

OE130174

Optical sensors • Through-beam sensors receivers

Sensor Optical, through-beam sensor receiver, 89x12x12mm, Sn: 5m, 12-30V diagnostic coverage, PNP/NPN push-pull, M8 connector, IP67, anodized aluminum+plastic, infrared light



Optical sensors work contactless. They detect objects, regardless of their properties (e.g. shape, color, surface structure, material). The basic mode of operation is based on the transmitter and receiver of light. There are three different versions: 1. the through-beam sensor consists of two separate devices, a transmitter and a receiver, which are aligned with each other. If the light beam between the two devices is interrupted, the switching output integrated in the receiver changes its status. 2. in the reflex light barrier, the transmitter and receiver are located in one device. The transmitted light beam is reflected onto the receiver by a reflector to be mounted opposite. As soon as the light beam is interrupted, the switching output integrated in the device changes its status. 3. the diffuse reflection sensor has a transmitter and receiver in one device. The transmitted light beam is reflected by the object to be detected. As soon as the receiver detects the reflected light, the switching output integrated in the device changes its status.

Electrical features

Display	LED display
Type of switching function	Normally closed (NC for PNP) Normally open (NO for NPN)
Type of electrical connection	Connector M8
Type of switching output	Push-pull
Rated switching current	100mA
Short-circuit protection	Yes
No-load current	35mA
Number of pins	3
Switching distance	0 - 500mm
Switching frequency	500Hz
Scanning function	Light-/dark-on mode
Reverse polarity protection	Yes
Operating voltage (DC)	10 - 30V

Mechanical features

Design	Cuboid
Width	12mm
Height	88.9mm
Storage temperature	-40 - 80°C
Length	12mm
Surface	Anodized
Degree of protection (IP)	IP67
Active area material of sensor	Plastic
Housing material	Aluminum
Ambient temperature	-25 - 60°C

Optical features

Light source	Infrared light
Light beam form	Point
Wavelength of the sensor	880nm
Angle of beam spread	12.5°

Other features

Scope of delivery	Receiver
Version	Through-beam sensor receiver

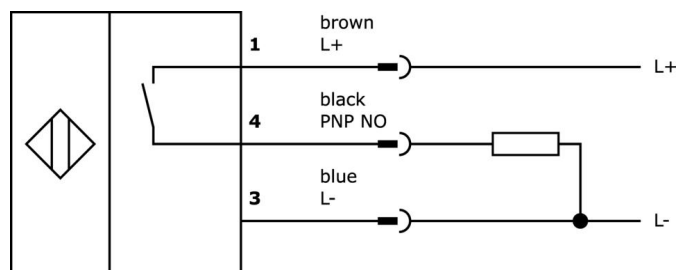
Classification

ETIM 8

More

IPF Product Group	100 optical sensors
packaging dimensions	123 x 77 x 25 mm
gross weight	46 g
Customs tariff number	85365019
WEEE number	40951076
Reach-compliant	Yes
RoHS-compliant	Yes

Connection



Installation



Mounting / installation may only be carried out by a qualified electrician!

Disposal



Safety warnings

Before initial operation, please make sure to follow all safety instructions that may be provided in the product information.

Never use these devices in applications where the safety of a person depends on their functionality.

For suitable connection and mounting accessories, please refer to our website www.ipf-electronic.com.

Dimensional drawing

