

# OS10S SERIES PHOTOELECTRIC SENSOR

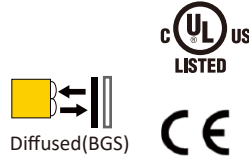


## Product Description:

- High performance small square type photoelectric sensor, standard mounting aperture 25.4mm
- 150mm BGS diffuse, suitable for logistics, photovoltaic, lithium, AGV and other industries

## Product features:

- 150mm BGS light and dark pass and detection distance can be adjusted
- IP67 protection rating



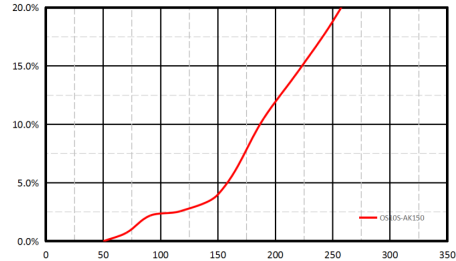
Type	Distance	Beam	Output	Connection	Wiring
OS10S-AK150CN6 *M <sup>1)</sup>	6...150mm	Red	NPN	Cable	Fig.1
OS10S-AK150CP6 *M <sup>1)</sup>	6...150mm	Red	PNP	Cable	Fig.2
OS10S-AK150CN6Q8	6...150mm	Red	NPN	M8 Connector,4pin	Fig.3
OS10S-AK150CP6Q8	6...150mm	Red	PNP	M8 Connector,4pin	Fig.4
OS10S-AK150CN6Q8.3	6...150mm	Red	NPN	M8 Connector,3pin	Fig.5
OS10S-AK150CP6Q8.3	6...150mm	Red	PNP	M8 Connector,3pin	Fig.6

Note 1): \* M refers to the cable length in meters. If there is no \* M in the model, the default cable length is 2 meters.

## TECHNICAL SPECIFICATION

OPERATING VOLTAGE	10...30VDC Class 2	AMBIENT TEMPERATURE OPERATION	-20°C...+60°C
RIPPLE VOLTAGE	±10% of U <sub>b</sub>	AMBIENT TEMPERATURE STORAGE	-40°C...+70°C
LIGHT SOURCE TYPE	Red LED	CIRCUIT PROTECTION	Short-circuit protection, reverse polarity protection, over-load protection
OUTPUT CHARACTERISTIC	PNP/NPN	PROTECTION DEGREE	IP67
LOAD CURRENT	≤100mA	HOUSING MATERIAL	PBT+PC
SWITCHING FREQUENCY	400Hz	CONNECTING TYPE	*m PVC cable /M8 connector
ADJUSTMENT OF OPERATING DISTANCE	Knob adjustment		
SWITCH MODE	Light On or Dark on		
UL TEMPERATURE	50°C		

Scanning distance difference Curve (White 90%/black 6%)



scanning distance (on white 90%) X(mm)

We reserve the right to make technical alterations without prior notice. | EN&CN | Creation date:01.01.26 | UM\_SP\_OS10S-AK150-Q8-Q8.3\_V1.0\_EN&CN

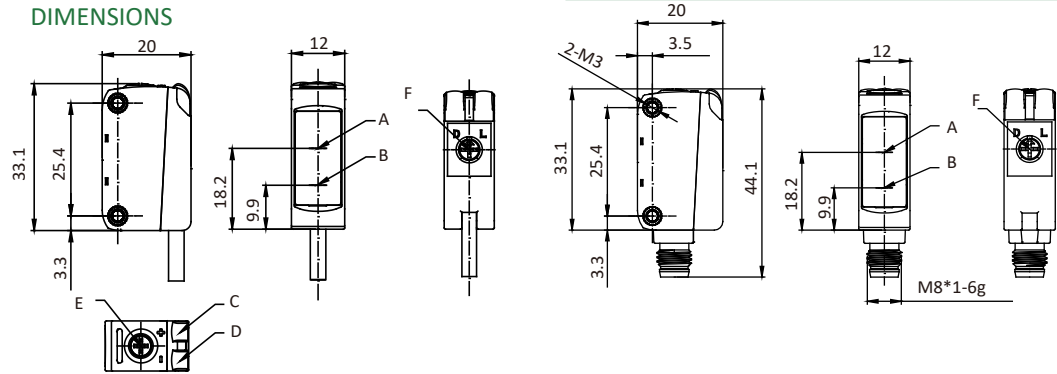
## MAINTAIN

Disassemble; please return to ELCO

# OS10S SERIES PHOTOELECTRIC SENSOR



## DIMENSIONS

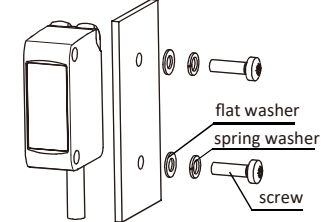


## INDICATORS

A	Receiver	
B	Emitter	
C	Output indicator	Yellow
D	steady state indicator	Green
E	Distance adjustment knob	
F	Switch mode	L.O. or D.O.

## INSTALL

Recommended to use M3\*0.5 screw for fastening  
Tightening torques ≤ 0.5N m



## ELECTRICAL CONNECTION

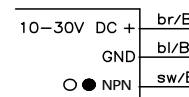


Fig.1

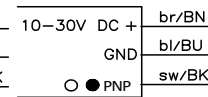


Fig.2

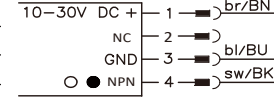


Fig.3

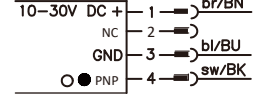


Fig.4

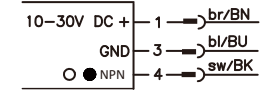


Fig.5

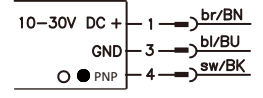
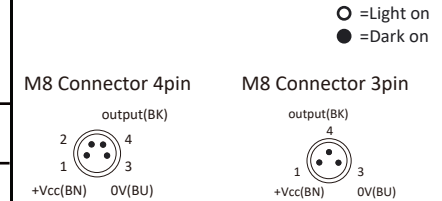


Fig.6

## SAFETY PRECAUTIONS

<b>DANGER!</b>	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.
<b>WARN</b>	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.
<b>NOTICE</b>	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.
	Do not use the same wiring with the power cord and high-voltage line, otherwise the main module may fail or be damaged due to noise. When using a commercially available switching regulator, be sure to ground the housing ground 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.



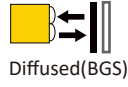
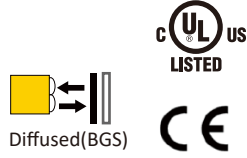
We reserve the right to make technical alterations without prior notice. | EN&CN | Creation date:01.01.26 | UM\_SP\_OS10S-AK150-Q8-Q8.3\_V1.0\_EN&CN

产品说明:

- 高性能小型光电传感器, 标准安装孔径25.4mm
- 150mm BGS漫反,适用于物流输送、光伏、锂电、AGV等行业

产品特点:

- 150mm BGS 亮暗通和检测距离可调
- IP67防护等级



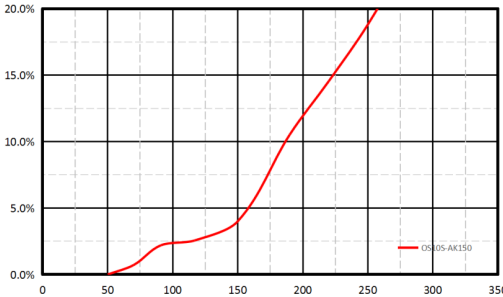
型号	检测距离	光源	输出方式	连接方式	接线图
OS10S-AK150CN6 *M <sup>1)</sup>	6...150mm	红光	NPN	线缆	图1
OS10S-AK150CP6 *M <sup>1)</sup>	6...150mm	红光	PNP	线缆	图2
OS10S-AK150CN6Q8	6...150mm	红光	NPN	M8 连接器,4pin	图3
OS10S-AK150CP6Q8	6...150mm	红光	PNP	M8 连接器,4pin	图4
OS10S-AK150CN6Q8.3	6...150mm	红光	NPN	M8 连接器,3pin	图5
OS10S-AK150CP6Q8.3	6...150mm	红光	PNP	M8 连接器,3pin	图6

注1): \*M表示线缆长度,单位米,型号中无\*M默认线缆长度为2米。

技术参数

工作电压	10...30VDC Class 2	工作温度	-20°C...+60°C
光源	红光 LED	环境温度	-40°C...+70°C
输出特性	PNP/NPN	UL 温度	50°C
负载电流	≤100mA	保护电路	短路保护、反极性保护 输出过载保护
开关频率	400Hz	防护等级	IP67
检测距离调节	旋钮调节	外壳	PC+PBT,PMMA
开关模式设置	旋钮调节、亮暗通可选	连接方式	*m PVC线缆 /M8 连接器

检测距离差异曲线 (白90%黑6%)

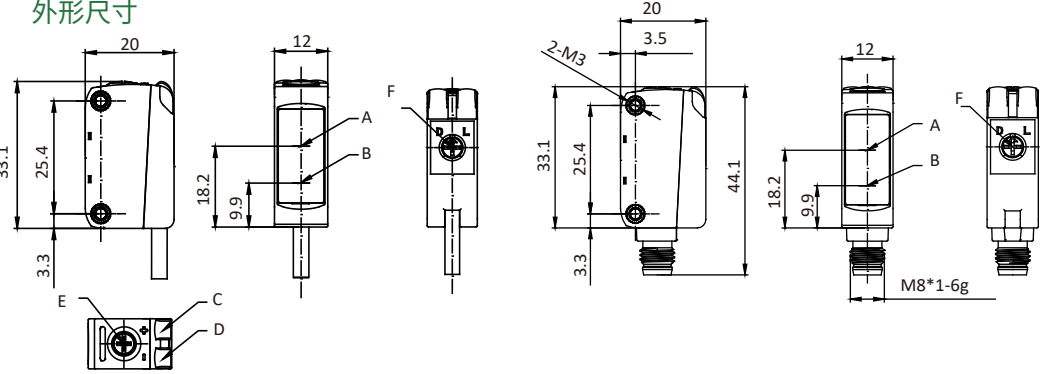


检测距离 (以90%白板为准)

维修

禁止客户拆解产品, 请返厂维修

外形尺寸

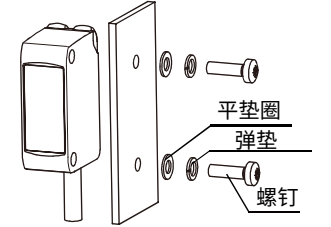


操作指示

A	接收端	
B	发射端	
C	输出指示灯	黄色
D	稳态指示灯	绿色
E	距离调节旋钮	
F	亮暗通旋钮	L亮通/D暗通

安装

建议使用M3\*0.5螺钉紧固, 拧紧力矩≤0.5N.m



接线图

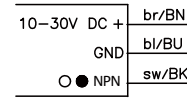


图1

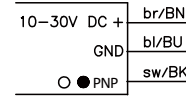


图2

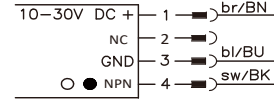


图3

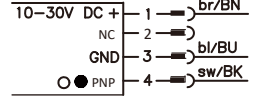


图4

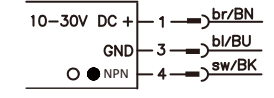


图5

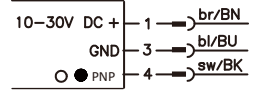


图6

安全防护措施

▲危险	<ul style="list-style-type: none"> <li>• 本产品仅供目标物检测之用, 请勿将本产品用于保护人体或人体部位等目的。</li> <li>• 本产品不得作为防爆产品使用, 请勿在危险场所或潜在爆炸气体的环境中使用本产品。</li> <li>• 若不按此规定使用控制或调整装置、或执行各步操作, 就可能引起有害的辐射照射。</li> </ul>
▲警告	<ul style="list-style-type: none"> <li>• 本产品是采用直流供电的传感器, 请勿施加交流电源, 如果施加交流电压, 则可能导致产品爆炸或起火。</li> </ul>
注意	<ul style="list-style-type: none"> <li>• 请勿与电源线和高压线使用同一配线, 否则可能因噪音声导致主模块发生故障或受损。</li> <li>• 使用市面所售的开关稳压器时, 请务必将壳体接地端子和接地端子接地。</li> <li>• 请勿在室外使用本产品。</li> </ul>

