

Product Description:

- Laser ranging sensor ,940nm laser light source,metal shell;
Suitable for logistics,packaging,automobiles,non-standard equipment and other applications.



Product features:

- High precision,precise positioning
- Strong ambient light resistance and compact size
- Two-way switch output
- Visible laser indication light source with ranging band



Type	Distance	Light source	Switching frequency	Repeatability	Resolution	Wiring
OSM42-K2500C2B6*M	50...2500mm	Red laser+ laser indication	30HZ	5mm	1mm	Fig1
OSM42-K2500C2B6-* Q12						
OSM42-K4000C2B6*M	50...4000mm	Red laser+ laser indication	30HZ	5mm	1mm	Fig1
OSM42-K4000C2B6-* Q12						

Note 1: This product is a laser product, which can be used after 10 minutes of preheating after power-on.

Note 2: For breakout products, *M represents the cable length; if not specified, the default is 2 meters.

For pigtail products, * represents the cable length in meters. If there is no Wei connector product

TECHNICAL SPECIFICATION

OPERATING VOLTAGE	10...30 V DC , Class2	AMBIENT TEMPERATURE OPERATION	-10°C ... +50°C
LIGHT SOURCE TYPE	VCSEL laser, 940 nm	AMBIENT TEMPERATURE STORAGE	-20°C ... +60°C
OUTPUT	Two-way switch value, push-pull output,bright and can be set	CIRCUIT PROTECTION	Short-circuit protection, over-load protection reverse polarity protection,
LOAD CURRENT	≤150mA	PROTECTION DEGREE	IP67
POWER SUPPLY	<0.8W	SHELL	Die casting zinc
FACTORY DEFAULT	light-on switch 1(black) 2500mm switch 2(white) 1000mm	LASER LABEL	pasting on packing bag
TYPE OF ATTACHMENT	Cable type/pigtail	MAINTAIN	disassemble; please return to ELCO
		MAXIMUM HUMIDITY	Max.85%Rh
		ALTITUDE	Up to 2000m
		POLLUTION DEGREE	3



SAFETY PRECAUTIONS

⚠ DANGEROUS	This product is for the purpose of object detection only.Do not use this product for the purpose of protecting human body or human body parts.This product should not be used as an explosion-proof product.Do not use this product in dangerous places or in the environment of potentially explosive gases. Failure to use the control or adjustment device or perform the steps in accordance with this regulation may result in harmful radiation exposure. Ce produit est à des fins de détection d' objets seulement.N' utilisez pas ce produit dans le but de protéger le corps humain ou des parties du corps humain.Ce produit ne doit pas être utilisé comme produit antidéflagrant.Ne pas utiliser ce produit dans des endroits dangereux ou dans l' environnement de gaz potentiellement explosifs. La non-utilisation du dispositif de commande ou de réglage ou l' exécution des étapes conformément au présent règlement peut entraîner une exposition aux rayonnements nocifs.
⚠ WARN	This product is a sensor with DC power supply.Please do not apply AC power supply.If AC voltage applied,the product may explode or catch fire. Ce produit est un capteur avec alimentation cc.Veuillez ne pas appliquer d' alimentation en courant alternatif.En cas de tension,le produit peut exploser ou prendre feu.
NOTE	Do not use the same wiring with the power cord and high-voltage line,otherwise the mainmodule may fail or be damaged due to noise.When using a commercially available switching regulator,be sure to ground the housingground terminal and the ground terminal. Please do not use this product outdoors. N'utilisez pas le même câblage avec le cordon d'alimentation et la ligne à haute tension,sinon le module principal peut tomber en panne ou être endommagé en raison du bruit.Lorsque vous utilisez un régulateur de commutation disponible dans le commerce,assurez-vous de mettre à la terre le terminal d'habitation et le terminal de terre.Veuillez ne pas utiliser ce produit à l'extérieur.

产品说明:

- 激光测距传感器, 940nm激光光源, 金属外壳;
适用物流、包装、汽车、非标设备等应用



产品特点:

- 高精度, 精准定位
- 抗环境光能力强, 紧凑尺寸
- 两路开关量输出
- 测距带可见激光指示光源



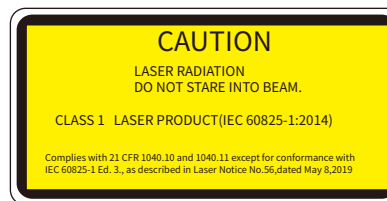
型号	检测距离	光源	响应频率	重复精度	分辨率	接线图
OSM42-K2500C2B6*M	50...2500mm	红色激光+ 激光指示	30HZ	5mm	1mm	图1
OSM42-K2500C2B6*- Q12						
OSM42-K4000C2B6*M	50...4000mm	红色激光+ 激光指示	30HZ	5mm	1mm	图1
OSM42-K4000C2B6*- Q12						

注1: 本产品为激光类产品, 上电预热十分钟后使用。

注2: 出线产品*M代表线长, 如无为默认2M长度。pigtail产品*代表线长, 单位为米, 若无为接插件产品。

技术参数

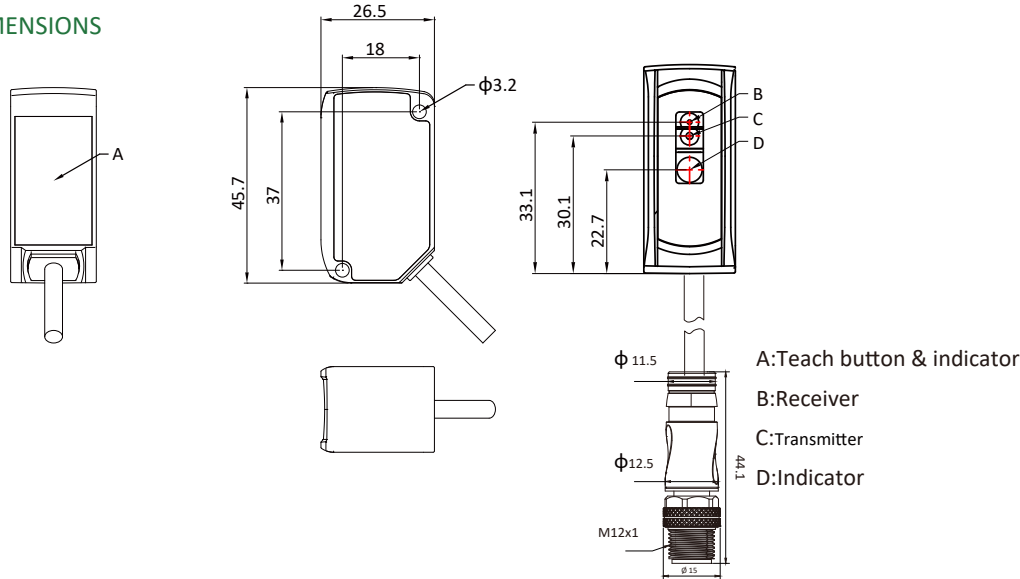
工作电压	10...30VDC, Class2	工作温度	-10°C...+50°C
光源类型	VCSEL激光, 940nm	环境温度	-20°C...+60°C
输出模式	两路开关量, 推挽输出, 亮暗通可设	保护电路	短路保护 过载保护 反极性保护
负载电流	≤150mA	防护等级	IP67
功率	<0.8W	外壳	压铸锌
出厂默认	亮通, 开关量1 (黑线) 2500mm; 开关量2 (白线) 1000mm;	激光标签	包装袋粘贴
连接形式	线缆式/pigtail	维护信息	异常返厂宜科处理
		最高湿度	最高85%相对湿度
		海拔	高达2000米
		污染程度	三级



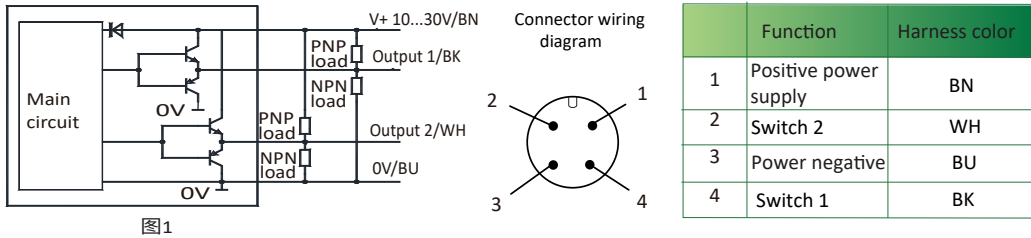
安全注意事项

▲危险	本产品仅用于物体检测。请勿将本产品用于保护人体或人体部位。本产品不得用作防爆产品。请勿在危险场所或可能存在爆炸性气体的环境中使用本产品。本装置控制或调节装置的未使用或未按本规定执行步骤, 可能导致有害辐射暴露。未按照本规定使用控制或调节装置或未执行相应步骤, 可能导致有害辐射暴露。
▲警告	该产品为直流电源传感器。请勿使用交流电源。如接入交流电压, 产品可能会爆炸或起火。
通知	请不要将电源线与高压线路使用同一布线, 否则主模块可能会因噪声而故障或损坏。在使用市售的开关稳压器时, 请确保将外壳接地端子和地线端子接地。请勿在户外使用本产品。

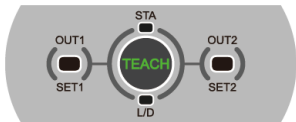
DIMENSIONS



ELECTRICAL CONNECTION

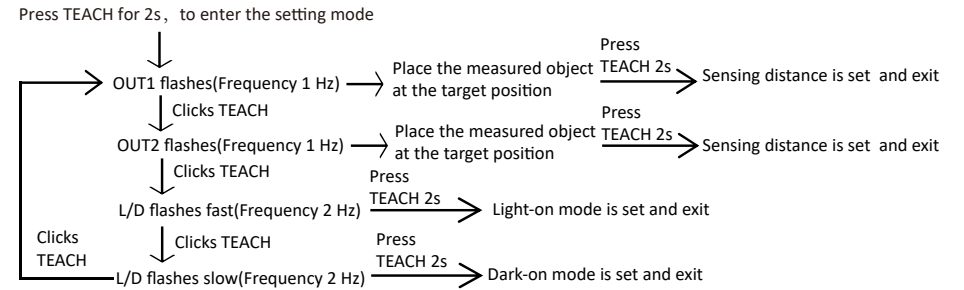


TEACH BUTTON & INDICATOR



Indicator description:
 STA: Status indicator, the target object is within the measurement range, LED keep on; the target object is out of the measurement range, LED flashes (on 0.5s/off 0.5s);
 L/D: Lumopus and dark pass indicator, set to light-on, LED on; set to dark-on, LED off;
 OUT1: Switch 1 digital out indicator, LED on when output;
 At teaching mode, indicates the setting of switch 1;
 OUT2: Switch 2 digital out indicator, LED on when output;
 At teaching mode, indicates the setting of switch 2;
Key description:
 TEACH: Setting key

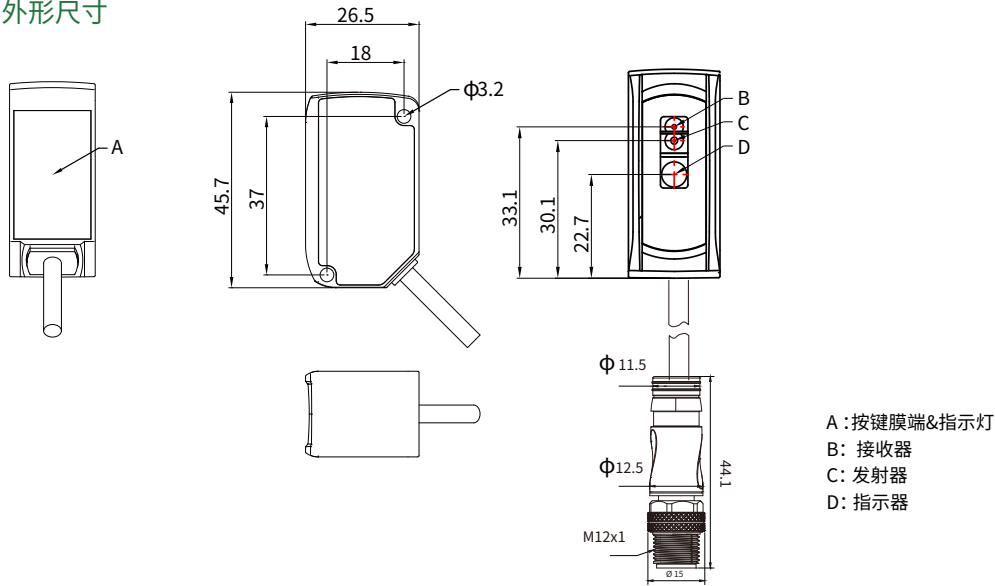
TEACHING GUIDE



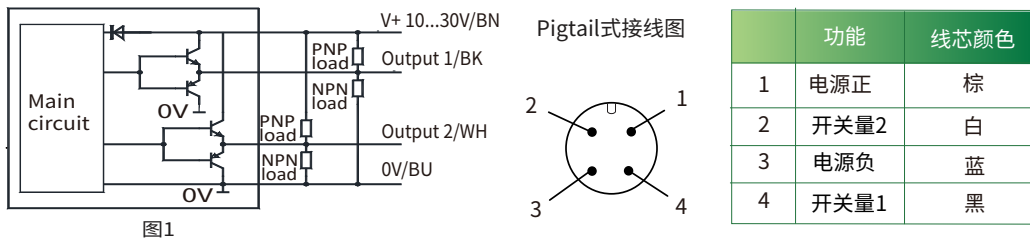
INSTALLATION

- In the case of color or material difference When the material or color of moving object is extremely different, install it in the direction shown on the left to keep the measurement error to a minimum.
- Detect rotating objects When detecting a rotating object, install it in the direction shown on the left, which can suppress the influence of the object's vertical vibration and position shift.
- When there is a step. If there is a step in the moving detection object, install it according to the method shown on the left, so as to suppress the influence of the step edge during measurement.
- Measure in narrow places and recessed parts In the case of measuring in a narrow place or hole, please be careful not to block the light path from the light emitting part to the light receiving part when installing.
- When installed on the L-structure Please install according to the method shown on the left to avoid the multiple reflected light from the vertical entering the light receiving part.

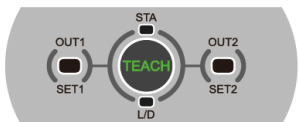
外形尺寸



接线图



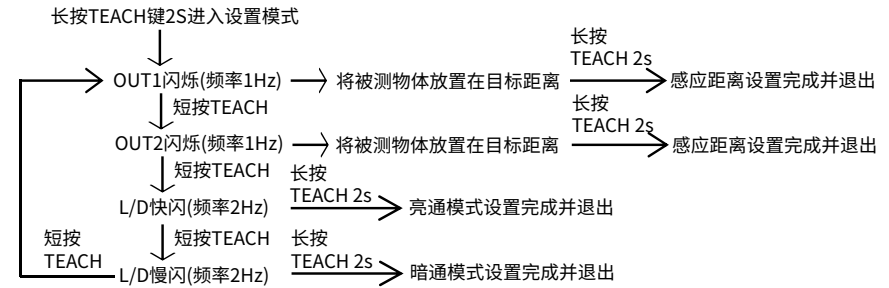
按键指示界面说明



指示灯说明:
STA:状态指示灯, 目标物体在测量范围内, 灯长亮;
目标物体在测量范围外, 灯闪烁(亮0.5s/灭0.5s);
L/D:亮通/暗通指示灯, 设置为亮通模式时, 灯长亮;
设置为暗通模式时, 灯长灭;
OUT1:开关量1数字输出指示灯, 有输出时长亮;在教导模式时指示开关量1的设置;
OUT2:开关量2数字输出指示灯, 有输出时长亮;在教导模式时指示开关量2的设置;

按键说明:
TEACH:设置键

操作说明



安装示意图

