

PESI0007

Laser sensors • Through-beam sensors receivers

sensor laser, Through-beam sensor receiver, M18x1 90long, aperture 6.5x0.8mm, Sn: 2.5m, 12-32V DC, PNP/NPN Push-pull, 0-10V, Connector M12 4pin, IP67, Brass Nickel-plated, Laser diode, red 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

Type of switching function	Normally open (NO for PNP) Normally closed (NC for NPN)
Type of analog output	0 - 10V
Type of electrical connection	Connector M12
Type of switching output	PNP/NPN
Rated switching current	100 mA
Setting procedure	Manual adjustment
Laser power	1 mW
No-load current	40 mA
Number of pins	4
Switching distance	0 - 2500 mm
Switching frequency	5000 Hz
Scanning function	Light-/dark-on mode
Absolute repeat accuracy	0.008 mm
Operating voltage (DC)	12 - 32 V

Mechanical features

Design	Cylinder, screw-thread
Thread length	60 mm
Thread pitch	1 mm
Storage temperature	-20 - 85 °C
Length	90 mm
Surface	nickel-plated
Degree of protection (IP)	IP67
Housing material	Brass
Thread dimension	M18
Ambient temperature	-20 - 50 °C

Optical features

Aperture width	0.8 mm
Aperture length	6.5 mm
Filter	Interference filter
Light source	Laser diode, red light
Light beam form	Line
Wavelength of the sensor	670 nm

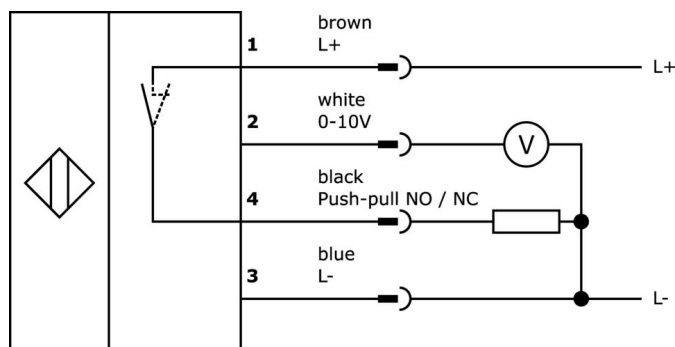
Classification

ETIM 8	EC002716 Through-beam photoelectric sensor
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More

IPF Product Group	705 special devices (SI)
packaging dimensions	123 x 77 x 25 mm
gross weight	107 g
Customs tariff number	85365019
WEEE number	40951076
POP-compliant	Yes
Reach-compliant	Yes
RoHS-compliant	Yes

Connection



Extract accessories program

AY000026



accessories, Hexagon nut, M18x1,
Wrench size 24mm, Brass Nickel-
plated

AY000038



accessories, Hexagon nut, M18x1,
Wrench size 24mm, Stainless steel

AY000162



Accessories, magnetic, Ø43mm,
neodymium-iron-boron, inside
thread M5, rubber

AY000159



accessories sensor, Mounting
pipe, Ø12mm 200long, Aluminum
Anodised

AY000070



Tool, Flat-tip screwdriver, 1.6x0.
4mm, Grip design 1-component

AY000154



Tool, Screwdriver set, Internal
hexagon 0.7mm, Internal hexagon
0.9mm, Internal hexagon 1.3mm,
Internal hexagon 1.5mm, Internal
hexagon 2mm, Slot 1.5mm, Slot
2mm, Slot 2.5mm, Chromium steel

AY000117



accessories sensor, Fixture kit,
Metal, ball joint

You can find further accessories on our homepage



Installation

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



Disposal

WEEE number according to § 6 para. 3
ElektroG: 40951076

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.