FUWEI

Guangzhou FUWEI Electronic Technology Co.,Ltd

Frame-type Counting Sensor

FGQ Series

Product Features

- Detection area:50*50mmor120*120mm(optional)
- Response time: 80 us
- Minimum detectable object: Irregular object with a diameter of φ0.3mm
- Output mode:NPN,PNP
- Light source:infrared light(940nm)

Application Scenario

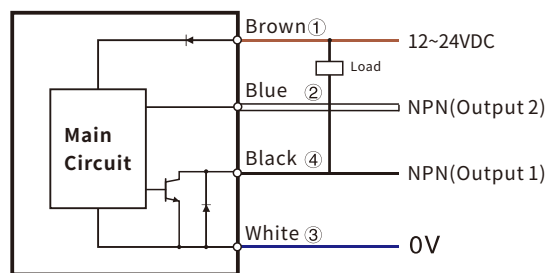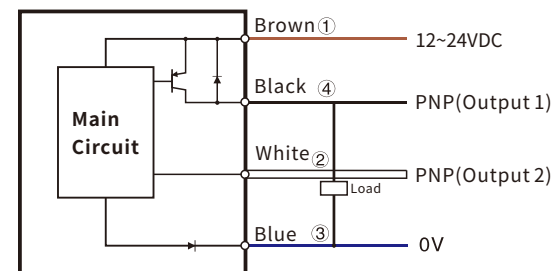Electronic Interface Counting | Counting Of lrregularly Shaped Workpieces | Artisan Craft Counting

Specifications And Parameters

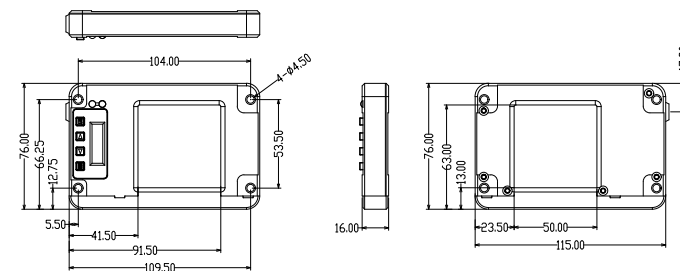| Model	NPN	FGQ-50N-X	FGQ-120N-X
	PNP	FGQ-50P-X	FGQ-120P-X
Detection area		50*50mm	120*120mm
Minimum detection size		φ0.3mm	φ2mm
Light source type		Infrared light 940nm	
Response time		80us	
Power supply voltage		12-24VDC	
Output selection		Single count, cumulative count	
Sensitivity setting		Button adjustment	
Delay		0-9999ms	
Consumption current		≤20mA	
Load current		≤100mA	
Voltage drop		≤2V	
Protection circuit		Short-circuit protection，Polarity protection，Overload protection	
Anti-ambient light		sunlight≤20,000Lux；incandescent light 3,000Lux	
Ambient temperature		-10℃～55℃(No condensation, no icing)	
Ambient humidity		35~85%RH	
Vibration resistance		10-55Hz, Dual amplitude:1.5mm, X, Y, Z axes are 2 hours each	
Shell material		Aluminum alloy, black anodized	
Connection method		2m PVC lead wire	

Wiring Diagram
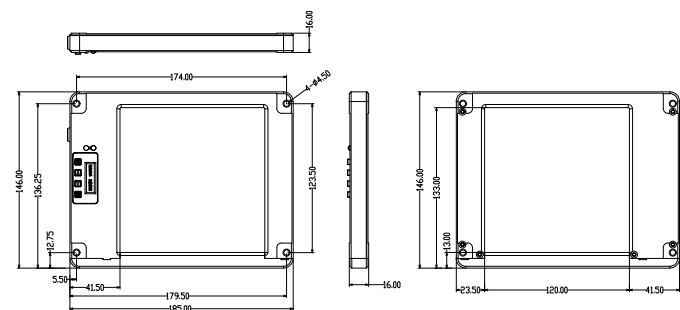
NPN Output

PNP Output

Note: Output 1is For Single Count Output
Output 2 is For Cumulative Count Output

Dimensions

FGQ-50系列

FGQ-120系列

Product Function Analysis

Auto-learn key

Function '+' key

Function '-' key

Function menu key

Single Count
Output Indicator Light

Cumulative Count
Output Indicator Light

Dynamic compensation enabled

7.Press the "MODE" button briefly to enter the dynamic compensa-tion function. Use the "UP" or "DOWN" button to select on or off

Button lock

8.Press and hold the "DOWN" and "MODE" buttons simultaneously to lock/unlock the buttons

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Counts 10   0

1.Power-on screen, use the "UP" or "DOWN" button to set the count setting

Threshold 8100   6408

2.Press the "MODE" button briefly to enter the threshold setting.

NC D-ON   6408

3.Press the "MODE" button briefly again to enter the output action selection

NO L-ON   6408

4.Press the "UP" or "DOWN" button briefly again to select normally open (NO) or normally closed (NC)

Light intensity 100   4526

5.Press and hold the "MODE" bu-tton to enter the light intensity mode, with adjustable settings from level 1 to 100. Use the "UP" or "DOWN" button to set the desired level

Timer standard output

6.Press the "MODE" button briefly to enter the timing mode. Use the "UP" or "DOWN" button to sequentially select standard output, single output with delay, and output hold