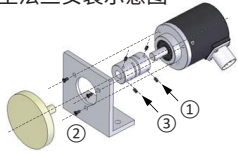


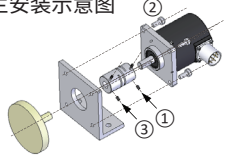
轴型编码器安装:

A型/C型法兰安装示意图



- ① 将联轴器安装到编码器
- ② 将编码器安装到支架
- ③ 将联轴器套装于被测轴上

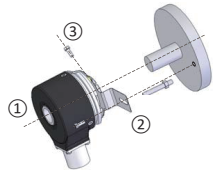
D型法兰安装示意图



- ① 将联轴器安装到编码器
- ② 将编码器安装到支架上
- ③ 将联轴器套装于被测轴上

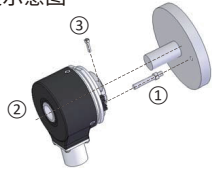
轴套型编码器安装:

单翼弹簧片安装示意图



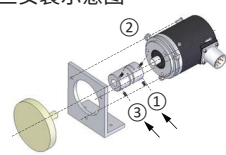
- ① 将编码器套装于电机上
 - ② 固定弹簧片
 - ③ 紧固编码器锁圈螺丝
- 注: 产品安装要以弹簧片本身不发生任何形变为标准

挡销安装示意图



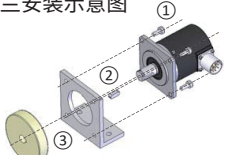
- ① 将挡销安装于电机或者支架上
- ② 将编码器通过挡销套装于被测轴上, 确保挡销尾端面与支撑槽底有0.8 mm的余量
- ③ 紧固编码器锁圈螺丝

B型法兰安装示意图



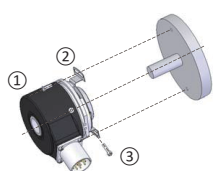
- ① 将联轴器安装到编码器
- ② 将编码器通过偏心器安装到支架上
- ③ 将联轴器套装于被测轴上

M型法兰安装示意图



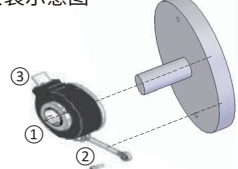
- ① 将编码器安装到支架上
- ② 将键装入键槽
- ③ 将编码器安装到电机上

双翼弹簧片安装示意图



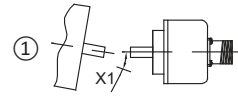
- ① 将编码器套装于电机上
 - ② 固定弹簧片
 - ③ 紧固编码器锁圈螺丝
- 注: 产品安装要以弹簧片本身不发生任何形变为标准

拐臂安装示意图

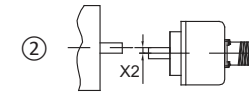


- ① 将编码器套装于被测轴上
 - ② 固定方向扭矩臂
 - ③ 紧固编码器锁圈螺丝
- 注: 产品正确安装时拐臂不能与编码器外壳接触

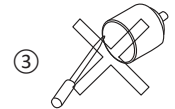
安装注意事项:



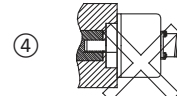
编码器与被测物体轴之间的角度偏差X1 < 1.5°。



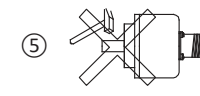
编码器与驱动输出轴之间的径向偏差X2 < 0.1 mm。



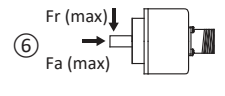
禁止局部或部分拆卸或改装编码器。



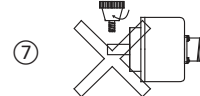
编码器与外部连接需要避免刚性连接。



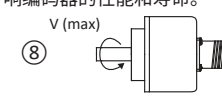
编码器是高精度仪器, 安装时严禁敲击和磕碰, 安装或使用不当会影响编码器的性能和寿命。



安装时注意编码器允许的轴向/径向最大负载, 严禁超过最大值。



禁止对编码器轴进行打磨、切割、钻孔等任何加工处理。



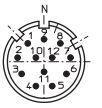
注意不要超过编码器的极限转速, 否则可能出现信号丢失。

电气参数:

接口类型	模拟量 4 ... 20 mA
供电电压	10 ... 30 V DC / 5 V DC
模拟量信号	4 ... 20 mA

端子配置:

信号	0V	+Ub	---	---	I+	I-	STZ	V/R	STT	---	---	---	屏蔽
色标	白	棕	绿	黄	灰	粉	蓝	红	黑	紫	灰/粉	红/蓝	⏏
针号(M23 12针)	1	2	3	4	5	6	7	8	9	10	11	12	PH



M23 12针

I+: 电流环路的输入

I-: 电流环路的输出

STZ: SET输入 (持续高电平2秒), 当前位置点输出电流被设定为4 mA

V/R: Up/down输入, 常通状态下, 可切换编码器加、减计数功能;

出厂设置: 目视轴端, 常断状态, 顺时针旋转, 编码器电流值增大, 常通状态, 顺时针旋转, 编码器电流值减小;

STT: SET输入 (持续高电平2秒), 输出电流被设定为20 mA

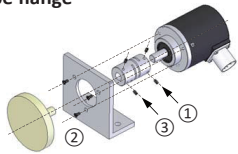
注: 保持轴不转动, 同时置STZ和STT为高电平 (持续同时2秒), 恢复满量程4 ... 20 mA, 当前位置被置位并输出4 mA。

接线原理:

- 1、编码器采用两线制工作方式。供电电源 (直流) 与信号输出 (4 ... 20 mA 电流) 共用。
- 2、电源端按功能定义接线, 同时, 电源正极 (+V) 可并联到编码器的 "I+" 端子。
- 3、编码器的 "I-" 端子连接到接收设备 (如 PLC 模拟量输入模块、显示仪表等) 的 "I+" 端子。
- 4、接收设备的 "I-" 端子连接到电源负极 (COM/GND), 形成一个完整回路。

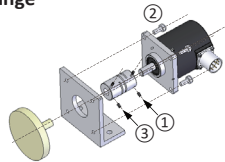
ENCODER INSTALLATION

A/C type flange



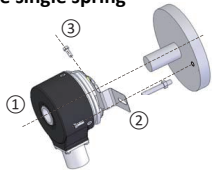
- ① Install coupling onto the encoder
- ② Install encoder onto the stand
- ③ Install the coupling onto the motor shaft

D type flange



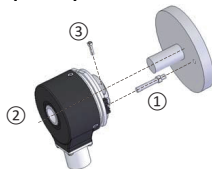
- ① Install coupling onto the encoder
- ② Install encoder onto the stand
- ③ Install the coupling onto the motor shaft

Standard hollow shaft encoders equipped with the single spring



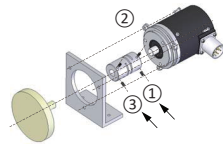
- ① Install the encoder on the motor
- ② Fasten the spring
- ③ Tighten the screws on encoder

Standard hollow shaft encoders equipped with torque stop



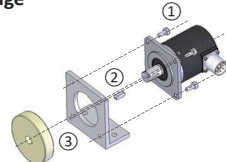
- ① Install the torque stop on the motor or bracket
- ② Install the encoder on the measured shaft via torque stop. Make sure there is 0.8 mm gap between the end side of the torque and the support trench
- ③ Tighten the screws on encoder

B type flange



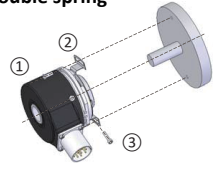
- ① Install coupling onto the encoder
- ② Install encoder onto the stand via eccentricizer
- ③ Install the coupling onto the motor shaft

M type flange



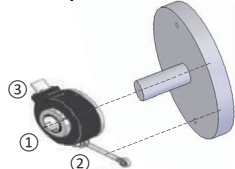
- ① Install encoder onto the stand
- ② Install the key into the keyslot
- ③ Install encoder onto the motor

Standard hollow shaft encoders equipped with the double spring



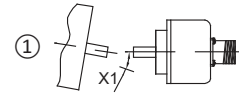
- ① Install the encoder on the motor
- ② Fasten the spring
- ③ Tighten the screws on encoder

Standard hollow shaft encoders equipped with universal torque arm

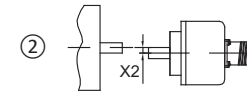


- ① Install the encoder on the motor
- ② Fasten the universal torque arm
- ③ Tighten the screws on encoder

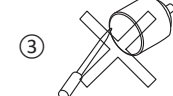
INSTALLATION ATTENTION



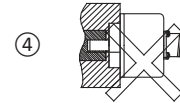
The angle deviation between the encoder and shaft is $X1 < 1.5^\circ$.



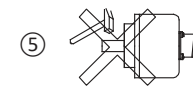
The radial deviation between the encoder and shaft is $X2 < 0.1 \text{ mm}$.



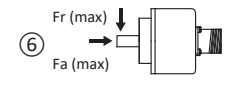
No modification.



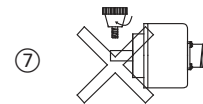
Don't use rigid connection between encoder and flange.



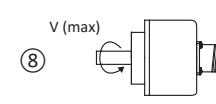
No hammer and impact.



Axial and radial load not beyond the limit.



No machining to the shaft. (Inc. skiving, sawing, drilling)



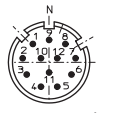
Not beyond $V(\text{max})$, otherwise signal will be lost.

ELECTRICAL PARAMETERS

Interface type	Analogue Output 4 ... 20 mA
Supply voltage	10 ... 30 V DC / 5 V DC
Signal	4 ... 20 mA

TERMINAL ASSIGNMENT

Signal	0V	+Ub	---	---	I+	I-	STZ	V/R	STT	---	---	---	SHD
Color	WH	BN	GN	YE	GY	PK	BU	RD	BK	VT	GY/PK	RD/BU	⏏
Pin(M23 12-pin)	1	2	3	4	5	6	7	8	9	10	11	12	PH



M23 12-pin

I+: Input current

I-: Output current

STZ: SET input, the high level will last 2 s and output current of this position will be set to 4 mA.

V/R: Up/down input, in the normally open state, the encoder's counting function can be switched.

Factory settings: Observe the shaft end, in the normally closed state, the encoder's current will increase when the shaft turning clockwise, in the normally open state, the encoder's current will decrease when the shaft turning clockwise.

STT: SET input, the high level will last 2 s and output current of this position will be set to 20 mA.

Note: If keep the shaft static, set STZ and STT to high level for 2 s at the same time, the current will restore the full range as 4 ... 20 mA, and output current of this position will be set to 4 mA.

WIRING PRINCIPLE

1. The encoder operates using a 2-wire system. The power supply (DC) and signal output (4 ... 20 mA current) share the same wiring.

2. Connect the power terminals according to their functional definitions. Additionally, the positive power terminal (+V) can be connected in parallel to the encoder's "I+" terminal.

3. Connect the encoder's "I-" terminal to the "I-" terminal of the receiving device (e.g., PLC analog input module, display instrument, etc.).

4. Connect the receiving device's "-" terminal to the negative power terminal (COM/GND), thereby completing the circuit.