



新立盈®

致力为客户创造最大价值

- ▶ 永磁无刷减速电机
- ▶ 高效率无刷电机
- ▶ 变频齿轮电机
- ▶ 三相异步电机





新立盈公司自2010年成立以来，立足于全球工业自动化领域，聚集行业资深团队自主研发，生产，销售行星减速机，中空减速机、蜗轮蜗杆减速机，谐波减速机，RV减速机等传动装置。所生产的精密型减速机可搭配任意伺服马达，步进马达。具有超低背隙(1~3arcmin)精度等级，低噪声(60dAB),高效率(>95%)三大特性。产品广泛应用于工具机床，激光雕刻机，全伺服纸巾机械，精度凹凸版印刷机，精密涂布机，伺服弯管机，数控弹簧机等自动化程度较高设备。立志通过优良产品协同伺服电机厂家及系统集成贸易商服务国内自动化行业。

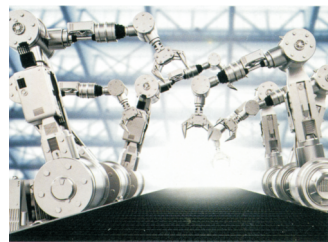
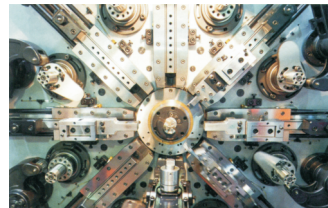
我们的优势

响应迅速

交期快速

服务高效

应用行业



目录索引

永磁无刷减速电机



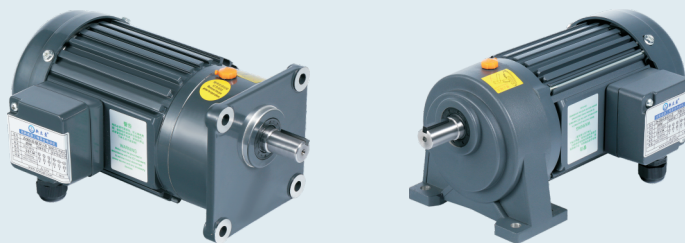
Page.
1-29

高效率无刷电机



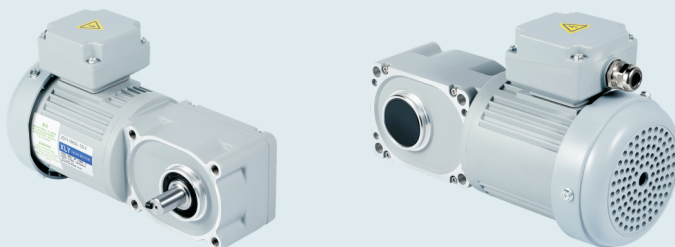
Page.
30-47

变频齿轮电机



Page.
48-82

三相异步电机



Page.
83-114

微型永磁无刷齿轮减速电机 DC BRUSHLESS GEAR MOTOR

轻松、简单，实现速度控制。
Easy And Simple To Achieve Speed Control.



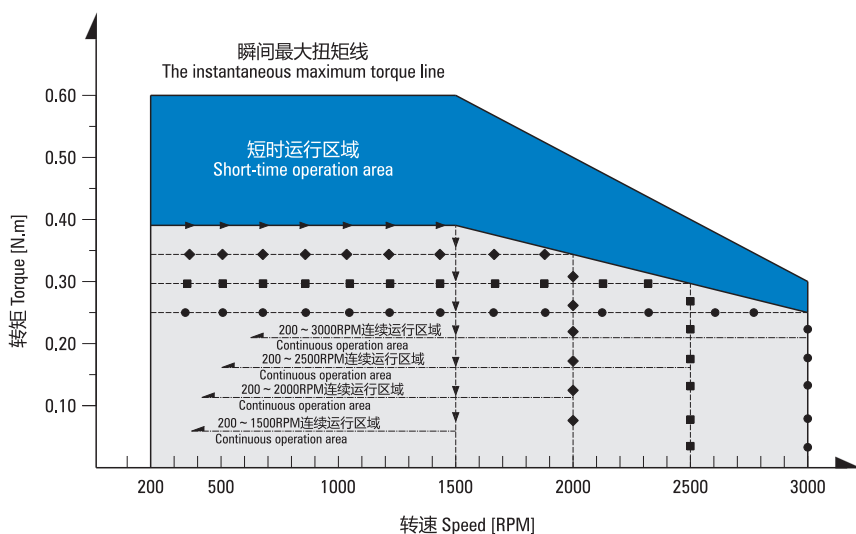
● 控制器
Controller

● 永磁无刷平行轴减速电机
DC brushless parallel shaft speed reducing motor

● L型永磁无刷减速电机
L type brushless DC motor

永磁无刷电机特性曲线说明

Description Of Brushless DC Motor Characteristic Curve



- **瞬时最大扭矩线:** 电机启动、瞬间冲击负载的最大扭矩；超越此转矩值时，会引起驱动器的过流保护，造成停机；
- **短时运行区:** 电机不同转速时，可在此力矩区内短时运行，时间过长易引起电机发热，从而造成烧机或驱动过热保护启动，造成停机；
- **额定运行扭矩线:** 电机在不同转速下的额定力矩，可在此力矩下长时间运行；
- **连续运行区:** 在不同转速时，电机在此相应区间内连续运行。
- **The maximum of instaneeous torque line:** the motor starting the maximum torque of motor , instantaneous impact load; beyond the torque value, over-current protection will lead to stop.
- **Short-term running area:** when the motor at different speed, it can operate in a short time during this torque range, but after a long time it can cause heating of the motor, resulting motor break or drive overheat protection start, cause stopping working.
- **Rated torque Rated torque of the motor line:** at different speeds, the motor can run for a long time in this moment.
- **In Continuous operation area:** at different speed, the motor can operate continuous.

产品特点 PRODUCT FEATURES

■ 无刷电机的基本特点 The Characteristics Of Brushless Motor Suitable For Speed Control Are Introduced

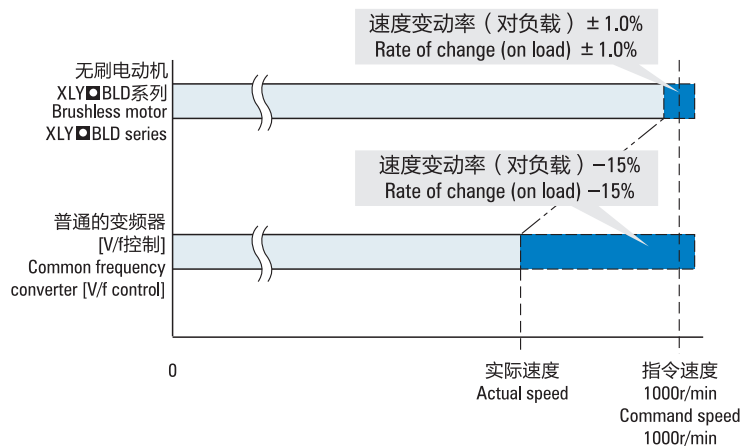
无刷电机上，无需使用通常被认为是DC电动机缺点的刷子和整流子等机械触点，DC电动机使用刷子和整流子进行旋转，因此需要定期进行维护；而无刷电动机使用霍尔IC检测到的信号，利用驱动电路的晶体管的ON/OFF进行旋转，因此无需维护。

On brushless motor ,it is unnecessarily using brush ,commutator and any other mechanical contact. Brush motor need brush and commutator to running ,so it need to regular maintain. However, brushless motor used Hall IC to detect the signal and used driving circuit of crystal catheter's ON/OFF. So it dispense with maintain.

■ 可进行稳定的速度控制 Stable Speed Control

无刷电动机持续对设定速度和来自电动机的速度反馈信号进行对比，来调节施加到电动机上的电压；因此，即使负载状况发生变化，仍可以从低速瞬间调整到设定速度，并以此稳定的速度运行。使用变频器控制的三相感应电动机不进行反馈控制，因此负载变大时，速度会大幅下降；对于速度稳定性要求较高的用途，建议使用无刷电动机。

Brushless DC motors compare the setting speed with the speed feedback signals from the motor at all times and adjust the motor's applied voltage. For this reason, even if the load changes, stable rotation is performed from low speed to high speed. Common inverter-controller three-phase induction motors do not have this type of feedback control and when the load changes, the speed can be affected. Brushless DC motors are recommended for applications that require the speed to be maintained regardless of the load fluctuation.



■ 宽广的速度控制范围 Wide Speed Control Range

无刷电动机的速度控制范围比AC调速电动机及变频器更广，由于不像AC调速电动机那样在低速时有使用转矩限制，因此，无刷电动机适用于从低速到高速都需要一定转矩的用途。

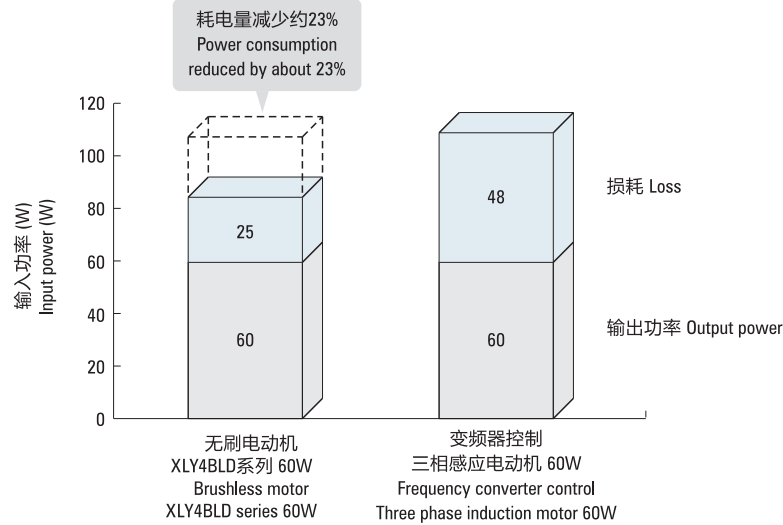
The brushless DC motor has a broader speed control range compared to three-phase inverter driven motors. Unlike three-phase inverter driven motors, the torque at low speed is not limited, so brushless DC motors are suited for applications that require constant.

| 产品样式 Product Style | 速度控制范围 Speed Control Range | 速度比 Rate Ratio |
|--|----------------------------|----------------|
| 无刷电动机 Brushless motor | 80~3000 | 50 |
| 变频器控制 Frequency converter control 三相感应电动机 Three phase induction motor | 200~2400 | 12 |
| AC调速电动机 AC speed regulating motor | 50Hz: 90~1400 | 15 |
| | 60Hz: 90~1600 | 17 |

有助于节能 Saving Energy

无刷电动机的转子使用了永磁铁，可减少转子的二次损耗，因此与采用变频控制的三相感应电动机相比，耗电量减少约23%，有助于装置的节能。

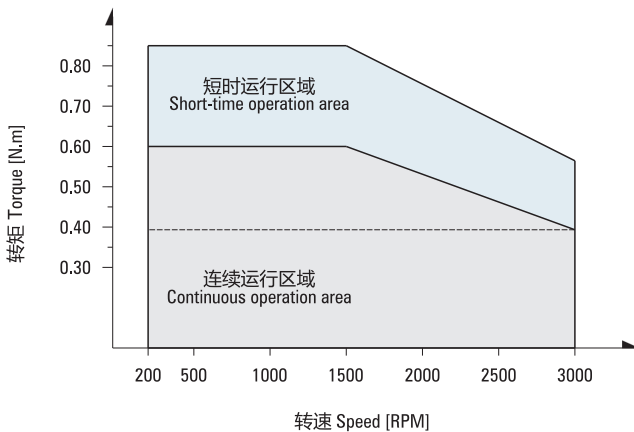
DC Brushless motor used permanent magnets, it can reduce the secondary loss of rotor. So compared with adopts frequency conversion control of three-phase induction motor, the power reduced 23%. This is in favour of saving energy.



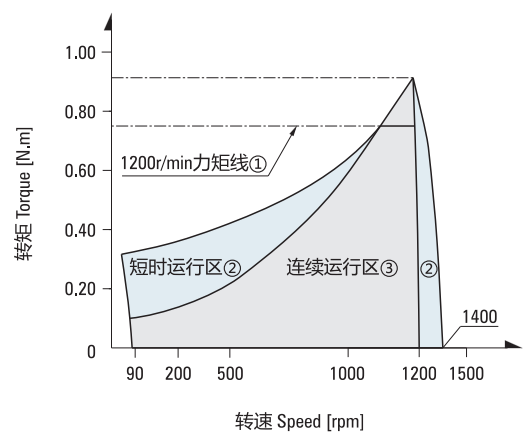
低速大力矩性能 Low Speed And High Torque Performance

永磁无刷减速电机低速时可维持大力矩连续运行，且运行平稳。DC brushless motor have a steady big torque when running at low speed.

● XLY5BLD120-220GU-30S 曲线图 Diagram
(XLY标准驱动器 XLY Standard Drive)



● 5IK120RGU-CF (220V/50Hz)
(XLY标准驱动器 XLY Standard Drive)



①1200r/min torque line ②Short-time operating area ③Continuous operation area

● 无刷、交流调速且连续运行性能一览表 Working performance table of brushless motor and ac speed adjustable motor

| 序号 Serial Number | XLY5BLD120-220GU-25S | | | | | 5IK120RGU-CF | | | | |
|------------------------|----------------------|--------------------|--------------------|-----------------------|-----------------------------|---------------------|--------------------|--------------------|-----------------------|-----------------------------|
| | 力矩 Moment N.m | 转速 Speed rpm | 电流 Current A | 效率 Efficiency % | 温升 Temperature Rise K | 力矩 Moment N.m | 转速 Speed rpm | 电流 Current A | 效率 Efficiency % | 温升 Temperature Rise K |
| 1 | 0.595 | 200 | 0.485 | 26.5 | ≤50K | 0.010 | 200 | 0.850 | 3.00 | ≤80K |
| 2 | 0.595 | 500 | 0.671 | 47.5 | ≤50K | 0.150 | 500 | 1.070 | 8.00 | ≤80K |
| 3 | 0.595 | 1000 | 0.966 | 62.0 | ≤40K | 0.500 | 1000 | 1.186 | 32.5 | ≤80K |
| 4 | 0.595 | 1500 | 1.200 | 69.0 | ≤40K | 0.915 | 1400 | 0.981 | 60.0 | ≤55K |

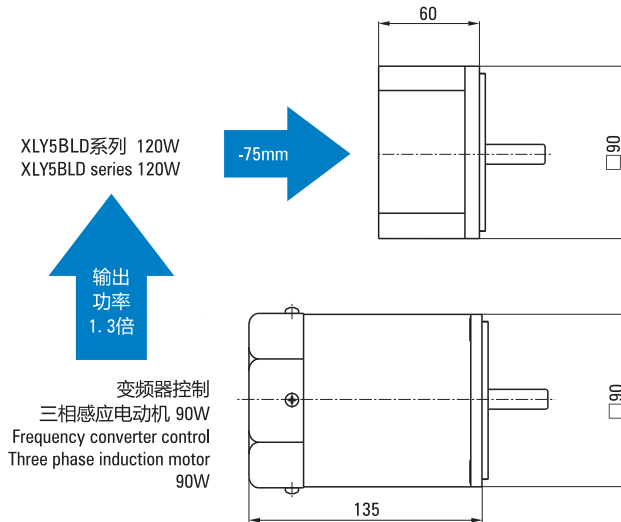
环境温度-10°C~+40°C下使用 Ambient temperature -10°C~+40°C environment



■ 薄型、大功率 Thin, High Power

无刷电动机的转子使用永磁体，因此实现了薄型和大功率；比如，与安装尺寸90的三相感应电动机相比总长缩短>75mm，输出功率达到1.3倍。若采用无刷电动机，有助于实现装置的小型化。

Brushless DC motors have a slim body and provide high power due to permanent magnets being used in the rotor. For example, the overall length is 75mm shorter and the output power is 1.3 times higher than that of three-phase induction motors with a frame size of 90mm. Using brushless DC motors can contribute to downsizing and space saving.



■ 搭载保护功能，有助于保护设备系统的安全 Protection Function, Help To Protect The Safety Of The Equipment System

由于加载了过流、欠压、缺相等保护功能，因此可保证设备系统运行时的安全。

Due to the load of the overcurrent, undervoltage, open phase protection, for this reason can ensure the safety of equipment system.

■ 电机的一般规格——转速 Motor Spec——Speed

| 电机轴转速 Motor Speed | 减速比 Reduction Ratio | | | | | | | | | | | |
|----------------------|------------------------|--------|--------|--------|--------|--------|--------|--------|--------|-------|-------|------|
| | 3 | 3.6 | 5 | 6 | 7.5 | 9 | 10 | 12.5 | 15 | 18 | 20 | 25 |
| 200~1500RPM | 67~500 | 56~417 | 40~300 | 33~250 | 27~200 | 22~167 | 20~150 | 16~120 | 13~100 | 11~83 | 10~75 | 8~60 |
| 2000RPM | 667 | 556 | 400 | 334 | 267 | 222 | 200 | 160 | 133 | 111 | 100 | 80 |
| 2500RPM | 833 | 694 | 500 | 417 | 333 | 278 | 250 | 200 | 167 | 139 | 125 | 100 |
| 3000RPM | 1000 | 833 | 600 | 500 | 400 | 333 | 300 | 240 | 200 | 167 | 150 | 120 |

| 电机轴转速 Motor Speed | 减速比 Reduction Ratio | | | | | | | | | | |
|----------------------|------------------------|------|------|------|------|------|------|--------|--------|-----|-------|
| | 30 | 36 | 50 | 60 | 75 | 90 | 100 | 120 | 150 | 180 | 200 |
| 200~1500RPM | 7~50 | 6~42 | 4~30 | 3~25 | 3~20 | 2~17 | 2~15 | 2~12.5 | 1.5~10 | 1~8 | 1~7.5 |
| 2000RPM | 67 | 56 | 40 | 33 | 27 | 22 | 20 | 17 | 13 | 11 | 10 |
| 2500RPM | 83 | 69 | 50 | 42 | 33 | 28 | 25 | 21 | 17 | 14 | 13 |
| 3000RPM | 100 | 83 | 60 | 50 | 40 | 33 | 30 | 25 | 20 | 17 | 15 |

■ 电机的一般规格——产品种类 Motor Spec——Product Type

| 电动机 Motor | 方形尺寸 Square Size | 输出功率 Output Power | 机型 Model | 驱动器 Driver | 电源电压 Voltage Supply |
|-----------|------------------|-------------------|---|------------|---|
| | 60X60 | 15、25 | 标准型 Standard type IP40 或 or IP54 | | DC24~48 单相 Single phase 100~120V 单相 Single phase 220~240V |
| | 70X70 | 30、40 | | | |
| | 80X80 | 40、60 | | | |
| | 90X90(GN) | 40、60 | | | |
| | 90X90(GU) | 60、90、120 | | | |
| | 104X104 | 200、400 | | | |
| | 120X120 | 750、1000 | | | |

电机的一般规格——基本性能 Motor Spec——Basic Performance

| 项目 | 电动机 | 驱动器 |
|-----------------------|--|--|
| 绝缘电阻（不得将电机与驱动连接状态下测试） | 在常温常湿环境下连续运行后，以DC500V电阻表测试电动机线圈与外壳之间的测量值应在50MΩ以上 | 在常温常湿环境下连续运行后，电源端子与保护接地端子间、电源端子与输入/输出信号端之间的电阻值以DC500V电阻表测量达50MΩ以上 |
| 绝缘耐压（不得将电机与驱动连接状态下测试） | 在常温常湿环境下连续运行后，线圈、外壳间以50Hz、AC1.5kV施加1分钟无异常，泄漏电流<10mA | 在常温常湿环境下连续运行后，电源端子与保护接地端子间以50Hz、AC1.5kV，电源端子与输入/输出信号端之间以50Hz、AC1.5kV施加1分钟无异常 |
| 温度上升 | 在常温常湿环境下连续运行后，以热电偶法测量的线圈温度上升值在55°C以下、测量外壳表面温度上升值在40°C以下① | 在常温常湿环境下连续运行后，以热电偶法测量的铝质散热板温度上升值在50°C以下 |
| 使用环境 | 环境温度 | -10°C~+40°C (无结冰) |
| | 环境湿度 | 85%以下 (无凝霜) |
| | 海拔高度 | 1000m以下 |
| | 介质环境 | 无腐蚀性气体、尘埃；不可在含有放射性物质、磁场及真空等特殊环境中使用 |
| | 振动 | 不可施加连续振动或过度冲击 |
| 保存环境② | 环境温度 | -10°C~+40°C (无结冰) |
| | 环境湿度 | 85%以下 (无凝霜) |
| | 海拔高度 | 1000m以下 |
| 耐热等级 | B级 | / |
| 保护等级 | IP40 & IP54 | IP20 |

① 为了使电动机外壳表面温度能保持在90°C以下，需将电动机安装在以下尺寸的散热板（材质：铝）上；25W:115X115X厚度5、60W:135X135X厚度5、120W:165X165X厚度5、200W:200X200X厚度5。（单位：mm）

② 保护环境也包括运输途中的短期值。

| Project Item | Motor | Driver |
|--|--|--|
| Insulation resistance (No motor and drive connection state test) | 50MΩ or more when 500VDC megger is applied between the windings and the case after continuous operation under normal ambient temperature and humidity | 50MΩ or more when 500VDC megger is applied between the power supply terminal and the protective earth terminal, and between the power supply terminal and the I/O signal terminal after continuous operation under normal ambient temperature and humidity |
| Insulation resistance (No motor and drive connection state test) | Sufficient to withstand AC1.5kv at 50Hz applied between the windings and the case for 1 minute after continuous operation under normal ambient temperature and humidity | Sufficient to withstand AC1.5kv at 50Hz applied between the power supply terminal and the protective earth terminal and the I/O signal terminal for 1 minute after continuous operation under normal ambient temperature and humidity |
| Temperature rise | The temperature rise of windings is 55°C max, and that of the case surface is 40°C max, measured by the thermocouple method after rated continuous operation under normal ambient temperature and humidity | The temperature of the heat sink is 50°C max, measured by the thermocouple method after rated continuous operation under normal ambient temperature and humidity |
| Use environment | Ambient temperature | -10°C~+40°C (Non-freezing) |
| | Ambient humidity | 85% or less (No-condensing) |
| | Altitude | 1000m following |
| | Medium environment | Non corrosive gas, dust; can not be used in a special environment containing radioactive substances, magnetic fields and vacuum, etc |
| | Vibration | Not to exert a continuous vibration or excessive impact |
| Save environment② | Ambient temperature | -10°C~+40°C (Non-freezing) |
| | Ambient humidity | 85% or less (No-condensing) |
| | Altitude | 1000m following |
| Heat resistance grade | B stage | / |
| Protection level | IP40 & IP54 | IP20 |

① In order to make the motor shell surface temperature can be maintained below 90°C, the motor installed in the following dimensions of the radiating plate (Material: aluminum); thickness of 25W: 115X115X5, the thickness of the 60W: 135X135X5, the thickness of the 120W: 165X165X5, the thickness of the 200W: 200X200X5. (Unit: mm)

② The storage condition applies to a short period such as a period during transportation.

型号阅读方法 PRODUCT CODE

电动机 Motor

XLY 5 BLD 90 - 220 GN(L) - 30S - M
 ① ② ③ ④ ⑤ ⑥ ⑦ ⑧

| | | | | | | | |
|---|--|--|-------|-------|-------|---------|---------|
| ① | 公司名称 Company | 新立盈 XLY | | | | | |
| ② | 座机号 Code | 2 | 4 | 5 | 55 | 6 | 7 |
| | 电机安装法兰 Mounting flange mm | □60 | □80 | □90 | □90 | □104 | □120 |
| | 机壳尺寸 Case dimension | 60*60 | 80*80 | 90*90 | 90*90 | 104*104 | 120*120 |
| ③ | 电机种类 Motor type | BLD: 永磁无刷电机 BLD: DC Brushless gear motor | | | | | |
| ④ | 输出功率 (W) Output power (W) | (例e.g) 90: 90W | | | | | |
| ⑤ | 电源电压 Voltage | (例e.g) 24: 24VDC (可选电压24V~48VDC, 单相100V~120VAC, 单相220V~240VAC, 50/60Hz) 24: 24VDC (Optional voltage 24V~48VDC, single phase 100V~120VAC, single phase 220V~240VAC, 50/60Hz) | | | | | |
| ⑥ | 相对于方型减速箱 Relative to square type gear box: 齿轴形状 Motor shaft type | GN: GN型齿轮轴 GN type gear shaft GU: GU型齿轮轴 GU type gear shaft | | | | | |
| | 相对于L型减速箱 L type gearbox: 齿轴形状 Shaft shape | GNL: GN型L系列齿轮轴 (主要为2&4系列) Type L GN series gear shaft (Mainly for 2&4 series) GUL: GU型L系列齿轮轴 (主要为5&6系列) Type L GU series gear shaft (Mainly for 5&6 series) | | | | | |
| | 光电机出轴形状 Shape of the output shaft: A: 圆轴型 Circular shaft type | A1: 键槽型 Keyway type | | | | | |
| ⑦ | 电机转速 Motor speed | | | | | | |
| ⑧ | 电机附加配件 M: 电磁制动器 BM: 闭环反馈方式, 一般指电机增加编码器 (包括简易型霍尔编码器) Motor parts M: Electromagnetic brake BM: Closed loop feedback mode, generally refers to the motor to increase the encoder (Including the simple holzer encoder) | | | | | | |

方型减速器 Square Shape Gearbox

5 GN 50 K
 ① ② ③ ④

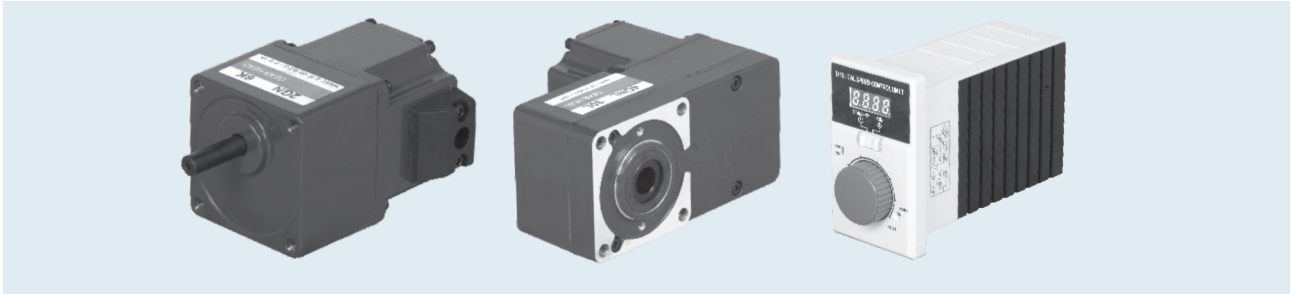
| | | |
|---|-----------------------------|---|
| ① | 减速机安装尺寸 Gearhead frame size | 2: 60mm 3: 70mm 4: 80mm 5: 90mm 6: 104mm 7: 120mm |
| ② | 类型 Gear type | GN: GN型齿轮 GN type gear GU: GU型齿轮轴 GU type gear |
| ③ | 减速比 Gear ratio | (例e.g) 50: 减速比 50: Reduction ratio |
| ④ | 轴承种类 Bearing type | K: 滚珠轴承 (对GU型方箱体标注为KB) K: Ball bearing (On the GU type square box marked as KB) |

L型减速器 L Type Gearbox

5 GU 50 LC
 ① ② ③ ④

| | | |
|---|-----------------------------|--|
| ① | 减速机安装尺寸 Gearhead frame size | 2: 60mm 3: 70mm 4: 80mm 5: 90mm 6: 104mm 7: 120mm |
| ② | 类型 Gear type | GN: GN型齿轮轴 (针对L系列2&4) Type GN gear shaft (For L series 2&4) GU: GU型齿轮轴 (针对L系列5&6) Type GU gear shaft (For L series 5&6) |
| ③ | 减速比 Gear ratio | (例e.g) 50: 减速比 50: Reduction ratio |
| ④ | 减速箱类型 Bearing type | LC: L型空心轴输出减速器 L type hollow shaft output reducer RC: 弧锥齿空心轴输出 Hollow shaft output of spiral bevel gear RT: 弧锥齿实心轴输出 Solid shaft output of spiral bevel gear |

60系列永磁无刷齿轮减速电机 60 SERIES OF BRUSHLESS DC MOTOR



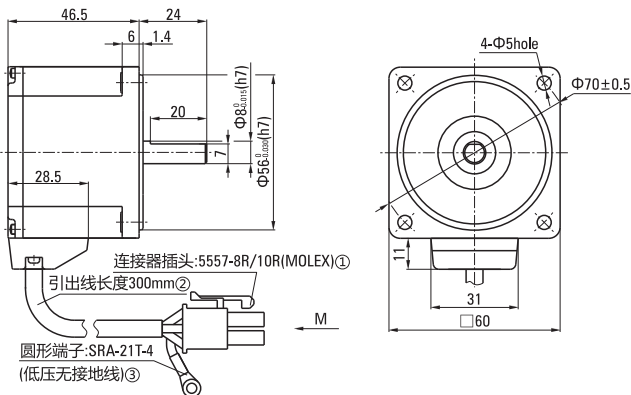
电机基本特性 Basic Characteristics Of Motor

- 25W (DC电源时适用于24VDC/36VDC/48VDC) 25W (DC Power Supply When Applied To 24VDC/36VDC/48VDC)

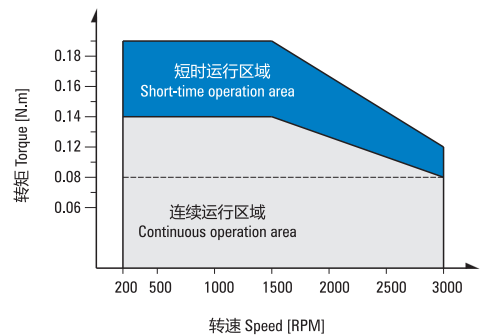
| 额定功率(连续) Rated power (Continuous) | | W | 25 (15W/25W) | | |
|-------------------------------------|---|--|---------------------|---------------------|-------------------------------|
| 额定转速 Rated speed | | r/min | 3000 | | |
| 额定转矩 Rated torque | | N.m | 0.08 | | |
| 瞬时最大转矩 Instantaneous maximum torque | | N.m | 0.12 | | |
| 转子转动惯量 Rotor moment of inertia | | J:×10 ⁻⁴ kg.m ² | 0.042 | | |
| 速度控制范围 Speed control range | | RPM | 200~3000 | | |
| 速度变化率 Speed control range | 对负载 On load | ±1.0%以下: 条件0~额定转矩、额定转速、额定电压、常温 Below ±1%: condition 0~rated torque, rated speed, rated voltage, room temperature | | | |
| | 对电压 On voltage | ±1.0%以下: 条件额定电压±10%、额定转速、额定负载、常温 Below ±1%: condition rated voltage ±10%, rated speed, rated load, room temperature | | | |
| | 对温度 On temperature | ±1.0%以下: 条件使用环境温度-10°C~+40°C额定转速、额定负载、额定电压 Below ±1%: Conditions of ambient temperature -10°C~+40°C rated voltage, rated load and rated speed | | | |
| 电源输入 Power input | 额定电压 Rated voltage | V | 单相Single phase 110V | 单相Single phase 220V | 24VDC(可选Optional 36VDC/48VDC) |
| | 电压容许范围 Voltage tolerance range | | ±10% | | |
| | 频率 Frequency | Hz | 50/60 | / | |
| | 频率容许范围 Frequency tolerance range | | ±5% | / | |
| | 额定输入电流 Rated input current | A | 1.0 | 0.6 | 1.7 |
| | 瞬时最大输入电流 Instantaneous maximum input current | A | 2.0 | 1.2 | 2.6 |

圆轴型光电机 Circular Shaft Type Optical Motor

- XLY2BLD25-□A-30S □—电压 Voltage 24/36/48/110/220



- XLY2BLD25-220A-30S 曲线图 Diagram (XLY标准驱动器 XLY Standard Drive)



● 低压电机接线插孔对应信号说明

Low Voltage Wire Plughole Corresponding Signal Explanation

| | | | | |
|----------|---|-----|----|-----|
| plughole | 1 | 2 | 3 | 4 |
| signal | U | W | Hv | Hu |
| plughole | 5 | 6 | 7 | 8 |
| signal | V | GND | Hw | Vcc |

● 高压电机接线插孔对应信号说明

High Voltage Wire Plughole Corresponding Signal Explanation

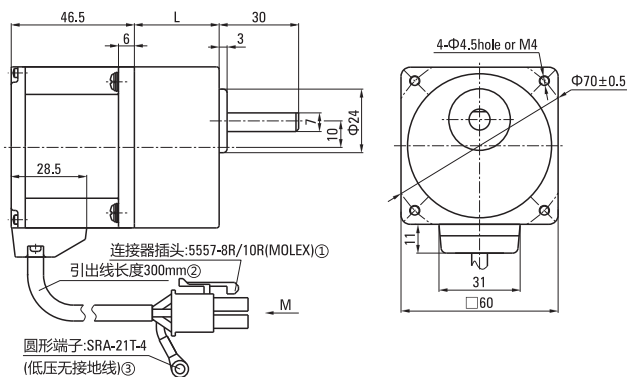
| 排线对应的意义 | | | | | | | | | |
|---------|------|------|------|------|------|---|------|--------|------|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| 蓝(粗) | 黄(细) | 黄(粗) | 绿(细) | 绿(粗) | 蓝(细) | | 金属丝网 | 红(细) | 黑(细) |
| W | Hu | U | Hv | V | Hw | | | Vcc+5V | GND |



25W

● 平行轴减速机 Parallel Shaft Speed Reducer

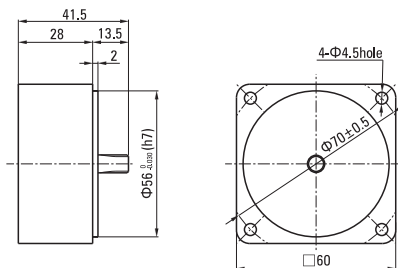
XLY2BLD25-□GN-30S/2GN□K □—电压 Voltage 24/36/48/110/220
□—速比数值 Velocity Ratio Value



①Connector: 5557-8R/10R (MOLEX) ②The sheath length of lead line 300mm ③Round terminal: SRA-21T-4 (Low ground)

● 中间减速器 Decimal Gearhead

2GN□XK □—速比数值, 一般为10 Velocity Ratio Value, Generally 10



| 减速器型号 Gearhead Model | 减速比 Gear Ratio | L尺寸 Dimension |
|-------------------------|-------------------|------------------|
| 2GN□K | 3~18 | 32&41 |
| | 20~200 | 41 |

●减速器型号的□中为减速比的数值
Enter the gear ratio in the box (□) within the model name

● XLY2BLD15-□GN-30S/2GN□K整机容许力矩 (单位: N.m) XLY2BLD15-□GN-30S/2GN□K Machine Allowable Torque (Unit: N.m)

| 型号 Model | 电机轴转速 Motor Speed | 减速比 Reduction Ratio | | | | | | | | | | | | | | | | | | | | | | |
|---------------|----------------------|------------------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| | | 3 | 3.6 | 5 | 6 | 7.5 | 9 | 10 | 12.5 | 15 | 18 | 20 | 25 | 30 | 36 | 50 | 60 | 75 | 90 | 100 | 120 | 150 | 180 | 200 |
| XLY2BLD15-□GN | 200~1500RPM | 0.18 | 0.22 | 0.30 | 0.36 | 0.45 | 0.54 | 0.60 | 0.75 | 0.91 | 1.08 | 1.09 | 1.36 | 1.63 | 1.96 | 2.72 | 3.00 | 3.00 | 3.00 | 3.00 | 3.00 | 3.00 | 3.00 | 3.00 |
| | 2000RPM | 0.15 | 0.18 | 0.26 | 0.31 | 0.38 | 0.45 | 0.51 | 0.64 | 0.77 | 0.92 | 0.92 | 1.15 | 1.38 | 2.30 | 2.50 | 3.00 | 3.00 | 3.00 | 3.00 | 3.00 | 3.00 | 3.00 | 3.00 |
| | 2500RPM | 0.14 | 0.17 | 0.23 | 0.28 | 0.35 | 0.42 | 0.46 | 0.58 | 0.70 | 0.84 | 0.84 | 1.05 | 1.25 | 1.51 | 2.09 | 2.27 | 2.83 | 3.00 | 3.00 | 3.00 | 3.00 | 3.00 | 3.00 |
| | 3000RPM | 0.12 | 0.14 | 0.19 | 0.23 | 0.29 | 0.35 | 0.39 | 0.48 | 0.58 | 0.70 | 0.70 | 0.87 | 1.05 | 1.25 | 1.74 | 1.88 | 2.35 | 2.82 | 3.00 | 3.00 | 3.00 | 3.00 | 3.00 |

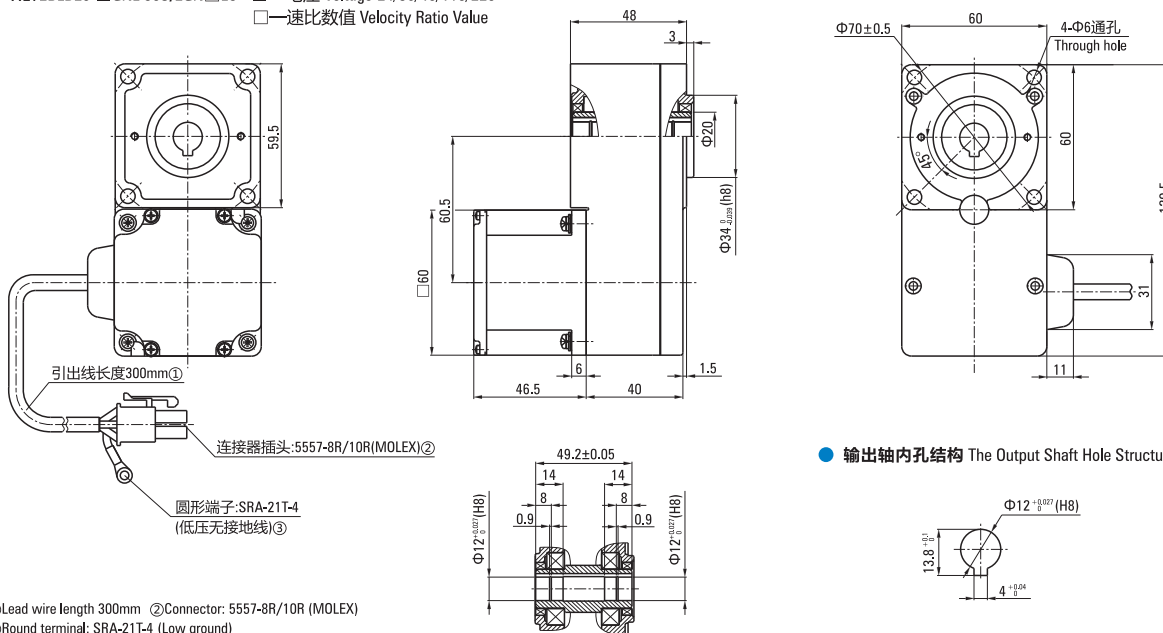
● XLY2BLD25-□GN-30S/2GN□K整机容许力矩 (单位: N.m) XLY2BLD25-□GN-30S/2GN□K Machine Allowable Torque (Unit: N.m)

| 型号 Model | 电机轴转速 Motor Speed | 减速比 Reduction Ratio | | | | | | | | | | | | | | | | | | | | | | |
|---------------|----------------------|------------------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| | | 3 | 3.6 | 5 | 6 | 7.5 | 9 | 10 | 12.5 | 15 | 18 | 20 | 25 | 30 | 36 | 50 | 60 | 75 | 90 | 100 | 120 | 150 | 180 | 200 |
| XLY2BLD25-□GN | 200~1500RPM | 0.30 | 0.36 | 0.50 | 0.60 | 0.75 | 0.91 | 1.00 | 1.26 | 1.51 | 1.81 | 1.81 | 2.27 | 2.72 | 3.00 | 3.00 | 3.00 | 3.00 | 3.00 | 3.00 | 3.00 | 3.00 | 3.00 | 3.00 |
| | 2000RPM | 0.26 | 0.31 | 0.43 | 0.51 | 0.64 | 0.77 | 0.85 | 1.06 | 1.28 | 1.53 | 1.53 | 1.92 | 2.30 | 2.76 | 3.00 | 3.00 | 3.00 | 3.00 | 3.00 | 3.00 | 3.00 | 3.00 | 3.00 |
| | 2500RPM | 0.23 | 0.28 | 0.39 | 0.46 | 0.58 | 0.69 | 0.77 | 0.97 | 1.16 | 1.39 | 1.39 | 1.74 | 2.09 | 2.51 | 3.00 | 3.00 | 3.00 | 3.00 | 3.00 | 3.00 | 3.00 | 3.00 | 3.00 |
| | 3000RPM | 0.19 | 0.23 | 0.32 | 0.39 | 0.48 | 0.58 | 0.64 | 0.81 | 0.97 | 1.16 | 1.16 | 1.45 | 1.74 | 2.09 | 2.90 | 3.00 | 3.00 | 3.00 | 3.00 | 3.00 | 3.00 | 3.00 | 3.00 |

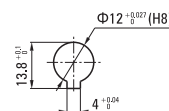
注Note: 表格中的□ (灰底部分) 表示旋转方向与电机转向一致。The □ (gray) in the table indicates that the rotation direction is consistent with the motor.
(不同转速及速比下的力矩为XLY标准驱动器下测试所得。The torque under different speed and speed ratio is obtained under the XLY standard.)

● L型减速机 L Type Speed Reducer

XLY2BLD25-□GNL-30S/2GN□LC □—电压 Voltage 24/36/48/110/220
□—速比数值 Velocity Ratio Value



● 输出轴内孔结构 The Output Shaft Hole Structure



①Lead wire length 300mm ②Connector: 5557-8R/10R (MOLEX)
③Round terminal: SRA-21T-4 (Low ground)

● XLY2BLD15-□GNL-30S/2GN□LC整机容许力矩 (单位: N.m) XLY2BLD15-□GNL-30S/2GN□LC Machine Allowable Torque (Unit: N.m)

| 电机轴转速 Motor Speed | 减速比 Reduction Ratio | 5 | 10 | 15 | 20 | 30 | 50 | 100 | 200 |
|----------------------|------------------------|------|------|------|------|------|------|------|------|
| 200~1500RPM | | 0.27 | 0.54 | 0.82 | 1.09 | 1.63 | 2.72 | 5.44 | 10.9 |
| 2000RPM | | 0.23 | 0.46 | 0.69 | 0.92 | 1.38 | 2.30 | 4.60 | 9.20 |
| 2500RPM | | 0.21 | 0.42 | 0.63 | 0.84 | 1.25 | 2.09 | 4.18 | 8.37 |
| 3000RPM | | 0.17 | 0.35 | 0.52 | 0.70 | 1.05 | 1.74 | 3.49 | 6.97 |

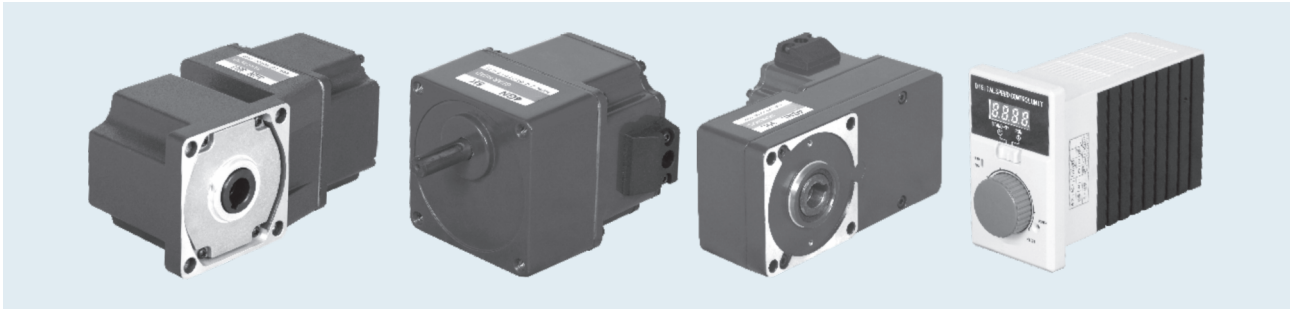
注Note: 表格中的所有速比旋转方向与电机转向相反。All gearbox output turn direction in form are opposite as motor turn direction.
(不同转速及速比下的力矩为XLY标准驱动器下测试所得。The torque under different speed and speed ratio is obtained under the XLY standard.)

● XLY2BLD25-□GNL-30S/2GN□LC整机容许力矩 (单位: N.m) XLY2BLD25-□GNL-30S/2GN□LC Machine Allowable Torque (Unit: N.m)

| 电机轴转速 Motor Speed | 减速比 Reduction Ratio | 5 | 10 | 15 | 20 | 30 | 50 | 100 | 200 |
|----------------------|------------------------|------|------|------|------|------|------|------|-------|
| 200~1500RPM | | 0.50 | 1.00 | 1.51 | 2.01 | 2.72 | 4.53 | 9.06 | 16.40 |
| 2000RPM | | 0.43 | 0.85 | 1.28 | 1.70 | 2.30 | 3.83 | 7.67 | 13.90 |
| 2500RPM | | 0.39 | 0.77 | 1.16 | 1.55 | 2.09 | 3.49 | 6.97 | 12.60 |
| 3000RPM | | 0.29 | 0.58 | 0.87 | 1.16 | 1.74 | 2.90 | 5.81 | 11.62 |

注Note: 表格中的所有速比旋转方向与电机转向相反。All gearbox output turn direction in form are opposite as motor turn direction.
(不同转速及速比下的力矩为XLY标准驱动器下测试所得。The torque under different speed and speed ratio is obtained under the XLY standard.)

80系列永磁无刷齿轮减速电机 80 SERIES OF BRUSHLESS DC MOTOR



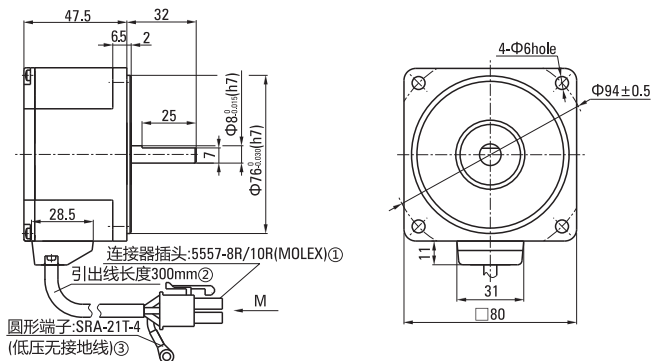
电机基本特性 Basic Characteristics Of Motor

- 60W (DC电源时适用于24VDC/36VDC/48VDC) 60W (DC Power Supply When Applied To 24VDC/36VDC/48VDC)

| | | | | | |
|-------------------------------------|---|--|---------------------|---------------------|-------------------------------|
| 额定功率 (连续) Rated power (Continuous) | W | 60 (40W/60W) | | | |
| 额定转速 Rated speed | r/min | 3000 | | | |
| 额定转矩 Rated torque | N.m | 0.191 | | | |
| 瞬时最大转矩 Instantaneous maximum torque | N.m | 0.287 | | | |
| 转子转动惯量 Rotor moment of inertia | J:10 ⁻⁴ kg.m ² | 0.082 | | | |
| 速度控制范围 Speed control range | RPM | 200~3000 | | | |
| 速率变化率 Speed control range | 对负载 On load | ±1.0%以下: 条件0~额定转矩、额定转速、额定电压、常温 Below ±1%: condition 0~rated torque, rated speed, rated voltage, room temperature | | | |
| | 对电压 On voltage | ±1.0%以下: 条件额定电压±10%、额定转速、额定负载、常温 Below ±1%: condition rated voltage ±10%, rated speed, rated load, room temperature | | | |
| | 对温度 On temperature | ±1.0%以下: 条件使用环境温度-10°C~+40°C额定转速、额定负载、额定电压 Below ±1%: Conditions of ambient temperature -10°C~+40°C rated voltage, rated load and rated speed | | | |
| 电源输入 Power input | 额定电压 Rated voltage | V | 单相Single phase 110V | 单相Single phase 220V | 24VDC(可选Optional 36VDC/48VDC) |
| | 电压容许范围 Voltage tolerance range | | ±10% | | |
| | 频率 Frequency | Hz | 50/60 | / | |
| | 频率容许范围 Frequency tolerance range | | ±5% | | |
| | 额定输入电流 Rated input current | A | 1.7 | 1.0 | 3.7 |
| | 瞬时最大输入电流 Instantaneous maximum input current | A | 3.3 | 1.9 | 5.6 |

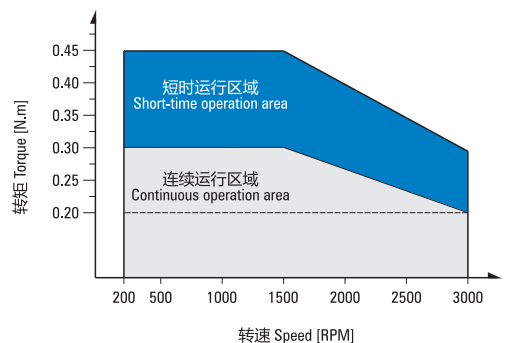
圆轴型光电机 Circular Shaft Type Optical Motor

- XLY4BLD60-□A-30S □—电压 Voltage 24/36/48/110/220



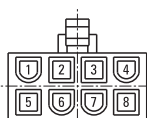
- ①Connector: 5557-8R/10R (MOLEX) ②The sheath length of lead line 300mm ③Round terminal: SRA-21T-4 (Low ground)

- XLY4BLD60-220A-30S 曲线图 Diagram (XLY标准驱动器 XLY Standard Drive)



- 低电压电机接线插孔对应信号说明

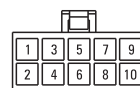
Low Voltage Wire Plughole Corresponding Signal Explanation



| | | | | |
|----------|---|-----|----|-----|
| plughole | 1 | 2 | 3 | 4 |
| signal | U | W | Hv | Hu |
| plughole | 5 | 6 | 7 | 8 |
| signal | V | GND | Hw | Vcc |

- 高压电机接线插孔对应信号说明

High Voltage Wire Plughole Corresponding Signal Explanation



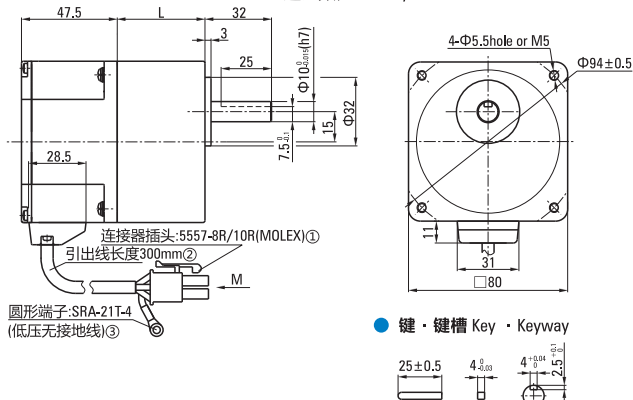
| 排线对应的意义 | | | | | | | | | |
|---------|-------|-------|-------|-------|-------|---|------|--------|-------|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| 蓝 (粗) | 黄 (粗) | 黄 (粗) | 绿 (细) | 绿 (粗) | 蓝 (粗) | | 金属丝网 | 红 (细) | 黑 (细) |
| W | Hu | U | Hv | V | Hw | | | Vcc+5V | GND |



60W

● 平行轴减速机 Parallel Shaft Speed Reducer

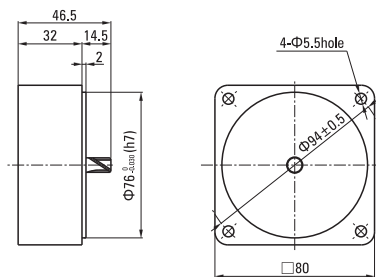
XLY4BLD60-□GN-30S/4GN□K □—电压 Voltage 24/36/48/110/220
□—速比数值 Velocity Ratio Value



①Connector: 5557-8R/10R (MOLEX) ②The sheath length of lead line 300mm ③Round terminal: SRA-21T-4 (Low ground)

● 中间减速器 Decimal Gearhead

4GN□XK □—速比数值,一般为10 Velocity Ratio Value, Generally 10



| 减速器型号 Gearhead Model | 减速比 Gear Ratio | L尺寸 Dimension |
|-------------------------|-------------------|------------------|
| 4GN□K | 3~18 | 32&43.5 |
| | 20~200 | 43.5 |

●减速器型号的□中为减速比的数值
Enter the gear ratio in the box (□) within the model name

● XLY4BLD40-□GN-30S/4GN□K整机容许力矩 (单位: N.m) XLY4BLD40-□GN-30S/4GN□K Machine Allowable Torque (Unit: N.m)

| 型号 Model | 电机轴转速 Motor Speed | 减速比 Reduction Ratio | | | | | | | | | | | | | | | | | | | | | | |
|---------------|----------------------|------------------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| | | 3 | 3.6 | 5 | 6 | 7.5 | 9 | 10 | 12.5 | 15 | 18 | 20 | 25 | 30 | 36 | 50 | 60 | 75 | 90 | 100 | 120 | 150 | 180 | 200 |
| XLY4BLD40-□GN | 200~1500RPM | 0.48 | 0.58 | 0.80 | 0.97 | 1.21 | 1.45 | 1.61 | 2.01 | 2.41 | 2.90 | 2.90 | 3.63 | 4.35 | 5.22 | 7.25 | 7.87 | 8.00 | 8.00 | 8.00 | 8.00 | 8.00 | 8.00 | 8.00 |
| | 2000RPM | 0.41 | 0.49 | 0.68 | 0.82 | 1.02 | 1.23 | 1.36 | 1.70 | 2.04 | 2.45 | 2.45 | 3.07 | 3.68 | 4.42 | 6.13 | 6.66 | 8.00 | 8.00 | 8.00 | 8.00 | 8.00 | 8.00 | 8.00 |
| | 2500RPM | 0.37 | 0.45 | 0.62 | 0.74 | 0.93 | 1.11 | 1.24 | 1.55 | 1.86 | 2.23 | 2.23 | 2.79 | 3.35 | 4.02 | 5.58 | 6.05 | 7.56 | 8.00 | 8.00 | 8.00 | 8.00 | 8.00 | 8.00 |
| | 3000RPM | 0.31 | 0.37 | 0.52 | 0.62 | 0.77 | 0.93 | 1.03 | 1.29 | 1.55 | 1.86 | 1.86 | 2.32 | 2.79 | 3.35 | 4.65 | 5.01 | 6.26 | 7.52 | 8.00 | 8.00 | 8.00 | 8.00 | 8.00 |

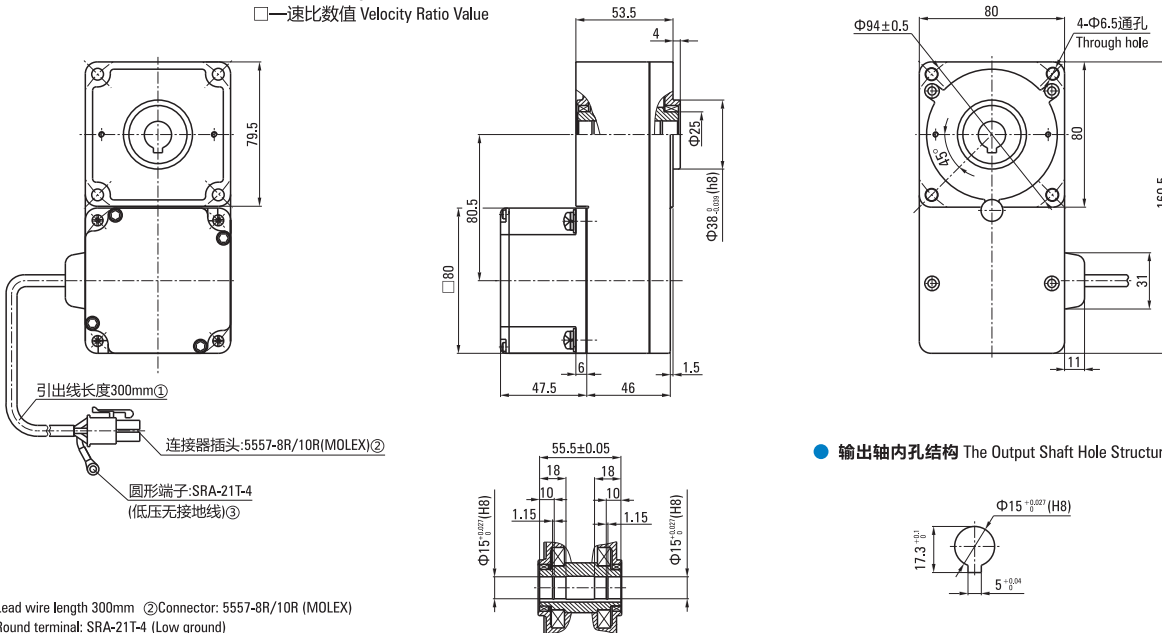
● XLY4BLD60-□GN-30S/4GN□K整机容许力矩 (单位: N.m) XLY4BLD60-□GN-30S/4GN□K Machine Allowable Torque (Unit: N.m)

| 型号 Model | 电机轴转速 Motor Speed | 减速比 Reduction Ratio | | | | | | | | | | | | | | | | | | | | | | |
|---------------|----------------------|------------------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| | | 3 | 3.6 | 5 | 6 | 7.5 | 9 | 10 | 12.5 | 15 | 18 | 20 | 25 | 30 | 36 | 50 | 60 | 75 | 90 | 100 | 120 | 150 | 180 | 200 |
| XLY4BLD60-□GN | 200~1500RPM | 0.72 | 0.87 | 1.21 | 1.45 | 1.81 | 2.17 | 2.41 | 3.02 | 3.62 | 4.34 | 4.35 | 5.44 | 6.53 | 7.83 | 8.00 | 8.00 | 8.00 | 8.00 | 8.00 | 8.00 | 8.00 | 8.00 | 8.00 |
| | 2000RPM | 0.61 | 0.74 | 1.02 | 1.23 | 1.53 | 1.84 | 2.04 | 2.55 | 3.06 | 3.68 | 3.68 | 4.60 | 5.52 | 6.63 | 8.00 | 8.00 | 8.00 | 8.00 | 8.00 | 8.00 | 8.00 | 8.00 | 8.00 |
| | 2500RPM | 0.56 | 0.67 | 0.93 | 1.11 | 1.39 | 1.67 | 1.86 | 2.32 | 2.78 | 3.34 | 3.35 | 4.18 | 5.02 | 6.02 | 8.00 | 8.00 | 8.00 | 8.00 | 8.00 | 8.00 | 8.00 | 8.00 | 8.00 |
| | 3000RPM | 0.46 | 0.56 | 0.77 | 0.93 | 1.16 | 1.39 | 1.55 | 1.93 | 2.32 | 2.78 | 2.79 | 3.49 | 4.18 | 5.02 | 6.97 | 7.52 | 8.00 | 8.00 | 8.00 | 8.00 | 8.00 | 8.00 | 8.00 |

注Note: 表格中的□(灰底部分)表示旋转方向与电机转向一致。The □(gray) in the table indicates that the rotation direction is consistent with the motor.
(不同转速及速比下的力矩为XLY标准驱动器下测试所得。The torque under different speed and speed ratio is obtained under the XLY standard.)

● L型减速机 L Type Speed Reducer

XLY4BLD60-□GNL-30S/4GN□LC □—电压 Voltage 24/36/48/110/220
□—速比数值 Velocity Ratio Value



①Lead wire length 300mm ②Connector: 5557-8R/10R (MOLEX)
③Round terminal: SRA-21T-4 (Low ground)

● XLY4BLD40-□GNL-30S/4GN□LC整机容许力矩 (单位: N.m) XLY4BLD40-□GNL-30S/4GN□LC Machine Allowable Torque (Unit: N.m)

| 电机轴转速 Motor Speed | 减速比 Reduction Ratio | | | | | | | | |
|----------------------|------------------------|------|------|------|------|------|-------|-------|--|
| | 5 | 10 | 15 | 20 | 30 | 50 | 100 | 200 | |
| 200~1500RPM | 0.73 | 1.45 | 2.18 | 2.90 | 4.35 | 7.25 | 14.50 | 29.00 | |
| 2000RPM | 0.61 | 1.23 | 1.84 | 2.45 | 3.68 | 6.13 | 12.30 | 24.50 | |
| 2500RPM | 0.56 | 1.12 | 1.67 | 2.23 | 3.35 | 5.58 | 11.20 | 22.30 | |
| 3000RPM | 0.46 | 0.93 | 1.39 | 1.86 | 2.79 | 4.65 | 9.30 | 18.59 | |

● XLY4BLD60-□GNL-30S/4GN□LC整机容许力矩 (单位: N.m) XLY4BLD60-□GNL-30S/4GN□LC Machine Allowable Torque (Unit: N.m)

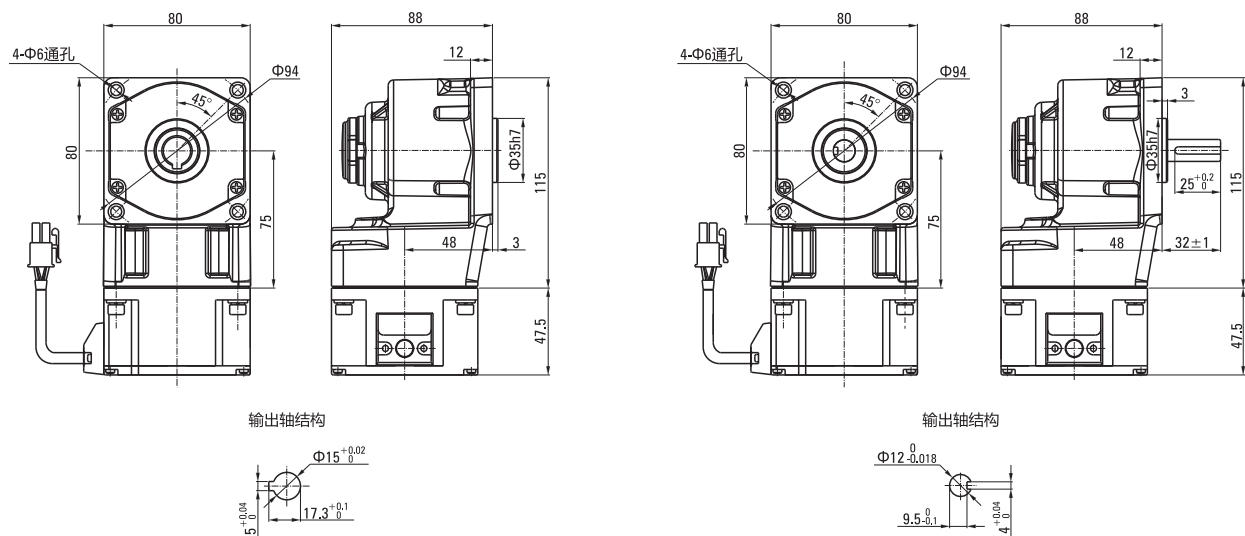
| 电机轴转速 Motor Speed | 减速比 Reduction Ratio | | | | | | | | |
|----------------------|------------------------|------|------|------|------|------|-------|-------|--|
| | 5 | 10 | 15 | 20 | 30 | 50 | 100 | 200 | |
| 200~1500RPM | 1.21 | 2.41 | 3.62 | 4.83 | 6.53 | 10.9 | 21.80 | 39.30 | |
| 2000RPM | 1.02 | 2.04 | 3.06 | 4.08 | 5.52 | 9.20 | 18.40 | 33.30 | |
| 2500RPM | 0.93 | 1.86 | 2.78 | 3.71 | 5.02 | 8.37 | 16.70 | 30.30 | |
| 3000RPM | 0.70 | 1.39 | 2.09 | 2.79 | 4.18 | 6.97 | 13.94 | 27.89 | |

注Note: 表格中的所有速比旋转方向与电机转向相反。All gearbox output turn direction in form are opposite as motor turn direction.
(不同转速及速比下的力矩为ZD标准驱动器下测试所得。The torque under different speed and speed ratio is obtained under the ZD standard.)

● 弧锥直角减速电机 Arc Cone Right Angle Speed Reducer Motor

XLY4BLD60-□GN-30S/4GN□RC □—电压 Voltage 24/36/48/110/220
□—速比数值 Velocity Ratio Value

XLY4BLD60-□GN-30S/4GN□RT □—电压 Voltage 24/36/48/110/220
□—速比数值 Velocity Ratio Value



● XLY4BLD40-□GN-30S/4GN□RC/RT整机容许力矩 (单位: N.m) XLY4BLD40-□GN-30S/4GN□RC/RT Machine Allowable Torque (Unit: N.m)

| 型号 Model | 电机轴转速 Motor Speed | 减速比 Reduction Ratio | | | | | | | | | | | | | | | | | |
|---------------|----------------------|------------------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| | | 7.5 | 9 | 10 | 12.5 | 15 | 18 | 20 | 25 | 30 | 36 | 50 | 60 | 75 | 90 | 100 | 120 | 150 | 180 |
| XLY4BLD40-□GN | 200~1500RPM | 1.21 | 1.45 | 1.61 | 2.01 | 2.41 | 2.90 | 2.90 | 3.63 | 4.35 | 5.22 | 7.25 | 7.87 | 8.00 | 8.00 | 8.00 | 8.00 | 8.00 | 8.00 |
| | 2000RPM | 1.02 | 1.23 | 1.36 | 1.70 | 2.04 | 2.45 | 2.45 | 3.07 | 3.68 | 4.42 | 6.13 | 6.66 | 8.00 | 8.00 | 8.00 | 8.00 | 8.00 | 8.00 |
| | 2500RPM | 0.93 | 1.11 | 1.24 | 1.55 | 1.86 | 2.23 | 2.23 | 2.79 | 3.35 | 4.02 | 5.58 | 6.05 | 7.56 | 8.00 | 8.00 | 8.00 | 8.00 | 8.00 |
| | 3000RPM | 0.63 | 0.76 | 0.84 | 1.05 | 1.26 | 1.51 | 1.68 | 2.10 | 2.52 | 3.03 | 4.20 | 5.58 | 6.97 | 8.00 | 8.00 | 8.00 | 8.00 | 8.00 |

● XLY4BLD60-□GN-30S/4GN□RC/RT整机容许力矩 (单位: N.m) XLY4BLD60-□GN-30S/4GN□RC/RT Machine Allowable Torque (Unit: N.m)

| 型号 Model | 电机轴转速 Motor Speed | 减速比 Reduction Ratio | | | | | | | | | | | | | | | | | |
|---------------|----------------------|------------------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| | | 7.5 | 9 | 10 | 12.5 | 15 | 18 | 20 | 25 | 30 | 36 | 50 | 60 | 75 | 90 | 100 | 120 | 150 | 180 |
| XLY4BLD60-□GN | 200~1500RPM | 1.81 | 2.17 | 2.41 | 3.02 | 3.62 | 4.34 | 4.35 | 5.44 | 6.53 | 7.83 | 8.00 | 8.00 | 8.00 | 8.00 | 8.00 | 8.00 | 8.00 | 8.00 |
| | 2000RPM | 1.53 | 1.84 | 2.04 | 2.55 | 3.06 | 3.68 | 3.68 | 4.60 | 5.52 | 6.63 | 8.00 | 8.00 | 8.00 | 8.00 | 8.00 | 8.00 | 8.00 | 8.00 |
| | 2500RPM | 1.39 | 1.67 | 1.86 | 2.32 | 2.78 | 3.34 | 3.35 | 4.18 | 5.02 | 6.02 | 8.00 | 8.00 | 8.00 | 8.00 | 8.00 | 8.00 | 8.00 | 8.00 |
| | 3000RPM | 0.95 | 1.13 | 1.26 | 1.58 | 1.89 | 2.27 | 2.52 | 3.15 | 3.78 | 4.54 | 6.30 | 8.00 | 8.00 | 8.00 | 8.00 | 8.00 | 8.00 | 8.00 |

注Note: 表格中的 () (灰底部分) 表示旋转方向与电机转向一致。The (gray) in the table indicates that the rotation direction is consistent with the motor.
(不同转速及速比下的力矩为XLY标准驱动器下测试所得。The torque under different speed and speed ratio is obtained under the XLY standard.)

90系列永磁无刷齿轮减速电机 (GN型) 90 SERIES OF BRUSHLESS DC MOTOR (GN TYPE)



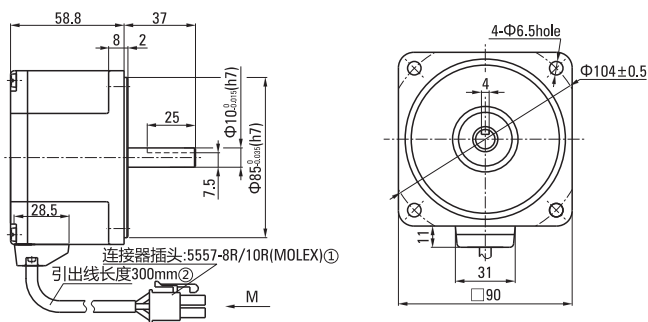
电机基本特性 Basic Characteristics Of Motor

● 60W (DC电源时适用于24VDC/36VDC/48VDC) 60W (DC Power Supply When Applied To 24VDC/36VDC/48VDC)

| | | | | | |
|-------------------------------------|--|--|---------------------|---------------------|-------------------------------|
| 额定功率(连续) Rated power (Continuous) | W | 60 (40W/60W) | | | |
| 额定转速 Rated speed | r/min | 3000 | | | |
| 额定转矩 Rated torque | N.m | 0.191 | | | |
| 瞬时最大转矩 Instantaneous maximum torque | N.m | 0.287 | | | |
| 转子转动惯量 Rotor moment of inertia | J: $\times 10^{-4} \text{kg.m}^2$ | 0.082 | | | |
| 速度控制范围 Speed control range | RPM | 200~3000 | | | |
| 速率变化率 Speed control range | 对负载 On load | ±1.0%以下: 条件0~额定转矩、额定转速、额定电压、常温 Below ±1%: condition 0~rated torque, rated speed, rated voltage, room temperature | | | |
| | 对电压 On voltage | ±1.0%以下: 条件额定电压±10%、额定转速、额定负载、常温 Below ±1%: condition rated voltage ±10%, rated speed, rated load, room temperature | | | |
| | 对温度 On temperature | ±1.0%以下: 条件使用环境温度-10°C~+40°C额定转速、额定负载、额定电压 Below ±1%: Conditions of ambient temperature -10°C~+40°C rated voltage, rated load and rated speed | | | |
| 电源输入 Power input | 额定电压 Rated voltage | V | 单相Single phase 110V | 单相Single phase 220V | 24VDC(可选Optional 36VDC/48VDC) |
| | 电压容许范围 Voltage tolerance range | | ±10% | | |
| | 频率 Frequency | Hz | 50/60 | / | |
| | 频率容许范围 Frequency tolerance range | | ±5% | | |
| | 额定输入电流 Rated input current | A | 1.7 | 1.0 | 3.7 |
| | 瞬时最大输入电流 Instantaneous maximum input current | A | 3.3 | 1.9 | 5.6 |

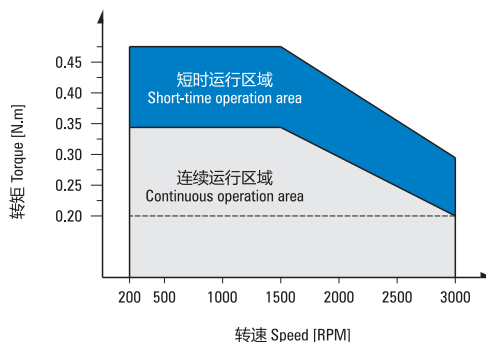
圆轴型光电机 Circular Shaft Type Optical Motor

● XLY5BLD60-□A-30S □—电压 Voltage 24/36/48/110/220



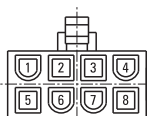
①Connector: 5557-8R/10R (MOLEX) ②Lead wire length 300mm

● XLY5BLD60-220A-30S 曲线图 Diagram
(XLY标准驱动器 XLY Standard Drive)



● 低压电机接线插孔对应信号说明

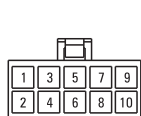
Low Voltage Wire Plughole Corresponding Signal Explanation



| | | | | |
|----------|---|-----|----|-----|
| plughole | 1 | 2 | 3 | 4 |
| signal | U | W | Hv | Hu |
| plughole | 5 | 6 | 7 | 8 |
| signal | V | GND | Hw | Vcc |

● 高压电机接线插孔对应信号说明

High Voltage Wire Plughole Corresponding Signal Explanation



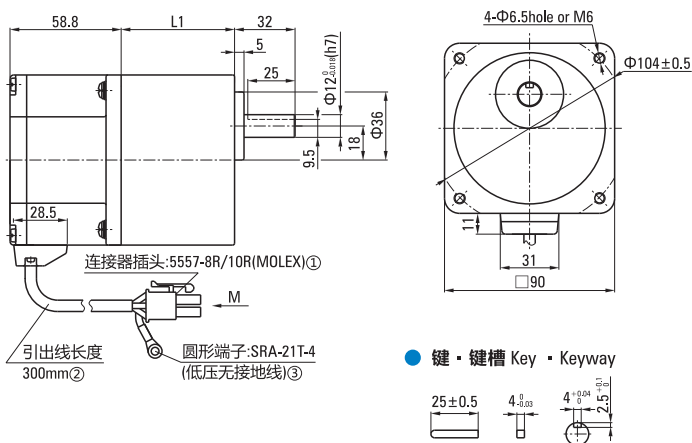
| 排线对应的意义 | | | | | | | | | |
|---------|------|------|------|------|------|---|------|--------|------|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| 蓝(粗) | 黄(细) | 黄(粗) | 绿(细) | 绿(粗) | 蓝(细) | | 金属丝网 | 红(细) | 黑(细) |
| W | Hu | U | Hv | V | Hw | | | Vcc+5V | GND |



60W

● 平行轴减速机 Parallel Shaft Speed Reducer

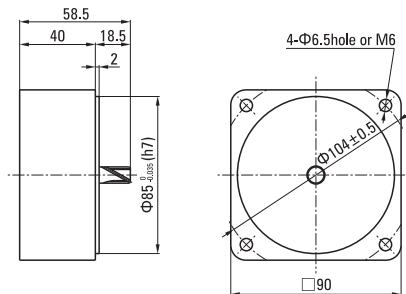
XLY5BLD60-□GN-30S/5GN□K □—电压 Voltage 24/36/48/110/220
□—速比数值 Velocity Ratio Value



● 键 · 键槽 Key · Keyway

● 中间减速器 Decmal Gearhead

5GN□XK □—速比数值, 一般为10 Velocity Ratio Value, Generally 10



| 减速器型号 Gearhead Model | 减速比 Gear Ratio | L尺寸 Dimension |
|-------------------------|-------------------|------------------|
| 5GN□K | 3~18 | 42&60 |
| | 20~200 | 60 |

● 减速器型号的□中为减速比的数值
Enter the gear ratio in the box (□) within the model name

①Connector: 5557-8R/10R (MOLEX) ②The sheath length of lead line 300mm ③Round terminal: SRA-21T-4 (Low ground)

● XLY5BLD40-□GN-30S/5GN□K整机容许力矩 (单位: N.m) XLY5BLD40-□GN-30S/5GN□K Machine Allowable Torque (Unit: N.m)

| 型号 Model | 电机轴转速 Motor Speed | 减速比 Reduction Ratio | | | | | | | | | | | | | | | | | | | | | | |
|---------------|----------------------|------------------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| | | 3 | 3.6 | 5 | 6 | 7.5 | 9 | 10 | 12.5 | 15 | 18 | 20 | 25 | 30 | 36 | 50 | 60 | 75 | 90 | 100 | 120 | 150 | 180 | 200 |
| XLY5BLD40-□GN | 200~1500RPM | 0.48 | 0.58 | 0.80 | 0.97 | 1.21 | 1.45 | 1.61 | 2.01 | 2.41 | 2.90 | 2.90 | 3.63 | 4.35 | 5.22 | 7.25 | 7.87 | 9.83 | 10.0 | 10.0 | 10.0 | 10.0 | 10.0 | 10.0 |
| | 2000RPM | 0.41 | 0.49 | 0.68 | 0.82 | 1.02 | 1.23 | 1.36 | 1.70 | 2.04 | 2.45 | 2.45 | 3.07 | 3.68 | 4.42 | 6.13 | 6.66 | 8.32 | 9.98 | 10.0 | 10.0 | 10.0 | 10.0 | 10.0 |
| | 2500RPM | 0.37 | 0.45 | 0.62 | 0.74 | 0.93 | 1.11 | 1.24 | 1.55 | 1.86 | 2.23 | 2.23 | 2.79 | 3.35 | 4.02 | 5.58 | 6.05 | 7.56 | 9.08 | 10.0 | 10.0 | 10.0 | 10.0 | 10.0 |
| | 3000RPM | 0.31 | 0.37 | 0.52 | 0.62 | 0.77 | 0.93 | 1.03 | 1.29 | 1.55 | 1.86 | 1.86 | 2.32 | 2.79 | 3.35 | 4.65 | 5.01 | 6.26 | 7.52 | 8.35 | 10.0 | 10.0 | 10.0 | 10.0 |

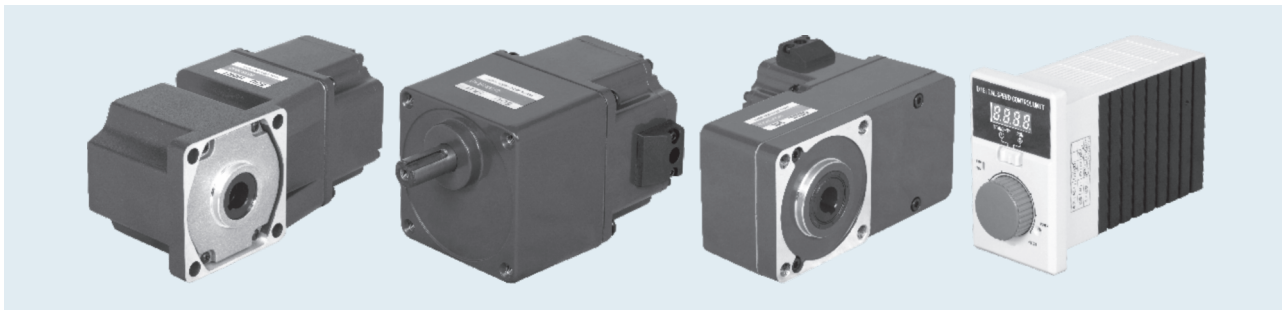
● XLY5BLD60-□GN-30S/5GN□K整机容许力矩 (单位: N.m) XLY5BLD60-□GN-30S/5GN□K Machine Allowable Torque (Unit: N.m)

| 型号 Model | 电机轴转速 Motor Speed | 减速比 Reduction Ratio | | | | | | | | | | | | | | | | | | | | | | |
|---------------|----------------------|------------------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| | | 3 | 3.6 | 5 | 6 | 7.5 | 9 | 10 | 12.5 | 15 | 18 | 20 | 25 | 30 | 36 | 50 | 60 | 75 | 90 | 100 | 120 | 150 | 180 | 200 |
| XLY5BLD60-□GN | 200~1500RPM | 0.72 | 0.87 | 1.21 | 1.45 | 1.81 | 2.17 | 2.41 | 3.02 | 3.62 | 4.34 | 4.35 | 5.44 | 6.53 | 7.83 | 9.83 | 10.0 | 10.0 | 10.0 | 10.0 | 10.0 | 10.0 | 10.0 | 10.0 |
| | 2000RPM | 0.61 | 0.74 | 1.02 | 1.23 | 1.53 | 1.84 | 2.04 | 2.55 | 3.06 | 3.68 | 3.68 | 4.60 | 5.52 | 6.63 | 8.32 | 9.98 | 10.0 | 10.0 | 10.0 | 10.0 | 10.0 | 10.0 | 10.0 |
| | 2500RPM | 0.56 | 0.67 | 0.93 | 1.11 | 1.39 | 1.67 | 1.86 | 2.32 | 2.78 | 3.34 | 3.35 | 4.18 | 5.02 | 6.02 | 7.56 | 9.08 | 10.0 | 10.0 | 10.0 | 10.0 | 10.0 | 10.0 | 10.0 |
| | 3000RPM | 0.46 | 0.56 | 0.77 | 0.93 | 1.16 | 1.39 | 1.55 | 1.93 | 2.32 | 2.78 | 2.79 | 3.49 | 4.18 | 5.02 | 6.97 | 7.52 | 9.40 | 10.0 | 10.0 | 10.0 | 10.0 | 10.0 | 10.0 |

注: 表格中的□(灰底部分)表示旋转方向与电机转向一致。The □(gray) in the table indicates that the rotation direction is consistent with the motor.
(不同转速及速比下的力矩为XLY标准驱动器下测试所得。The torque under different speed and speed ratio is obtained under the XLY standard.)



90系列永磁无刷齿轮减速电机 (GU型) 90 SERIES OF BRUSHLESS DC MOTOR (GU TYPE)



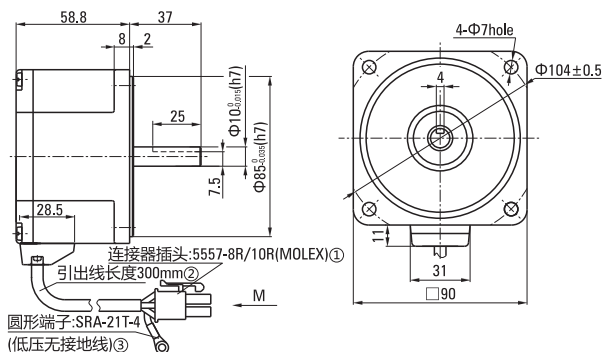
电机基本特性 Basic Characteristics Of Motor

● 120W (DC电源时适用于24VDC/36VDC/48VDC) 120W (DC Power Supply When Applied To 24VDC/36VDC/48VDC)

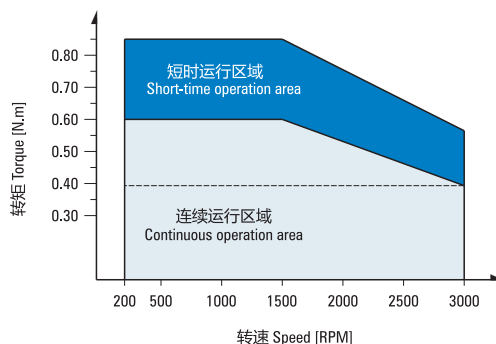
| | | | | | |
|-------------------------------------|--|--|---------------------|---------------------|-------------------------------|
| 额定功率(连续) Rated power (Continuous) | W | 120 (60W/90W/120W) | | | |
| 额定转速 Rated speed | r/min | 3000 | | | |
| 额定转矩 Rated torque | N.m | 0.382 | | | |
| 瞬时最大转矩 Instantaneous maximum torque | N.m | 0.573 | | | |
| 转子转动惯量 Rotor moment of inertia | J:10 ⁻⁴ kg.m ² | 0.250 | | | |
| 速度控制范围 Speed control range | RPM | 200~3000 | | | |
| 速率变化率 Speed control range | 对负载 On load | ±1.0%以下: 条件0~额定转矩、额定转速、额定电压、常温 Below ±1%: condition 0~rated torque, rated speed, rated voltage, room temperature | | | |
| | 对电压 On voltage | ±1.0%以下: 条件额定电压±10%、额定转速、额定负载、常温 Below ±1%: condition rated voltage ±10%, rated speed, rated load, room temperature | | | |
| | 对温度 On temperature | ±1.0%以下: 条件使用环境温度-10°C~+40°C额定转速、额定负载、额定电压 Below ±1%: Conditions of ambient temperature -10°C~+40°C rated voltage, rated load and rated speed | | | |
| 电源输入 Power input | 额定电压 Rated voltage | V | 单相Single phase 110V | 单相Single phase 220V | 24VDC(可选Optional 36VDC/48VDC) |
| | 电压容许范围 Voltage tolerance range | | ±10% | | |
| | 频率 Frequency | Hz | 50/60 | / | |
| | 频率容许范围 Frequency tolerance range | | ±5% | / | |
| | 额定输入电流 Rated input current | A | 3.5 | 2.0 | 6.8 |
| | 瞬时最大输入电流 Instantaneous maximum input current | A | 7.0 | 4.5 | 13.0 |

圆轴型光电机 Circular Shaft Type Optical Motor

● XLY5BLD120-□A-30S □—电压 Voltage 24/36/48/110/220

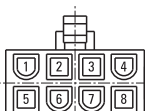


● XLY5BLD120-220A-30S 曲线图 Diagram (XLY标准驱动器 XLY Standard Drive)



● 低压电机接线插孔对应信号说明

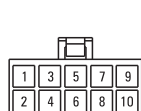
Low Voltage Wrie Plughole Corresp-onding Signal Explanation



| | | | | |
|----------|---|-----|----|-----|
| plughole | 1 | 2 | 3 | 4 |
| signal | U | W | Hv | Hu |
| plughole | 5 | 6 | 7 | 8 |
| signal | V | GND | Hw | Vcc |

● 高压电机接线插孔对应信号说明

High Voltage Wrie Plughole Corresp-onding Signal Explanation

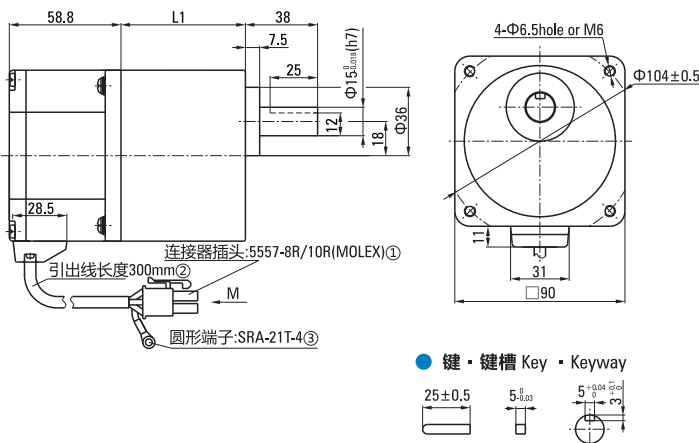


| 排线对应的意义 | | | | | | | | | |
|---------|-------|-------|-------|-------|-------|---|------|--------|-------|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| 蓝 (粗) | 黄 (粗) | 黄 (细) | 绿 (粗) | 绿 (细) | 蓝 (细) | | 金属丝网 | 红 (细) | 黑 (细) |
| W | Hu | U | Hv | V | Hw | | | Vcc+5V | GND |

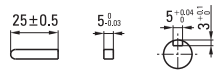
120W

● 平行轴减速机 Parallel Shaft Speed Reducer

XLY5BLD120-□GU-30S/5GU□K □—电压 Voltage 24/36/48/110/220
□—速比数值 Velocity Ratio Value



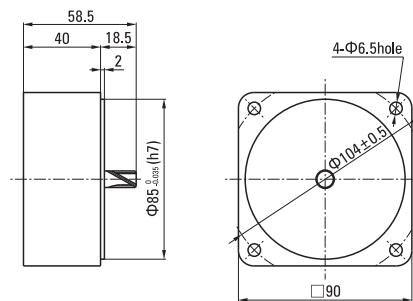
● 键 · 键槽 Key · Keyway



①Connector: 5557-8R/10R (MOLEX) ②The sheath length of lead line 300mm ③Round terminal: SRA-21T-4

● 中间减速器 Decmal Gearhead

5GU□XK □—速比数值, 一般为10 Velocity Ratio Value, Generally 10



| 减速器型号 Gearhead Model | 减速比 Gear Ratio | L尺寸 Dimension |
|-------------------------|-------------------|------------------|
| 5GU□K | 3~200 | 65.5 |

●减速器型号的□中为减速比的数值

Enter the gear ratio in the box (□) within the model name

● XLY5BLD60-□GU-30S/5GU□K整机容许力矩 (单位: N.m) XLY5BLD60-□GU-30S/5GU□K Machine Allowable Torque (Unit: N.m)

| 型号 Model | 电机轴转速 Motor Speed | 减速比 Reduction Ratio | | | | | | | | | | | | | | | | | | | | | | |
|---------------|----------------------|------------------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| | | 3 | 3.6 | 5 | 6 | 7.5 | 9 | 10 | 12.5 | 15 | 18 | 20 | 25 | 30 | 36 | 50 | 60 | 75 | 90 | 100 | 120 | 150 | 180 | 200 |
| XLY5BLD60-□GU | 200~1500RPM | 0.72 | 0.87 | 1.21 | 1.45 | 1.81 | 2.17 | 2.41 | 3.02 | 3.62 | 4.34 | 4.35 | 5.44 | 6.53 | 7.83 | 9.83 | 10.0 | 10.0 | 10.0 | 10.0 | 10.0 | 10.0 | 10.0 | 10.0 |
| | 2000RPM | 0.61 | 0.74 | 1.02 | 1.23 | 1.53 | 1.84 | 2.04 | 2.55 | 3.06 | 3.68 | 3.68 | 4.60 | 5.52 | 6.63 | 8.32 | 9.98 | 10.0 | 10.0 | 10.0 | 10.0 | 10.0 | 10.0 | 10.0 |
| | 2500RPM | 0.56 | 0.67 | 0.93 | 1.11 | 1.39 | 1.67 | 1.86 | 2.32 | 2.78 | 3.34 | 3.35 | 4.18 | 5.02 | 6.02 | 7.56 | 9.08 | 10.0 | 10.0 | 10.0 | 10.0 | 10.0 | 10.0 | 10.0 |
| | 3000RPM | 0.46 | 0.56 | 0.77 | 0.93 | 1.16 | 1.39 | 1.55 | 1.93 | 2.32 | 2.78 | 2.79 | 3.49 | 4.18 | 5.02 | 6.97 | 7.52 | 9.40 | 10.0 | 10.0 | 10.0 | 10.0 | 10.0 | 10.0 |

● XLY5BLD90-□GU-30S/5GU□K整机容许力矩 (单位: N.m) XLY5BLD90-□GU-30S/5GU□K Machine Allowable Torque (Unit: N.m)

| 型号 Model | 电机轴转速 Motor Speed | 减速比 Reduction Ratio | | | | | | | | | | | | | | | | | | | | | | |
|---------------|----------------------|------------------------|------|------|------|------|------|------|------|------|------|------|------|------|------|-------|-------|------|-------|-------|------|------|------|------|
| | | 3 | 3.6 | 5 | 6 | 7.5 | 9 | 10 | 12.5 | 15 | 18 | 20 | 25 | 30 | 36 | 50 | 60 | 75 | 90 | 100 | 120 | 150 | 180 | 200 |
| XLY5BLD90-□GU | 200~1500RPM | 1.09 | 1.30 | 1.81 | 2.18 | 2.72 | 3.26 | 3.62 | 4.53 | 5.43 | 6.52 | 6.53 | 8.16 | 9.79 | 11.8 | 14.7 | 17.7 | 20.0 | 20.0 | 20.0 | 20.0 | 20.0 | 20.0 | 20.0 |
| | 2000RPM | 0.92 | 1.10 | 1.53 | 1.84 | 2.30 | 2.76 | 3.06 | 3.83 | 4.59 | 5.51 | 5.52 | 6.90 | 8.28 | 9.94 | 12.5 | 15.0 | 18.7 | 20.0 | 20.0 | 20.0 | 20.0 | 20.0 | 20.0 |
| | 2500RPM | 0.84 | 1.00 | 1.39 | 1.67 | 2.09 | 2.51 | 2.78 | 3.48 | 4.18 | 5.01 | 5.02 | 6.27 | 7.53 | 9.04 | 11.3 | 13.6 | 17.0 | 20.0 | 20.0 | 20.0 | 20.0 | 20.0 | 20.0 |
| | 3000RPM | 0.70 | 0.84 | 1.16 | 1.39 | 1.74 | 2.09 | 2.32 | 2.90 | 3.48 | 4.18 | 4.18 | 5.23 | 6.27 | 7.53 | 10.46 | 11.28 | 14.1 | 16.91 | 18.79 | 20.0 | 20.0 | 20.0 | 20.0 |

● XLY5BLD120-□GU-30S/5GU□K整机容许力矩 (单位: N.m) XLY5BLD120-□GU-30S/5GU□K Machine Allowable Torque (Unit: N.m)

| 型号 Model | 电机轴转速 Motor Speed | 减速比 Reduction Ratio | | | | | | | | | | | | | | | | | | | | | | |
|----------------|----------------------|------------------------|------|------|------|------|------|------|------|------|------|------|------|------|-------|-------|-------|-------|------|------|------|------|------|------|
| | | 3 | 3.6 | 5 | 6 | 7.5 | 9 | 10 | 12.5 | 15 | 18 | 20 | 25 | 30 | 36 | 50 | 60 | 75 | 90 | 100 | 120 | 150 | 180 | 200 |
| XLY5BLD120-□GU | 200~1500RPM | 1.45 | 1.74 | 2.41 | 2.90 | 3.62 | 4.34 | 4.35 | 5.44 | 6.53 | 7.83 | 7.87 | 9.83 | 11.8 | 14.2 | 19.7 | 20.0 | 20.0 | 20.0 | 20.0 | 20.0 | 20.0 | 20.0 | 20.0 |
| | 2000RPM | 1.23 | 1.47 | 2.04 | 2.45 | 3.06 | 3.68 | 3.68 | 4.60 | 5.52 | 6.63 | 6.66 | 8.32 | 9.98 | 12.0 | 16.6 | 20.0 | 20.0 | 20.0 | 20.0 | 20.0 | 20.0 | 20.0 | 20.0 |
| | 2500RPM | 1.11 | 1.34 | 1.86 | 2.23 | 2.78 | 3.34 | 3.35 | 4.18 | 5.02 | 6.02 | 6.05 | 7.56 | 9.08 | 10.9 | 15.1 | 18.2 | 20.0 | 20.0 | 20.0 | 20.0 | 20.0 | 20.0 | 20.0 |
| | 3000RPM | 0.93 | 1.11 | 1.55 | 1.86 | 2.32 | 2.78 | 3.09 | 3.87 | 4.64 | 5.57 | 5.58 | 6.97 | 8.37 | 10.04 | 13.94 | 15.04 | 18.79 | 20.0 | 20.0 | 20.0 | 20.0 | 20.0 | 20.0 |

注Note: 表格中的□(灰底部分)表示旋转方向与电机转向一致。The □(gray) in the table indicates that the rotation direction is consistent with the motor.
(不同转速及速比下的力矩为XLY标准驱动器下测试所得。The torque under different speed and speed ratio is obtained under the XLY standard.)

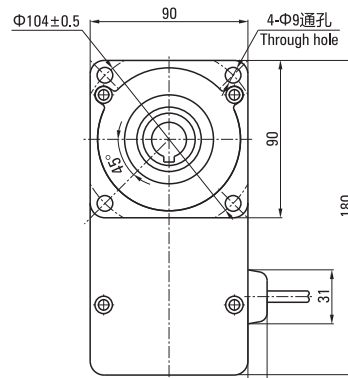
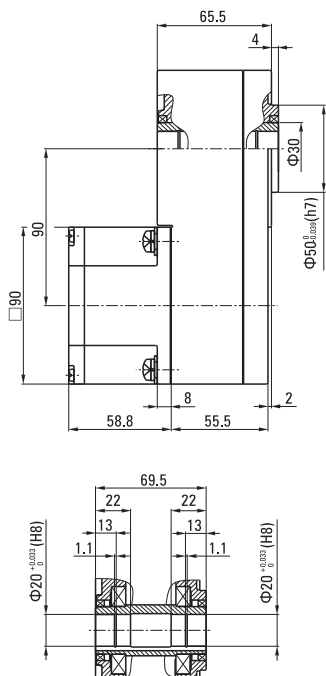
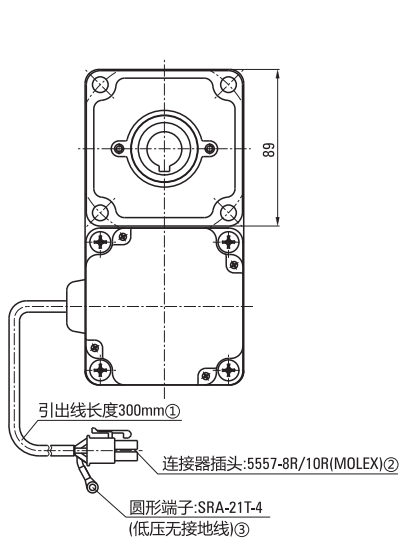


● L型减速机 L Type Speed Reducer

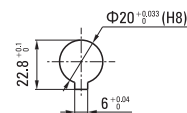
XLY5BLD120-□GUL-30S/5GU□LC

□—电压 Voltage 24/36/48/110/220

□—速比数值 Velocity Ratio Value



● 输出轴内孔结构 The Output Shaft Hole Structure



①Lead wire length 300mm ②Connector: 5557-8R/10R (MOLEX) ③Round terminal: SRA-21T-4 (Low ground)

● XLY5BLD60-□GUL-30S/5GU□LC整机容许力矩 (单位: N.m) XLY5BLD60-□GUL-30S/5GU□LC Machine Allowable Torque (Unit: N.m)

| 电机轴转速 Motor Speed | 5 | 10 | 15 | 20 | 30 | 50 | 100 | 200 |
|----------------------|------|------|------|------|------|------|-------|-------|
| 200~1500RPM | 1.09 | 2.18 | 3.26 | 4.35 | 6.53 | 10.9 | 21.8 | 43.5 |
| 2000RPM | 0.92 | 1.84 | 2.76 | 3.68 | 5.52 | 9.20 | 18.4 | 36.8 |
| 2500RPM | 0.84 | 1.67 | 2.51 | 3.35 | 5.02 | 8.37 | 16.7 | 33.5 |
| 3000RPM | 0.70 | 1.39 | 2.09 | 2.79 | 4.18 | 6.97 | 13.94 | 27.89 |

● XLY5BLD90-□GUL-30S/5GU□LC整机容许力矩 (单位: N.m) XLY5BLD90-□GUL-30S/5GU□LC Machine Allowable Torque (Unit: N.m)

| 电机轴转速 Motor Speed | 5 | 10 | 15 | 20 | 30 | 50 | 100 | 200 |
|----------------------|------|------|------|------|------|-------|-------|-------|
| 200~1500RPM | 1.63 | 3.26 | 4.90 | 6.53 | 9.79 | 16.3 | 32.6 | 65.3 |
| 2000RPM | 1.38 | 2.76 | 4.14 | 5.52 | 8.28 | 13.8 | 27.6 | 55.2 |
| 2500RPM | 1.25 | 2.51 | 3.76 | 5.02 | 7.53 | 12.5 | 25.1 | 50.2 |
| 3000RPM | 1.05 | 2.09 | 3.14 | 4.18 | 6.27 | 10.46 | 20.91 | 41.83 |

● XLY5BLD120-□GUL-30S/5GU□LC整机容许力矩 (单位: N.m) XLY5BLD120-□GUL-30S/5GU□LC Machine Allowable Torque (Unit: N.m)

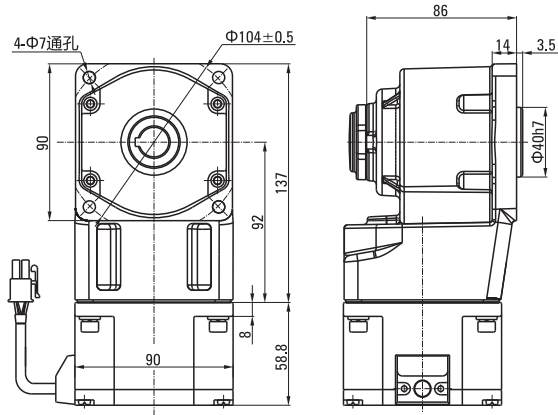
| 电机轴转速 Motor Speed | 5 | 10 | 15 | 20 | 30 | 50 | 100 | 200 |
|----------------------|------|------|------|------|------|-------|-------|-------|
| 200~1500RPM | 2.41 | 4.83 | 7.24 | 9.65 | 13.1 | 21.8 | 43.5 | 68.0 |
| 2000RPM | 2.04 | 4.08 | 6.13 | 8.17 | 11.0 | 18.4 | 36.8 | 66.6 |
| 2500RPM | 1.86 | 3.71 | 5.57 | 7.43 | 10.0 | 16.7 | 33.5 | 60.5 |
| 3000RPM | 1.39 | 2.79 | 4.18 | 5.58 | 8.37 | 13.94 | 27.89 | 55.77 |

注 Note : 表格中的所有速比旋转方向与电机转向相反。All gearbox output turn direction in form are opposite as motor turn direction.
(不同转速及速比下的力矩为XLY标准驱动器下测试所得。The torque under different speed and speed ratio is obtained under the XLY standard.)

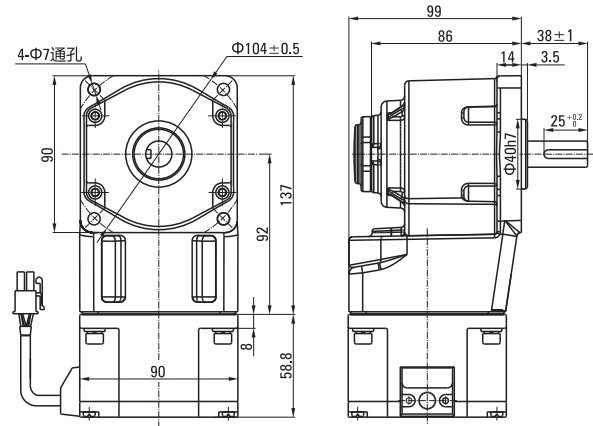
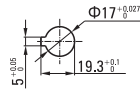
● 弧锥直角减速电机 Arc Cone Right Angle Speed Reducer Motor

XLY5BLD120-□GU-30S/5GU□RC □—电压 Voltage 24/36/48/110/220
□—速比数值 Velocity Ratio Value

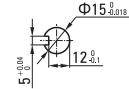
XLY5BLD120-□GU-30S/5GU□RT □—电压 Voltage 24/36/48/110/220
□—速比数值 Velocity Ratio Value



输出轴结构



输出轴结构



● XLY5BLD60-□GU-30S/5GU□RC/RT整机容许力矩 (单位: N.m) XLY5BLD60-□GU-30S/5GU□RC/RT Machine Allowable Torque (Unit: N.m)

| 型号 Model | 电机轴转速 Motor Speed | 减速比 Reduction Ratio | | | | | | | | | | | | | | | | | |
|---------------|-------------------|---------------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| | | 7.5 | 9 | 10 | 12.5 | 15 | 18 | 20 | 25 | 30 | 36 | 50 | 60 | 75 | 90 | 100 | 120 | 150 | 180 |
| XLY5BLD60-□GU | 200~1500RPM | 1.81 | 2.17 | 2.41 | 3.02 | 3.62 | 4.34 | 4.35 | 5.44 | 6.53 | 7.83 | 9.83 | 10.0 | 10.0 | 10.0 | 10.0 | 10.0 | 10.0 | 10.0 |
| | 2000RPM | 1.53 | 1.84 | 2.04 | 2.55 | 3.06 | 3.68 | 3.68 | 4.60 | 5.52 | 6.63 | 8.32 | 9.98 | 10.0 | 10.0 | 10.0 | 10.0 | 10.0 | 10.0 |
| | 2500RPM | 1.39 | 1.67 | 1.86 | 2.32 | 2.78 | 3.34 | 3.35 | 4.18 | 5.02 | 6.02 | 7.56 | 9.08 | 10.0 | 10.0 | 10.0 | 10.0 | 10.0 | 10.0 |
| | 3000RPM | 0.95 | 1.13 | 1.26 | 1.58 | 1.89 | 2.27 | 2.52 | 3.15 | 3.78 | 5.02 | 6.97 | 8.37 | 10.0 | 10.0 | 10.0 | 10.0 | 10.0 | 10.0 |

● XLY5BLD90-□GU-30S/5GU□RC/RT整机容许力矩 (单位: N.m) XLY5BLD90-□GU-30S/5GU□RC/RT Machine Allowable Torque (Unit: N.m)

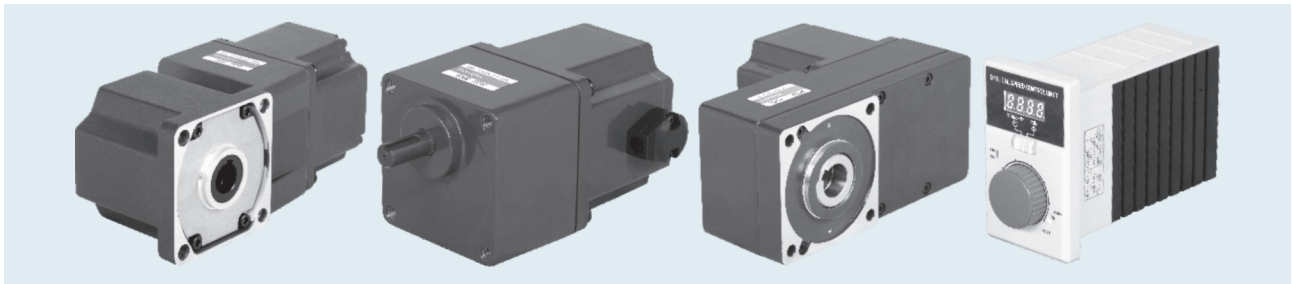
| 型号 Model | 电机轴转速 Motor Speed | 减速比 Reduction Ratio | | | | | | | | | | | | | | | | | |
|---------------|-------------------|---------------------|------|------|------|------|------|------|------|------|------|-------|-------|-------|-------|------|------|------|------|
| | | 7.5 | 9 | 10 | 12.5 | 15 | 18 | 20 | 25 | 30 | 36 | 50 | 60 | 75 | 90 | 100 | 120 | 150 | 180 |
| XLY5BLD90-□GU | 200~1500RPM | 2.72 | 3.26 | 3.62 | 4.53 | 5.43 | 6.52 | 6.53 | 8.16 | 9.79 | 11.8 | 14.7 | 17.7 | 20.0 | 20.0 | 20.0 | 20.0 | 20.0 | 20.0 |
| | 2000RPM | 2.30 | 2.76 | 3.06 | 3.83 | 4.59 | 5.51 | 5.52 | 6.90 | 8.28 | 9.94 | 12.5 | 15.0 | 18.7 | 20.0 | 20.0 | 20.0 | 20.0 | 20.0 |
| | 2500RPM | 2.09 | 2.51 | 2.78 | 3.48 | 4.18 | 5.01 | 5.02 | 6.27 | 7.53 | 9.04 | 11.3 | 13.6 | 17.0 | 20.0 | 20.0 | 20.0 | 20.0 | 20.0 |
| | 3000RPM | 1.42 | 1.70 | 1.89 | 2.36 | 2.84 | 3.40 | 3.78 | 4.73 | 5.67 | 7.53 | 10.46 | 12.55 | 15.69 | 18.82 | 20.0 | 20.0 | 20.0 | 20.0 |

● XLY5BLD120-□GU-30S/5GU□RC/RT整机容许力矩 (单位: N.m) XLY5BLD120-□GU-30S/5GU□RC/RT Machine Allowable Torque (Unit: N.m)

| 型号 Model | 电机轴转速 Motor Speed | 减速比 Reduction Ratio | | | | | | | | | | | | | | | | | |
|----------------|-------------------|---------------------|------|------|------|------|------|------|------|------|-------|-------|-------|------|------|------|------|------|------|
| | | 7.5 | 9 | 10 | 12.5 | 15 | 18 | 20 | 25 | 30 | 36 | 50 | 60 | 75 | 90 | 100 | 120 | 150 | 180 |
| XLY5BLD120-□GU | 200~1500RPM | 3.62 | 4.34 | 4.35 | 5.44 | 6.53 | 7.83 | 7.87 | 9.83 | 11.8 | 14.2 | 19.7 | 20.0 | 20.0 | 20.0 | 20.0 | 20.0 | 20.0 | 20.0 |
| | 2000RPM | 3.06 | 3.68 | 3.68 | 4.60 | 5.52 | 6.63 | 6.66 | 8.32 | 9.98 | 12.0 | 16.6 | 20.0 | 20.0 | 20.0 | 20.0 | 20.0 | 20.0 | 20.0 |
| | 2500RPM | 2.78 | 3.34 | 3.35 | 4.18 | 5.02 | 6.02 | 6.05 | 7.56 | 9.08 | 10.9 | 15.1 | 18.2 | 20.0 | 20.0 | 20.0 | 20.0 | 20.0 | 20.0 |
| | 3000RPM | 1.89 | 2.27 | 2.52 | 3.15 | 3.78 | 4.54 | 5.04 | 6.30 | 7.56 | 10.04 | 13.94 | 16.73 | 20.0 | 20.0 | 20.0 | 20.0 | 20.0 | 20.0 |

注: 表格中的 (灰底部分) 表示旋转方向与电机转向一致。The (gray) in the table indicates that the rotation direction is consistent with the motor. (不同转速及速比下的力矩为XLY标准驱动器下测试所得。The torque under different speed and speed ratio is obtained under the XLY standard.)

104系列永磁无刷齿轮减速电机 104 SERIES OF BRUSHLESS DC MOTOR



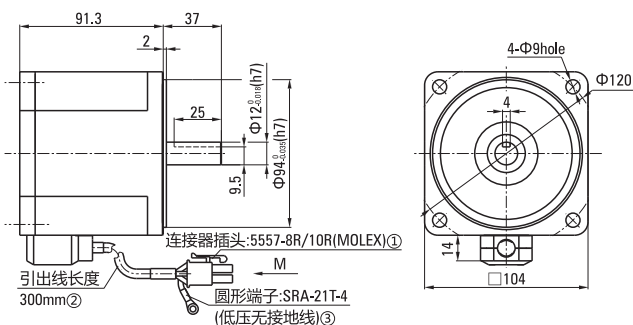
电机基本特性 Basic Characteristics Of Motor

● 200W (DC电源时适用于24VDC/36VDC/48VDC) 200W (DC Power Supply When Applied To 24VDC/36VDC/48VDC)

| | | | | | |
|-------------------------------------|--|--|---------------------|--|------|
| 额定功率(连续) Rated power (Continuous) | W | 200 (200W/400W) | | | |
| 额定转速 Rated speed | r/min | 3000 | | | |
| 额定转矩 Rated torque | N.m | 0.636 | | | |
| 瞬时最大转矩 Instantaneous maximum torque | N.m | 0.955 | | | |
| 转子转动惯量 Rotor moment of inertia | J:×10 ⁻⁴ kg.m ² | 0.460 | | | |
| 速度控制范围 Speed control range | RPM | 高压High pressure 200-2500RPM (低压Low pressure 200-3000RPM) | | | |
| 速率变化率 Speed control range | 对负载 On load | ±1.0%以下: 条件 0~额定转矩、额定转速、额定电压、常温 Below ±1%: condition 0~rated torque, rated speed, rated voltage, room temperature | | | |
| | 对电压 On voltage | ±1.0%以下: 条件 额定电压±10%、额定转速、额定负载、常温 Below ±1%: condition rated voltage ±10%, rated speed, rated load, room temperature | | | |
| | 对温度 On temperature | ±1.0%以下: 条件使用环境温度-10°C~+40°C额定转速、额定负载、额定电压 Below ±1%: Conditions of ambient temperature -10°C~+40°C rated voltage, rated load and rated speed | | | |
| 电源输入 Power input | 额定电压 Rated voltage | V | 单相Single phase 110V | 单相Single phase 220V 36VDC(可选Optional 48VDC) | |
| | 电压容许范围 Voltage tolerance range | | ±10% | | |
| | 频率 Frequency | Hz | 50/60 | / | |
| | 频率容许范围 Frequency tolerance range | | ±5% | | / |
| | 额定输入电流 Rated input current | A | 4.7 | 2.4 | 7.5 |
| | 瞬时最大输入电流 Instantaneous maximum input current | A | 9.0 | 4.8 | 11.5 |

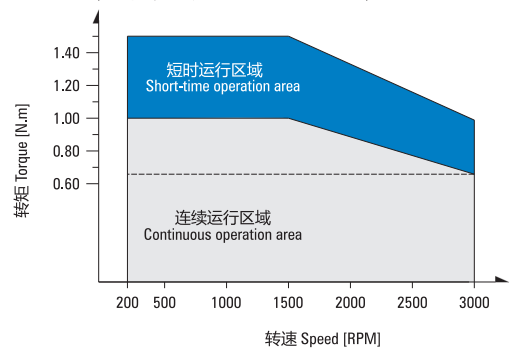
圆轴型光电机 Circular Shaft Type Optical Motor

● XLY6BLD200-□A-30S □—电压 Voltage 24/36/48/110/220



① Connector: 5557-8R/10R (MOLEX) ② Lead wire length 300mm ③ Round terminal: SRA-21T-4 (Low ground)

● XLY6BLD200-220A-30S 曲线图 Diagram (XLY标准驱动器 XLY Standard Drive)



● 低压电机接线插孔对应信号说明

Low Voltage Wire Plughole Corresponding Signal Explanation

| | | | | |
|----------|---|-----|----|-----|
| plughole | 1 | 2 | 3 | 4 |
| signal | U | W | Hv | Hu |
| plughole | 5 | 6 | 7 | 8 |
| signal | V | GND | Hw | Vcc |

● 高压电机接线插孔对应信号说明

High Voltage Wire Plughole Corresponding Signal Explanation

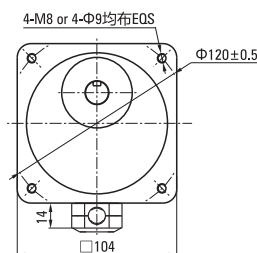
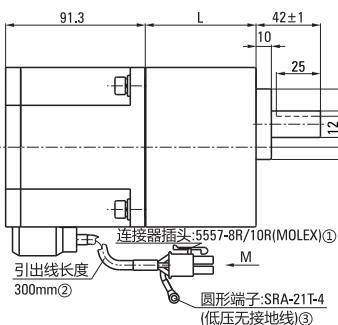
| | | | | | | | | | |
|---------|-------|-------|-------|-------|-------|---|------|--------|-------|
| 排线对应的意义 | | | | | | | | | |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| 蓝 (粗) | 黄 (细) | 黄 (粗) | 绿 (细) | 绿 (粗) | 蓝 (细) | | 金属丝网 | 红 (细) | 黑 (细) |
| W | Hu | U | Hv | V | Hw | | | Vcc+5V | GND |

200W

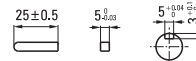
● 平行轴减速机 Parallel Shaft Speed Reducer

XLY6BLD200-□GU-30S/6GU□K □—电压 Voltage 24/36/48/110/220

□—速比数值 Velocity Ratio Value



● 键·键槽 Key · Keyway



| 减速器型号 Gearhead Model | 减速比 Gear Ratio | L尺寸 Dimension |
|-------------------------|-------------------|------------------|
| 6GU□K | 3~200 | 72 |

● 减速器型号的□中为减速比的数值
Enter the gear ratio in the box (□) within the model name

①Connector: 5557-8R/10R (MOLEX) ②The sheath length of lead line 300mm ③Round terminal: SRA-21T-4 (Low ground)

● XLY6BLD200-□GU-30S/6GU□K整机容许力矩 (单位: N.m) XLY6BLD200-□GU-30S/6GU□K Machine Allowable Torque (Unit: N.m)

| 型号 Model | 电机轴转速 Motor Speed | 减速比 Reduction Ratio | | | | | | | | | | | | | | | | | | | | |
|----------------|----------------------|------------------------|------|------|------|------|------|------|------|------|-------|-------|-------|-------|-------|-------|-------|------|------|------|------|------|
| | | 3 | 3.6 | 5 | 6 | 7.5 | 9 | 12.5 | 15 | 18 | 25 | 30 | 36 | 50 | 60 | 75 | 90 | 100 | 120 | 150 | 180 | 200 |
| XLY6BLD200-□GU | 200~1500RPM | 2.41 | 2.90 | 4.02 | 4.83 | 6.03 | 7.24 | 9.06 | 10.9 | 13.1 | 16.4 | 19.7 | 23.6 | 32.8 | 39.3 | 40.0 | 40.0 | 40.0 | 40.0 | 40.0 | 40.0 | 40.0 |
| | 2000RPM | 2.04 | 2.45 | 3.40 | 4.08 | 5.11 | 6.13 | 7.67 | 9.20 | 11.0 | 13.9 | 16.6 | 20.0 | 27.7 | 33.3 | 40.0 | 40.0 | 40.0 | 40.0 | 40.0 | 40.0 | 40.0 |
| | 2500RPM | 1.86 | 2.23 | 3.09 | 3.71 | 4.64 | 5.57 | 6.97 | 8.37 | 10.0 | 12.6 | 15.1 | 18.2 | 25.2 | 30.3 | 37.8 | 40.0 | 40.0 | 40.0 | 40.0 | 40.0 | 40.0 |
| | 3000RPM | 1.55 | 1.86 | 2.58 | 3.09 | 3.87 | 4.64 | 5.81 | 6.97 | 8.37 | 10.44 | 12.53 | 15.04 | 20.88 | 25.06 | 31.32 | 37.59 | 40.0 | 40.0 | 40.0 | 40.0 | 40.0 |

● XLY6BLD400-□GU-30S/6GU□K整机容许力矩 (单位: N.m) XLY6BLD400-□GU-30S/6GU□K Machine Allowable Torque (Unit: N.m)

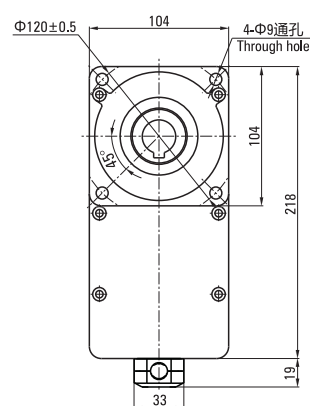
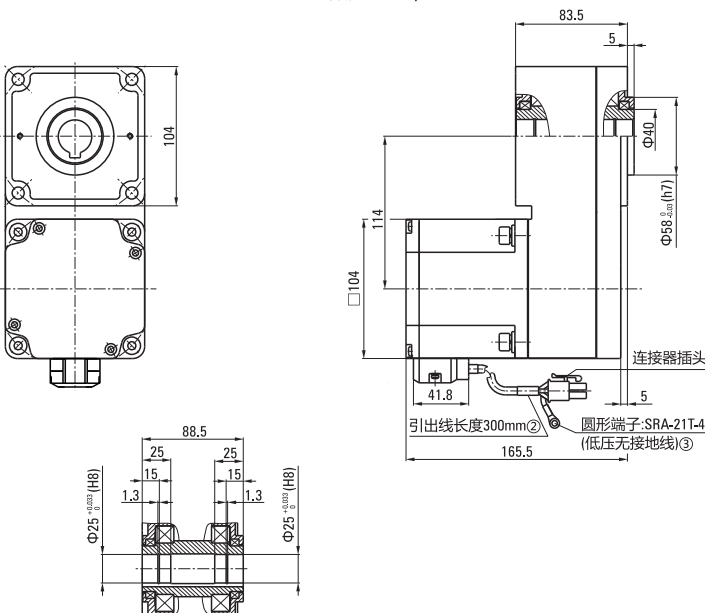
| 型号 Model | 电机轴转速 Motor Speed | 减速比 Reduction Ratio | | | | | | | | | | | | | | | | | | | | |
|----------------|----------------------|------------------------|------|------|------|-------|-------|-------|-------|-------|-------|-------|-------|------|------|------|------|------|------|------|------|------|
| | | 3 | 3.6 | 5 | 6 | 7.5 | 9 | 12.5 | 15 | 18 | 25 | 30 | 36 | 50 | 60 | 75 | 90 | 100 | 120 | 150 | 180 | 200 |
| XLY6BLD200-□GU | 200~1500RPM | 4.82 | 5.80 | 8.04 | 9.66 | 12.06 | 14.48 | 18.12 | 21.8 | 26.2 | 32.8 | 39.4 | 40.0 | 40.0 | 40.0 | 40.0 | 40.0 | 40.0 | 40.0 | 40.0 | 40.0 | 40.0 |
| | 2000RPM | 4.08 | 4.90 | 6.80 | 8.16 | 10.22 | 12.26 | 15.34 | 18.4 | 22.0 | 27.8 | 33.2 | 40.0 | 40.0 | 40.0 | 40.0 | 40.0 | 40.0 | 40.0 | 40.0 | 40.0 | 40.0 |
| | 2500RPM | 3.72 | 4.46 | 6.18 | 7.42 | 9.28 | 11.14 | 13.94 | 16.74 | 20.0 | 25.2 | 30.2 | 36.4 | 40.0 | 40.0 | 40.0 | 40.0 | 40.0 | 40.0 | 40.0 | 40.0 | 40.0 |
| | 3000RPM | 3.09 | 3.71 | 5.16 | 6.19 | 7.74 | 9.28 | 11.62 | 13.94 | 16.73 | 20.88 | 25.06 | 30.07 | 40.0 | 40.0 | 40.0 | 40.0 | 40.0 | 40.0 | 40.0 | 40.0 | 40.0 |

注Note: 表格中的□(灰底部分)表示旋转方向与电机转向一致。The □(gray) in the table indicates that the rotation direction is consistent with the motor.
(不同转速及速比下的力矩为ZD标准驱动器下测试所得。The torque under different speed and speed ratio is obtained under the ZD standard.)

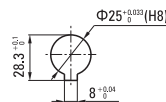
● L型减速机 L Type Speed Reducer

XLY6BLD200-□GUL-30S/6GU□LC □—电压 Voltage 24/36/48/110/220

□—速比数值 Velocity Ratio Value



● 输出轴内孔结构 The Output Shaft Hole Structure



①Connector: 5557-8R/10R (MOLEX) ②Lead wire length 300mm ③Round terminal: SRA-21T-4 (Low ground)

● XLY6BLD200-□GU-30S/6GU□LC 整机容许力矩 (单位: N.m) XLY6BLD200-□GU-30S/6GU□LC Machine Allowable Torque (Unit: N.m)

| 电机轴转速 Motor Speed | 5 | 15 | 20 | 30 | 40 | 50 | 100 |
|----------------------|------|------|-------|-------|-------|-------|-------|
| 200~1500RPM | 4.02 | 12.1 | 16.10 | 21.80 | 32.20 | 40.20 | 80.40 |
| 2000RPM | 3.40 | 10.2 | 13.60 | 20.40 | 27.20 | 34.00 | 68.00 |
| 2500RPM | 3.09 | 9.27 | 12.36 | 18.54 | 24.72 | 30.90 | 61.80 |
| 3000RPM | 2.32 | 6.96 | 9.280 | 13.92 | 18.56 | 23.20 | 46.40 |

● XLY6BLD400-□GU-30S/6GU□LC 整机容许力矩 (单位: N.m) XLY6BLD400-□GU-30S/6GU□LC Machine Allowable Torque (Unit: N.m)

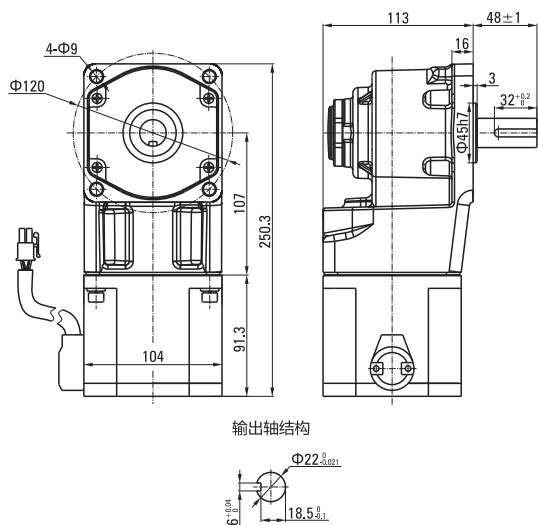
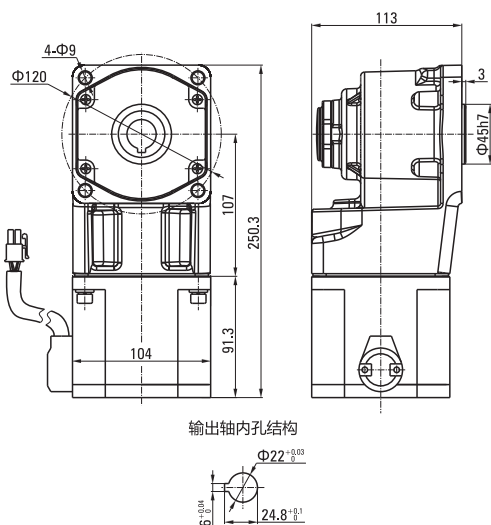
| 电机轴转速 Motor Speed | 5 | 15 | 20 | 30 | 40 | 50 | 100 |
|----------------------|------|-------|-------|-------|-------|-------|-------|
| 200~1500RPM | 8.04 | 24.20 | 32.20 | 43.60 | 64.40 | 80.40 | 120.0 |
| 2000RPM | 6.80 | 20.40 | 27.20 | 40.80 | 54.40 | 68.00 | 120.0 |
| 2500RPM | 6.18 | 18.54 | 24.72 | 37.08 | 49.44 | 61.80 | 120.0 |
| 3000RPM | 4.64 | 13.92 | 18.56 | 27.84 | 37.12 | 46.40 | 92.80 |

注Note: 表格中的所有速比旋转方向与电机转向相反。All gearbox output turn direction in form are opposite as motor turn direction.
(不同转速及速比下的力矩为ZD标准驱动器下测试所得。The torque under different speed and speed ratio is obtained under the ZD standard.)

● 弧锥直角减速电机 Arc Cone Right Angle Speed Reducer Motor

XLY6BLD200-□GU-30S/6GU□RC □—电压 Voltage 24/36/48/110/220
□—速比数值 Velocity Ratio Value

XLY6BLD200-□GU-30S/6GU□RT □—电压 Voltage 24/36/48/110/220
□—速比数值 Velocity Ratio Value



● XLY6BLD200-□GU-30S/6GU□RC/RT 整机容许力矩 (单位: N.m) XLY6BLD200-□GU-30S/6GU□RC/RT Machine Allowable Torque (Unit: N.m)

| 型号 Model | 电机轴转速 Motor Speed | 速比 Reduction Ratio | | | | | | | | | | | | | | | | | |
|----------------|----------------------|--------------------|------|------|------|------|-------|-------|-------|-------|-------|-------|------|------|------|------|------|------|------|
| | | 7.5 | 9 | 12.5 | 15 | 18 | 25 | 30 | 36 | 50 | 60 | 75 | 90 | 100 | 120 | 150 | 180 | 200 | |
| XLY6BLD200-□GU | 200~1500RPM | 6.03 | 7.24 | 9.06 | 10.9 | 13.1 | 16.4 | 19.7 | 23.6 | 32.8 | 39.3 | 40.0 | 40.0 | 40.0 | 40.0 | 40.0 | 40.0 | 40.0 | 40.0 |
| | 2000RPM | 5.11 | 6.13 | 7.67 | 9.20 | 11.0 | 13.9 | 16.6 | 20.0 | 27.7 | 33.3 | 40.0 | 40.0 | 40.0 | 40.0 | 40.0 | 40.0 | 40.0 | 40.0 |
| | 2500RPM | 4.64 | 5.57 | 6.97 | 8.37 | 10.0 | 12.6 | 15.1 | 18.2 | 25.2 | 30.3 | 37.8 | 40.0 | 40.0 | 40.0 | 40.0 | 40.0 | 40.0 | 40.0 |
| | 3000RPM | 3.15 | 3.78 | 5.25 | 6.30 | 7.56 | 10.51 | 12.61 | 15.13 | 23.24 | 27.89 | 34.86 | 40.0 | 40.0 | 40.0 | 40.0 | 40.0 | 40.0 | 40.0 |

● XLY6BLD400-□GU-25S/6GU□RC/RT 整机容许力矩 (单位: N.m) XLY6BLD400-□GU-25S/6GU□RC/RT Machine Allowable Torque (Unit: N.m)

| 型号 Model | 电机轴转速 Motor Speed | 速比 Reduction Ratio | | | | | | | | | | | | | | | | | |
|----------------|----------------------|--------------------|-------|-------|-------|-------|-------|-------|-------|------|------|------|------|------|------|------|------|------|------|
| | | 7.5 | 9 | 12.5 | 15 | 18 | 25 | 30 | 36 | 50 | 60 | 75 | 90 | 100 | 120 | 150 | 180 | 200 | |
| XLY6BLD400-□GU | 200~1500RPM | 12.06 | 14.48 | 18.12 | 21.8 | 26.2 | 32.8 | 39.4 | 40.0 | 40.0 | 40.0 | 40.0 | 40.0 | 40.0 | 40.0 | 40.0 | 40.0 | 40.0 | 40.0 |
| | 2000RPM | 10.22 | 12.26 | 15.34 | 18.4 | 22.0 | 27.8 | 33.2 | 40.0 | 40.0 | 40.0 | 40.0 | 40.0 | 40.0 | 40.0 | 40.0 | 40.0 | 40.0 | 40.0 |
| | 2500RPM | 9.28 | 11.14 | 13.94 | 16.74 | 20.0 | 25.2 | 30.2 | 36.4 | 40.0 | 40.0 | 40.0 | 40.0 | 40.0 | 40.0 | 40.0 | 40.0 | 40.0 | 40.0 |
| | 3000RPM | 6.30 | 7.56 | 10.51 | 12.61 | 15.13 | 21.01 | 25.21 | 30.25 | 40.0 | 40.0 | 40.0 | 40.0 | 40.0 | 40.0 | 40.0 | 40.0 | 40.0 | 40.0 |

注Note: 表格中的 () (灰底部分) 表示旋转方向与电机转向一致。The (gray) in the table indicates that the rotation direction is consistent with the motor.
(不同转速及速比下的力矩为XLY标准驱动器下测试所得。The torque under different speed and speed ratio is obtained under the XLY standard.)

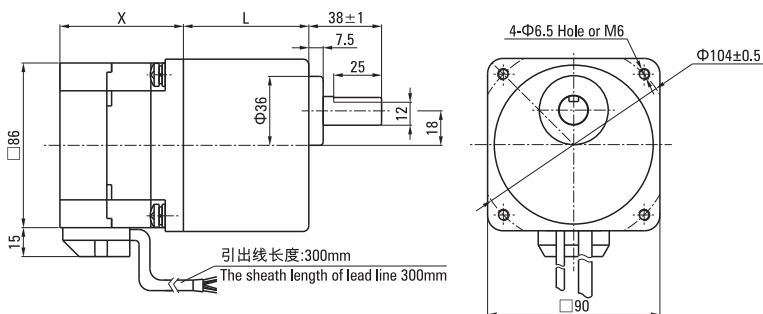


86系列永磁无刷齿轮减速电机 (GU型) 86 SERIES OF BRUSHLESS DC MOTOR (GU TYPE)



● 平行轴减速机 Parallel Shaft Speed Reducer

XLY55BLD120-GUL-30S/5GULC —电压 Voltage 24/36/48/110/220
—速比数值 Velocity Ratio Value

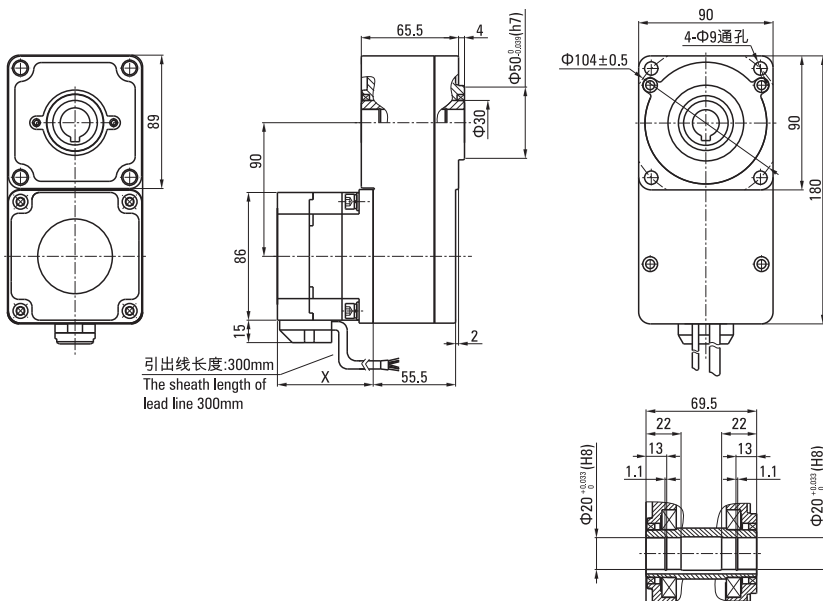


● 键·键槽 Key·Keyway



● L型减速机 L Type Speed Reducer

XLY55BLD120-GUL-30S/5GULC —电压 Voltage 24/36/48/110/220
—速比数值 Velocity Ratio Value



● 电机功率段 Motor Power Band

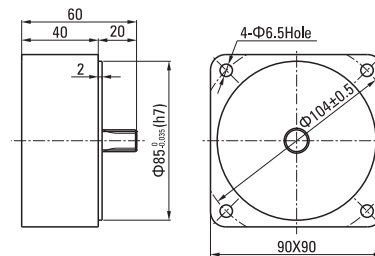
| 额定功率 (W) Rated Power | 额定转速 (RPM) Rated Speed | 长度X (mm) Extent |
|-------------------------|---------------------------|--------------------|
| 200 | 3000 | 64.5 |
| 300 | 3000 | 74.5 |
| 400 | 3000 | 84.5 |
| 500 | 3000 | 94.5 |
| 600 | 3000 | 105.5 |
| 750 | 3000 | 130 |

| 减速器型号 Gearhead Model | 减速比 Gear Ratio | L尺寸 Dimension |
|---------------------------------|-------------------|------------------|
| 5GU <input type="checkbox"/> KB | 3~200 | 65.5 |

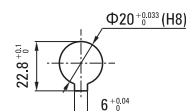
● 减速器型号中的中为减速比的数值
Enter the gear ratio in the box () within the model name

● 中间减速器 Decimal Gearhead

5GUXK
—速比数值, 一般为10 Velocity Ratio Value, Generally 10



● 输出轴内孔结构 The Output Shaft Hole Structure



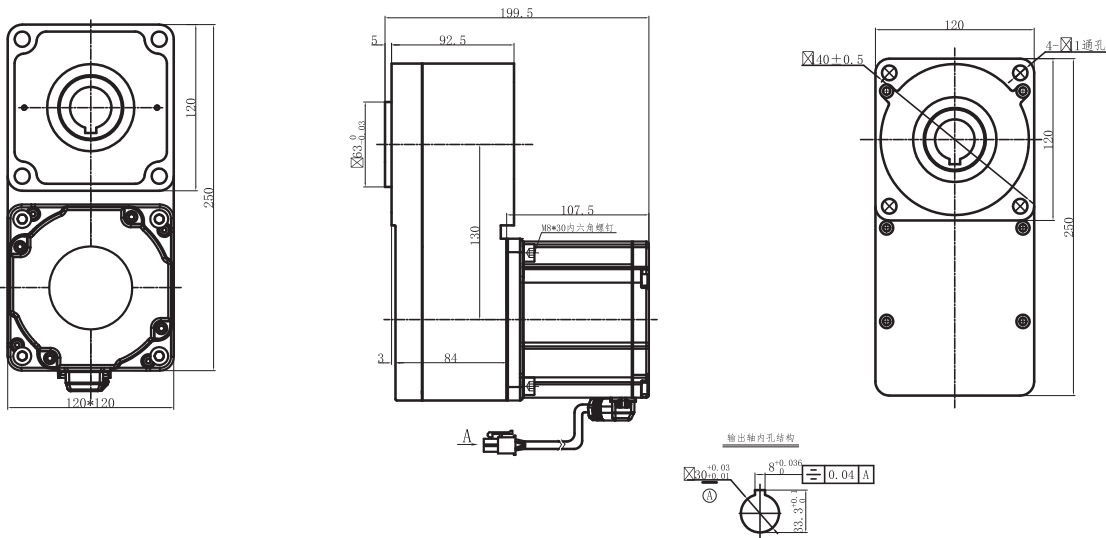
120系列直流无刷减速电机 (GU型) 120 SERIES OF BRUSHLESS DC MOTOR (GU TYPE)



750W

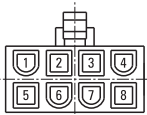
● 平行轴减速机 Parallel Shaft Speed Reducer

XLY7BLD750-□GU-30S/7GU□K □—电压 Voltage 24/36/48/110/220
□—速比数值 Velocity Ratio Value



● 低压电机接线插孔对应信号说明

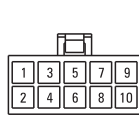
Low Voltage Wrie Plughole Corresp-onding Signal Explanation



| | | | | |
|----------|---|-----|----------------|-----------------|
| plughole | 1 | 2 | 3 | 4 |
| signal | U | W | H _z | H _u |
| plughole | 5 | 6 | 7 | 8 |
| signal | V | GND | H _w | V _{cc} |

● 高压电机接线插孔对应信号说明

High Voltage Wrie Plughole Corresp-onding Signal Explanation



| 排线对应的意义 | | | | | | | | | |
|---------|----------------|------|----------------|------|----------------|---|------|---------------------|------|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| 蓝(粗) | 黄(细) | 灰(粗) | 绿(细) | 粉(粗) | 棕(细) | | 金属丝网 | 橙(细) | 白(细) |
| W | H _u | U | H _v | V | H _w | | | V _{cc} +5V | GND |

● XLY7BLD750-□GU-30S/7GU□RC/RT整机容许力矩(单位: N.m) XLY7BLD750-□GU-30S/7GU□RC/RT Machine Allowable Torque (Unit: N.m)

| 电机型号 | 功率(W) | 电压(V) | 高度(mm) | 减速器型号 | 减速比 | 高度(mm) | 最大容许转矩(N.M) |
|------------------------|-------|-------|--------|-------|-------|--------|-------------|
| XLY-7BLD750-48GUL-30S | 750 | 48 | 107.5 | 7GU□L | 5~100 | 97.5 | 174 |
| XLY-7BLD750-220GUL-30S | 750 | 220 | 107.5 | 7GU□L | 5~100 | 97.5 | 174 |

DY 系列无刷驱动器 HOW TO READ

BLD · DY — 120 L/H/S2 D/X
① ② ③ ④ ⑤

| | | | |
|---|----|-------------------------------|-------------|
| ① | 类型 | BLD: 无刷电机驱动器 DRV: 驱动器及相关产品 | |
| ② | 版本 | DY: DY系列 | |
| ③ | 功率 | 120 | 200 |
| | | 120W | 200W |
| ④ | 电压 | L: 低压DC24V~48V | L2: 低压DC24V |
| | | H/S2: 高压AC220V/50Hz | |
| ⑤ | 功能 | D: 带数字显示 | |
| | | X: 扩展功能 | |



DY 系列无刷驱动器特点 Features of DY series brushless motor driver

- 数字显示：采用4位数码管显示：运行状态、设定速度、运行速度、故障指示。
- 稳速运行：采用速度闭环控制（控制精度±0.5%）。
- 输入输出：2组NPN型数字输入接口（正转和反转）；1组开漏型数字输出接口（故障输出）。
- 速度给定：通过面板旋钮设定运行速度，方便快捷。
- 完善的故障检测及保护功能：1、欠压、过压、过流、过载、堵转、短路、缺相、过温等多种故障检测；2、故障发生后，驱动器根据故障类型进行相应的保护动作；3、故障信息可通过数码管进行显示。
- 扩展功能包括：扩展3组NPN型数字量输入接口、1组模拟量接口、1组485通讯控制接口。



● DRV.C13-90L2

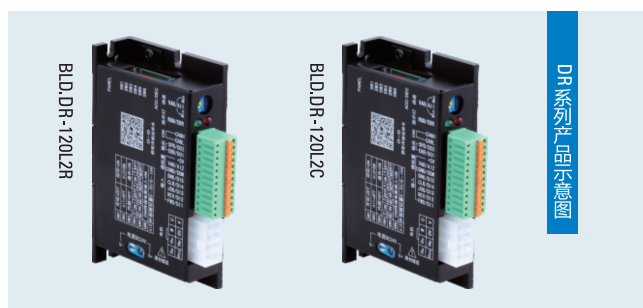


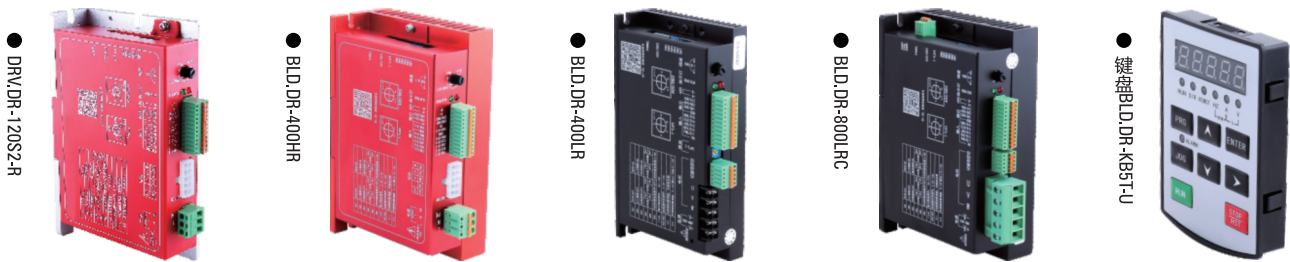
● DRV.C13-120S2

DR 系列无刷驱动器 HOW TO READ

BLD · DR — 120 L/H/S2 C/R
① ② ③ ④ ⑤

| | | | | |
|---|----|---|------|------|
| ① | 类型 | BLD: 无刷电机驱动器 | | |
| | | DRV: 驱动器及相关产品 | | |
| ② | 版本 | DR: DR系列 | | |
| | | 120 | 400 | 800 |
| ③ | 功率 | 120W | 400W | 800W |
| | | L: DC24V~48V (L1:12V; L2:24V; L3:36V; L4:48V) | | |
| ④ | 电压 | H/S2: 高压AC220V | | |
| | | C: CAN通信 | | |
| ⑤ | 功能 | R: 带485通讯 | | |





DR 系列无刷驱动器特点 Features of DR series brushless motor driver

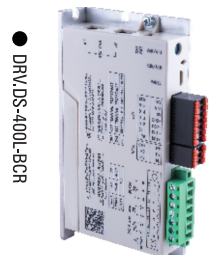
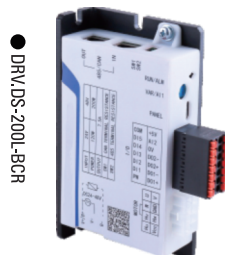
- 多种运行方式：开环、闭环（控制精度±0.5%）。
- 多种命令给定：多功能输入端子控制、通讯控制、外置键盘控制。
- 多种速度给定：内置旋钮、外部模拟电压（0~5/10V）或PWM（3k~10kHz）、HDI高速脉冲输入0~20KHZ频率给定、通讯给定、键盘给定、多段速度、简易PLC控制（视具体型号而定）。
- 加/减速度控制：0.3s~10s范围，可通过旋钮调节、通讯调节和键盘调节。
- 电子刹车功能：实现快速电磁制动。
- 多功能输入接口：5个数字量输入，用户可通过键盘自定义为：正转、反转、点动、自由停止、电子刹车、多段速度等多种功能输入。
- 多功能输出接口：2个数字量输出用户可通过键盘自定义为：运行中、故障、速度输出、过载预警、虚拟端子输出等多种功能输出。
- 完善的故障检测及保护功能：欠压、过压、过流、过载、堵转、短路、缺相、过温等多种故障检测；故障发生后，驱动器根据故障类型进行相应的保护动作；故障信息可通过LED灯或键盘进行显示。

键盘配件：外引键盘可用于设置驱动器参数、读取驱动器状态，实现键盘控制、多功能输入、多功能输出、多段速度、简易PLC等功能。

DS 系列无刷驱动器 HOW TO READ

DRV • DS — 200 L/S2 B/C/R
① ② ③ ④ ⑤

| | | | | |
|---|----|---|-----------|------|
| ① | 类型 | DRV: 驱动器及相关产品 | | |
| ② | 版本 | DS: DS系列 | | |
| ③ | 功率 | 120 | 200 | 400 |
| | | 120W | 200W | 400W |
| ④ | 电压 | L: DC24V~48V (L1:12V; L2:24V; L3:36V; L4:48V) | | |
| | | S2: 高压AC220V | | |
| ⑤ | 功能 | B: 带制动/刹车 | R: 带485通讯 | |
| | | C: CAN通信 | D: 带数字显示 | |





DS系列无刷驱动器特点

Features of DS series brushless motor driver

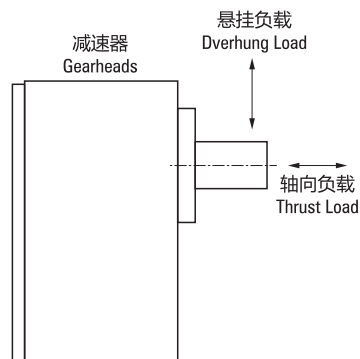
- 多种运行方式：开环、闭环（控制精度 $\pm 0.5\%$ ）。
- 多种控制方式：四象限运行、零速保持、力矩/速度模式、零速定位。
- 多种命令给定：多功能输入端子控制（支持NPN、PNP输入）；通讯控制；外置键盘控制。
- 多种速度给定：内置旋钮、外部模拟电压（0~5/10V）或PWM（3k~10kHz）、HDI高速脉冲输入0~20KHZ频率给定、通讯给定、键盘给定、多段速度、简易PLC控制（视具体型号而定）。
- 加/减速度控制：0.3s~10s可通过通讯调节和键盘调节。
- 电子刹车功能：实现快速电磁制动，可外接能耗电阻制动。
- 多功能输入接口：5个数字量输入（支持NPN和PNP）用户可通过键盘自定义为：正转、反转、点动、自由停止、电子刹车、多段速度等多种功能输入。
- 多功能输出接口：2个数字量输出用户可通过键盘自定义为：运行中、故障、速度输出、过载预警、虚拟端子输出等多种功能输出。
- 完善的故障检测及保护功能：欠压、过压、过流、过载、堵转、短路、缺相等多种故障检测；故障发生后，驱动器根据故障类型进行相应的保护动作；故障信息可通过LED灯或键盘进行显示。

通用规格 COMMON SPECIFICATIONS

电动机的容许悬挂负载·容许轴向负载 Permissible Overhung Load And Permissible Thrust Load Of Motor

容许悬挂负载 Permissible Overhung Load

| 电动机 Motor | | 容许悬挂负载 Permissible Overhung Load | |
|-----------------------------------|---|-------------------------------------|------|
| 安装尺寸 Motor Frame Size □(mm) | 输出轴直径 Output Shaft Diameter □(mm) | 距轴端的距离 Distance From Shaft End | |
| | | 10mm | 20mm |
| 42 | 5 | 40 | - |
| 60 | 6 | 50 | 110 |
| 70 | 6 | 40 | 60 |
| 80 | 8 | 90 | 140 |
| | 10 | 110 | 120 |
| 90 | 10 | 140 | 200 |
| | 12 | 240 | 270 |
| 100 | 14 | 320 | 350 |



- 容许轴向负载。
- 请尽量不要施加轴向负载。即使不得已的情况下，请将轴向负载控制在电动机重量的一半以下。
- Permissible thrust load.
- Avoid thrust loads as much as possible. If thrust load is unavoidable, keep it to half or less of the motor mass.

电动机的容许悬挂负载·容许轴向负载 Allowable Suspension Load Of Motor • Allowable Axial Load

| 型号 Model | 减速比 Gear Ratio | 最大容许转矩 Maximum Permissible Torque N.m | 容许悬挂负载 Permissible Overhung Load N | | 容许轴向 Permissible Thrust Load N |
|-----------------|-------------------|---|---------------------------------------|--------------------------------|--------------------------------------|
| | | | 距轴端10mm 10mm From Shaft End | 距轴端20mm 20mm From Shaft End | |
| 2GN□K | 3~18 | 3.0 | 50 | 80 | 30 |
| | 25~200 | | 120 | 180 | |
| 4GN□K | 3~18 | 8.0 | 100 | 150 | 50 |
| | 25~200 | | 200 | 300 | |
| 5GN□K | 3~18 | 10 | 250 | 350 | 100 |
| | 25~200 | | 300 | 450 | |
| 5GU□KB 5GU□K | 3~9 | 20 | 400 | 500 | 150 |
| | 12.5~18 | | 450 | 600 | |
| | 25~200 | | 500 | 700 | |
| 6GU□K | 3~200 | 40 | 1100 | 1500 | 300 |

减速器的容许负载惯性惯量J Permissible Load Inertia For Gearhead J

- 连接到减速器上的负载惯性惯量 (J) 较大的情况下，在频繁的间歇运转的起动瞬间（或以电磁制动及制动器进行急停时）会出现瞬时较大的转矩。该冲击负载过大会导致减速器及电动机损坏。
- 下面列出了电动机轴上的容许负载惯性惯量的值，使用时请控制在此数值下。三相电动机的容许负载惯性惯量是指从一旦停止运转后再进行反转时的数值。
- 请利用下面的公式计算减速器输出轴上的容许惯性惯量 (J)。
- 通过带电磁制动电动机、制动器及速度控制电动机的瞬时停止来运转容许负载惯性惯量时的使用寿命为200万次。
- When a high load inertia (J) is connected to a gearhead, high torque is exerted instantaneously on the gearhead when starting up in frequent, discontinuous operations (or when stopped by an electromagnetic brake, or when stopped instantaneously by a brake pack). Excessive impact loads can cause the gearhead or motor damage.
- The table below gives values for permissible load inertia on the motor shaft. Use the motor and gearhead within these parameters. The permissible inertial load value shown for three-phase motors is the value when reversing after a stop.
- The permissible load inertia (J) on the gearhead output shaft is calculated with the following equation.
- The life of the gearhead when operating at the permissible inertial load with instantaneous stops of the motors with electromagnetic brakes, brake packs or speed control motors is at least 2 million cycles.

■ 减速器输出轴上的容许负载惯性惯量 Permissible Load Inertia For Gear Head Output Shaft

减速比1/3 ~ 1/50时 JG=JM×I
 减速比1/60以上时 JG=JM×2500

Gear ratio 1/3 ~ 1/50 JG=JM×I
 Gear ratio 1/60 or high JG=JM×2500

JG: 减速器输出轴容许负载惯性惯量J (×10kg.m平方)
 JM: 减速器输出轴容许负载惯性惯量J (×10kg.m平方)
 I: 减速比 (例: 减速比1/3时 i=3)
 JG: Permissible load inertia gearhead output shaft J (×10kg.m²)
 JM: Permissible load inertia at the motor shaft J (×10kg.m²)
 I: Gear ratio (Example: i= 3 means the gear ratio or 1/3)

■ 电动机轴上的容许负载惯性惯量 Permissible Load Inertia At The Motor Shaft

| 电动机电源相数 No.Of Phase | 安装尺寸 Motor Frame Size | 输出功率 Output Power | 电动机轴上的容许负载惯性惯量 Permissible Load Inertia At The Motor Shaft | |
|------------------------|--------------------------|----------------------|---|--------------------------------------|
| | | | J(×10 ⁻⁴ kg.m ²) | GD ² (kg.m ²) |
| 单相 Single-phase | 42 | 1W, 3W | 0.016 | 0.07 |
| | 60 | 3W※, 6W | 0.062 | 0.25 |
| | 70 | 6W※, 15W | 0.14 | 0.52 |
| | 80 | 10W※, 25W | 0.31 | 1.2 |
| | 90 | 20W※, 40W | 0.75 | 3 |
| | | 60W | 1.1 | 4.6 |
| | | 90W | 1.1 | 4.6 |
| | | 120W | 1.1 | 4.6 |
| | 100 | 120W | 2 | 8 |
| | | 140W | 2 | 8 |
| 180W | | 2 | 8 | |
| 三相 Three-phase | 60 | 6W | 0.062 | 0.25 |
| | 70 | 15W | 0.14 | 0.52 |
| | 80 | 25W | 0.31 | 1.2 |
| | 90 | 40W | 0.75 | 3 |
| | | 60W | 1.1 | 4.6 |
| | | 90W | 1.1 | 4.6 |
| | | 120W | 1.1 | 4.6 |
| | 100 | 120W | 2 | 8 |
| | | 140W | 2 | 8 |
| | | 180W | 2 | 8 |
| 直流 DC Power | 60 | 6W, 10W, 15W | 0.062 | 0.25 |
| | 70 | 15W | 0.14 | 0.52 |
| | 80 | 25W, 40W | 0.31 | 1.2 |
| | 90 | 40W | 0.75 | 3 |
| | | 60W | 1.1 | 4.6 |
| | | 90W | 1.1 | 4.6 |
| | | 120W | 1.1 | 4.6 |
| | 100 | 250W | 2 | 8 |

※是指转矩电动机的输出功率 ※Output power for torque motors

■ 减速器容许转矩的计算 The Calculation For The Permissible Torque Of Gearhead

部分机型并未列在容许转矩表上, 需要时可按以下公式计算。

Permissible torque for some products are omitted. In that case, use the equation below to calculate the permissible torque.

容许转矩 Permissible torque $TG=TM \times i \times \eta$

TG: 减速器容许转矩 Permissible torque of gearhead

TM: 电动机转矩 Motor torque

i: 减速器减速比 Gear ratio gearhead

η : 减速器传动效率 Gearhead efficiency

■ 减速器传动效率 Gearhead Efficiency

| 型号Model | | 减速比Gear Ratio | | | | | | | | | | | | | | | | | | | | | |
|---------|-----------|---------------|-----|---|---|-----|---|------|----|----|----|----|-----|----|----|-----|----|-----|-----|-----|-----|-----|--|
| | | 3 | 3.6 | 5 | 6 | 7.5 | 9 | 12.5 | 15 | 18 | 25 | 30 | 36 | 50 | 60 | 75 | 90 | 100 | 120 | 150 | 180 | 200 | |
| 2GN□K | | 81% | | | | | | | | | | | 73% | | | 66% | | | | | | | |
| 4GN□K | 4GN□RC/RT | 81% | | | | | | | | | | | 73% | | | 66% | | | | | | | |
| 5GN□K | | 81% | | | | | | | | | | | 73% | | | 66% | | | | | | | |
| 5GU□KB | 5GU□RC/RT | 81% | | | | | | | | | | | 73% | | | 66% | | | 59% | | | | |
| 6GU□K | 6GU□RC/RT | 81% | | | | | | | | | | | 73% | | | 66% | | | | | | | |

| 型号Model | | 减速比Gear Ratio | | | | | | | |
|---------|--|---------------|-----|----|----|----|----|-----|-----|
| | | 5 | 10 | 15 | 20 | 30 | 50 | 100 | 200 |
| 2GN□L | | 83% | 89% | | | | | | |
| 4GN□L | | 74% | 89% | | | | | | |
| 5GU□L | | 74% | 89% | | | | | | |
| 6GU□L | | 74% | 89% | | | | | | |



选购配件 ACCESSORIES

电动机·减速器用安装底座 Motor • Gearhead Mounin Brackets

便于安装固定电动机、减速器的专用安装底座。为可对应大功率电动机、减速器的高强度型产品。安装底座上钻有螺孔，请用减速器附属的螺丝来组合电动机与减速器。安装电动机单体时，请另用安装用螺丝。

Eight kinds of mounting brackets for motors and gearheads are available. They are high-strength type, which can be used with high power motor/gearheads. These brackets come with tapped. To mount the motor and gearhead, simply fasten with the screws provided to the gearhead. To mount the motor alone, mounting screws must be provided separately.

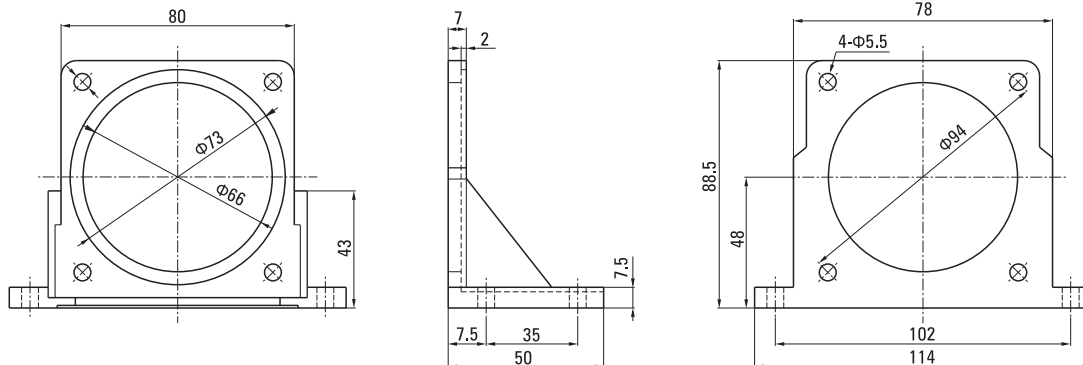


安装尺寸80mm用 Motor Frame Size: 80mm

型号 Model: ZD4M5 重量 Weight: 200g 材质 Material: 铝合金 Aluminum

适用产品 Applicable products: 4GN 减速器 4GN Gearhead

安装尺寸 □80mm 电动机 Motor with the frame size of □80mm

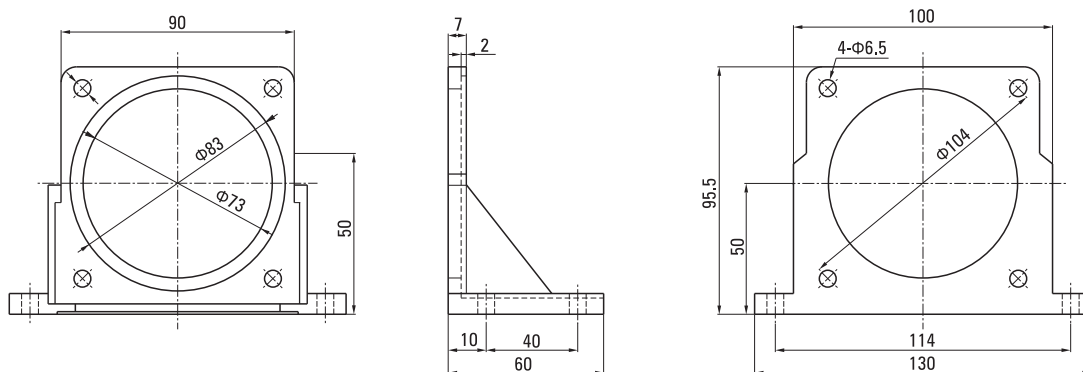


安装尺寸90mm用 Motor Frame Size: 90mm

型号 Model: ZD5M5 重量 Weight: 270g 材质 Material: 铝合金 Aluminum

适用产品 Applicable products: 5GN、5GU 减速器 5GN、5GU Gearhead

安装尺寸 □90mm 电动机 Motor with the frame size of □90mm



无刷电动机用减速机 SPEED REDUCER FOR BRUSHLESS MOTOR

■ 薄型、大功率 Thin, High Power

无刷电动机的转子使用永磁体，因此实现了薄型和大功率；比如，与安装尺寸90的三相感应电动机相比总长缩短>75mm，输出功率达到1.3倍。若采用无刷电动机，有助于实现装置的小型化。

Brushless DC motors have a slim body and provide high power due to permanent magnets being used in the rotor. For example, the overall length is 75mm shorter and the output power is 1.3 times higher than that of three-phase induction motors with a frame size of 90mm. Using brushless DC motors can contribute to downsizing and space saving.

■ 主要特征 Main features

● 强大的性能与功能 Powerful performance and functionality

- 速度控制范围80~4000r/min
The speed control range is 80~4000r/min
- 速度变动率±0.2%
Rate of change of velocity ±0.2%
- 可限制转矩
Controllable torque
- 多段变速运行，最大16速
Multi-speed, maximum 16
- 停止时提供保持力矩（最大为额定转矩的50%）
Provides holding torque at stop (Up to 50% of rated torque)
- 防尘、防水（保护等级IP54）
Dustproof and waterproof (Protection class IP54)
- 采用了喷塑壳体工艺，保证较强的耐腐蚀性能
Spray plastic shell technology is adopted to ensure strong corrosion resistance

● 使用简单，价格便宜 Easy to use and cheap to use

- 备有可用于测试及避免出现故障的监控、测试功能
Equipped with monitoring and testing functions that can be used to test and avoid failure
- 通过驱动器主体执行数字设定、操作
Perform digital settings and operations through the drive body
- 小型、薄型驱动器，可实现紧密安装
Small, thin drives for tight mounting
- 可利用电脑及外部信号设定速度
Can use the computer and external signals to set the speed
- 直接连接时，电动机、驱动器之间最长10m
When directly connected, the maximum distance between motor and driver is 10m
- 产品种类30W~750W
Product category 30W~750W

■ 可选的两种减速机 Two optional speed reducers



| 平行轴减速机S齿轮型 Parallel shaft reducer S gear type | | | | | |
|--|-----|------|------|------|------|
| 30W | 60W | 120W | 200W | 400W | 750W |
| 长寿命减速机 Long life reducer | | | | | |

| 直角轴高强度减速机SF中空轴型 SF hollow shaft type of high strength reducer with right angle shaft | | | |
|---|------|------|------|
| 30W | 120W | 200W | 400W |
| 节省空间、节约成本 Save space and cost | | | |

| 电动机 Motor | 输出功率 Output power | 机座号 Seat number | 减速机减速比（联体型） Reducer ratio motor | 保护等级 Protection level | 适配驱动器 Drive |
|-------------|-------------------|-----------------|---------------------------------|-----------------------|-------------|
| S系列 Series | 30W | 60 | 5、10、15、20、30、50、100、200 | IP54 | DS |
| | 60W | 70 | 5、10、15、20、30、50、100、200、360 | | |
| | 60W | 80 | 5、10、15、20、30、50、100、200 | | |
| | 120W | 90 | | | |
| | 200W | 100 | | | |
| | 400W | 100 | | | |
| SF系列 Series | 750W | 120 | 5、10、15、20、30、50 | | |
| | 30W | SF2-12 | 7.5、10、15、20、30、50 | IP54 | DS |
| | 120W | SF2-15 | | | |
| | 200W | SF2-20 | | | |
| 400W | SF2-25 | | | | |

电动机的构造升级，以更小的机身实现了高输出功率和高效率。

The structure of the motor is upgraded to realize high output power and high efficiency with a smaller body.

无刷电动机的特征 CHARACTERISTICS OF BRUSHLESS MOTOR

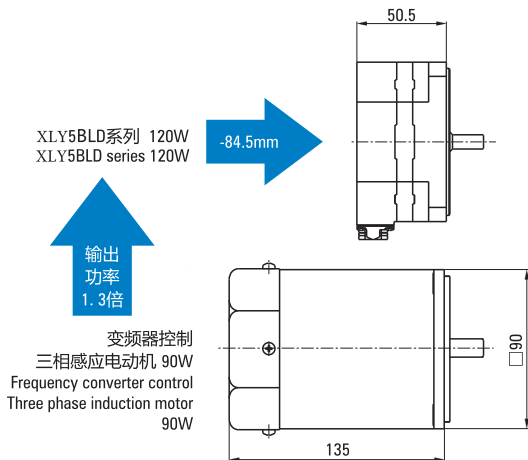
无刷电机上，无需使用通常被认为是DC电动机缺点的刷子和整流子等机械触点，DC电动机使用刷子和整流子进行旋转，因此需要定期进行维护；而无刷电动机使用霍尔IC检测到的信号，利用驱动电路的晶体管的ON/OFF进行旋转，因此无需维护。

On brushless motor, it is unnecessarily using brush, commutator and any other mechanical contact. Brush motor need brush and commutator to running, so it need to regular maintain. However, brushless motor used Hall IC to detect the signal and used driving circuit of crystal catheter's ON/OFF. So it dispense with maintain.

■ 薄型、轻量、大功率 Thin, lightweight, high power

无刷电动机的转子使用永磁体，因此，实现了薄型、轻量和大功率。可满足装置的小型化需求。

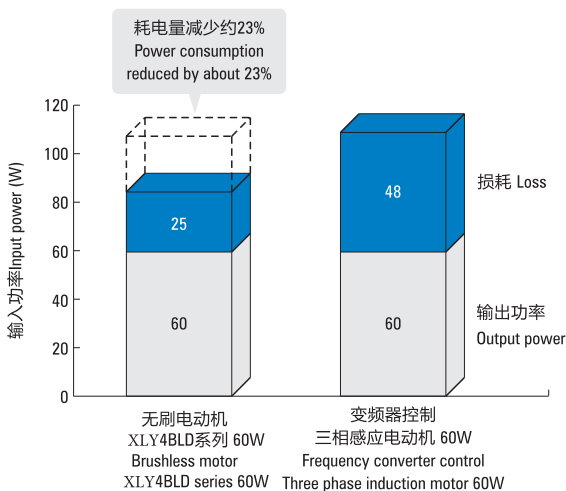
Brushless motor rotor using permanent magnet steel, so that a thin, light and high-power. The utility model can meet the miniaturization requirement of the device.



■ 以输出60W进行的比较 (参考值)

Comparison with output of 60W (Reference value)

额定输出50Hz时 (代表值) Rated output 50Hz (Representative value)



■ 采用新型连接器 Using a new connector

内置O型圈密封圈、密封垫，很好的提升防护性能。且插头采用扳扣形式，无需螺丝固定，操作简单。

Built-in type O ring seal ring, sealing gasket, a good promotion of protective performance. And the plug is in the form of pulling, no screw is needed to fix, and the operation is simple.

■ 广泛的速度控制范围 Wide angle of speed control

| 产品群 Product group | 速度控制范围* Speed control range* | 速度比 Velocity ratio |
|--|--|-----------------------|
| 无刷电动机BMU系列 Brushless motor BMU series | 80~4000r/min | 1:50 |
| 变频器控制三相感应电动机 Three-phase induction motor controlled by frequency converter | 200~2400r/min | 1:12 |
| AC调速电动机 AC motor | 50HZ: 90~1400r/min 60HZ: 90~1600r/min | 1:15 |

*不同的产品各有不同的速度控制范围。

*Different products have different speed control range.

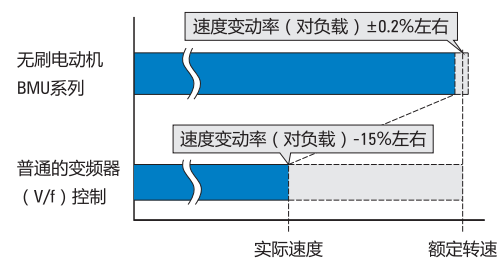
■ 可进行稳定的速度控制 Stable Speed Control

无刷电动机持续对设定速度和来自电动机的速度反馈信号进行对比，来调节施加到电动机上的电压；因此，即使负载状况发生变化，仍可以从低速瞬间调整到设定速度，并以此稳定的速度运行。使用变频器控制的三相感应电动机不进行反馈控制，因此负载变大时，速度会大幅下降；对于速度稳定性要求较高的用途，建议使用无刷电动机。

Brushless DC motors compare the setting speed with the speed feedback signals from the motor at all times and adjust the motor's applied voltage. For this reason, even if the load changes, stable rotation is performed from low speed to high speed. Common inverter-controller three-phase induction motors do not have this type of feedback control and when the load changes, the speed can be affected. Brushless DC motors are recommended for applications that require the speed to be maintained regardless of the load fluctuation.

■ 负载率80%时速度变化对比 (参考值)

Comparison of speed change at 80% loading rate
(Reference value)

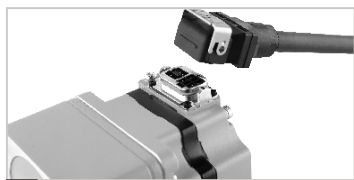


■ 有助于节能 Helps save energy

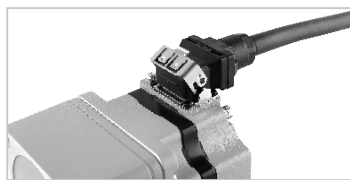
无刷电动机的转子部使用永磁体，减少了转子的二次损耗，大幅度减少耗电。有助于装置的节能。

The permanent magnet steel is used in the rotor part of the brushless motor, which reduces the secondary loss of the rotor and greatly reduces the power consumption. To help save the energy of the device.

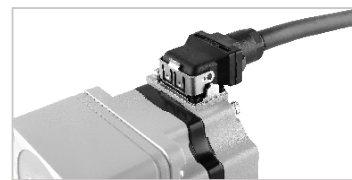
■ 安装方式 The installation is complete



插入连接器 Insertion connector



扳倒锁杆 Down the lock lever



连接完成 The connection to complete

■ 安装方式（常规款） The installation is complete (Standard model)



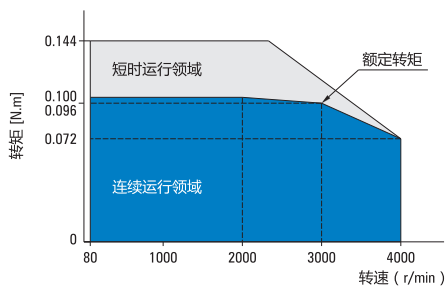
锁紧器可按两个方向出现 The wire outlet direction can be both side

转速—转矩特性 SPEED -- TORQUE CHARACTERISTICS

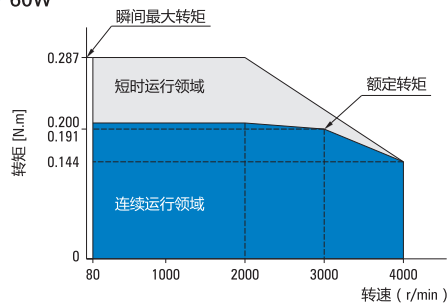
连续运行领域：可做连续运行的领域。Continuous operation field: The field in which continuous operation can be done.

短时运行领域：主要为加速时使用的领域。Short-term operation area: Mainly for use during acceleration.

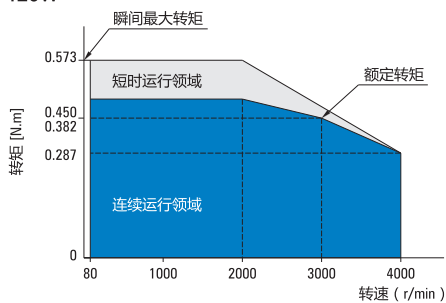
● 30W



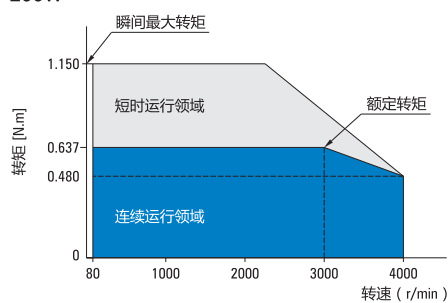
● 60W



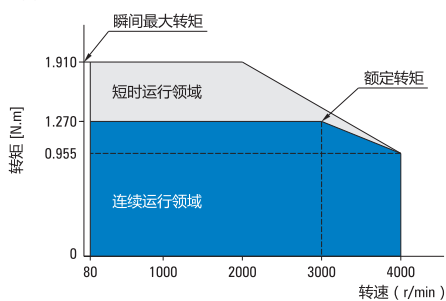
● 120W



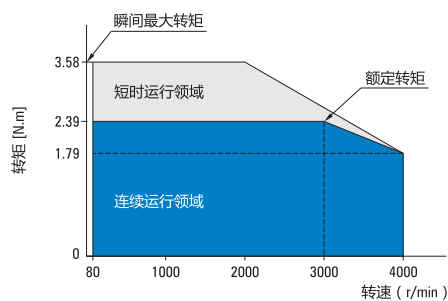
● 200W



● 400W



● 750W





一般规格 GENERAL SPECIFICATION

| 项目 Projects | | 电动机 Electric Motor | 驱动器 Drive |
|---------------------------------------|-----------------------------|---|--|
| 绝缘电阻 Insulation Resistance | | 于常温常湿环境下作连续运行后,以DC500V高阻表测量电动机线圈与外壳之间的测量值为100MΩ以上。 After continuous operation in normal temperature and humidity, the measuring value between the coil and the casing of the motor is more than 100MΩ with DC500V high resistance meter. | 于常温常湿下连续运行后,电源端子与保护接地端子间、电源端子与输入/输出信号端子间的电阻值以DC500V高阻表测量达100MΩ以上。 After continuous operation at room temperature and humidity, the resistance between power supply terminal and protective grounding terminal, power supply terminal and input / output signal terminal is measured by DC500V high resistance meter over 100MΩ. |
| 绝缘耐压 Insulation withstand voltage | | 于常温常湿下连续运行后,线圈、外壳间以50Hz、AC1.5kV施加1分钟无异常。 After continuous operation under normal temperature and humidity, 50Hz and AC1.5kV are applied between the coil and Shell for 1 minute without any abnormality. | 于常温常湿下连续运行后,电源端子与保护接地端子间以50Hz、AC1.5kV,电源端子与输入/输出端子间以50Hz、AC1.5kV施加1分钟无异常。 After continuous operation under normal temperature and humidity, 50Hz, AC 1.5 kV are applied between power terminal and protective grounding terminal, 50Hz, AC 1.5 kV are applied between power terminal and input /output terminal for 1 minute without any abnormality. |
| 温度上升 Temperature rise | | 于常温常湿下额定连续运行后,以热电偶法测量的线圈温度上升值在50°C以下(400W为60°C以下),外壳表面的温度上升测定值为40°C以下(400W为50°C以下)*1。 After rated continuous operation at normal temperature and humidity, the temperature rise of the coil measured by thermocouple method is below 50°C (400W is below 60°C), and the temperature rise of the shell surface is below 40°C (400W is below 50°C) *1. | 于常温常湿下额定连续运行后,以热电偶法测量的散热板温度上升值在50°C以下。 After rated continuous operation at normal temperature and humidity, the temperature rise of the heat sink measured by thermocouple method is below 50°C. |
| 使用环境 Service environment | 环境温度 Ambient temperature | 0 ~ +40°C (无结冰) 0 ~ +40°C (no icing) | 0 ~ +40°C (无结冰) [仅限将400W型的驱动器前侧朝上安装时,0 ~ +35°C (无结冰)。] 0 ~ +40°C (no icing) [0 ~ +35°C (no icing) only when the driver of type 400W is installed front side up.] |
| | 环境湿度 Ambient humidity | 85%以下 (无结露) Less than 85% (no dew) | |
| | 标高 Elevation | 海拔1,000m以下 Below 1,000m | |
| | 介质环境 Media environment | 无腐蚀性气体、尘埃。不可在含有放射性物质、磁场以及真空等特殊环境中使用。 No corrosive gas and dust. Can Not contain radioactive material, magnetic field and vacuum and other special environment. | |
| | 振动 Vibration | 不施加连续振动或过度冲击。依据JIS C 60068-2-6正弦波振动测试方法。 频率范围: 10-55Hz、单振幅: 0.15mm、摇摆方向: 3方向(X、Y、Z)、摇摆次数: 20次。 Do not apply continuous vibration or excessive shock. According to JIS C 60068-2-6 sine wave vibration test method frequency range: 10-55Hz, single amplitude: 0.15mm, swing direction: 3 directions (X, Y, Z), swing frequency: 20 times. | |
| 保存环境*2 Preserve the environment *2 | 环境温度 Ambient temperature | -20 ~ +70°C (无结冰) -20 ~ +70°C (no icing) | -25 ~ +70°C (无结冰) -25 ~ +70°C (no icing) |
| | 环境湿度 Ambient humidity | 85%以下 (无结露) Less than 85% (no dew) | |
| | 标高 Elevation | 海拔3,000m以下 Below 3,000m | |
| 耐热等级 Heat resistance grade | | UL/CSA规格: 105 (A)、EN规格: 120 (E) UL/CSA specification: 105 (A), EN specification: 120 (E) | — |
| 保护等级*3 Protection level *3 | | 连接电缆线时: IP66 (圆轴型的安装面除外) Connecting cable: IP66 (except for round shaft mounting surface) | IP20 |

一般规格 GENERAL SPECIFICATION

*1 为了使电动机外壳表面温度能保持在90°C以下，请将圆轴型电动机安装在以下尺寸的散热板（材质：铝）上。

30W型：115×115mm 厚度5mm。 **60W型**：135×135mm 厚度5mm。

120W型：165×165mm 厚度5mm。 **200W型**：200×200mm 厚度5mm。

400W型：250×250mm 厚度6mm。 **750W型**：300×300mm 厚度6mm。

*2 保存环境也包括运送途中的短期值。

*3 表示防尘、防水性能的IP值依据IEC 60529及IEC 60034-5规定。

注意 · 请勿于电动机与驱动器连接的状态下进行绝缘电阻测量、耐压测试。

· 电动机的材质、表面处理。

[**材质**：外壳-铝，输出轴-40Cr，螺丝-不锈钢（仅外部露出部分，不包括保护接地端子）]

[**表面处理**：外壳：涂装（安装面除外）]

*1 In order to keep the surface temperature of the motor housing below 90°C, the round shaft motor shall be mounted on a heat sink plate (Material: Aluminum) of the following size.

30W type: 115×115mm thickness 5mm. 60W type: 135×135mm thickness 5mm.

120W type: 165×165mm thickness 5mm. 200W type: 200×200mm thickness 5mm.

400W type: 250×250mm thickness 6mm. 750W type: 300×300mm thickness 6mm.

*2 Storage environment also includes short-term value in transit.

*3 Ip value indicating dustproof and waterproof performance is in accordance with IEC 60529 and IEC 60034-5 regulations.

Take notice of · Please do not conduct insulation resistance measurement and voltage withstand test when the motor is connected to the driver.

· Material and surface treatment of motor.

[Material: housing-aluminum, output shaft-40Cr, screw-stainless steel (Exposed part only, excluding protective ground terminal)]

[Surface treatment: Housing: Coating (Excluding mounting surface)]

S系列的输出轴转速 Output shaft speed of S series

单位Unit: r/min

| 电动机轴转速 Shaft speed | 5 | 10 | 15 | 20 | 30 | 50 | 100 | 200 | 360 |
|-----------------------|-----|-----|-----|-----|------|-----|-----|-----|-------|
| 80r/min | 16 | 8 | 5.3 | 4 | 2.7 | 1.6 | 0.8 | 0.4 | 0.22 |
| 2000r/min | 400 | 200 | 133 | 100 | 66.7 | 40 | 20 | 10 | 5.55 |
| 3000r/min | 600 | 300 | 200 | 150 | 100 | 60 | 30 | 15 | 8.33 |
| 4000r/min | 800 | 400 | 267 | 200 | 133 | 80 | 40 | 20 | 11.11 |

容许径向负载 · 容许轴向负载 Permissible radial load permissible axial load

● 平行轴减速机 Parallel shaft reducer

| 输出功率 Output power | 减速比 Deceleration ratio | | 容许径向负载 Permissible radial load | | 容许轴向负载 (N) Allowable axial load (N) |
|----------------------|---------------------------|---------------|--|--|--|
| | | | 距输出轴前端10mm (N) 10mm (N) from the front end of the output shaft | 距输出轴前端20mm (N) 20mm (N) from the front end of the output shaft | |
| 30W | 5 | 80-3000r/min时 | 100 | 150 | 40 |
| | | 4000r/min时 | 90 | 110 | |
| | 10、15、20 | 80-3000r/min时 | 150 | 200 | |
| | | 4000r/min时 | 130 | 170 | |
| | 30、50、100、200 | 80-3000r/min时 | 200 | 300 | |
| | | 4000r/min时 | 180 | 230 | |
| 60W | 5 | 80-3000r/min时 | 200 | 250 | 100 |
| | | 4000r/min时 | 180 | 220 | |
| | 10、15、20 | 80-3000r/min时 | 300 | 350 | |
| | | 4000r/min时 | 270 | 330 | |
| | 30、50、100、200 | 80-3000r/min时 | 450 | 550 | |
| | | 4000r/min时 | 420 | 500 | |
| 120W | 5 | 80-3000r/min时 | 300 | 400 | 100 |
| | | 4000r/min时 | 230 | 300 | |
| | 10、15、20 | 80-3000r/min时 | 400 | 500 | |
| | | 4000r/min时 | 370 | 430 | |
| | 30、50、100、200 | 80-3000r/min时 | 500 | 650 | |
| | | 4000r/min时 | 450 | 550 | |
| 200W 400W | 5、10、15、20 | 80-3000r/min时 | 550 | 800 | 200 |
| | | 4000r/min时 | 500 | 700 | |
| | 30、50 | 80-3000r/min时 | 1000 | 1250 | 300 |
| | | 4000r/min时 | 900 | 1100 | |
| | 100*、200* | 80-3000r/min时 | 1400 | 1700 | 400 |
| | | 4000r/min时 | 1200 | 1400 | |
| 750W | 5、10 | 80-3000r/min时 | - | - | 800 |
| | | 4000r/min时 | - | - | |
| | 15、20、30、50 | 80-3000r/min时 | - | - | 800 |
| | | 4000r/min时 | - | - | |

S系列的容许转动惯量J The admissible moment of inertia of s series J

● 平行轴减速机 Parallel shaft reducer

| 输出功率 Power | | 减速比 Ratio motor | 5 | 10 | 15 | 20 | 30 | 50 | 100 | 200 |
|------------|--|-----------------|------|-----|------|------|------|------|-------|-------|
| 30W | | | 12 | 50 | 110 | 200 | 370 | 920 | 2500 | 5000 |
| | 瞬时停止或瞬时正反向运行时 *Transient stop or transient forward and backward run time | | 1.55 | 6.2 | 14 | 24.8 | 55.8 | 155 | 155 | 155 |
| 60W | | | 22 | 95 | 220 | 350 | 800 | 2200 | 6200 | 12000 |
| | 瞬时停止或瞬时正反向运行时 *Transient stop or transient forward and backward run time | | 5.5 | 22 | 49.5 | 88 | 198 | 550 | 550 | 550 |
| 120W | | | 45 | 190 | 420 | 700 | 1600 | 4500 | 12000 | 25000 |
| | 瞬时停止或瞬时正反向运行时 *Transient stop or transient forward and backward run time | | 25 | 100 | 225 | 400 | 900 | 2500 | 2500 | 2500 |
| 200W | | | 100 | 460 | 1000 | 1700 | 3900 | 9300 | 18000 | 37000 |
| | 瞬时停止或瞬时正反向运行时 *Transient stop or transient forward and backward run time | | 50 | 200 | 450 | 800 | 1800 | 5000 | 5000 | 5000 |
| 400W | | | 100 | 460 | 1000 | 1700 | 3900 | 9300 | - | - |
| | 瞬时停止或瞬时正反向运行时 *Transient stop or transient forward and backward run time | | 50 | 200 | 450 | 800 | 1800 | 5000 | - | - |
| 750W | | | - | - | - | - | - | - | - | - |
| | 瞬时停止或瞬时正反向运行时 *Transient stop or transient forward and backward run time | | - | - | - | - | - | - | - | - |

* 也适用于数字设定将减速时间设定成小于0.1秒的情况。

* Also applies when the digital setting sets the deceleration time to less than 0.1 seconds.

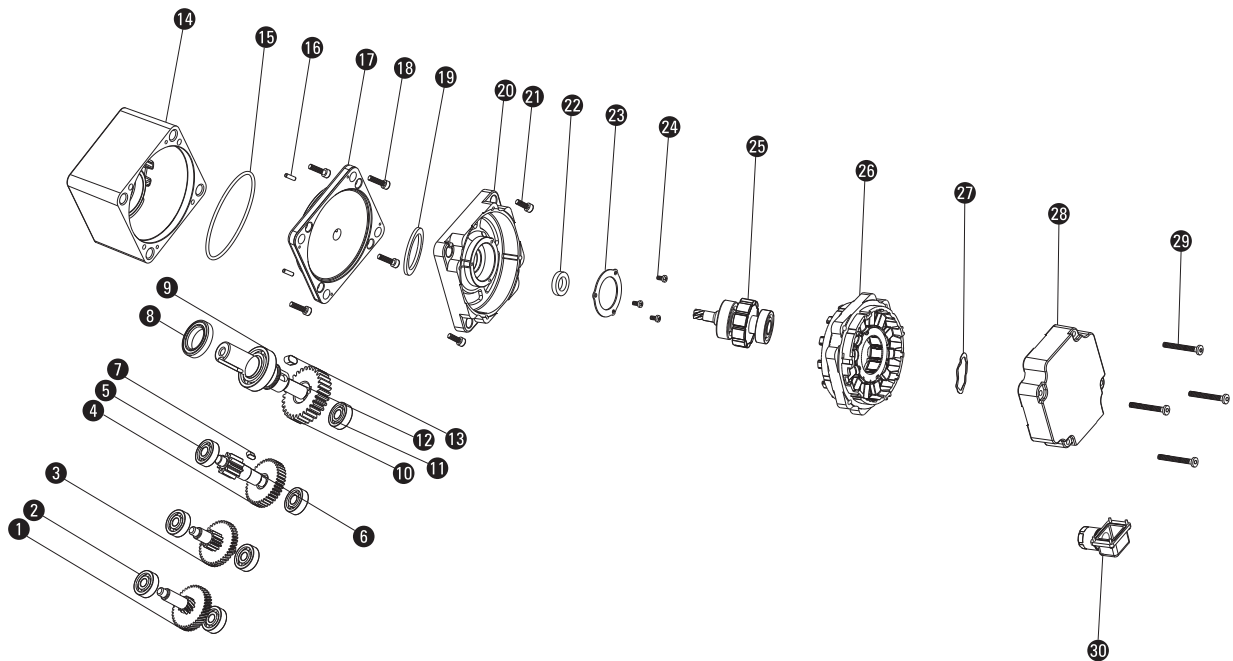
型号阅读方法 PRODUCT CODE

■ S系列电动机 S-series motor

XLY5 BLD 120 - 220 GV - 30S / 5GU 200V
① ② ③ ④ ⑤ ⑥ ⑦ ⑧

| | | |
|---|---|--|
| ① | 机座号：60×60(XLY2-60×60/XLY3-70×70/XLY4-80×80/XLY5-90×90/ XLY6-100×100/ XLY7-120×120) | Seat number: 60×60(XLY2-60×60/XLY3-70×70/XLY4-80×80/XLY5-90×90/ XLY6-100×100/ XLY7-120×120) |
| ② | 电机类型：无刷 | Motor type: Brushless |
| ③ | 功率：120W | Power: 120W |
| ④ | 电压：220VAC | Voltage: 220VAC |
| ⑤ | 减速器类型：S系列减速器 | Type of reducer: S-Series reducer |
| ⑥ | 转速：3,000RPM | Speed: 3,000RPM |
| ⑦ | 减速器机座：60 (2GU-60×60/3GU-70×70/4GU-80×80/5GU-90×90/ 6GU-100×100/7GU-120×120) | Reducer base: 60 (2GU-60×60/3GU-70×70/4GU-80×80/5GU-90×90/ 6GU-100×100/7GU-120×120) |
| ⑧ | 速比：200 | Speed ratio: 200 |

■ 解剖展示图 Square Shape Gearbox



■ 明细表 Parts List

| | | | | |
|-----------------------------------|------------------------------|--|---|---|
| 1: 一级传动轴 Primary drive shaft | 7: 键 Keys | 14: 箱体 Box body | 21: 内六角圆柱头螺钉 Hexagon socket head screws | 26: 嵌线定子 Stator core |
| 2: 轴承 Bearing | 8: 油封 Axle sleeve | 15: O型圈 O-ring | 22: 油封 Oil seal | 27: 波形弹性垫圈 Corrugated spring washer |
| 3: 二级传动轴 Secondary drive shaft | 9: 轴承 Bearing | 16: 定位销 Locating pin | 23: 盖板 Cover plate | 28: 后端盖 Back cover |
| 4: 三级从齿 Three-stage slave | 10: 四级从齿 Four-stage slave | 17: 箱盖 Box cover | 24: 十字槽盘头螺钉 Crossrecessed PAN head screws | 29: 内六角不锈钢螺钉 Hexagon socket stainless steel screws |
| 5: 轴承 Bearing | 11: 轴承 Bearing | 18: 内六角圆柱头螺钉 Hexagon socket head screws | 25: 转子 Rotating shaft | 30: 出线固定架 Outgoing retainer |
| 6: 四级主齿 Hird gear | 12: 输出光轴 Output shaft | 19: 密封垫圈 Sealing washer | | |
| | 13: 键 Keys | 20: 前端盖 Front end cover | | |

电动机 ELECTRIC MOTOR

30W

- 平行轴减速机 Parallel shaft speed reducer

| 型号 Model number | 电机型号 Motor type | 减速器型号 Type of reducer | 减速比 Deceleration ratio | L |
|---------------------------|---------------------|--------------------------|---------------------------|----|
| XLY2BLD30-220GV-30S/2GU□V | XLY2BLD30-220GV-30S | 2GU□V | 5 ~ 20 | 34 |
| | | | 30 ~ 100 | 38 |
| | | | 200 | 43 |

S系列整机容许力矩 Machine allowable torque

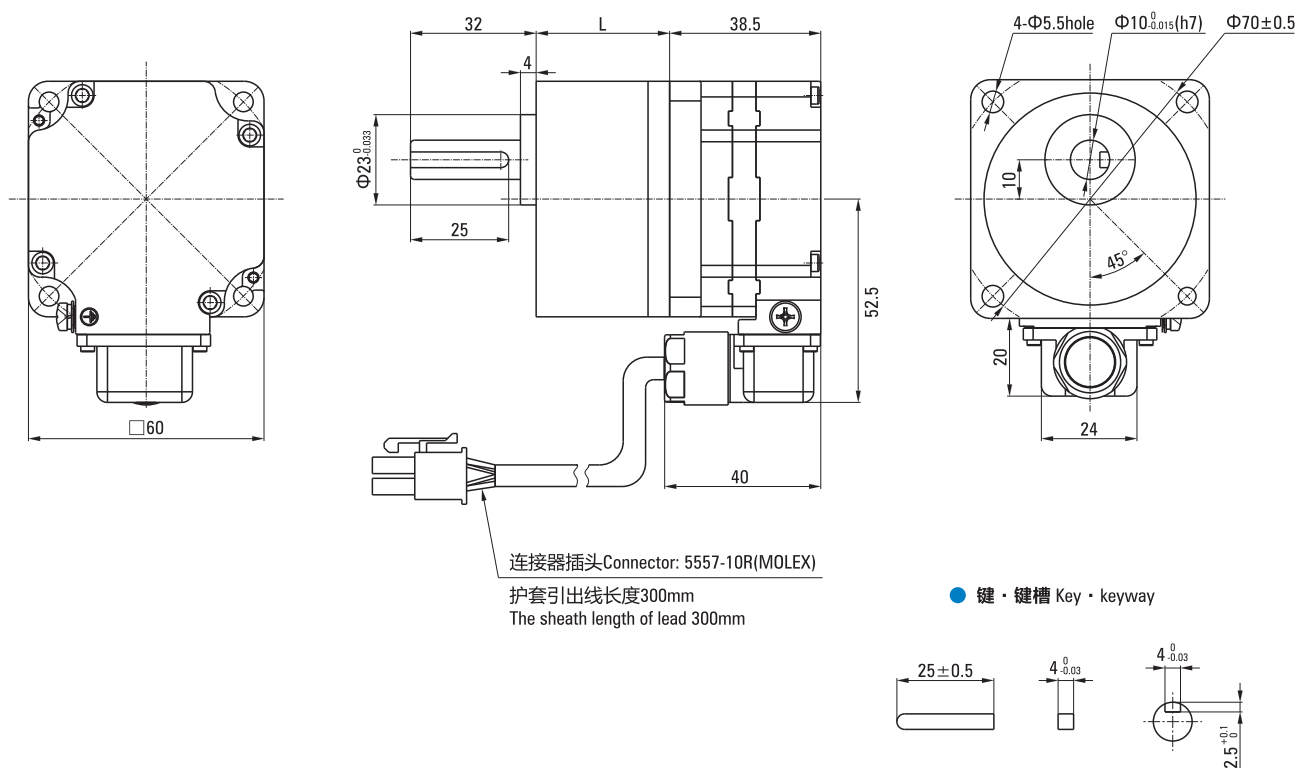
- 平行轴减速机 Parallel shaft speed reducer

单位Unit: N·m

| 输出功率 Output Power | 电机轴转速 Motor speed | 减速比 Reduction Ratio | 容许力矩 (N·m) | | | | | | | |
|----------------------|----------------------|---------------------|------------|------|------|-----|-----|-----|-----|-----|
| | | | 5 | 10 | 15 | 20 | 30 | 50 | 100 | 200 |
| 30W | 80 ~ 2000RPM | | 0.45 | 0.90 | 1.4 | 1.8 | 2.6 | 4.3 | 6.0 | 6.0 |
| | 3000RPM | | 0.43 | 0.86 | 1.3 | 1.7 | 2.6 | 4.1 | 6.0 | 6.0 |
| | 4000RPM | | 0.32 | 0.65 | 0.97 | 1.3 | 1.9 | 3.1 | 5.4 | 5.4 |

注Note: 表格中 (灰底部分) 表示旋转方向与电机转向一致。The (gray) in the table indicates that the rotation direction is consistent with the motor. (不同转速及速比下的力矩为ZD标准驱动器下测试所得。The torque under different speed and speed ratio is obtained under the ZD standard)

外观尺寸图 Dimensional drawing



电动机 ELECTRIC MOTOR

60W

- 平行轴减速机 Parallel shaft speed reducer

| 型号 Model number | 电机型号 Motor type | 减速机型号 Type of reducer | 减速比 Deceleration ratio | L |
|---------------------------|---------------------|--------------------------|---------------------------|----|
| XLY3BLD60-220GV-30S/3GU□V | XLY3BLD60-220GV-30S | 3GU□V | 5 ~ 20 | 41 |
| | | | 30 ~ 100 | 46 |
| | | | 200 ~ 360 | 51 |

S系列整机容许力矩 Machine allowable torque

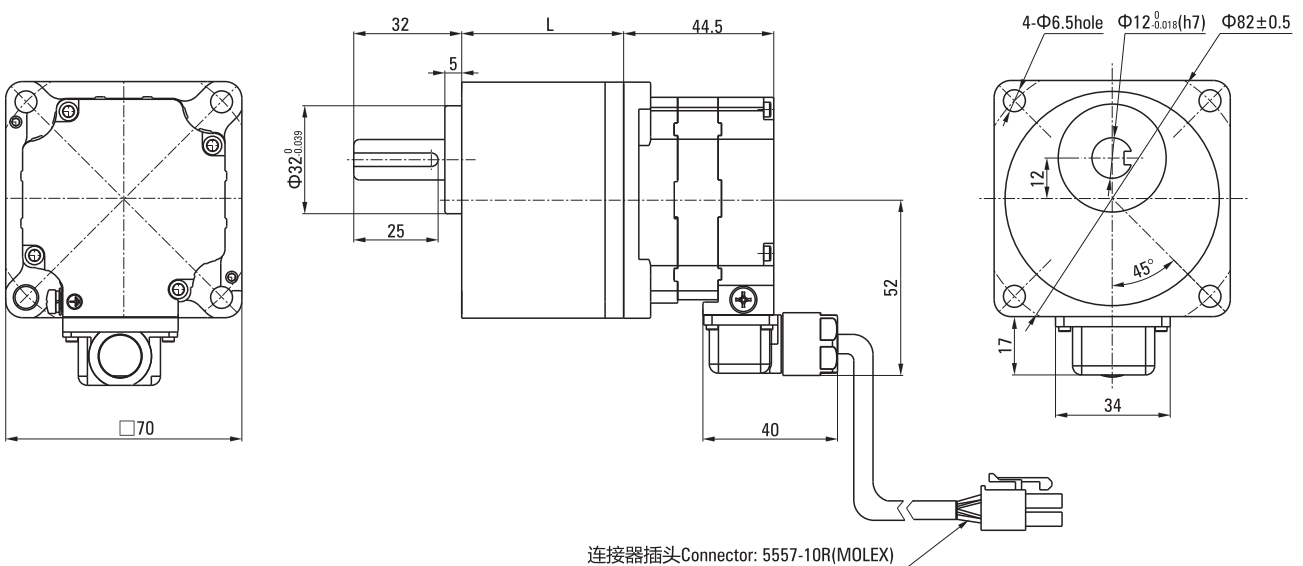
- 平行轴减速机 Parallel shaft speed reducer

单位Unit: N·m

| 输出功率 Output Power | 电机轴转速 Motor speed | 减速比 Reduction Ratio | | | | | | | | | |
|----------------------|----------------------|---------------------|-----|-----|-----|-----|-----|------|------|------|--|
| | | 5 | 10 | 15 | 20 | 30 | 50 | 100 | 200 | 360 | |
| 60W | 80 ~ 2000RPM | 0.90 | 1.8 | 2.7 | 3.6 | 5.2 | 8.6 | 16.0 | 16.0 | 16.0 | |
| | 3000RPM | 0.86 | 1.7 | 2.6 | 3.4 | 4.9 | 8.2 | 16.0 | 16.0 | 16.0 | |
| | 4000RPM | 0.65 | 1.3 | 1.9 | 2.6 | 3.7 | 6.2 | 12.4 | 14.0 | 14.0 | |

注Note: 表格中 (灰底部分) 表示旋转方向与电机转向一致。The (gray) in the table indicates that the rotation direction is consistent with the motor.
(不同转速及速比下的力矩为ZD标准驱动器下测试所得。The torque under different speed and speed ratio is obtained under the ZD standard)

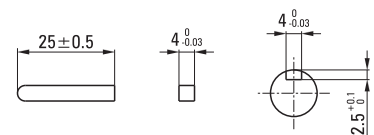
外观尺寸图 Dimensional drawing



连接器插头Connector: 5557-10R(MOLEX)

护套引出线长度300mm
The sheath length of lead 300mm

- 键 · 键槽 Key · keyway



电动机 ELECTRIC MOTOR

60W、120W

- 平行轴减速机 Parallel shaft speed reducer

| 型号 Model number | 电机型号 Motor type | 减速机型号 Type of reducer | 减速比 Deceleration ratio | L | L1 |
|----------------------------|----------------------|--------------------------|---------------------------|----|------|
| XLY4BLD60-220GV-30S/4GU□V | XLY4BLD60-220GV-30S | 4GU□V | 5 ~ 20 | 41 | 50.5 |
| | | | 30 ~ 100 | 46 | |
| | | | 200 | 51 | |
| XLY4BLD120-220GV-30S/4GU□V | XLY4BLD120-220GV-30S | 4GU□V | 5 ~ 20 | 41 | 54 |
| | | | 30 ~ 100 | 46 | |
| | | | 200 | 51 | |

S系列整机容许力矩 Machine allowable torque

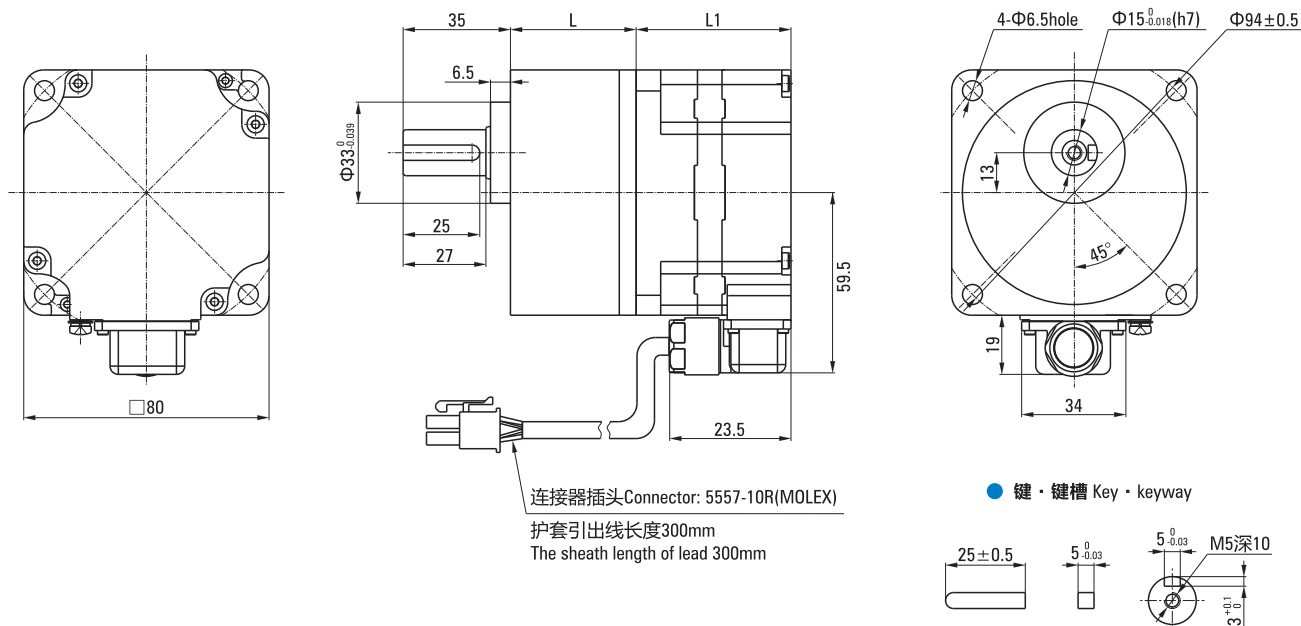
- 平行轴减速机 Parallel shaft speed reducer

单位Unit: N·m

| 输出功率 Output Power | 电机轴转速 Motor speed | 减速比 Reduction Ratio | | | | | | | |
|----------------------|----------------------|---------------------|-----|-----|-----|------|------|------|------|
| | | 5 | 10 | 15 | 20 | 30 | 50 | 100 | 200 |
| 60W | 80 ~ 2000RPM | 0.90 | 1.8 | 2.7 | 3.6 | 5.2 | 8.6 | 16.0 | 16.0 |
| | 3000RPM | 0.86 | 1.7 | 2.6 | 3.4 | 4.9 | 8.2 | 16.0 | 16.0 |
| | 4000RPM | 0.65 | 1.3 | 1.9 | 2.6 | 3.7 | 6.2 | 12.4 | 14.0 |
| 120W | 80 ~ 2000RPM | 2.0 | 4.1 | 6.1 | 8.1 | 11.6 | 19.4 | 30.0 | 30.0 |
| | 3000RPM | 1.7 | 3.4 | 5.2 | 6.9 | 9.9 | 16.4 | 30.0 | 30.0 |
| | 4000RPM | 1.3 | 2.6 | 3.9 | 5.2 | 7.4 | 12.3 | 24.7 | 27.0 |

注Note: 表格中 (灰底部分) 表示旋转方向与电机转向一致。The (gray) in the table indicates that the rotation direction is consistent with the motor.
(不同转速及速比下的力矩为ZD标准驱动器下测试所得。The torque under different speed and speed ratio is obtained under the ZD standard)

外观尺寸图 Dimensional drawing



电动机 ELECTRIC MOTOR

120W、200W

● 平行轴减速机 Parallel shaft speed reducer

| 型号 Model number | 电机型号 Motor type | 减速机型号 Type of reducer | 减速比 Deceleration ratio | L | L1 |
|----------------------------|----------------------|--------------------------|---------------------------|----|------|
| XLY5BLD120-220GV-30S/5GU□V | XLY5BLD120-220GV-30S | 5GU□V | 5 ~ 20 | 45 | 50.5 |
| | | | 30 ~ 100 | 58 | |
| | | | 200 | 64 | |
| XLY5BLD200-220GV-30S/5GU□V | XLY5BLD200-220GV-30S | 5GU□V | 5 ~ 20 | 45 | 54 |
| | | | 30 ~ 100 | 58 | |
| | | | 200 | 64 | |

S系列整机容许力矩 Machine allowable torque

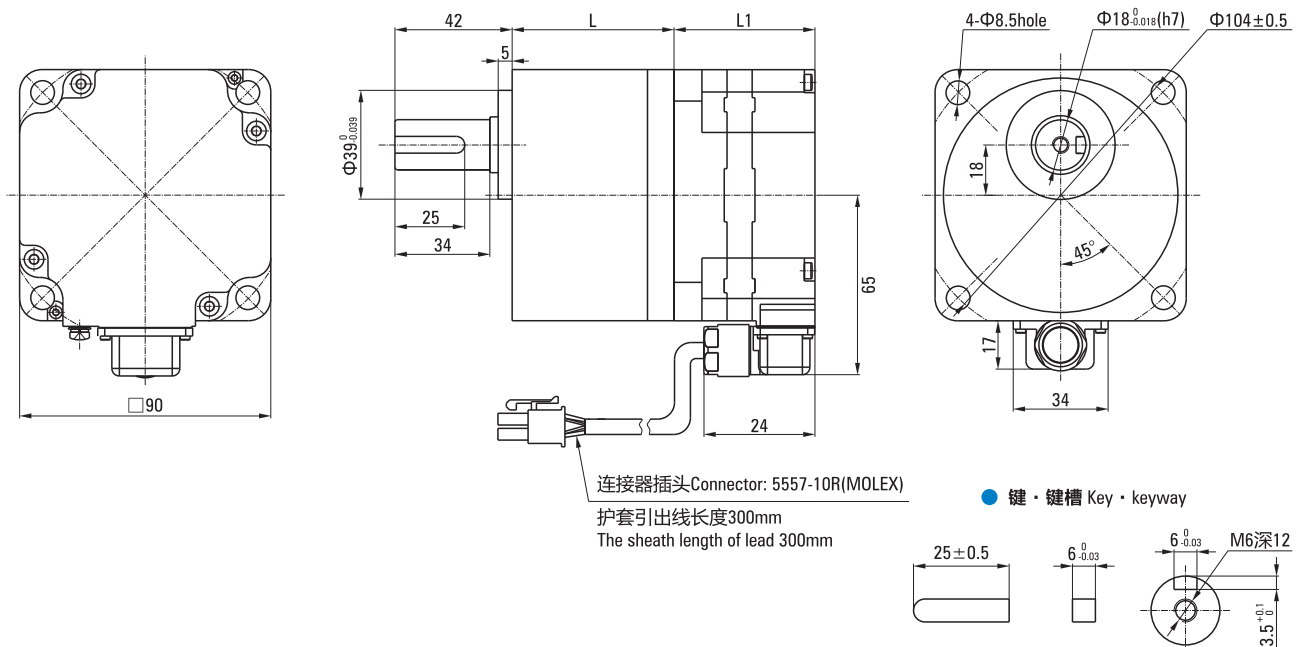
● 平行轴减速机 Parallel shaft speed reducer

单位Unit: N·m

| 输出功率 Output Power | 电机轴转速 Motor speed | 减速比 Reduction Ratio | | | | | | | | |
|----------------------|----------------------|---------------------|-----|-----|------|------|------|------|------|--|
| | | 5 | 10 | 15 | 20 | 30 | 50 | 100 | 200 | |
| 120W | 80 ~ 2000RPM | 2.0 | 4.1 | 6.1 | 8.1 | 11.6 | 19.4 | 30.0 | 30.0 | |
| | 3000RPM | 1.7 | 3.4 | 5.2 | 6.9 | 9.9 | 16.4 | 30.0 | 30.0 | |
| | 4000RPM | 1.3 | 2.6 | 3.9 | 5.2 | 7.4 | 12.3 | 24.7 | 27.0 | |
| 200W | 80 ~ 2000RPM | 2.9 | 5.7 | 8.6 | 11.5 | 16.4 | 27.4 | 51.6 | 70.0 | |
| | 4000RPM | 2.2 | 4.3 | 6.5 | 8.60 | 12.4 | 20.5 | 38.9 | 63.0 | |

注Note: 表格中 (灰底部分) 表示旋转方向与电机转向一致。The (gray) in the table indicates that the rotation direction is consistent with the motor.
(不同转速及速比下的力矩为XLY标准驱动器下测试所得。The torque under different speed and speed ratio is obtained under the XLY standard)

外观尺寸图 Dimensional drawing



电动机 ELECTRIC MOTOR

200W、400W

- 平行轴减速机 Parallel shaft speed reducer

| 型号 Model number | 电机型号 Motor type | 减速机型号 Type of reducer | 减速比 Deceleration ratio | L | L1 |
|----------------------------|----------------------|--------------------------|---------------------------|----|------|
| XLY6BLD200-220GV-30S/6GU□V | XLY6BLD200-220GV-30S | 6GU□V | 5 ~ 20 | 60 | 61.5 |
| | | | 30 ~ 100 | 72 | |
| | | | 200 | 86 | |
| XLY6BLD400-220GV-30S/6GU□V | XLY6BLD400-220GV-30S | 6GU□V | 5 ~ 20 | 60 | 61.5 |
| | | | 30 ~ 50 | 72 | |

S系列整机容许力矩 Machine allowable torque

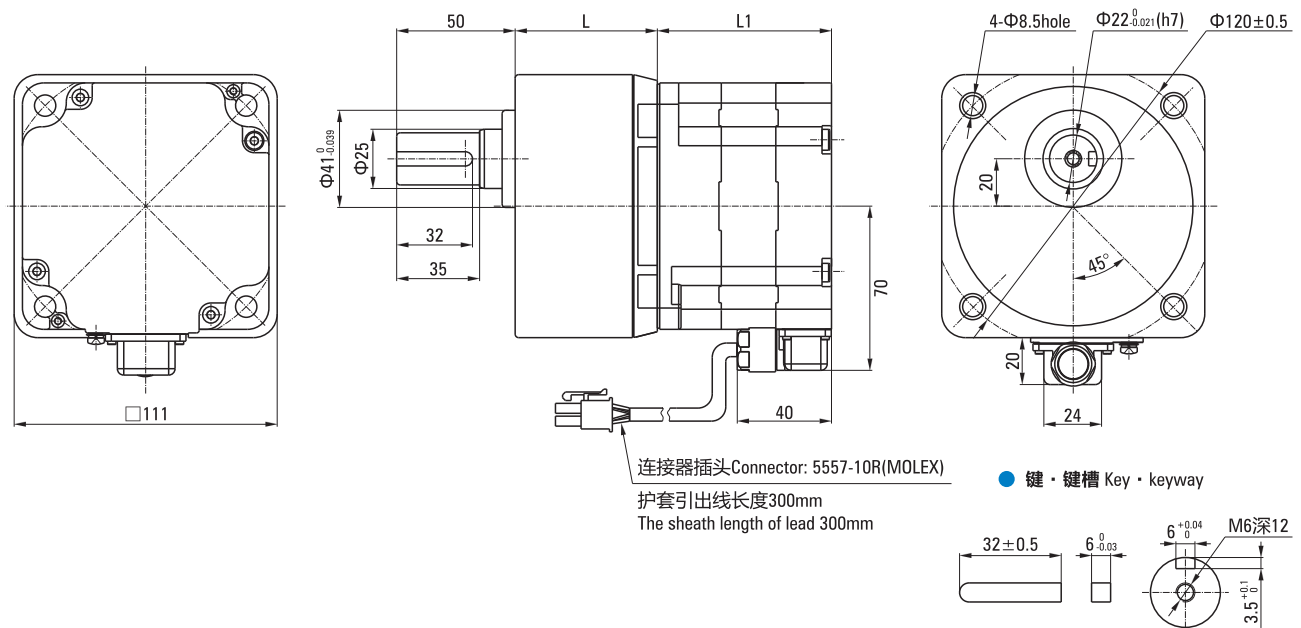
- 平行轴减速机 Parallel shaft speed reducer

单位Unit: N·m

| 输出功率 Output Power | 电机轴转速 Motor speed | 减速比 Reduction Ratio | 5 | 10 | 15 | 20 | 30 | 50 | 100 | 200 |
|----------------------|----------------------|---------------------|--------------|------|------|------|------|------|------|------|
| | | 200W | 80 ~ 2000RPM | 2.9 | 5.7 | 8.6 | 11.5 | 16.4 | 27.4 | 51.6 |
| 400W | 4000RPM | 2.2 | 4.3 | 6.5 | 8.60 | 12.4 | 20.5 | 38.9 | 63.0 | |
| | 80 ~ 3000RPM | 5.7 | 11.4 | 17.1 | 22.9 | 32.8 | 54.6 | - | - | |
| 400W | 4000RPM | 4.3 | 8.60 | 12.9 | 17.2 | 24.6 | 41.1 | - | - | |

注Note：表格中 □ (灰底部分) 表示旋转方向与电机转向一致。The □ (gray) in the table indicates that the rotation direction is consistent with the motor.
(不同转速及速比下的力矩为XLY标准驱动器下测试所得。The torque under different speed and speed ratio is obtained under the XLY standard)

外观尺寸图 Dimensional drawing



电动机 ELECTRIC MOTOR

750W

- 平行轴减速机 Parallel shaft speed reducer

| 型号 Model number | 电机型号 Motor type | 减速器型号 Type of reducer | 减速比 Deceleration ratio | L |
|----------------------------|----------------------|--------------------------|---------------------------|----|
| XLY7BLD750-220GV-30S/7GU□V | XLY7BLD750-220GV-30S | 7GU□V | 5 ~ 10 | 84 |
| | | | 15 ~ 50 | |

S系列整机容许力矩 Machine allowable torque

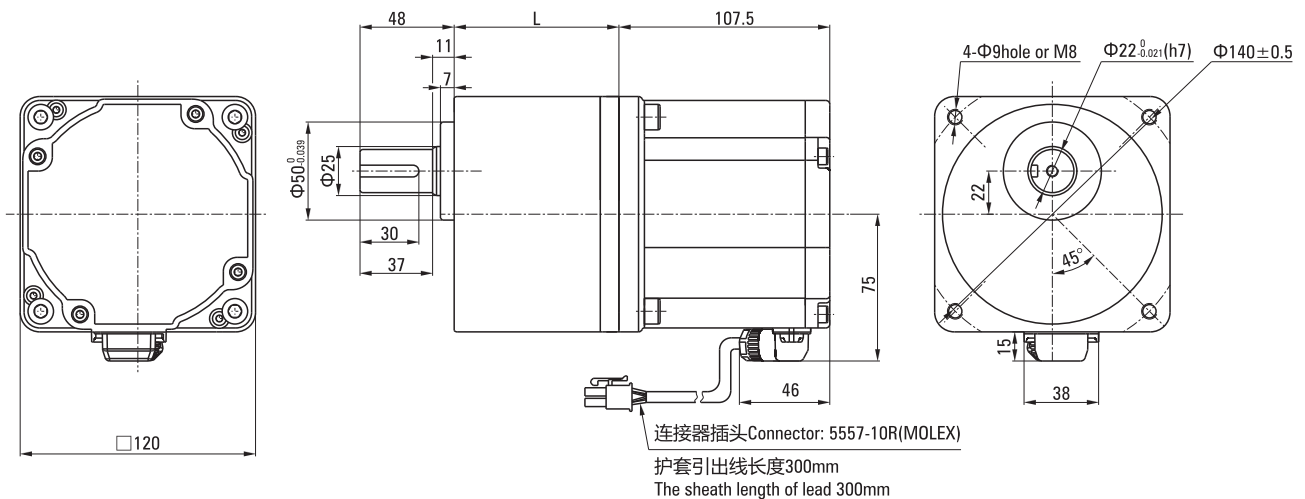
- 平行轴减速机 Parallel shaft speed reducer

单位Unit: N·m

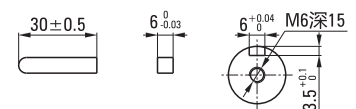
| 输出功率 Output Power | 电机轴转速 Motor speed | 减速比 Reduction Ratio | | | | | |
|----------------------|----------------------|---------------------|-------|-------|-------|--------|--------|
| | | 5 | 10 | 15 | 20 | 30 | 50 |
| 750W | 200 ~ 1500RPM | 19.34 | 38.68 | 52.29 | 69.72 | 100.00 | 100.00 |
| | 2000RPM | 14.50 | 29.01 | 39.21 | 52.29 | 78.43 | 100.00 |
| | 2500RPM | 11.60 | 23.21 | 31.37 | 41.83 | 62.74 | 100.00 |
| | 4000RPM | 9.67 | 19.34 | 26.14 | 34.86 | 52.29 | 87.14 |

注Note: 表格中 (灰底部分) 表示旋转方向与电机转向一致。The (gray) in the table indicates that the rotation direction is consistent with the motor.
(不同转速及速比下的力矩为XLY标准驱动器下测试所得。The torque under different speed and speed ratio is obtained under the XLY standard)

外观尺寸图 Dimensional drawing



- 键 · 键槽 Key · keyway



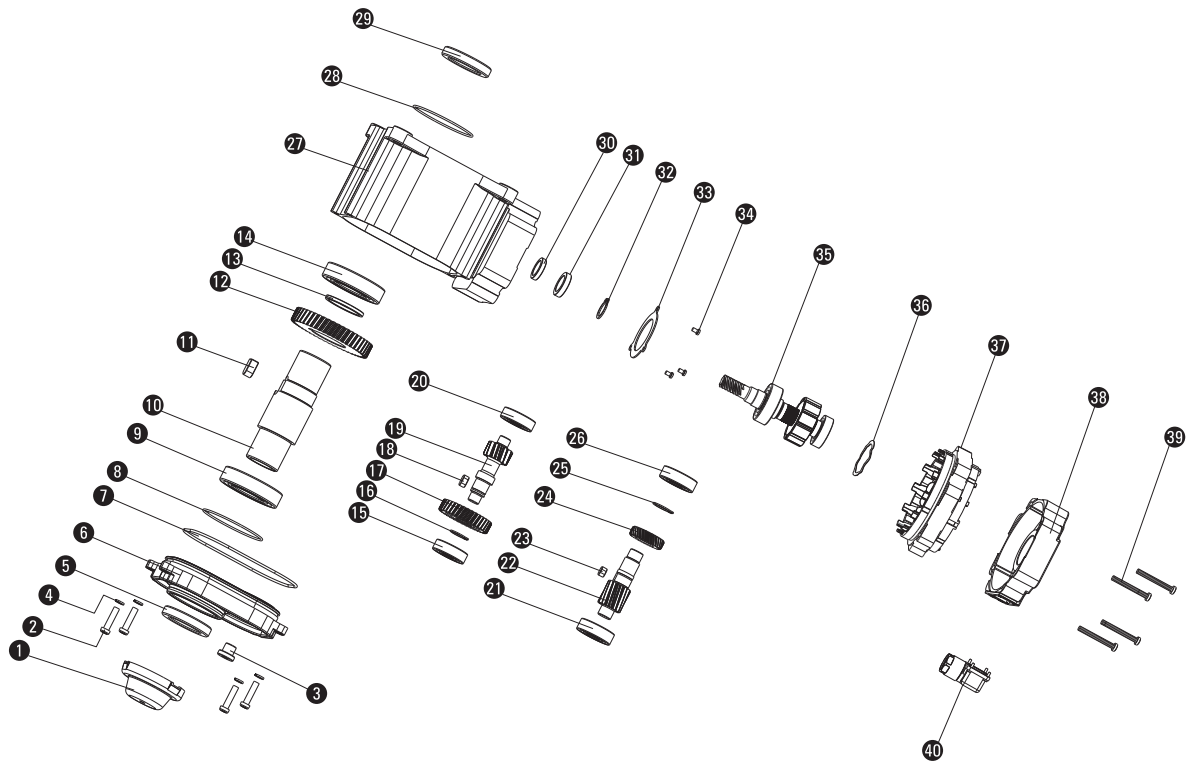
型号阅读方法 PRODUCT CODE

SF系列电动机 SF-series motor

XLY5 BLD 200 - 220 GS - 30S / 20H 30SF
① ② ③ ④ ⑤ ⑥ ⑦ ⑧

| | | |
|---|---|--|
| ① | 机座号：60×60 (XLY2-60×60/XLY4-80×80/XLY5-90×90/XLY6-100×100) | Seat number: 60×60 (XLY2-60×60/XLY4-80×80/XLY5-90×90/XLY6-100×100) |
| ② | 电机类型：无刷 | Motor type: Brushless |
| ③ | 功率：200W | Power: 200W |
| ④ | 电压：220VAC | Voltage: 220VAC |
| ⑤ | 减速器类型：SF系列减速器 | Type of reducer: SF-Series reducer |
| ⑥ | 转速：3,000RPM | Speed: 3,000RPM |
| ⑦ | 输出轴孔径：Φ20 (12H-12/15H-15/20H-20/25H-25) | Output shaft aperture: Φ20 (12H-12/15H-15/20H-20/25H-25) |
| ⑧ | 速比：30 | Speed ratio: 30 |

解剖展示图 Square Shape Gearbox



明细表 Parts List

| | | | | |
|---|-----------------------------------|----------------------------------|---|---|
| 1: 轴头套 Axle sleeve | 10: 输出轴 Output shaft | 19: 三级主齿 Hird gear | 28: O型圈 O-ring | 36: 波形弹性垫圈 Corrugated spring washer |
| 2: 内六角圆柱头螺钉 Hexagon socket head screws | 11: 键 Keys | 20: 轴承 Bearing | 29: 油封 Oil seal | |
| 3: 注油螺钉 Oil-filling screw | 12: 三级从齿 Three-stage slave | 21: 轴承 Bearing | 30: 油封 Oil seal | 37: 嵌线定子 Rotor core |
| 4: 弹簧垫圈 Spring washer | 13: 调整垫圈 Adjusting washer | 22: 二级主齿 Secondary main tooth | 31: 油封 Oil seal | |
| 5: 油封 Axle sleeve | 14: 轴承 Bearing | 23: 键 Keys | 32: 轴用挡圈 Axle collar | 38: 后端盖 Back cover |
| 6: 箱盖 Box cover | 15: 轴承 Bearing | 24: 一级从齿 First gear | 33: 盖板 Cover plate | |
| 7: O型圈 O-ring | 16: 轴用挡圈 Axle collar | 25: 轴用挡圈 Axle collar | 34: 十字槽盘头螺钉 Cross recessed PAN head screws | 39: 内六角不锈钢螺钉 Hexagon socket stainless steel screws |
| 8: O型圈 O-ring | 17: 二级从齿 Shaft secondary slave | 26: 轴承 Bearing | | |
| 9: 轴承 Bearing | 18: 键 Keys | 27: 箱体 Box body | 35: 转子 Rotating shaft | 40: 出线固定架 Outgoing retainer |

电动机 ELECTRIC MOTOR

60W

- 直角减速机 Right angle gearbox

| 型号 Model number | 电机型号 Motor type | 减速器型号 Type of reducer | 减速比 Deceleration ratio |
|----------------------------|---------------------|--------------------------|---------------------------|
| XLY2BLD60-220GS-30S/12H□SF | XLY2BLD60-220GS-30S | 12H□SF | 7.5 ~ 50 |

SF系列整机容许力矩 Machine allowable torque

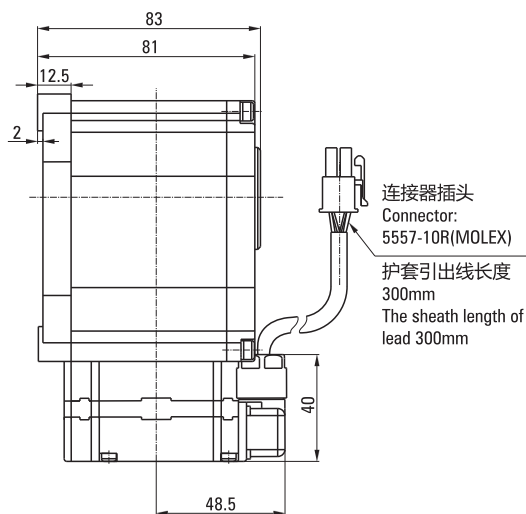
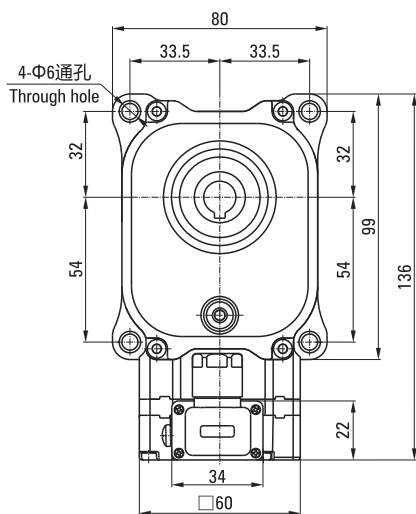
- 直角减速机 Right angle gearbox

单位Unit: N·m

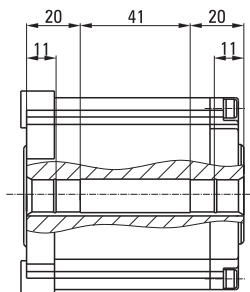
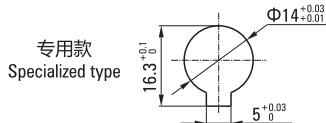
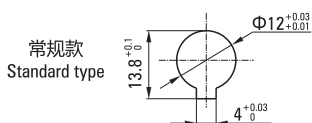
| 输出功率 Output Power | 电机轴转速 Motor speed | 减速比 Reduction Ratio | | | | |
|----------------------|----------------------|---------------------|-----|-----|-----|-----|
| | | 7.5 | 10 | 20 | 30 | 50 |
| 60W | 80 ~ 2000RPM | 0.90 | 1.8 | 3.6 | 5.2 | 8.6 |
| | 3000RPM | 0.86 | 1.7 | 3.4 | 4.9 | 8.2 |
| | 4000RPM | 0.65 | 1.3 | 2.6 | 3.7 | 6.2 |

注Note: 表格中 (灰底部分) 表示旋转方向与电机转向一致。The (gray) in the table indicates that the rotation direction is consistent with the motor. (不同转速及速比下的力矩为XLY标准驱动器下测试所得。The torque under different speed and speed ratio is obtained under the XLY standard)

外观尺寸图 Dimensional drawing



- 输出轴内孔结构 The output shaft hole structure



电动机 ELECTRIC MOTOR

120W

- 直角减速机 Right angle gearbox

| 型号 Model number | 电机型号 Motor type | 减速机型号 Type of reducer | 减速比 Deceleration ratio |
|-----------------------------|----------------------|--------------------------|---------------------------|
| XLY4BLD120-220GS-30S/15H□SF | XLY4BLD120-220GS-30S | 15H□SF | 7.5 ~ 50 |

SF系列整机容许力矩 Machine allowable torque

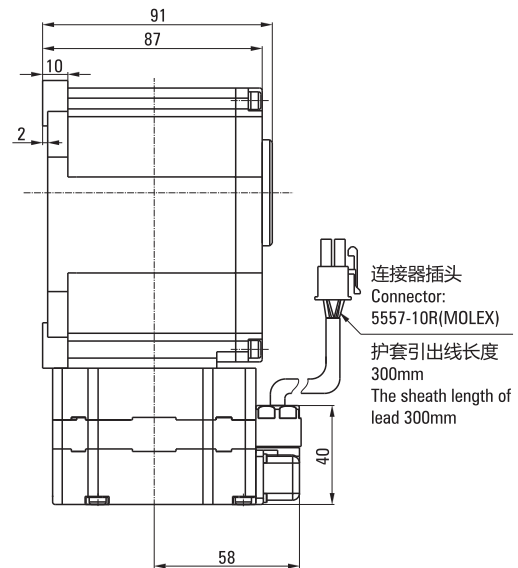
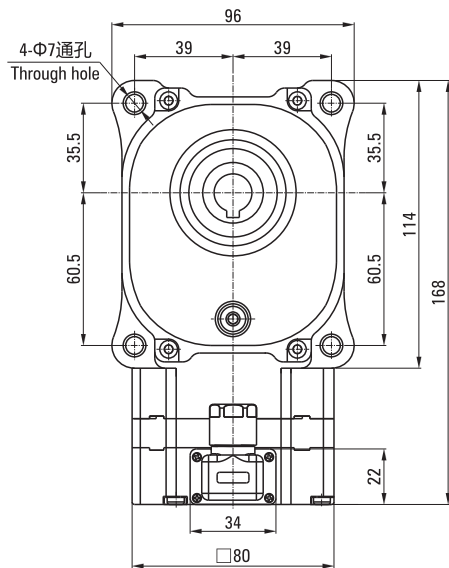
- 直角减速机 Right angle gearbox

单位Unit: N·m

| 输出功率 Output Power | 减速比 Reduction Ratio | | | | | |
|----------------------|----------------------|-----|-----|-----|------|------|
| | 电机轴转速 Motor speed | 7.5 | 10 | 20 | 30 | 50 |
| 120W | 80 ~ 2000RPM | 2.7 | 3.6 | 7.2 | 10.3 | 17.2 |
| | 3000RPM | 2.3 | 3.0 | 6.1 | 8.80 | 14.5 |
| | 4000RPM | 1.7 | 2.3 | 4.6 | 6.60 | 10.9 |

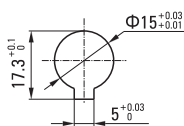
注Note: 表格中 (灰底部分) 表示旋转方向与电机转向一致。The (gray) in the table indicates that the rotation direction is consistent with the motor.
(不同转速及速比下的力矩为XLY标准驱动器下测试所得。The torque under different speed and speed ratio is obtained under the XLY standard)

外观尺寸图 Dimensional drawing

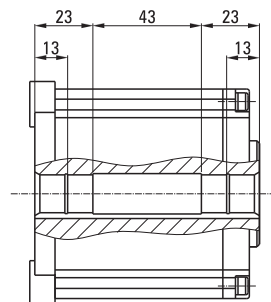
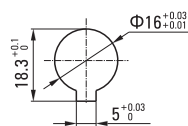


- 输出轴内孔结构 The output shaft hole structure

常规款
Standard type



专用款
Specialized type



电动机 ELECTRIC MOTOR

200W

- 直角减速机 Right angle gearbox

| 型号 Model number | 电机型号 Motor type | 减速器型号 Type of reducer | 减速比 Deceleration ratio |
|-----------------------------|----------------------|--------------------------|---------------------------|
| XLY5BLD200-220GS-30S/20H□SF | XLY5BLD200-220GS-30S | 20H□SF | 7.5 ~ 50 |

SF系列整机容许力矩 Machine allowable torque

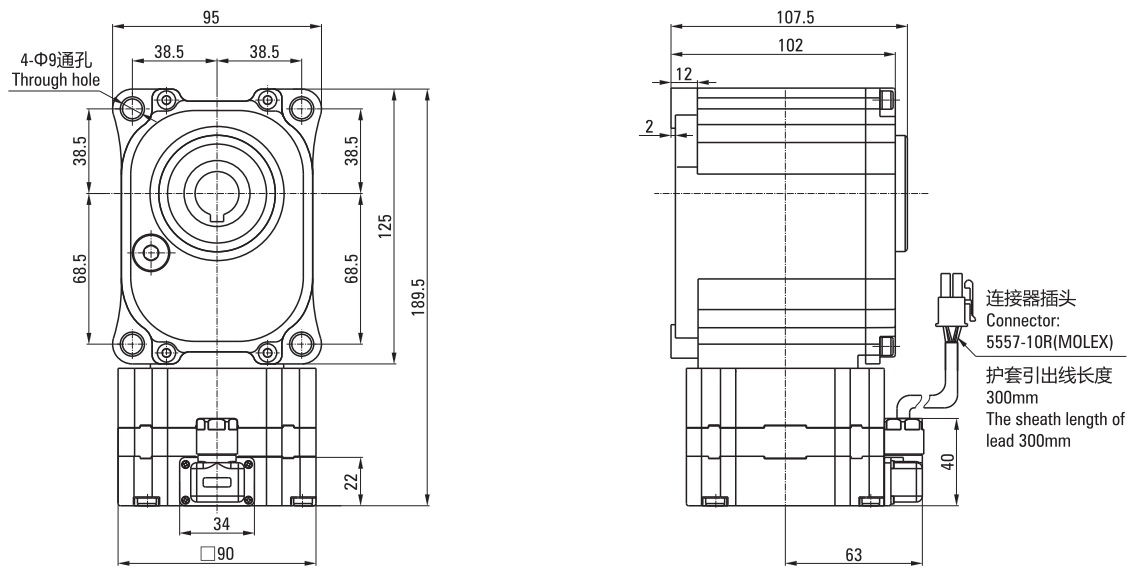
- 直角减速机 Right angle gearbox

单位Unit: N·m

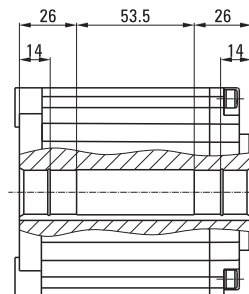
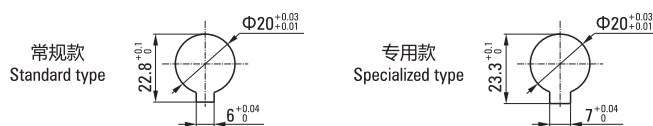
| 输出功率 Output Power | 电机轴转速 Motor speed | 减速比 Reduction Ratio | | | | |
|----------------------|----------------------|---------------------|-----|------|------|------|
| | | 7.5 | 10 | 20 | 30 | 50 |
| 200W | 80 ~ 2000RPM | 3.8 | 5.0 | 10.2 | 14.5 | 24.3 |
| | 3000RPM | 2.9 | 3.8 | 7.60 | 11.0 | 18.3 |

注Note: 表格中 (灰底部分) 表示旋转方向与电机转向一致。The (gray) in the table indicates that the rotation direction is consistent with the motor.
(不同转速及速比下的力矩为XLY标准驱动器下测试所得。The torque under different speed and speed ratio is obtained under the XLY standard)

外观尺寸图 Dimensional drawing



- 输出轴内孔结构 The output shaft hole structure



电动机 ELECTRIC MOTOR

400W

- 直角减速机 Right angle gearbox

| 型号 Model number | 电机型号 Motor type | 减速器型号 Type of reducer | 减速比 Deceleration ratio |
|-----------------------------|----------------------|--------------------------|---------------------------|
| XLY6BLD400-220GS-30S/25H□SF | XLY5BLD400-220GS-30S | 25H□SF | 7.5 ~ 50 |

SF系列整机容许力矩 Machine allowable torque

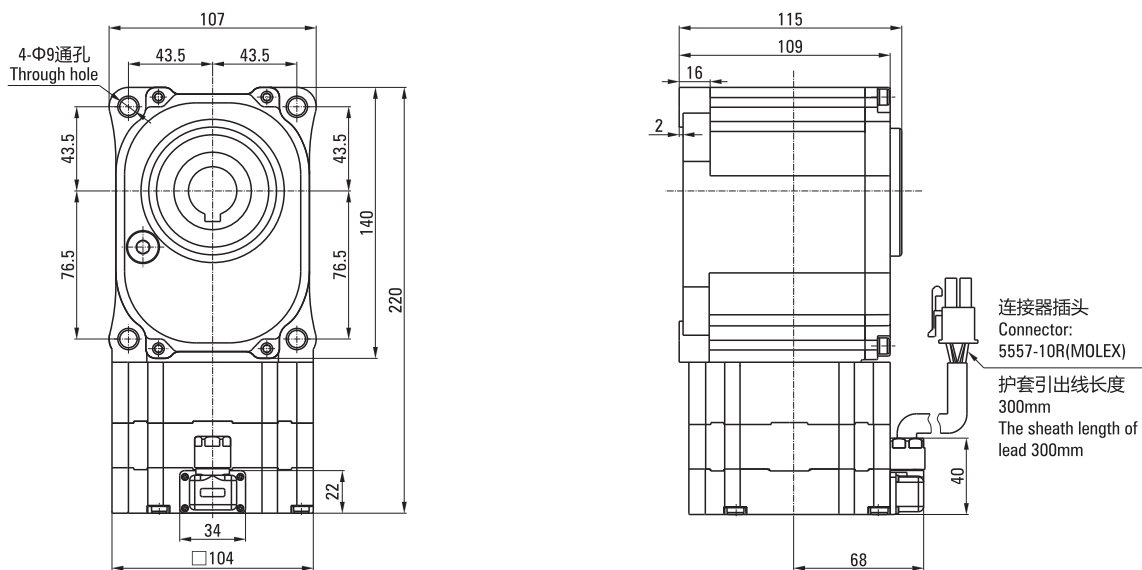
- 直角减速机 Right angle gearbox

单位Unit: N·m

| 输出功率 Output Power | 电机轴转速 Motor speed | 减速比 Reduction Ratio | | | | |
|----------------------|----------------------|---------------------|------|------|------|------|
| | | 7.5 | 10 | 20 | 30 | 50 |
| 400W | 80 ~ 2000RPM | 7.6 | 10.1 | 20.3 | 29.1 | 48.5 |
| | 3000RPM | 5.7 | 7.60 | 15.2 | 21.8 | 36.5 |

注Note: 表格中 (灰底部分) 表示旋转方向与电机转向一致。The (gray) in the table indicates that the rotation direction is consistent with the motor.
(不同转速及速比下的力矩为XLY标准驱动器下测试所得。The torque under different speed and speed ratio is obtained under the XLY standard)

外观尺寸图 Dimensional drawing



- 输出轴内孔结构 The output shaft hole structure

