

## Photoelectric Sensor, Code : PR18-BC10DPO

A Photoelectric Sensor consists primarily of an Emitter for emitting light and a Receiver for receiving light. When emitted light is interrupted or reflected by the sensing object, it changes the amount of light that arrives at the Receiver. The Receiver detects this change and converts it to an electrical output. These sensors are made of light sensitive parts. This makes them useful in detecting the light emitters or any type of light source. There are various types of this sensor. Majorly they utilize the phenomena of reflection of light in which emitter and receiver together detect the reflection of light that strikes the object. In some other cases they spot any disturbance due to the target in the beam of light.

### General Attributes

|                            |   |
|----------------------------|---|
| ■ Housing size [mm]        | : M18*1*30  |
| ■ Power supply             | : 10...30VDC  |
| ■ Mode                     | : Diffuse reflection                                  |
| ■ SN [mm]                  | : 10cm, 40cm  |
| ■ Light source             | : Infrared LED (880nm)                                |
| ■ Output                   | : PNP NO  |
| ■ Response time            | : Max, 8.2ms  |
| ■ Repeat accuracy          | : ≤5%   |
| ■ Load current [mA]        | : ≤200mA  |
| ■ Residual voltage         | : ≤2.5V   |
| ■ Consumption current [mA] | : ≤25mA   |
| ■ Protection circuit       | : Surge, reverse polarity and short-circuit Indicator |
| ■ Ambient temp.[°C]        | : -15...55°C  |
| ■ Ambient RH               | : 35...95%  |
| ■ Protection degree        | : IP67  |
| ■ Housing material         | : Nickel-copper Alloy                                 |
| ■ Connection               | : PVC Cable 2m  |



### Application Notes

Checking presence, inspecting completeness, counting and sorting.

Checking the presence of coloured objects, detection of printed marks, inspecting LEDs, colours and luminescent objects.

Measurement of parts, monitoring of sag, measurement of thickness and distance, measurement of path and filling level.

Reading of bar codes and data matrix codes, OCR, tracking of components, colour identification

Front-edge detection, Pick & Place, quality inspection

For further information please visit : <https://goo.gl/5MtPaA>