LANBAO PSE-YC Series Optical Sensor Instruction Manual

LANBAO PSE-YC Series Optical Sensor

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Precautions

- Please make sure that the power supply voltage is within the rated value before powering on.
- The time from powering-on to normal detection of the sensor is 100 ms, please ensure that the sensor is used after 100 ms of powering on.
- When using different power sources for the sensor and load, be sure to turn on the power of the sensor first .
- When the sensor is not used, it is recommended to cut off the power of the load first and then turn off the power of the sensor .
- Do not subject the sensor to severe external forces (such as hammer hits, etc.) during installation, so as not to damage the sensor performance .
- Avoid using thinner, alcohol or other organic solvents when cleaning.

Safety Warning

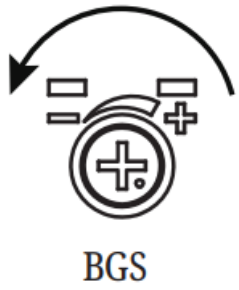
- Do not use in an environment with flammable, explosive or corrosive gases.
- Do not use in oil or chemical environments.
- Do not use in a high humidity environment.
- Do not use in direct sunlight.
- Do not use in other environmental conditions that exceed the rated value.
- Do not disassemble, repair or modify this product without authorization.

Scrap Treatment

- When the product is scrapped, please dispose of it as industrial waste.

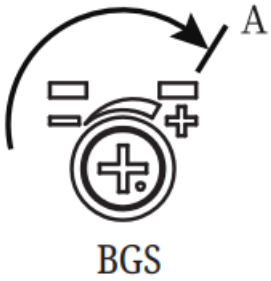
Distance Adjustment

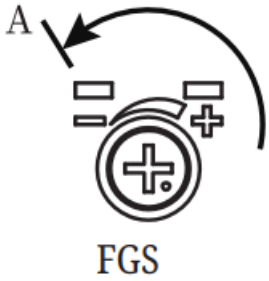
1. Turn the sensitivity adjuster fully.
   BGS function: Counterclockwise



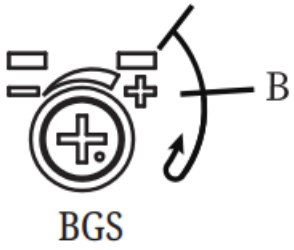
FGS function: Clockwise

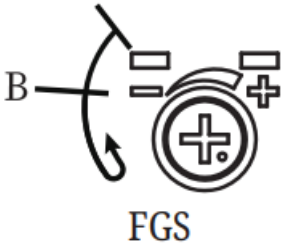
2. BGS function: In the object present condition, turn the sensitivity adjuster and confirm the point A where the sensor enters the sensing state. FGS function: In sensing back-ground condition, turn the sensitivity adjuster and confirm the point A where the sensor enters the non-sensing state.



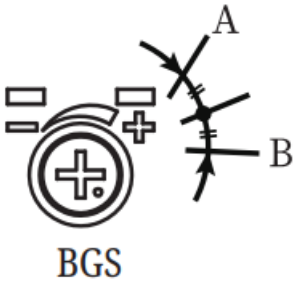


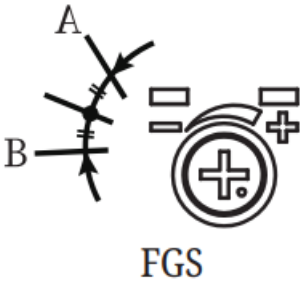
3. BGS function: After removing the sensing object, turn the sensitivity adjuster and confirm the point B where the sensor enters the non-sensing state. FGS function: In the object present condition, turn the sensitivity adjuster and confirm the point B where the sensor enters the sensing state.
   (If the sensor does not enter the “Light” state operation even when the sensing adjuster is turned fully clockwise, the postion is point B.)





4. The optimum postion to stably detect objects is the center point between A and B.





Technical specifications

Detection type		Background suppression							
		NPN NO	NPN NC	PNP NO	PNP NC	NPN	PNP	NPN	PNP
Format	Cable	PSE-YC5DNOR	PSE-YC5DNCR	PSE-YC5DPOR	PSE-YC5DPCR	PSE-YC25DNBR	PSE-YC25DPBR	PSE-YC35DNBR	PSE-YC35DPBR
	Connector	PSE-YC5DNOR-E3	PSE-YC5DNCR-E3	PSE-YC5DPOR-E3	PSE-YC5DPCR-E3	PSE-YC25DNBR-E3	PSE-YC25DPBR-E3	PSE-YC35DNBR-E3	PSE-YC35DPBR-E3
Sensing distance		0,2…5cm				0,5…25cm		0,5…35cm	
Return difference		2%				10%			
Distance adjustment		5-turn knob adjustment							
Light source		Red light(630nm)							
Light spot size		⌀ 2 mm (5 cm)				⌀ 6 mm (25 cm)			
Supply voltage		10…30 V DC							
Consumption current		≤20mA							
Load current		≤100mA							
Voltage drop		≤2V							
Circuit protection		Short circuit, Reverse polarity, Overload, Zener protection							

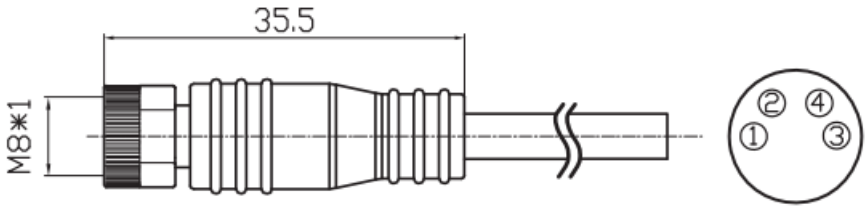
BGS/FGS Switch	The white wire connected to the positive electrode or floating is BGS, and the white wire connected to the negative electrode is FGS	/
NO/NC Switch	/	The white wire connected to the positive electrode or floating is NO, and the white wire connected to the negative electrode is NC
Response time	≤0,5ms	≤1ms
Indicator	Green: Power indicator; Yellow: Output, overload or short circuit	
Anti-ambient light	Sunlight interference ≤ 10,000 lux; Anti incandescent light interference ≤ 3,000 lux	
Ambient temperature	-25℃…55℃	
Storage temperature	-25℃…70℃	
Protection degree	IP67	
Certification	CE	
Material	PC+ABS	
Lens	PMMA	
Weight	Cable: about 50g; Connector: about 10g	
Accessories	Screw ×2, Mounting bracket ZJP-8, Operation manual	

Note: The standard detection target is a white card of 20cm*20cm(90% reflectivity)

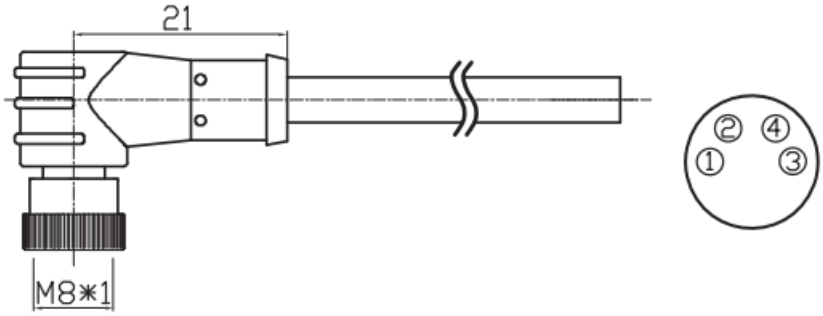
Accessory Dimensions(Sold Separately)

The following accessories need to be ordered additionally except for the ZJP-8 type mounting bracket.

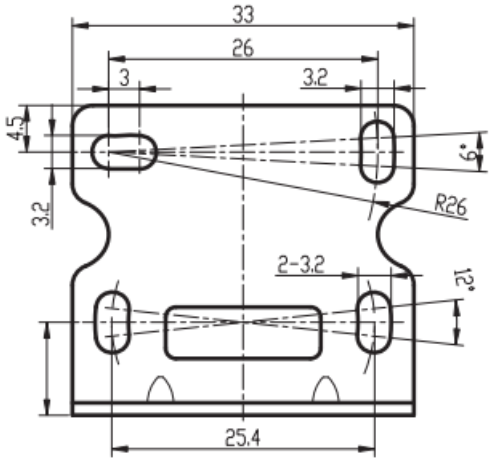
M8 Connector: CS S48L-3-2

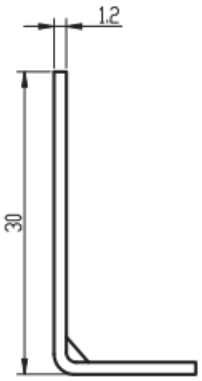


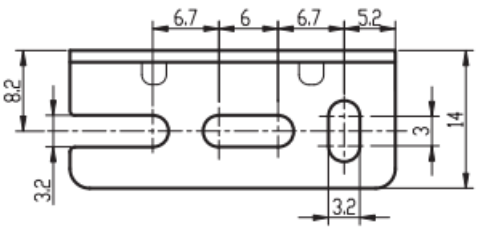
M8 Connector: CS S49L-3-2



Mounting Bracket: ZJP-8 (accessory)

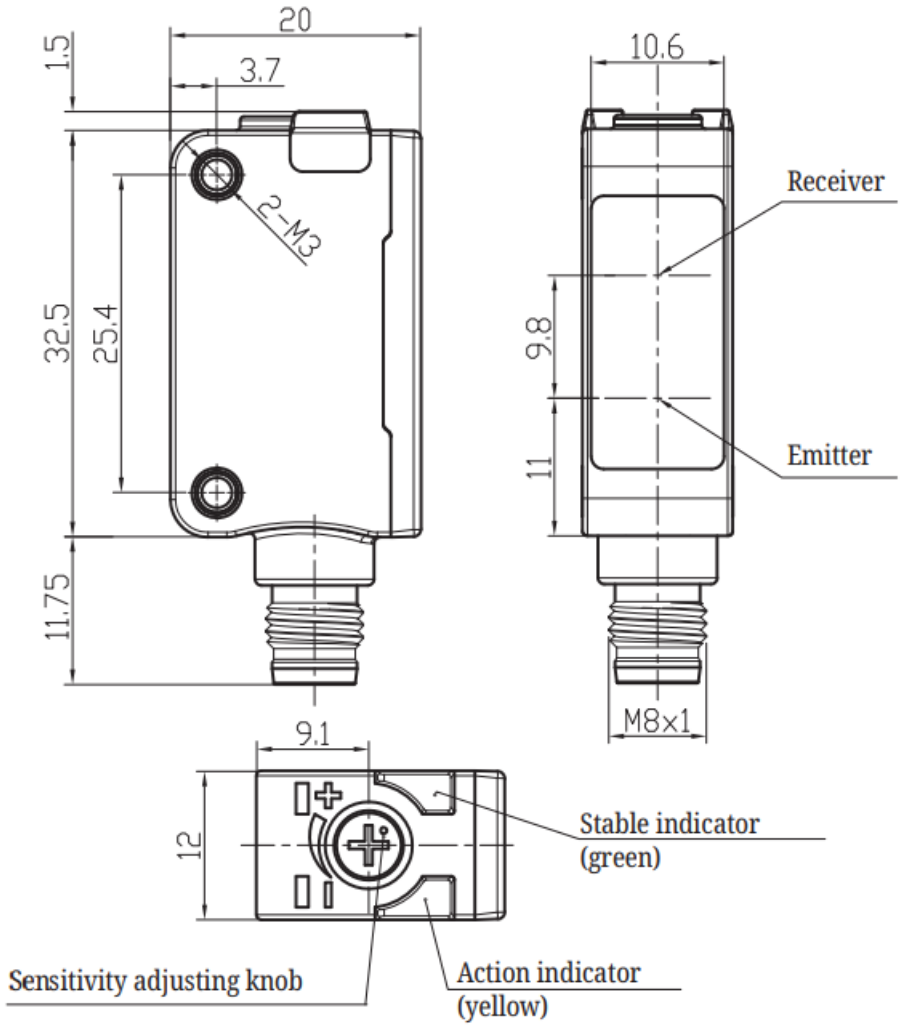




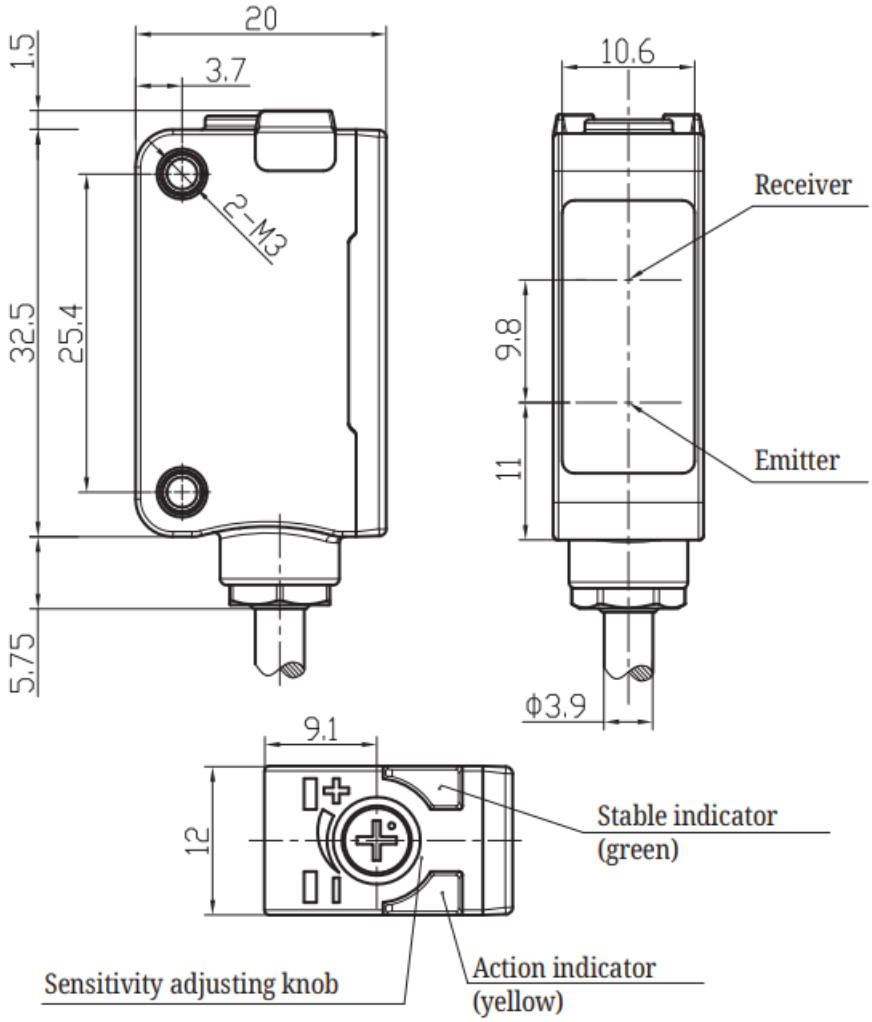


Dimensions

Background Suppression-Connector



Background Suppression-Cable



Terminal Wiring Diagram

PSE-YC5

1: + 4: OUT
3: - 2: -FGS / +BGS

BN: + BK: OUT
BU: - WH: -FGS / +BGS

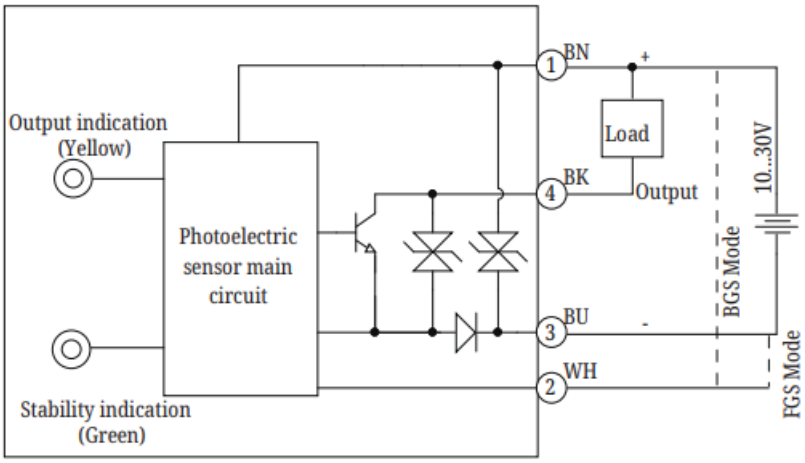
PSE-YC25, YC35

1: + 4: OUT
3: - 2: -NC / +NO

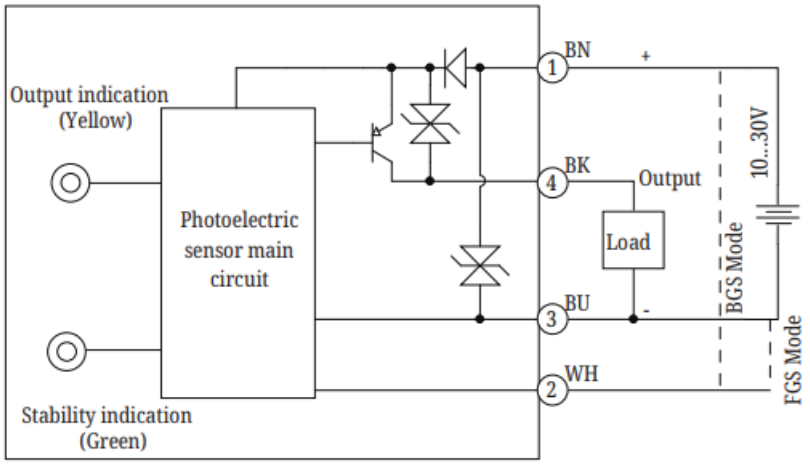
BN : + BK : OUT
BU : - WH : -NC/+NO

Wiring diagram

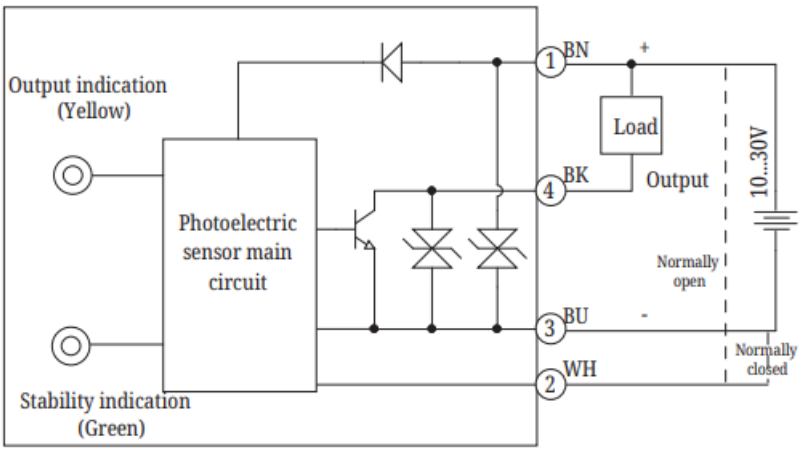
PSE-YC5(NPN Output)



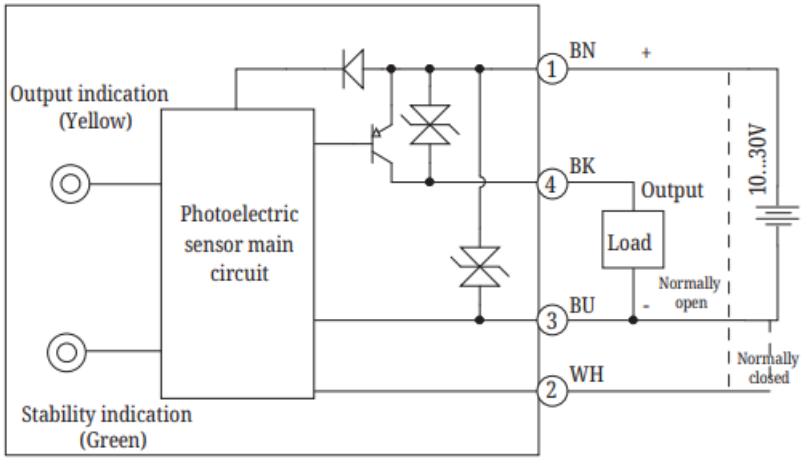
PSE-YC5(PNP Output)



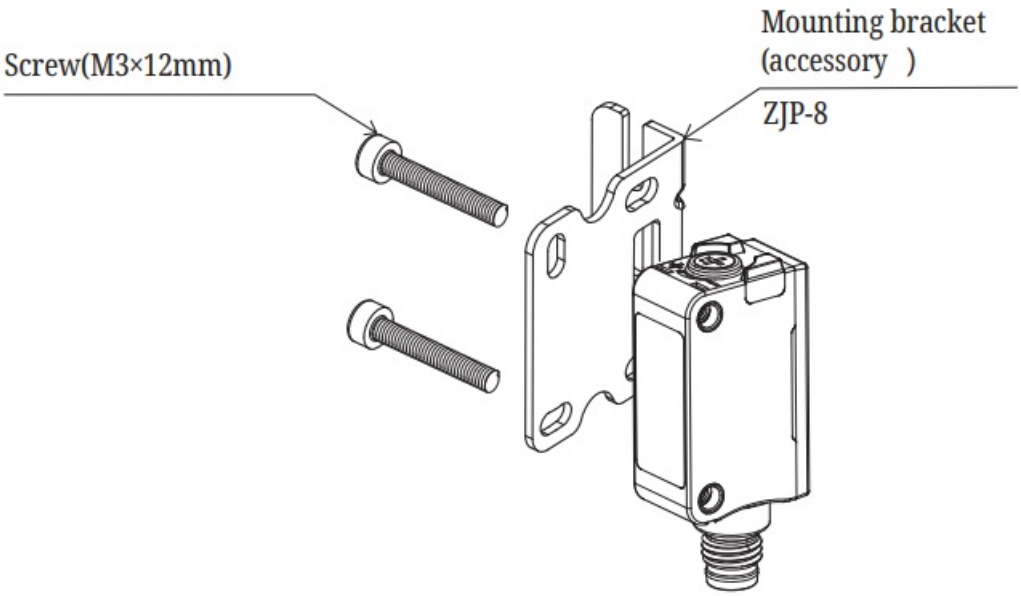
PSE-YC25, YC35(NPN Output)



PSE-YC25, YC35(PNP Output)



Mounting



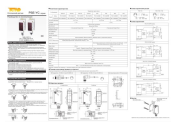
Note: When installing this product, please keep the tightening torque below 0,5 N·m.

CUDTOMER SUPPORT

eko-com.ru
Tel.: 8 (800) 333-70-75
E-mail: sale@teko-com.ru

Photoelectric sensor

Documents / Resources

	LANBAO PSE-YC Series Optical Sensor [pdf] Instruction Manual PSE-YC Series, PSE-YC Series Optical Sensor, Optical Sensor, Sensor

References

- О фонде | Foundation for Assistance for Internet Technologies and Infrastructure Development
- НПК «ТЕКО» - датчики, бесконтактные выключатели, приборы и средства автоматизации от производителя в Челябинске

Manuals+,