

OS050075

Optical sensors • Through-beam sensors transmitters

Sensor Optical, through-beam sensor Transmitter, M5x0.5 36lang, Sn: 0.5m, 10-30V diagnostic coverage, 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

Type of electrical connection	Cable connector M8
No-load current	8mA
No-load current, transmitter	8mA
Number of pins	3
Residual ripple	10%
Switching distance	0 - 500mm
Reverse polarity protection	Yes
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
Wavelength of the sensor	630nm
Angle of beam spread	15°

Other features

Scope of delivery	Transmitter
IO-Link version	V1.0.1
Version	Through-beam sensor transmitter

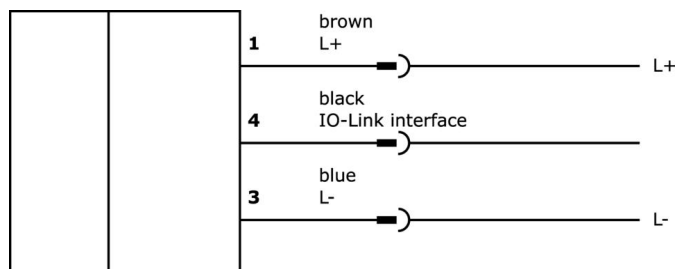
Classification

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

