

OE120124

High performance light barriers • Receivers amplified

Sensor Optical, through-beam sensor Receiver, M12x1 66lang, Sn: 1m, 15-30V diagnostic coverage, PNP/NPN push-pull, M12 connector, IP67, nickel-plated (n-pltd) brass, infrared light

including Nut



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

Display	LED display
Type of switching function	Normally open (NO for PNP) Normally closed (NC for NPN)
Type of electrical connection	Connector M12
Type of switching output	Push-pull
Rated switching current	100mA
Short-circuit protection	Yes
No-load current	30mA
No-load current, receiver	30mA
Number of pins	3
Switching distance	0 - 1000mm
Switching frequency	500Hz
Voltage drop	2V
Scanning function	Dark switching
Reverse polarity protection	Yes
Operating voltage (DC)	15 - 30V

Mechanical features

Design	Cylinder, screw-thread
Thread length	40mm
Thread pitch	1mm
Length	66mm
Surface	nickel-plated
Shock resistance	30g
Degree of protection (IP)	IP67
Vibration resistance	55Hz
Housing material	Brass
Thread dimension	M12
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°

Other features

Scope of delivery	Receiver
Version	Through-beam sensor receiver

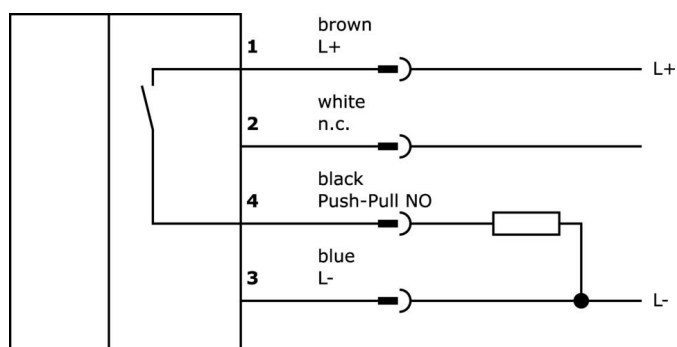
Classification

ETIM 8	EC002716 Through-beam photoelectric sensor
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More

IPF Product Group	101 high performance through-beam sensors and amplifiers
packaging dimensions	123 x 77 x 25 mm
gross weight	40 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.