

A

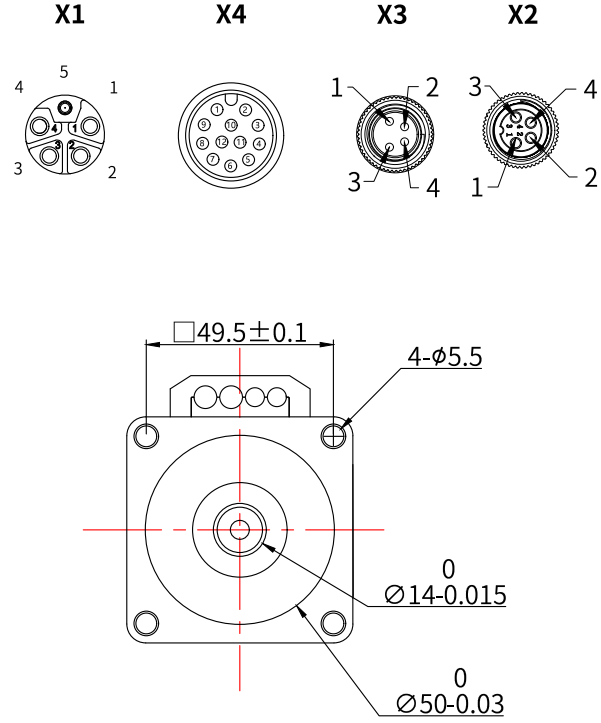
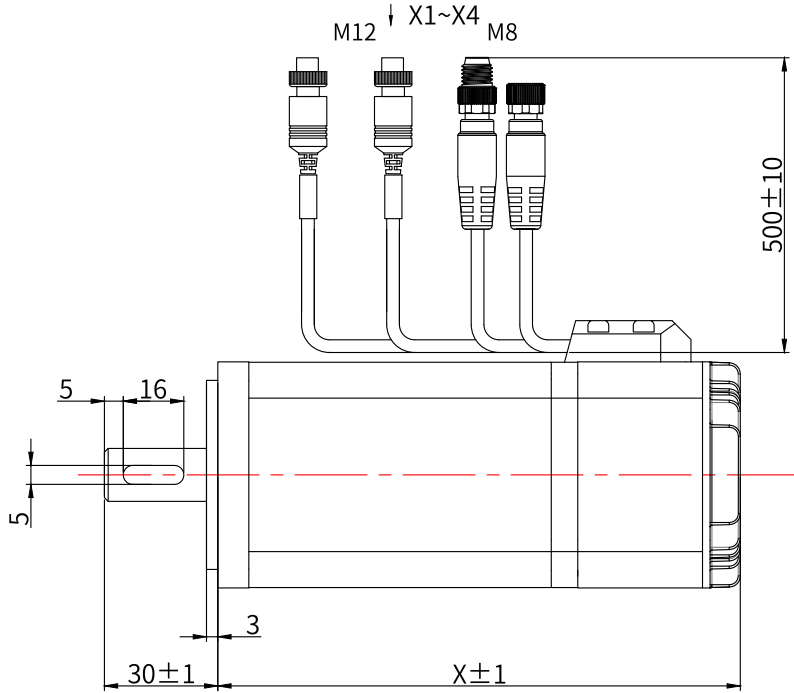
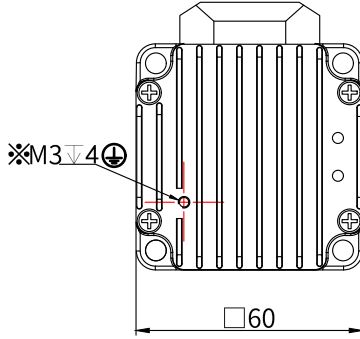
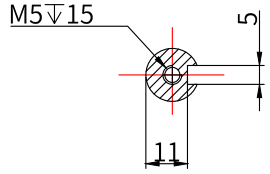
B

C

D

| 端子 |          | X1 电源 |       |       |       |       |   |      |        |     |      | X4 I/O  |     |              |              |         |              |           |           |    |    | X2 IN |        |        |     | X3 OUT |     |        |        |     |    |
|----|----------|-------|-------|-------|-------|-------|---|------|--------|-----|------|---------|-----|--------------|--------------|---------|--------------|-----------|-----------|----|----|-------|--------|--------|-----|--------|-----|--------|--------|-----|----|
|    |          | 1     | 2     | 3     | 4     | 5     | 6 | 1    | 2      | 3   | 4    | 5       | 6   | 7            | 8            | 9       | 10           | 11        | 12        | 13 | 14 | 1     | 2      | 3      | 4   | 外壳     | 1   | 2      | 3      | 4   | 外壳 |
| 信号 | CANopen  | 电源-   | 控制电源+ | 制动电阻- | 驱动电源+ | 制动电阻+ | - | DO1+ | DO_COM | AI1 | AGND | BAT_PWR | GND | STO_FB-/DI1- | STO_FB+/DI1+ | NC/DI2+ | STO_COM/DI2- | STO2/DI3+ | STO1/DI3- | -  | -  | GND   | CAN_L  | CAN_H  | GND | PE     | GND | CAN_L  | CAN_H  | GND | PE |
|    | EtherCAT | 电源-   | 控制电源+ | 制动电阻- | 驱动电源+ | 制动电阻+ | - | DO1+ | DO_COM | AI1 | AGND | BAT_PWR | GND | STO_FB-/DI1- | STO_FB+/DI1+ | NC/DI2+ | STO_COM/DI2- | STO2/DI3+ | STO1/DI3- | -  | -  | TX+   | RX+    | RX-    | TX- | PE     | TX+ | RX+    | RX-    | TX- | PE |
|    | RS485    | 电源-   | 控制电源+ | 制动电阻- | 驱动电源+ | 制动电阻+ | - | DO1+ | DO_COM | AI1 | AGND | BAT_PWR | GND | STO_FB-/DI1- | STO_FB+/DI1+ | NC/DI2+ | STO_COM/DI2- | STO2/DI3+ | STO1/DI3- | -  | -  | GND   | RS485+ | RS485- | GND | PE     | GND | RS485+ | RS485- | GND | PE |

| 版本<br>REV.MARK | 变更内容<br>REVISION RECORD | 签名<br>SIGNATURE | 日期<br>DATE |
|----------------|-------------------------|-----------------|------------|
| A01            | 修改电源模型                  | 曹继伟             | 2025/3/22  |
| A02            | 修改电源定义                  | 曹继伟             | 2025/5/12  |
| A03            | 调整惯量质量                  | 耿源              | 2025/8/30  |
| A04            | 增加24V-200W版本            | 耿源              | 2025/12/11 |



|                             | PSM6020D-XXX-24V-0HE-LP                 | PSM6020D-XXX-0HE(B)-LP | PSM6040D-XXX-0HE(B)-LP                  |
|-----------------------------|-----------------------------------------|------------------------|-----------------------------------------|
| 额定功率/Rated Power            | 200W                                    | 200W                   | 400W                                    |
| 额定电压/Rated Voltage          | 24VDC                                   | 48VDC                  |                                         |
| 额定电流/Rated Current          | 11.5A                                   | 8A                     | 12A                                     |
| 额定力矩/Rated Torque           | 0.64Nm                                  |                        | 1.27Nm                                  |
| 额定转速/Rated Speed            | 3000rpm                                 |                        |                                         |
| 峰值力矩/Peak Torque            | 1.27Nm                                  |                        | 2.54Nm                                  |
| 制动器电压/Brake Voltage         | —                                       | (24VDC)                |                                         |
| 制动器功率/Brake Power           | —                                       | (7.2W)                 |                                         |
| 运行方式/Operation Mode         | PP/PV/PT/CSP/Home                       |                        |                                         |
| 通信方式/Communication Mode     | EtherCAT CANopen RS485                  |                        |                                         |
| 编码器型号/Enconder Type         | 17位                                     |                        |                                         |
| 转子惯量/Rator Inertia          | 0.14*10 <sup>-4</sup> Kg.m <sup>2</sup> |                        | 0.21*10 <sup>-4</sup> Kg.m <sup>2</sup> |
| 重量/Weight                   | 1.15kg                                  | 1.1kg(1.5kg)           | 1.6kg(2.0kg)                            |
| 工作环境温度/Working Temperature  | 0-40℃                                   |                        |                                         |
| 工作环境湿度/Environment Humidity | 10%RH-85%RH无凝结                          |                        |                                         |

|                                         |     |                                       |               |                                                                                       |            |                                                                                                                                                     |             |                        |                             |  |  |
|-----------------------------------------|-----|---------------------------------------|---------------|---------------------------------------------------------------------------------------|------------|-----------------------------------------------------------------------------------------------------------------------------------------------------|-------------|------------------------|-----------------------------|--|--|
| 未注尺寸公差<br>DEFAULT DIMENSIONAL TOLERANCE |     | 未注形位公差<br>DEFAULT GEOMETRIC TOLERANCE |               |  |            |  北京立迈胜控制技术有限公司<br>Beijing Nimotion Control Technology Co.,Ltd. |             |                        |                             |  |  |
| GB/T 1804-M                             |     | GB/T 1184-K                           |               | FIRST ANGLE METHOD                                                                    |            |                                                                                                                                                     |             |                        |                             |  |  |
| 设计DRAWN                                 | 曹继伟 | 2025/5/12                             | 图号<br>DWG NO. | LMS-C20-24046                                                                         |            |                                                                                                                                                     | 型号<br>MODEL | PSM60XXD-XXX-OHE(B)-LP |                             |  |  |
| 审核CHK'D                                 | 耿源  | 2025/5/12                             | 物料编码<br>P/N   |                                                                                       |            |                                                                                                                                                     | 名称<br>TITLE | 一体化低压伺服电机              |                             |  |  |
| 批准APPV'D                                | 董春禄 | 2025/5/12                             | 版本<br>REV     | A04                                                                                   | 图幅<br>SIZE | A4                                                                                                                                                  | 比例<br>SCALE | 1:2                    | 共 1 张 第 1 张<br>SHEET 1 OF 1 |  |  |