

# Optical Passage Confirmation Sensors

## PG Series



### **Built-in automatic sensitivity-compensating circuit**

The sensitivity of the receiver is automatically adjusted by the built-in compensating circuit, even when the amount of light reaching the receiver is reduced due to dust or debris.

### **Self-diagnostic output simplifies maintenance**

In addition to the stable operation indicator, the PG features an alarm output, which is triggered by a sharp decrease in incident light quantity, or when the sensor cable is disconnected, allowing speedy correction.

### **OFF-delay time selector switch**

Can be set to 0.5 ms or 70 ms.

### **The sensor head window can be opened or closed**

The sensor head can be easily mounted to an installed pipe with no open end.



#### **ASK KEYENCE**

**1-888-KEYENCE**  
[www.keyence.com/ASKG](http://www.keyence.com/ASKG)


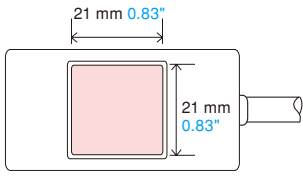



#### **FREE DOWNLOAD**

[www.keyence.com/DLG](http://www.keyence.com/DLG)

Free downloads for product and technical support are readily available in one convenient location

## Lineup

| Type        | Appearance  | Sensor window   | Smallest detectable object              | Model         |
|-------------|---|---|---|---------------|
| Sensor head |  |  | 0.5 mm 0.02" dia. min. opaque materials | <b>PG-602</b> |
| Amplifier   |  |   |   | <b>PG-610</b> |

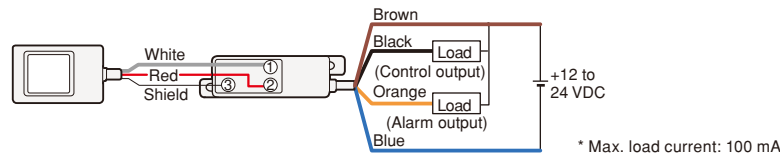
## Specifications

| Model                      | Sensor head                 |     |  |
|----------------------------|-----------------------------|-----|--|
|                            | Amplifier                   | NPN |  |
|                            |                             |     | <b>PG-602</b>  |
|                            |                             |     | <b>PG-610</b>  |
| Sensor window              |                             |     | 21 x 21 mm <b>0.83"</b>  |
| Smallest detectable object |                             |     | 0.5 mm <b>0.02"</b> dia. min. opaque materials   |
| Light source               |                             |     | Infrared LED   |
| Sensitivity adjustment     |                             |     | 1-turn trimmer   |
| Indicator                  |                             |     | Output: Red LED, Stable operation: Green LED   |
| Output <sup>1</sup>        | Control output <sup>2</sup> |     | NPN: 100 mA max. (40 V max.) Residual voltage: 1 V max.  |
|                            | Self-diagnostic output      |     | NPN: 100 mA max. (40 V max.) Residual voltage: 1 V max.  |
|                            | Response time               |     | 0.2 ms   |
| Off-delay time             |                             |     | 0.5/70 ms (selectable)   |
| Power supply               |                             |     | 12 to 24 VDC ±10%  |
| Current consumption        |                             |     | 40 mA max.   |
| Ambient light              |                             |     | Fluorescent lamp: 10,000 lux max., Sunlight: 1,500 lux max.  |
| Ambient temperature        |                             |     | Sensor head: -10 to +60°C (14 to 140°F), Amplifier: -10 to +50°C (14 to 122°F), No freezing                                |
| Relative humidity          |                             |     | 35 to 85%, No condensation   |
| Housing                    |                             |     | Polycarbonate  |
| Weight                     |                             |     | Sensor head (including 2-m <b>6.6'</b> cable): Approx. 40 g,<br>Amplifier (including 3-m <b>9.8'</b> cable): Approx. 100 g |

1. NPN output can easily be converted to PNP output by connecting the optional **OP-5148** PNP Output Converter.

2. One-shot output (ON when target passes through sensor)

## Connections

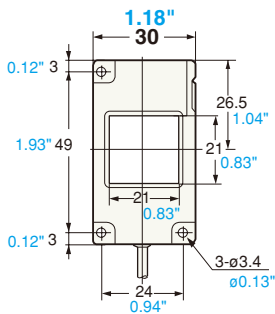


## Dimensions

Unit: mm inch

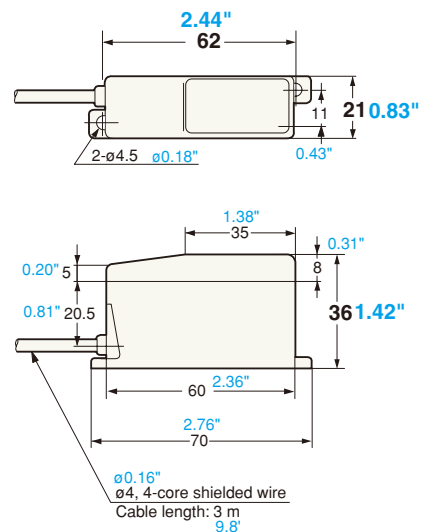
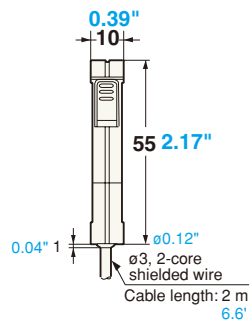
## Sensor head

## PG-602



## Amplifier

## PG-610



## New Products

## Fiberoptic Sensors

## Photoelectric Sensors

## Proximity Sensors

## Safety Equipment

## Flow/Pressure/Temperature

## Measurement Sensors

## Controls

## Static Eliminators

## Vision Systems

## Marking Equipment

## Code Readers

## Handheld Mobile Computers

## Microscopes

## Projector/3D Measurement Systems

