

贯通轴式丝杆步进电机

Through shaft type screw stepper motor



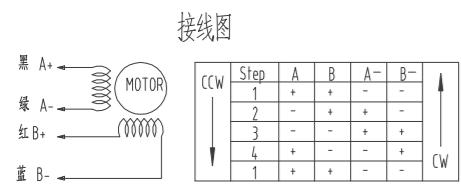
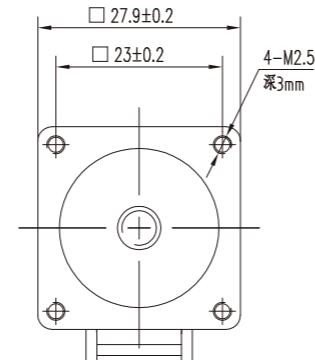
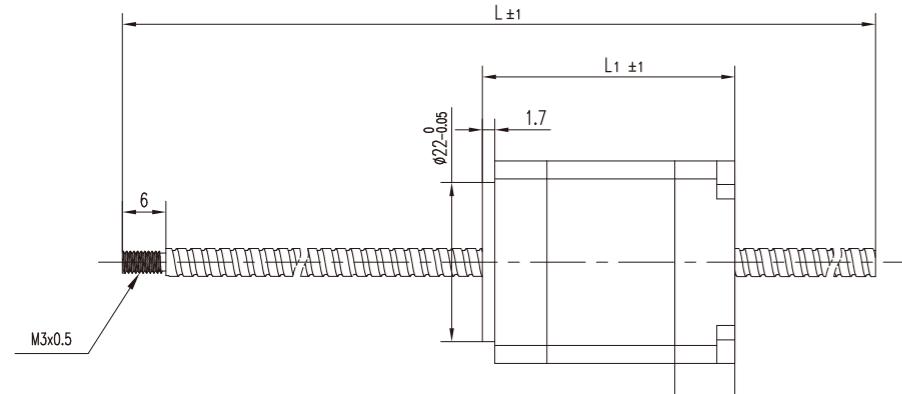
马达丝杆贯穿式代号说明

SLH - 28 - RE - 04 - 01 - 100L - N - M1 - E - 10 - 001

- 1 马达丝杆贯穿式代号
- 2 电机框号可选28/35/42/57
- 3 丝杆类型型号RE
- 4 表示丝杆公称直径
- 5 表示丝杆导程
- 6 丝杆总长度
- 7 电机出线方式
- N：直接出线
- P：接插件
- 8 马达类型
- M1：单叠
- M2：双叠
- 9 E代表编码器，
若无编码则不标
- 10 对应电机电流(1A=10)
对应电机电流(1.5A=15)
对应电机电流(3A=30)
- 11 图纸说明-客户特殊样式

- 1 code name for threaded motor
- 2 motor frame number optional 28/35/42/57
- 3 screw rod type type RE
- 4 represents the nominal diameter of the screw rod
- 5 represents the lead screw
- 6 total length of lead screw
- 7 motor outlet mode
- N: straight out
- P: connector
- 8 motor type
- M1: single stack
- M2: double stack
- 9 E is for encoder
if not coded, not marked
- 10 corresponding motor current (1A= 10)
corresponding motor current (1.5A = 15)
corresponding motor current (3A= 30)
- 11 drawing description-customer specific style

SLH28-Re

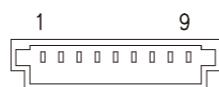
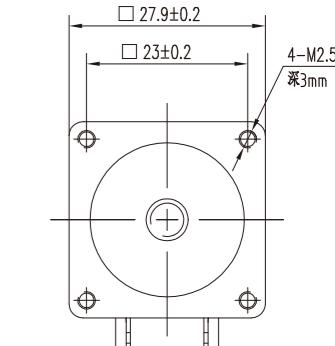
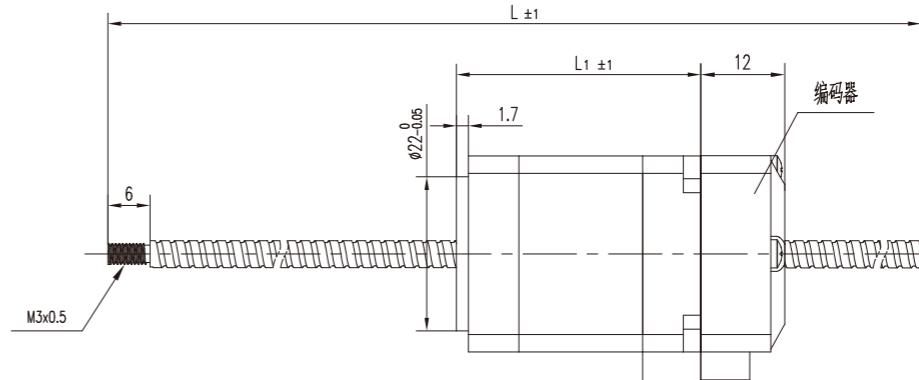
Shaft dia.(轴径) $\phi 4$ 

Model 样式	Lead 导程	L1
SLH28-Re0401-PM1-10	01	31.8
SLH28-Re0401-PM2-15	01	44.7
SLH28-Re0402-PM1-10	02	31.8
SLH28-Re0402-PM2-15	02	44.7

Ball Screw Specifications 主要技术参数	
Accuracy grade 精度等级	Ct7
Thread direction 螺纹方向	Right 右旋
Axial play 轴向间隙	Max 0.07mm
Anti-rust treatment 防锈处理	Anti-rust oil 防锈油
Repeatability 重复精度 (参考)	±0.05mm

Sliding Specifications 主要技术参数	
Motor model 马达类型	28H32 28H45
Motor code 马达代号	PM1 PM2
Step angle 步距角	1.8°
Rated voltage 额定电压	3.1V 3.12V
Rated current 额定电流	1A 1.5A
Resistance/phase 相阻抗	3.1Ω 2.08Ω
Inductance/phase 相电感	2.75mH 2.1mH
Max torque 最大力矩	0.08N.M 0.12N.M
Rotor inertia 转子惯量	≈4.8g.cm² ≈5.9g.cm²
Operating temperature 适用温度范围	-10°C~50°C

SLH28-Re-E

Shaft dia.(轴径) $\phi 4$ 

Housing: JST SHR-09V-S
Terminal: JST SSH-003T-P0.2-H
Wire: AWG 28

Pin No.	1	2	3	4	5	6	7	8	9
Description 定义	+5V	GND	EA+	EA-	Z+	Z-	PE	EB+	EB-

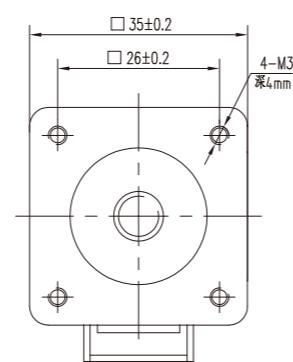
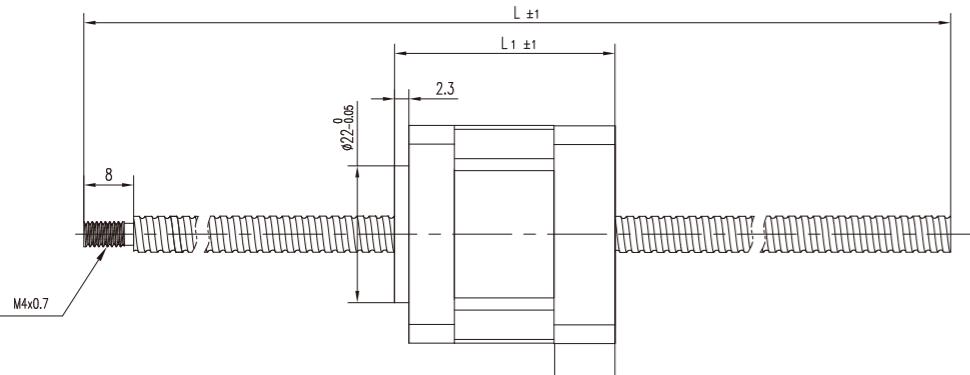


Model 样式	Lead 导程	L1
SLH28-Re0401-PM1-10	01	31.8
SLH28-Re0401-PM2-15	01	44.7
SLH28-Re0402-PM1-10	02	31.8
SLH28-Re0402-PM2-15	02	44.7

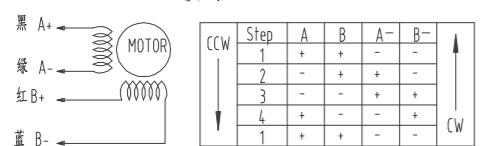
Ball Screw Specifications 主要技术参数	
Accuracy grade 精度等级	Ct7
Thread direction 螺纹方向	Right 右旋
Axial play 轴向间隙	Max 0.07mm
Anti-rust treatment 防锈处理	Anti-rust oil 防锈油
Repeatability 重复精度 (参考)	±0.05mm

Sliding Specifications 主要技术参数	
Motor model 马达类型	28H32 28H45
Motor code 马达代号	PM1 PM2
Step angle 步距角	1.8°
Rated voltage 额定电压	3.1V 3.12V
Rated current 额定电流	1A 1.5A
Resistance/phase 相阻抗	3.1Ω 2.08Ω
Inductance/phase 相电感	2.75mH 2.1mH
Max torque 最大力矩	0.08N.M 0.12N.M
Rotor inertia 转子惯量	≈4.8g.cm² ≈5.9g.cm²
Encoder resolution 编码器分辨率	2000CPR
Operating temperature 适用温度范围	-10°C~50°C

SLH35-Re

Shaft dia.(轴径) $\phi 6$ 

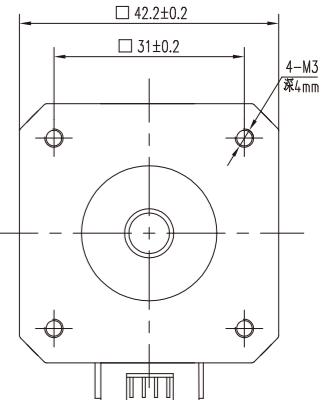
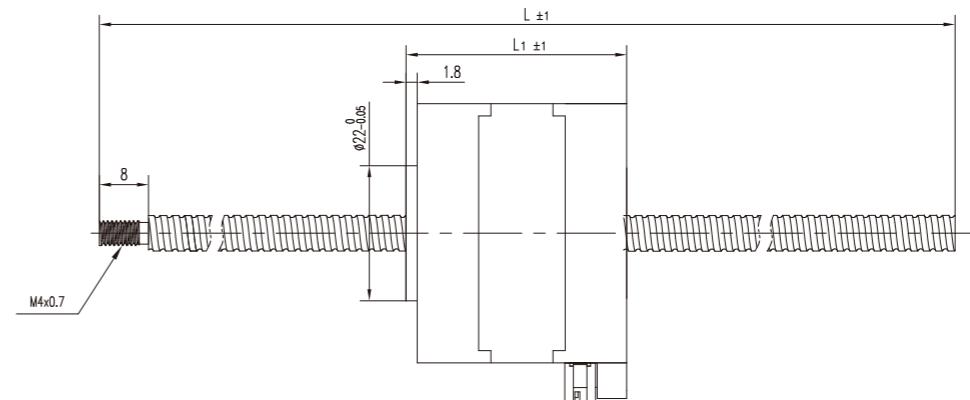
接线图



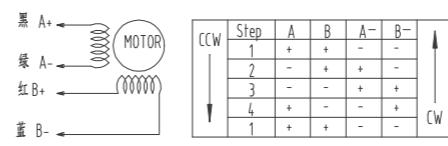
Model 样式	Lead 导程	L1
SLH35-Re0601-PM1-10	01	31.5
SLH35-Re0601-PM2-15	01	45.6
SLH35-Re0602-PM1-10	02	31.5
SLH35-Re0602-PM2-15	02	45.6
SLH35-Re0606-PM1-10	06	31.5
SLH35-Re0606-PM2-15	06	45.6
SLH35-Re0609-PM1-10	09	31.5
SLH35-Re0609-PM2-15	09	45.6
SLH35-Re0610-PM1-10	10	31.5
SLH35-Re0610-PM2-15	10	45.6
SLH35-Re0618-PM1-10	18	31.5
SLH35-Re0618-PM2-15	18	45.6

Ball Screw Specifications 主要技术参数	
Accuracy grade 精度等级	Ct7
Thread direction 螺纹方向	Right 右旋
Axial play 轴向间隙	Max 0.07mm
Anti-rust treatment 防锈处理	Anti-rust oil 防锈油
Repeatability 重复精度	±0.05mm

SLH42-Re

Shaft dia.(轴径) $\phi 6$ 

接线图

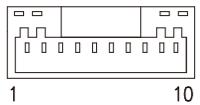
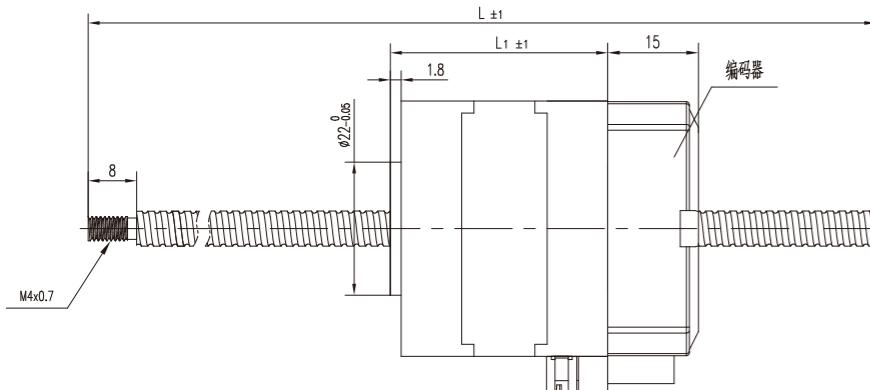


Model 样式	Lead 导程	L1
SLH42-Re0601-PM1-15	01	34.1
SLH42-Re0601-PM2-25	01	48.1
SLH42-Re0602-PM1-15	02	34.1
SLH42-Re0602-PM2-25	02	48.1
SLH42-Re0606-PM1-15	06	34.1
SLH42-Re0606-PM2-25	06	48.1
SLH42-Re0609-PM1-15	09	34.1
SLH42-Re0609-PM2-25	09	48.1
SLH42-Re0610-PM1-15	10	34.1
SLH42-Re0610-PM2-25	10	48.1
SLH42-Re0618-PM1-15	18	34.1
SLH42-Re0618-PM2-25	18	48.1

Ball Screw Specifications 主要技术参数	
Accuracy grade 精度等级	Ct7
Thread direction 螺纹方向	Right 右旋
Axial play 轴向间隙	Max 0.07mm
Anti-rust treatment 防锈处理	Anti-rust oil 防锈油
Repeatability 重复精度	±0.05mm

Sliding Specifications 主要技术参数		
Motor model 马达类型	42H35	42H49
Motor code 马达代码	PM1	PM2
Step angle 步距角	1.8°	
Rated voltage 额定电压	2.25V	2.0V
Rated current 额定电流	1.5A	2.5A
Resistance/phase 相阻抗	1.5Ω	0.8Ω
Inductance/phase 相电感	2.25mH	1.7mH
Max torque 最大力矩	0.25N.M	0.48N.M
Rotor inertia 转子惯量	≈24g.cm²	≈27g.cm²
Operating temperature 适用温度范围	-10°C~50°C	

SLH42-Re-E



Housing: JST GHR-10V-S

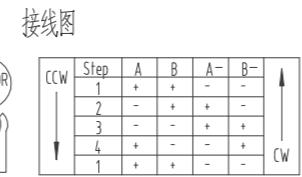
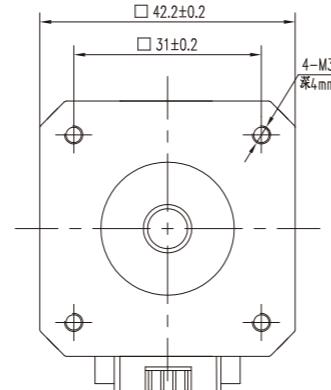
Terminal: JST SSHL-002T-P0.2

Wire: AWG 26

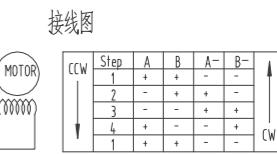
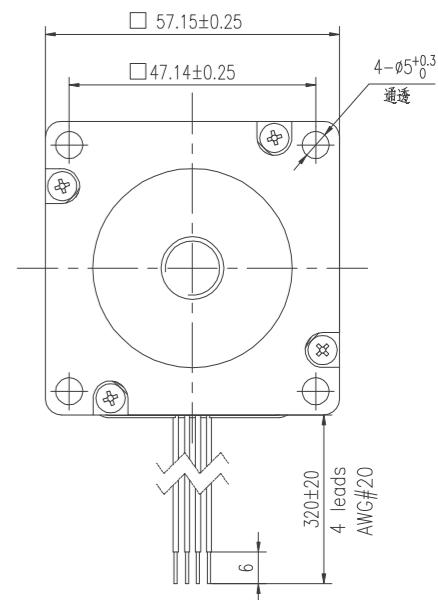
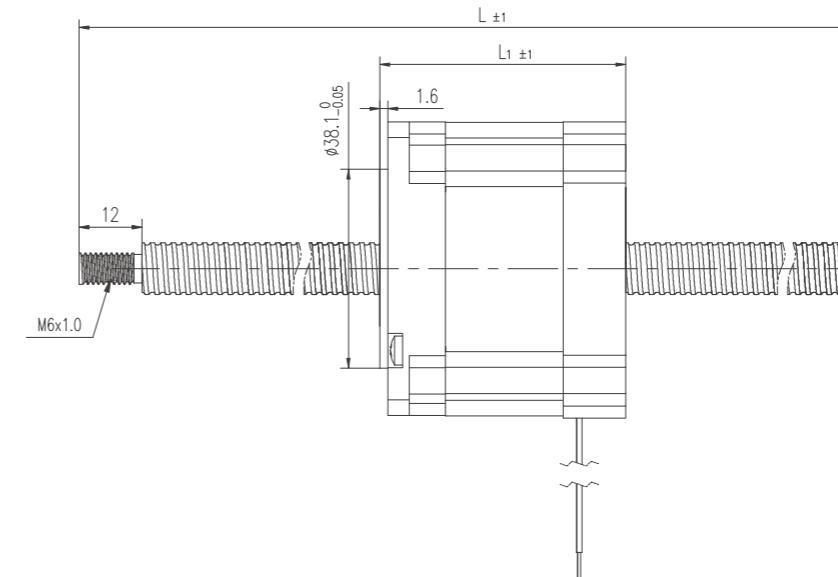
Pin No.	1	2	3	4	5	6	7	8	9	10
Description	PE	EA-	EA+	EB-	EB+	Z+	PE	GND	VCC	PE

Model 样式	Lead 导程	L1
SLH42-Re0601-PM1-15	01	34.1
SLH42-Re0601-PM2-25	01	48.1
SLH42-Re0602-PM1-15	02	34.1
SLH42-Re0602-PM2-25	02	48.1
SLH42-Re0606-PM1-15	06	34.1
SLH42-Re0606-PM2-25	06	48.1
SLH42-Re0609-PM1-15	09	34.1
SLH42-Re0609-PM2-25	09	48.1
SLH42-Re0610-PM1-15	10	34.1
SLH42-Re0610-PM2-25	10	48.1
SLH42-Re0618-PM1-15	18	34.1
SLH42-Re0618-PM2-25	18	48.1

Ball Screw Specifications 主要技术参数	
Accuracy grade 精度等级	Ct7
Thread direction 螺纹方向	Right 右旋
Axial play 轴向间隙	Max 0.07mm
Anti-rust treatment 防锈处理	Anti-rust oil 防锈油
Repeatability 重复精度	±0.05mm



SLH57-Re

Shaft dia.(轴径) $\phi 10$ 

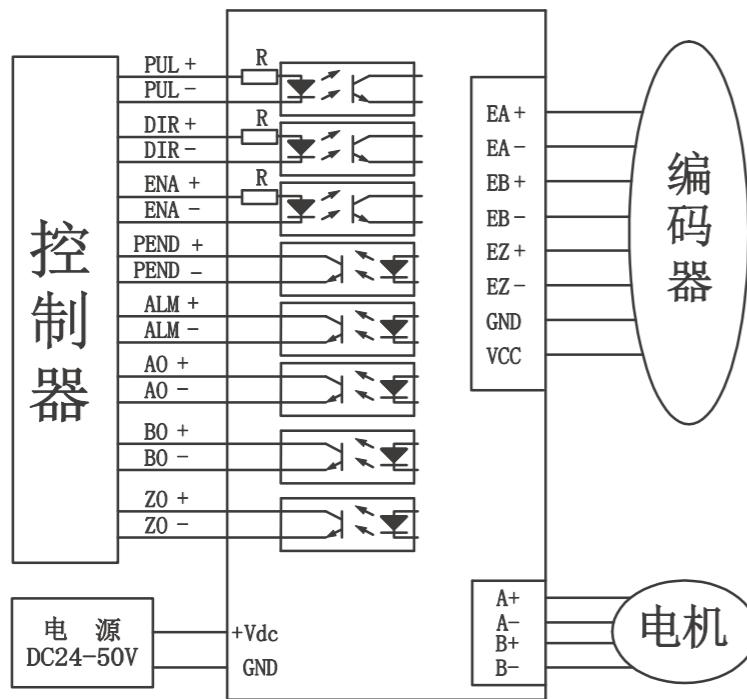
Model 样式	Lead 导程	L1
SLH57-Re1001-NM1-30	01	45.5
SLH57-Re1001-NM2-40	01	64.5
SLH57-Re1002-NM1-30	02	45.5
SLH57-Re1002-NM2-40	02	64.5
SLH57-Re1003-NM1-30	03	45.5
SLH57-Re1003-NM2-40	03	64.5
SLH57-Re1004-NM1-30	04	45.5
SLH57-Re1004-NM2-40	04	64.5
SLH57-Re1005-NM1-30	05	45.5
SLH57-Re1005-NM2-40	05	64.5
SLH57-Re1006-NM1-30	06	45.5
SLH57-Re1006-NM2-40	06	64.5
SLH57-Re1010-NM1-30	10	45.5
SLH57-Re1010-NM2-40	10	64.5
SLH57-Re1015-NM1-30	15	45.5
SLH57-Re1015-NM2-40	15	64.5
SLH57-Re1020-NM1-30	20	45.5
SLH57-Re1020-NM2-40	20	64.5
SLH57-Re1030-NM1-30	30	45.5
SLH57-Re1030-NM2-40	30	64.5

Ball Screw Specifications 主要技术参数	
Accuracy grade 精度等级	Ct7
Thread direction 螺纹方向	Right 右旋
Axial play 轴向间隙	Max 0.07mm
Anti-rust treatment 防锈处理	Anti-rust oil 防锈油
Repeatability 重复精度	±0.05mm

Sliding Specifications 主要技术参数	
Motor model 马达类型	57H45
Motor code 马达代号	NM1 NM2
Step angle 步距角	1.8°
Rated voltage 额定电压	1.68V 2.12V
Rated current 额定电流	3.0A 4.0A
Resistance/phase 相阻抗	0.56Ω 0.53Ω
Inductance/phase 相电感	1.5mH 1.7mH
Max torque 最大力矩	0.8N.M 1.6N.M
Rotor inertia 转子惯量	≈120g.cm² ≈126g.cm²
Operating temperature 适用温度范围	-10°C~50°C

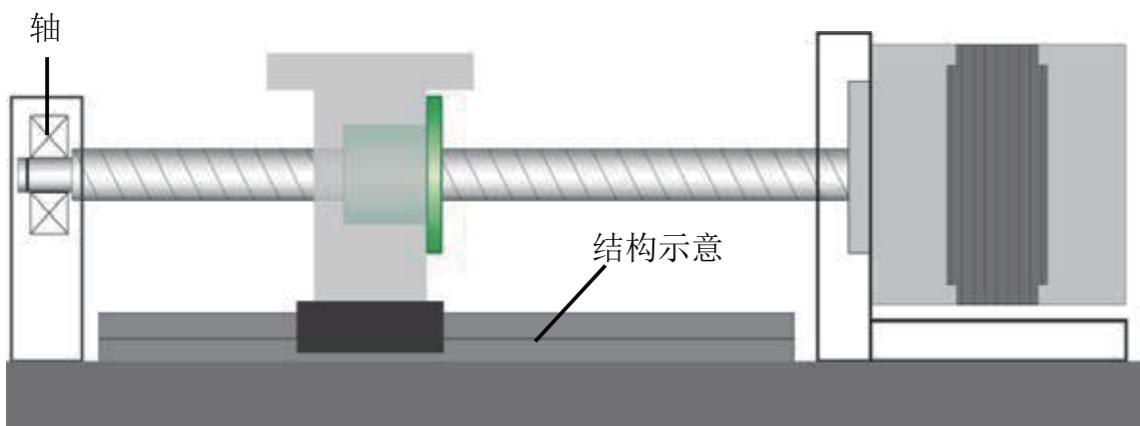
配线图

WIRING DIAGRAM



安装注意

INSTALLATION NOTES



● External执行器不是旋转停止结构。使用时需要设置外部旋转停止结构。（参照上图）轴端请务必用轴承支撑。

操作、使用注意事项

PRECAUTIONS FOR OPERATION AND USE

本产品是电机轴与丝杆轴一体型结构，因此无论是丝杆轴还是电机轴任意一方损坏，都不能维修。敬请了解。

This product is an integral structure of motor shaft and screw shaft, so no matter the screw shaft or motor shaft is damaged, it cannot be repaired. Please understand.

使用上注意

- 使用时请仔细阅读使用说明书，充分理解说明书内容，并务必严格遵守安全注意事项。
- 敲击本产品、将产品掉落或对其施加超过规定值的轴向负载、径向负载，将会导致产品损坏，请谨慎操作。
- 开封后请检查产品是否有异常，是否与所订购的产品一致。
- 若分解各部位，可能会导致异物进入及各部位组装精度降低，因此请勿分解本产品。
- 若异物进入，将会导致滚珠循环部位损坏、缩短产品寿命或导致功能失效等，因此请确实防止垃圾、切削粉末等异物的进入。
- 使用滚珠丝杆时，请务必涂抹润滑剂。在常规使用时，请每2~3个月检查一次油脂，并补充油。使用过程中油脂变脏时，请擦去旧的油脂后涂抹新的指定油脂。
- 请勿在超过本公司规定的负载、容许转速等规格值的条件下使用。
- 加减速速率，请以20ms/kHz以上为目标进行使用。
- 请勿拉扯电机导线。另外电机导线用于固定。请勿将其用于活动用途。
- 请勿靠近磁性存储媒体。
- 负载条件及使用驱动器不同，电机转矩速率的规格值也将不同。

Attention to Use

- Please read the operation manual carefully, fully understand the contents of the manual, and strictly observe the safety precautions.
- Knock the product, drop the product or apply axial load or radial load exceeding the specified value to it, which will cause damage to the product. Please operate carefully.
- After opening, please check whether the product is abnormal and consistent with the ordered product.
- If the parts are disassembled, foreign matters may enter and the assembly accuracy of each part may be reduced. Therefore, do not disassemble this product.
- If foreign matters enter, it will damage the ball circulation part, shorten the product life or cause the function failure, etc., so please do prevent the entry of garbage, cutting powder and other foreign matters.
- When using the ball screw, be sure to apply lubricant. In normal use, please check the grease every 2-3 months and add oil. When the grease becomes dirty during use, please wipe off the old grease and apply new specified grease.
- Do not use under the condition that the load, allowable speed and other specifications specified by the company are exceeded.
- Acceleration and deceleration rate, please use the target of more than 20ms / kHz.
- Do not pull the motor lead. In addition, the motor wire is used for fixing. Do not use it for activities.
- Keep away from magnetic storage media.
- The specification value of motor torque rate will be different with different load conditions and different drivers.

安全注意事项

- 发生异味、异常声音、冒烟、异常发热、振动等时，请立即停止运行，切断电源。
- 使用电流不能超过额定电流。
- 电机可能因负载条件及使用的驱动器而异常发热。使用时，请将电机表面温度控制在80°C以下。
- 请确认接线方式、驱动方式以及相序。错误接线将会导致电机异常动作。
- 请务必进行接地。
- 请勿强行弯曲、拉扯、夹住电机导线。
- 动作中请勿触摸活动部位。
- 维护检查前，请切断驱动器的输入电源。

Safety Precautions

- In case of peculiar smell, abnormal sound, smoke, abnormal heat, vibration, etc., please stop the operation immediately and cut off the power supply.
- The current used shall not exceed the rated current.
- The motor may overheat abnormally due to the load conditions and the driver used. When using, please control the motor surface temperature below 80 °C.
- Please confirm the wiring mode, driving mode and phase sequence. Wrong wiring will lead to abnormal operation of the motor.
- Be sure to ground.
- Do not bend, pull or clamp the motor wire by force.
- Do not touch the moving parts during the action.
- Before maintenance check, please cut off the input power of the drive.

使用环境

- 请勿在环境温度超过温度0~40、环境湿度超过20~80%RH、有结露、腐蚀性气体、易燃气体的场所使用。
- 请勿在产生强电场、强磁场的场所使用。
- 请勿在有铁粉等粉体、尘埃、油污、切削液、水分、盐分、有机溶剂发生或飞散的场所使用。
- 请勿在经常发生振动的场所以及有冲击、真空等特殊环境下使用。

Use Environment

- Do not use in places where the ambient temperature exceeds 0~40, the ambient humidity exceeds 20~80% RH, condensation, corrosive gas and flammable gas are present.
- Do not use in places where strong electric and magnetic fields are generated.
- Do not use it in places where iron powder, dust, oil, cutting fluid, moisture, salt and organic solvent occur or disperse.
- Do not use it in places where vibration often occurs or in special environments such as shock and vacuum.