

OE050175

Optical sensors • Through-beam sensors receivers

Sensor Optical, through-beam sensor Receiver, M5x0.5 36lang, Sn: 0.5m, 10-30V
diagnostic coverage, PNP NO, IO-Link, M8 cable connector 3-pin 0.3m PUR
(polyurethane), IP67, V2A+PMMA, red light unpolarized

including Nut, Toothed washer



Optical sensors function contactlessly. They detect objects independent of their characteristics (e.g., shape, color, surface structure, material). The basic operating principle is based on the transmission and reception of light. There are three different versions: 1. The through-beam sensor consists of two separate devices, a transmitter and a receiver that are aligned with one another. If the light beam between the two devices is interrupted, the switching output integrated in the receiver changes its status. 2. With the retro-reflective sensor, the transmitter and receiver are located in one device. The emitted light beam is reflected back to the receiver by a reflector that is to be mounted opposite the device. As soon as the light beam is interrupted, the switching output integrated in the device changes its status. 3. With the diffuse reflection sensor, the transmitter and receiver are in one device. The emitted light beam is reflected by the object that is to be detected. As soon as the receiver detects the reflected light, the switching output integrated in the device changes its status.

Electrical features

Response/decay time	0.5ms
Display	LED display
Type of switching function	Normally open contact (NO)
Type of electrical connection	Cable connector M8
Type of switching output	PNP
Rated switching current	100mA
Short-circuit protection	Yes
No-load current	10mA
No-load current, receiver	10mA
Number of pins	3
Residual ripple	10%
Switching distance	0 - 500mm
Switching frequency	1000Hz
Voltage drop	2V
Scanning function	Dark switching
Reverse polarity protection	Yes
Decay time	0.5ms
Operating voltage (DC)	10 - 30V

Mechanical features

Conductor cross-section	0.14mm ²
Design	Cylinder, screw-thread
Thread length	30mm
Thread pitch	0.5mm
Cable length	0.3m
Length	36mm
Maximum tightening torque	1Nm
Degree of protection (IP)	IP67
Active area material of sensor	Plastic (PMMA)
Housing material	Stainless steel (V2A)
Material of cable sheath	Plastic (PUR)
Thread dimension	M5
Ambient temperature	-25 - 65°C

Optical features

Light source	Polarity free red light
Light beam form	Point

Other features

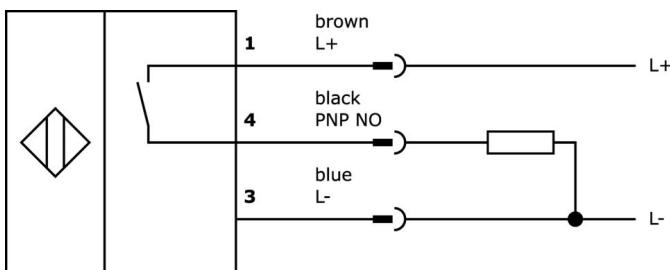
Scope of delivery	Receiver
IO-Link version	V1.0.1
Version	Through-beam sensor receiver

Classification

ETIM 8	EC002716 Through-beam photoelectric sensor
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More

IPF Product Group	100 optical sensors
packaging dimensions	210 x 180 x 10 mm
gross weight	22 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.

Any software, drivers or IODD files that may be required to operate your device can be downloaded free of charge from our homepage: www.ipf-electronic.com

Dimensional drawing