

F&C[®] Photoelectric type

Background suppression
photoelectric switch

New



<http://www.fctaiwan.com>

Get more information on F&C sensor technology and developments



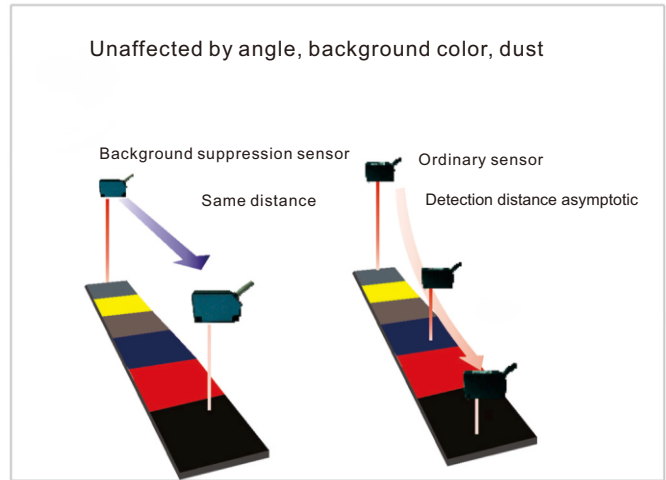
Official WeChat



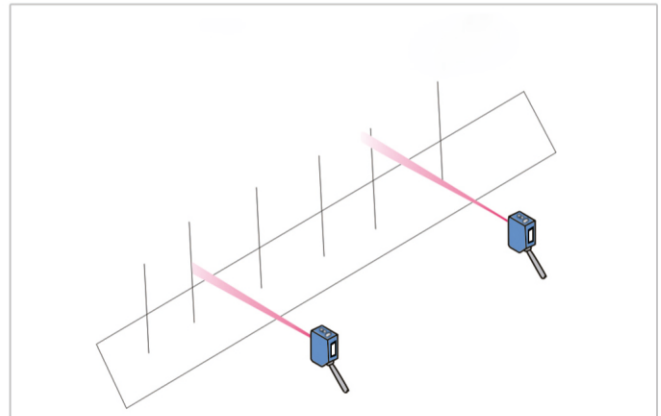
Technical Support

Application

Detecting translucent objects

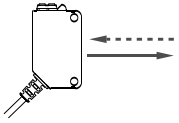
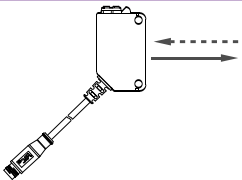
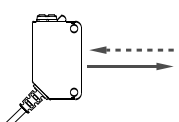
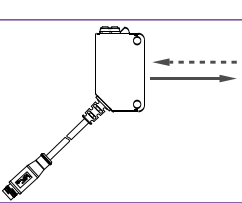
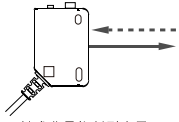
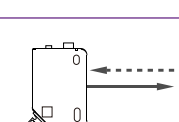
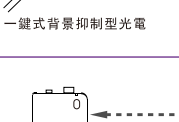
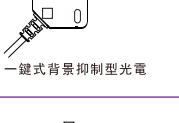


Detecting tiny objects



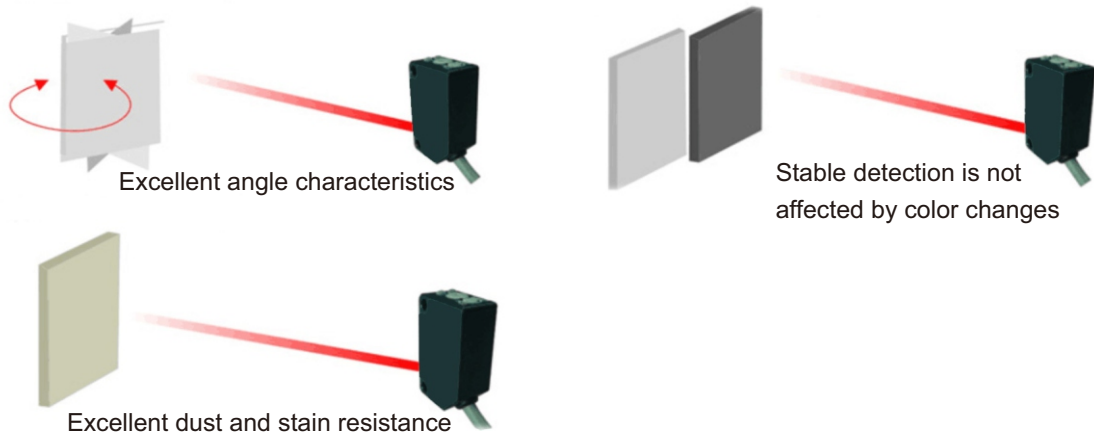
BGS Background suppression photoelectric

Photoelectric sensor

Installation method	Type	Outlook	Sensing distance	Model		Light souatus LED	Connecting method
				NPN	PNP		
Background suppression	Small square		10cm	BGS-10	BGS-10P	Red LED	Φ4 × 2M/3-wires
			10cm	BGS-10N/15D	BGS-10P/15D	Red LED	Φ4 × 2M/3-wires Lead 150mm with M8 connector
			30cm	BGS-30	BGS-30P	Red LED	Φ4 × 2M/3-wires
			30cm	BGS-30N/15D	BGS-30P/15D	Red LED	Φ4 × 2M/3-wires Lead 150mm with M8 connector
Simple background suppression	Large release	 一鍵式背景抑制型光電	10cm	BGS-S10N	BGS-S10P	Red LED	Φ4 × 2M/3-wires
		 一鍵式背景抑制型光電	10cm	BGS-S10N/D	BGS-S10P/D	Red LED	With M8 three core connector
		 一鍵式背景抑制型光電	30cm	BGS-S30N	BGS-S30P	Red LED	Φ4 × 2M/3-wires
		 一鍵式背景抑制型光電	30cm	BGS-S30N/D	BGS-S30P/D	Red LED	With M8 three core connector

- DR18 Series photoelectric
- DR12 Series photoelectric
- DR08/06 Series photoelectric
- QR Series photoelectric
- CR Series photoelectric
- Analog photoelectric
- BGS Series photoelectric
- HR long diastance photoelectric
- Groove photoelectric
- PJ Sall photoelectric
- JG3 Series laser sensor

BGS background suppression photoelectric switch

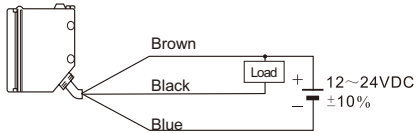
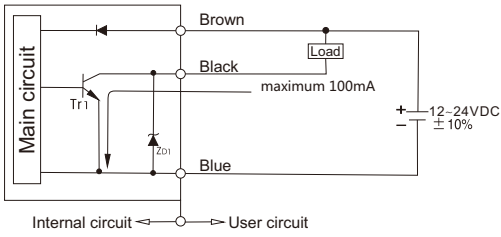


Project	Specification table
DR18 Series photoelectric	Sensing type
DR12 Series photoelectric	Background suppression of diffuse reflection
DR08/06 Series photoelectric	Tandard target
QR Series photoelectric	100x100mm White paper
CR Series photoelectric	Zero sensitivity adjustment
Analog photoelectric	Yes
BGS Series photoelectric	Light source
HR long diastance photoelectric	650nm infrared modulated light
Groove photoelectric	Hysteresis
PJ Sall photoelectric	< 10%Scanning distance
JG3 Series laser sensor	Operating Voltage
	12~24VDC±10% impulse (P-P)10%
	Current consumption
	<20mA
	Load current
	100mA
	Leakage current
	<0.01mA No Load
	Residual voltage
	<1.5VDC (Load current 100mA, wire 2M)
	Repeatability
	< 1%Scanning distance
	Response frequency
	300HZ
	Reverse polarity protection
	Yes
	Short circuit protection
	Yes
	Output type
	NPN.NO/NPN.NC PNP.NO/PNP.NC
	Response time
	0.5ms
	Insulation resistance
	>20MΩ (Between the charging part and the outer casing)
	Dielectric strength
	1000VDC 50~60Hz 1min (Between the charging part and the outer casing)
	Ambient temperature
	-10~50°C(Withou icing or condensation)
	Ambient humidity
	35~85% HR Relative humidtuy
	Ambien illumination
	Sunlight:3,000LX , Light:2,000LX
	Storage temperature
	-20~60°C(Withou icing or condensation)
	Storage humidity
	35~95% HR Relative humidtuy
	Protection degree
	IP66
	Connection
	Φ4.0x2M/3-wires Φ4.0 Lead 150mm with M8 connector
	Material
	PBT
	Weight
	Approx:48g/50g

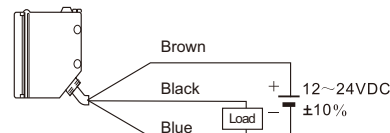
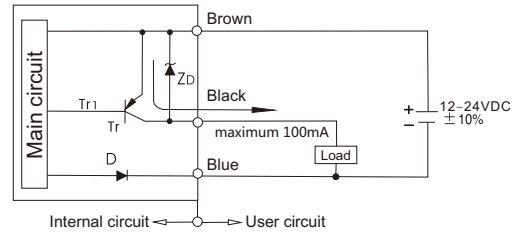
Wiring schemes

Photoelectric sensor

NPN. NO/NPN. NC



PNP. NO/PNP. NC



Pin layout



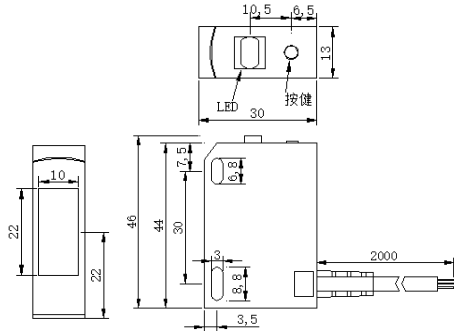
M8 three line

1	Brown
3	Blue
4	Black

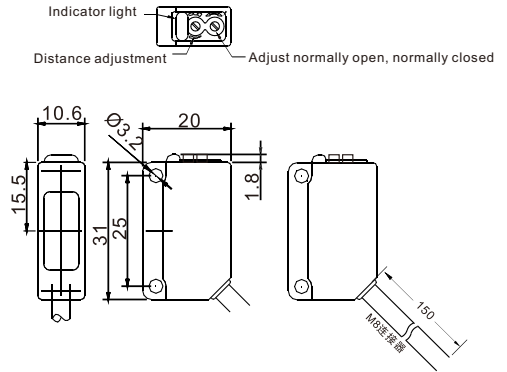
- DR18 Series photoelectric
- DR12 Series photoelectric
- DR08/06 Series photoelectric
- QR Series photoelectric
- CR Series photoelectric
- Analog photoelectric
- BGS Series photoelectric
- HR long diistance photoelectric
- Groove photoelectric
- PJ Sall photoelectric
- JG3 Series laser sensor

Dimensions

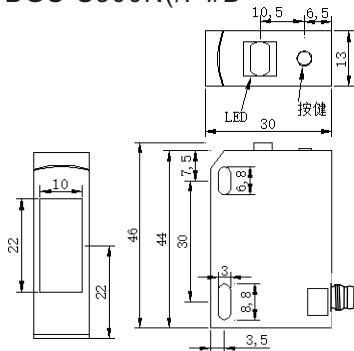
Straight outlet dimensions
 BGS-S100N/BGS-S300N
 BGS-S100P/BGS-S300P



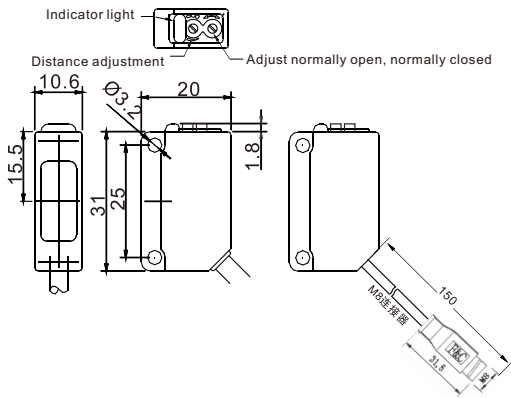
BGS-10/BGS-30
BGS-10P/BGS-30P



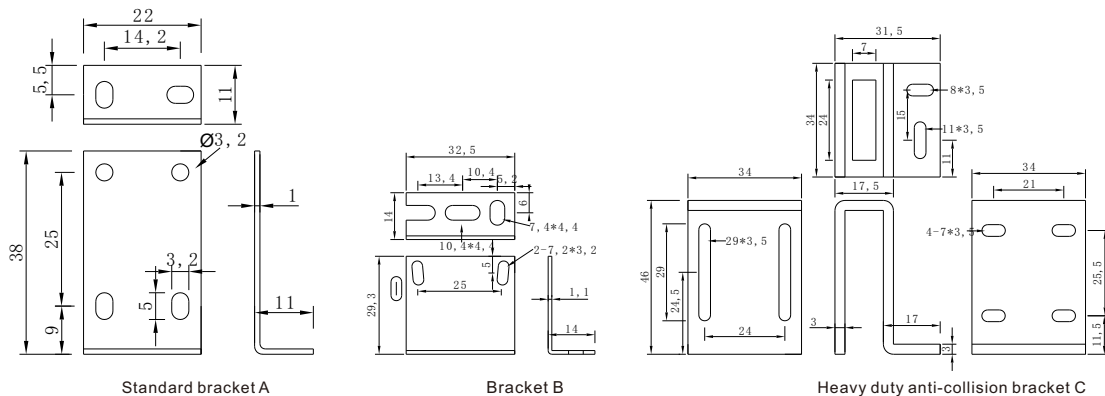
Direct with M8 connector dimensions
 BGS-S100N(/P)/D
 BGS-S300N(/P)/D



Direct with M8 connector (/15D) dimensions
 BGS-10N(/P)/15D
 BGS-30N(/P)/15D



Mounting bracket dimensions



Standard bracket A

Bracket B

Heavy duty anti-collision bracket C