Product description book

Product description

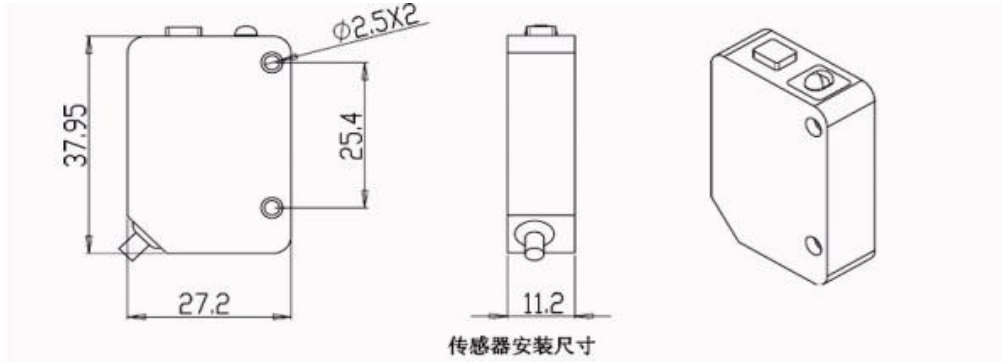
G1 series photoelectric sensor

G1-A100/300（N/P/NP）G1-B2K(N/P/NP)

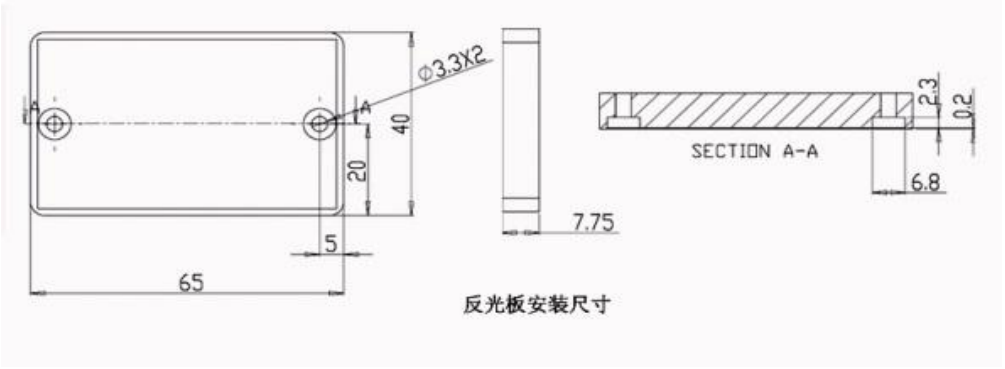
Characteristics:

1. Use all key settings.
2. Adopt infrared light source.
3. Suitable for detecting objects with different shapes.
4. ABS plastic shell.

Installation dimensions:



传感器安装尺寸



反光板安装尺寸

G1 selection reference table:

type	Classification model	Detection mode	Detection distance	Output mode	light source	Detection function							characteristic	app; application
						Highly reflective object	Small object	Opaque or translucent objects	Transparent object	Black and white detection distance difference	Gloss detection	Objects with large differences in shape		
G1-A	G1-A100N	diffuse reflection	2-100mm	NPN output	infrared light	o		o		Black and white equidistant		o	General photoelectric, key operation	Ordinary infrared photoelectric diffuse reflection
	G1-A100P			Output PNP										
	G1-A100NP			N+P output										
	G1-A300N		5-300mm	NPN output										
	G1-A300P			Output PNP										
	G1-A300NP			N+P output										
	G1-A100EN		2-100mm	NPN output	glow					20%			Red light, key operation, black and white detection distance difference of the same material is less than 20%.	If red light is needed to indicate the sensing position, and the detected objects are of the same material and different colors, the detection has advantages.
	G1-A100EP			Output PNP										
	G1-A100ENP			N+P output										
	G1-A300EN		5-300mm	NPN output										
	G1-A300EP			Output PNP										
	G1-A300ENP			N+P output										
G1-B	G1-B2KN	Regression reflection	200mm-2m	NPN output	infrared light		Detect 1mm minimum object					o	Keywords infrared, key operation, regression reflection	Ordinary infrared photoelectric regression reflection can detect 1mm objects.
	G1-B2KP			Output PNP										
	G1-B2KNP			N+P output										

G1-A specification parameters:

type		Diffuse reflection type		Enhanced diffuse reflection	
model	NPN	G1-A100N	G1-A300N	G1-A100EN	G1-A300EN
	PNP	G1-A100P	G1-A300P	G1-A100EP	G1-A300EP
	NPN+PNP	G1-A100NP	G1-A300NP	G1-A100ENP	G1-A300ENP
Detection distance		100mm	300mm	100mm	300mm
Detectable object		Opaque material			
Tolerance distance		20% of the maximum detection distance.			
Black-white gap		Black and white equidistant		20%	
Reaction time		0.5ms max			
light source		infrared light		glow	
Sensitivity adjustment		Set key			
operator schema		LIGHT-ON/DARK-ON (button automatic adjustment, long press for 10 seconds and automatic conversion)			
Indicator light		And power supply: red LED, stable operation: green LED			
Control output		Or NPN PNP: 100mA(40V) max, residual voltage: 1V max.			
protective circuit		Reverse current protection, overcurrent protection, overvoltage protection			
Power Supply		12 to 24 VDC 10%			
Consumption current		Maximum 25mA			
the protection grades		IP-66			

Ambient luminosity	Incandescent lamp: 5000lux max, daylight: 20000lux max
ambient temperature	"No freezing at -20 to +55℃"
relative humidity	35 to 85%, no condensation
shell	ABS
weight	21g (including 2m connector cable)

G1-B specification parameters:

type		Regression reflection type
model	NPN	G1-B2KN
	PNP	G1-B2KP
	NPN+PNP	G1-B2KNP
Detection distance		2000mm
Detectable object		Opaque or semi-transparent material
Reaction time		0.5ms max
light source		infrared light
Sensitivity adjustment		Set key
operator schema		LIGHT-ON/DARK-ON (button automatic adjustment, long press for 10 seconds and automatic conversion)
Indicator light		And power supply: red LED, stable operation: green LED
Control output		Or NPN PNP: 100mA(40V) max, residual voltage: 1V max.
protective circuit		Reverse current protection, overcurrent protection, overvoltage protection

Power Supply	12 to 24 VDC 10%
Consumption current	Maximum 25mA
the protection grades	IP-66
Ambient luminosity	Incandescent lamp: 5000lux max, daylight: 20000lux max
ambient temperature	"No freezing at -20 to +55℃"
relative humidity	35 to 85%, no condensation
shell	ABS
weight	21g (including 2m connector cable)

Wiring mode:

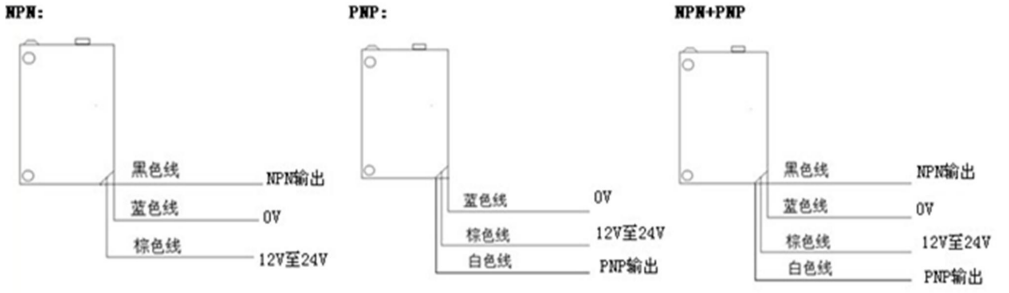
Brown line-10 ~ 24vdc

Blue line-0vdc

Black line ----NPN output

White line ----PNP output

接线图



Setting method:

1. Setting: After installation and fixation, aim the detection surface of the sensor at the detected object, press the setting button for 1~3 seconds and then release it. The indicator light flashes six times quickly. After the indicator light is stable, the set object can be stably detected at the set position.
2. Normally open and normally closed switch: hold the button for 10~15 seconds and then release it, the indicator light flashes quickly, and the mode switch is successful.

Use tips and suggestions:

1. Please do not direct strong light into the receiving and emitting mirror of the sensor.
2. During use, if the receiving and emitting mirror surface of the sensor is condensed or contaminated with oil or dust, please wipe the mirror surface with clean, dry and soft cloth, which can restore normal work.
3. If the sensor works in a working environment where oil stains or dust spread, please keep the mirror of the sensor clean.
4. If there are frequent large-scale light changes in the use environment, or there are many highly reflective items, or people or materials will pass through the opposite side of the sensor, it is recommended to set a fixed light shield on the opposite side of the sensor to ensure the reliability.

product assurance

1. Shelf life: From the date of shipment of this product, the shelf life is one year. If the product fails due to quality problems, the product will be exchanged for free within one year.

2. Non-warranty scope: the product performance and specifications are defined in the manual, and only the specifications and performance of this manual are used for warranty. Our company can provide technical support and suggestions for improvement for customers' improper use or mismatch of specifications and models, but it does not promise unconditional warranty.

http://www.xaori.net http://www.xaori.com.cn
Aalibab:https://xaori.en.alibaba.com/?spm=a2700.7756200.0.0.7c9871d2r1CZl
Tel: +86-0755-29898410 /+86-0755-29898460
Email: ron@xaori.net
Address: Kunhong Building, No. 38, Xinhe Avenue, Xinqiao Community, Shajing Street, Baoan District, Shenzhen, Guangdong, China