·mm <sup>2</sup> ) | Weight (kg)          |
|-------|-------------------|--------------------------------------------|-------------------------------------------|-------------------|------------------|-------------------|-----------------|-----------------------|--------------------------------------|----------------------|
| 51    | 34                | 44                                         | 91                                        | 58.8              | 98               | 10.42             | 13.48           | 3.26                  | 65                                   | 1.36<br>(With Brake) |
| 81    | 35                | 56                                         | 113                                       | 37                | 61.7             | 6.75              | 10.8            | 5.18                  |                                      |                      |
| 101   | 51                | 70                                         | 143                                       | 29.7              | 49.5             | 7.89              | 10.83           | 6.46                  |                                      |                      |
| 121   | 51                | 70                                         | 112                                       | 24.8              | 41.3             | 6.59              | 9.04            | 7.74                  |                                      |                      |

Rotary Actuator

L80I-E-XXX-BF-C00

GJ-DW-ME-0052

Laitual Drive

浙江来福谐波传动股份有限公司

|      |    |      |    |    |
|------|----|------|----|----|
| 标记   | 处数 | 更改内容 | 签字 | 日期 |
| 设计   |    |      |    |    |
| 审核   |    |      |    |    |
| 批准   |    |      |    |    |
| 工艺会签 |    |      |    |    |
| 版本号  |    | A4   |    |    |

|        |        |     |
|--------|--------|-----|
| 客户图样标记 | 重量(kg) | 比例  |
|        |        | 1:1 |
| 共 2 页  | 第 2 页  |     |