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Example of a General- Purpose Photoelectric Sensor

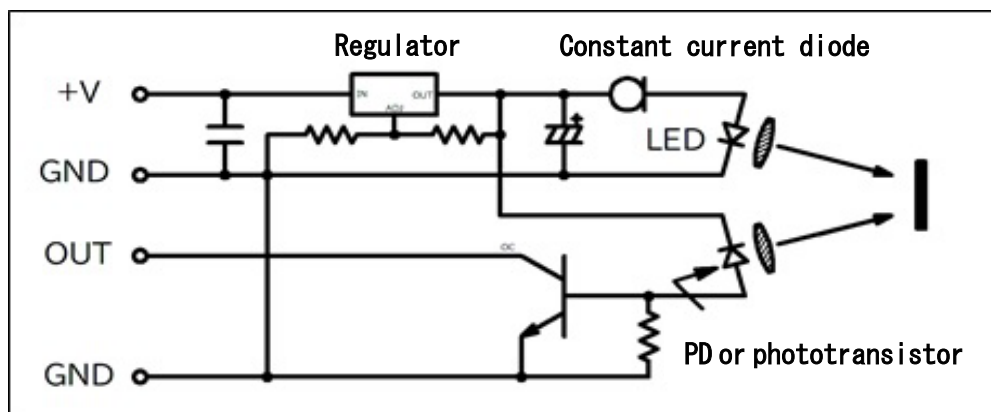
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Photoelectric sensors consist of a transmitter and receiver, and are used for detecting objects etc..

In a general photoelectric sensor, an LED is used for the transmitter and a PD is used for the receiver.

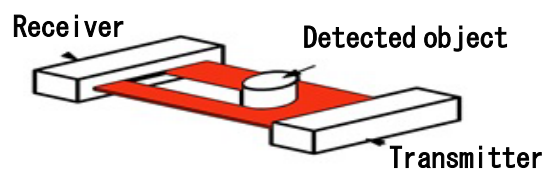
Basic Circuit for Photoelectric Sensors

A reflective photoelectric sensor, for example, is made up of an LED drive circuit and a PD signal conversion circuit.



(Explanation) This circuit is a basic circuit that outputs an OUT signal when the LED is lit with a constant current diode and then the reflected light from the object is detected by the PD.

As well as the reflection type, photoelectric sensors are widely used for position and object detection such as with the transmission type and position detection type typically used found in automatic machines.



Object detection using multiple LEDs and PDs as shown in the figure on the right can also obtain positional information.



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