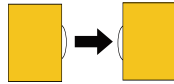


Product Description:

- High precision, through-beam sensor
- Combination with OSC1 controller, adapt to more scenes, multiplex output

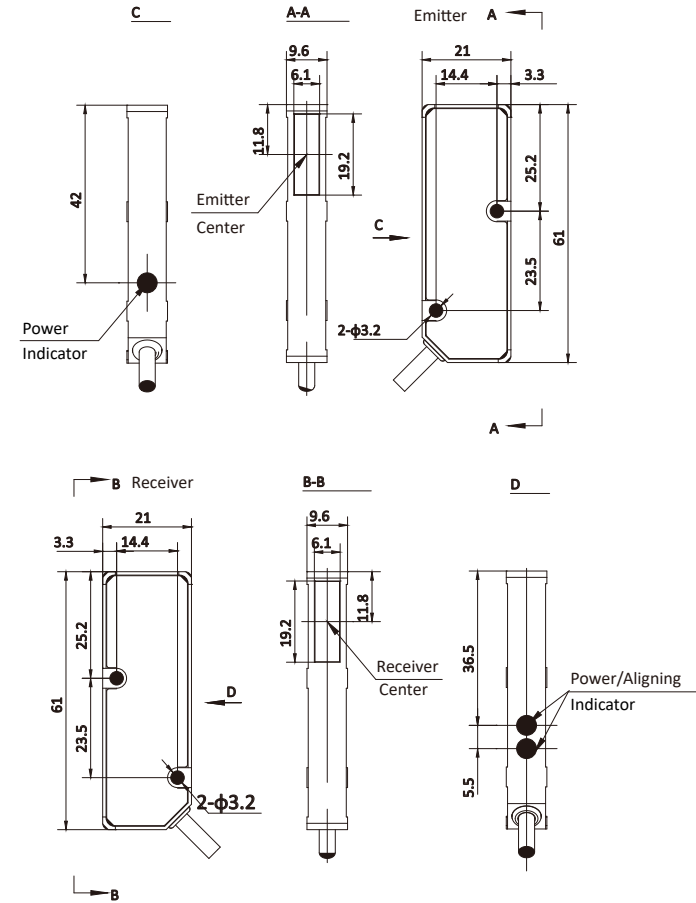


Type	Detection distance	Beam	Repeatability	Connection	Wiring diagram
OSMT60-S3006-0.3-Q8	300mm	Laser	±5μm	M8-4pin Connector	Fig.1
OSMT60-E3006-0.3-Q8		-----			Fig.2

TECHNICAL SPECIFICATION

OPERATING VOLTAGE	12...24VDC	RESPONSE TIME	500μs
RIPPLE VOLTAGE	±10% of U _B	AMBIENT ILLUMINATION	Incandescent light:3000lux Sunlight:10000lux
CURRENT CONSUMPTION	Emitter: ≤ 20mA Receiver: ≤ 80mA (12VDC)	CIRCUIT PROTECTION	Short-circuit protection, reverse polarity protection, over-load protection
BEAM	Red laser 650nm	BEAM SIZE	3x14mm
LINEARITY	+0.4%FS(40um) at an installation of 100mm	MEASURING RANGE	10mm
TEMPERATURE CHARACTERISTICS	±0.02%F.S./°C	HOUSING	Aluminium alloy
AMBIENT TEMPERATURE	-10...+50°C/35~85%RH (No condensation or icing)	WINDOWS	Glass
STORAGE TEMPERATURE	-20...+60°C/35~85%RH (No condensation or icing)	PROTECTION	IP67
CONNECTION	0.3M cable +M8-4pin Connector		

DIMENSIONS



Wiring diagram

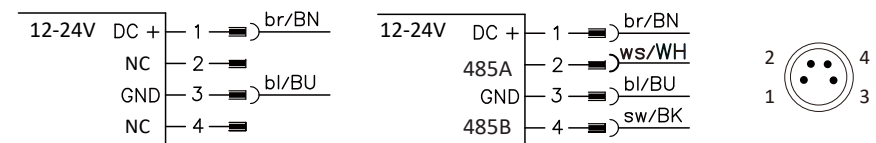
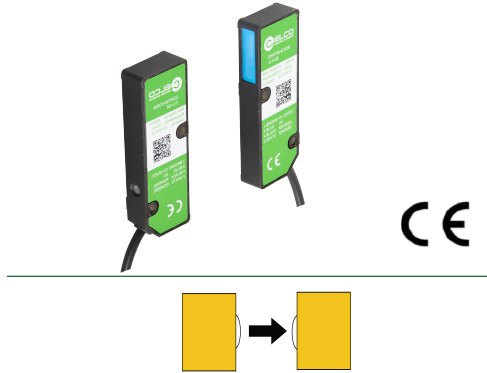


Fig.1

Fig.2

产品说明:

- 精度高，分体式感应器
- 搭配OSC1控制器一起使用，适应更多场景，多种输出模式

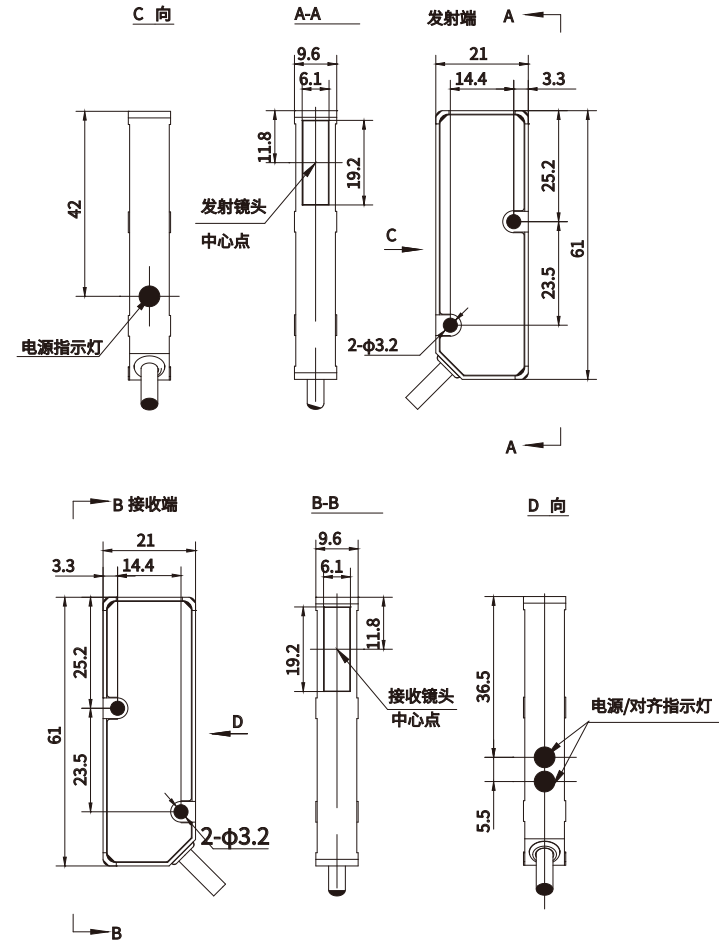


型号	检测距离	光源	重复精度	连接方式	接线图
OSMT60-S3006-0.3-Q8	300mm	激光	±5μm	M8,4针连接器	图1
OSMT60-E3006-0.3-Q8		----		M8,4针连接器	图2

技术参数

工作电压	12...24VDC	响应时间	500μs
纹波电压	±10% of U	环境照度	白炽灯: 3000lux以下 太阳光: 10000lux以下
消耗电流	发射器:20mA以下, 接收器:80mA以下(DC12V时)	保护电路	短路保护 反极性保护 输出过载保护
光源	红色半导体激光 650nm	光斑尺寸	3x14mm
线性度	安装距离100mm时: +0.4%FS(40um)	测量范围	10mm
温度特性	±0.02%F.S./°C	外壳	铝合金
工作温度	-10...+50°C/35~85%RH (无结露·结冰)	窗口	玻璃
储存温度	-20...+60°C/35~85%RH (无结露·结冰)	防护等级	IP67
连接形式	0.3线缆+M8 4针连接器		

外型尺寸及部位说明



接口定义和接线图

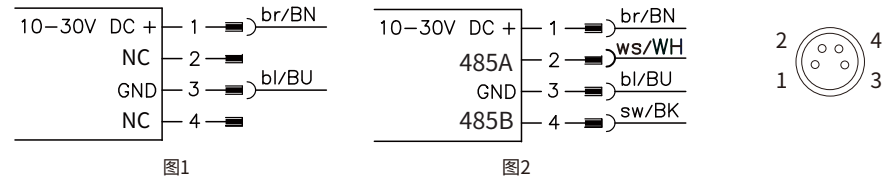


图1

图2

Installation instructions

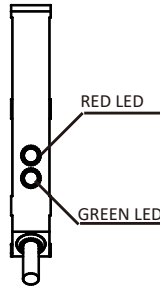
Before installation, please confirm that the serial numbers of the receiver and the emitter are the same. The serial number is engraved under the indicator .

Please keep the measured object in the middle between the receiver and the emitter.

Optical axis calibration and indicator description

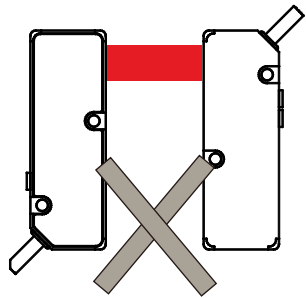
- (1) If the optical axis has been calibrated , all the LED of receiver are keep on.
- (2) If the receiver deviates upward, the red LED flashes;
If the receiver deviates downward, the green LED flashes;
If the receiver does not receive the emitted light, the red LED and the green LED will flash together.

Please adjust the optical axis according to the indicator LED.

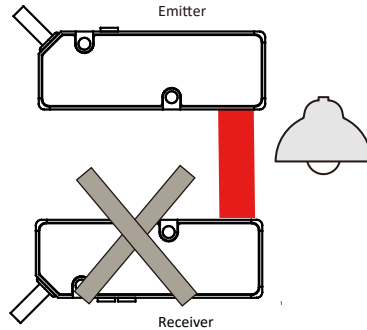


Please keep the windows of the emitter and receiver clean.If there is dirt,wipe with lens paper or a soft cloth that will not leave lint.

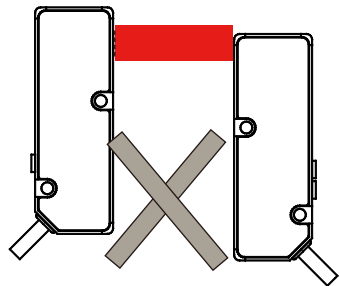
Please note the following incorrect installation methods



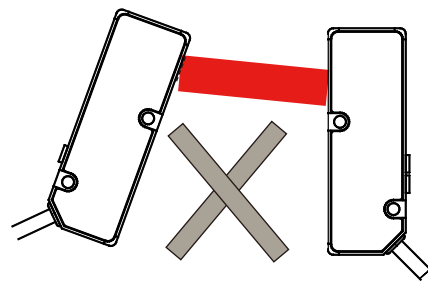
Reverse installation



Ambient lighting directly illuminates the receiving window



Dislocation installation



Inclined installation

- If the above installation method appears, it may lead to the decline of measurement accuracy.

Cautions

- The OSMT60 sensor should be used in combination with OSC1 controller.
If combination with other controllers, it may cause product failure.
- Use M3 screws(obtain separately)to mount the product,tighten to a torque of 0.5M·m or less.
- Please warm up the products for 30 minutes before use.
- Please turn off the power supply when the cable is routed or disconnect , otherwise it may cause product failure.
- Please don't connect it in parallel with the high-voltage line or power cord, otherwise the product may malfunction or be damaged due to electromagnetic induction.
- Please do not bend the cable at freezing temperature to avoid damaging the product.
- Please do not strongly impact the product or fall from a height to avoid damaging the product.
- When wiring this product with the controller, please follow this instructions or the controller instructions. Incorrect wiring may lead to misoperation or failure of the product or controller.
- When the connector is exposed, do not touch the pins in the connector port, and foreign objects are prohibited from entering the interior.
- Please separate high-voltage equipment, power supply equipment, machines that generate large switching current, welding motors, welding machines and other equipment that generate interference.
- When connecting or disconnecting the cable, please apply force to the connector part, and do not apply excessive force to the cable.
- Please do not touch the product and cable with wet hands to avoid damaging the product.
- Please use the product and controller within the rated output power range.
- Please wait 3s after changing the operation settings, and then cut off the power supply.

Laser Cautions

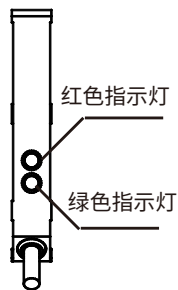
- The product emits visible laser beams, which is equivalent to class 1 of IEC 60825-1.
- If this product is exported to the United States, it must subject to the laser standard of FDA(Food and Drug Administration).
- When this product is installed in the customer's equipment, please follow the laws of the country or region.
- Be careful not to reflect the laser beam directly or through a mirror, etc, otherwise it will cause temporary visual impairment.
- Please warm up the products for 30 minutes before use.
- Please do not disassemble or modify the product without authorization.

安装说明

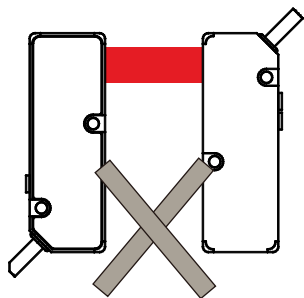
安装前请确认产品接收端与发射端序列号一致。产品序列号雕刻在指示灯下方。被测物请尽量保持在产品发射端与接收端中间位置。

光轴校准及指示灯说明

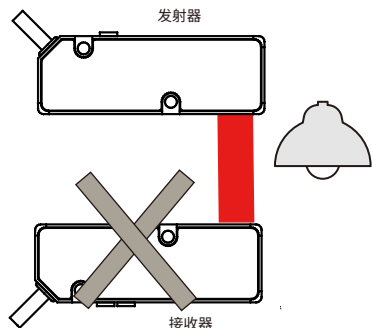
- (1) 若光轴已校准，传感头接收端的光轴调整指示灯全部亮起。
- (2) 若接收端向上偏移，红灯闪烁；若接收端向下偏移，绿灯闪烁；若接收端没有接收到发射光，红灯绿灯一起闪烁。请按照指示灯的指示调整光轴。



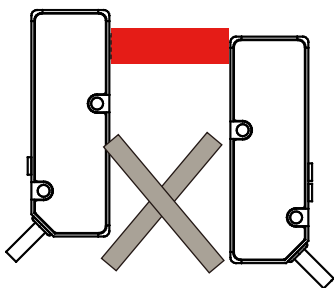
产品发射端与接收端窗口请保持清洁。如有脏污请使用无尘纸或不会残留毛屑的软布擦拭。请注意以下错误的安装方式



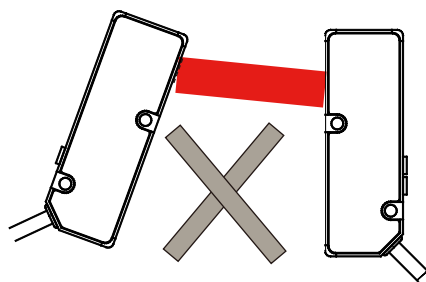
反向安装



环境照明灯光直接照射到接收器的镜头上



光轴错位安装



倾斜安装

- 如果出现上述的安装方式时，则有可能导致测量精度的下降。

注意事项

- 本产品需要与OSC1控制器配合使用，如与其他控制器一起使用可能会造成产品故障。
- 传感器头使用M3螺丝（另购）固定，紧固力矩不大于0.5N·m。
- 激光产品请预热30分钟后使用。
- 进行电缆布线或断开连接时请关闭电源，否则可能会导致故障发生。
- 请不要与高压线或电源线并联，否则可能会因电磁感应而导致本产品发生误动作、损坏。
- 请勿在冰点温度状态下弯曲电缆线，避免损坏产品。
- 请勿强烈撞击本产品，或从高处掉落，避免损坏产品。
- 本产品与控制器进行接线时，请按照本说明书或指定说明书的相关说明进行接线。错误接线可能会导致产品或控制器发生误动作或故障。
- 相关连接器外露时，请勿触碰连接器端口内的引脚，禁止异物进入内部。
- 请将高压设备、电源设备、产生大的开关电流的机器、电焊机、焊接机等产生干扰的设备分开放置。
- 当连接或断开电缆时，请施力在连接器部分上，不要对电缆施加过大的力。
- 请不要用潮湿的手触摸本产品 and 电缆，避免损坏产品。
- 请在额定输出功率范围内使用本产品与专用控制器。
- 产品工作时会发热，请不要长时间触摸。避免低温烫伤。
- 请在变更操作设置后等待3s，再做电源切断动作。

有关激光的使用注意

- 本产品放射可见激光光束，相当于激光产品安全规格等级中IEC 60825-1的class 1。
- 如果本产品出口到美国，必须遵守美国FDA（Food and Drug Administration）的激光标准。
- 当本产品装进客户的设备时，请遵循该国或地区的法律。
- 注意激光光束不要直接或通过镜面体等反射到眼睛，如果直视到激光光束，会引起短期的视觉障碍。
- 激光产品请预热30分钟后使用。
- 请不要擅自拆卸或改造本产品。