

PE98A133

Laser sensors • Through-beam sensors receivers

sensor laser, Through-beam sensor receiver, 24x28x124mm, aperture 16x1mm, Sn: 5m, 24V DC, PNP/NPN Push-pull, 0-10V, Connector M12 4pin, IP67, Aluminum Anodised, Laser diode, red light



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	Öffner (NC bei PNP) Schließer (NO bei NPN)
Type of analog output	0 - 10V
Type of electrical connection	Connector M12
Type of switching output	Push-pull
Rated switching current	100mA
Setting procedure	Manual adjustment
Laser power	1mW
No-load current	30mA
Number of pins	4
Switching distance	0 - 5000mm
Switching frequency	25000Hz
Scanning function	Light-/dark-on mode
Operating voltage (DC)	24V

Mechanical features

Design	Cuboid
Width	124mm
Height	24mm
Storage temperature	-20 - 85°C
Length	28mm
Surface	teflon coated
Degree of protection (IP)	IP67
Volume	Medium
Housing material	Aluminum
Ambient temperature	-20 - 50°C

Optical features

Aperture width	1mm
Aperture length	16mm
Filter	Interference / polarizing filter
Light source	Laser diode, red light
Light beam form	Line
Wavelength of the sensor	670nm

Other features

Scope of delivery	Receiver
Ambient temperature	-20 - 50°C
Version	Through-beam sensor receiver

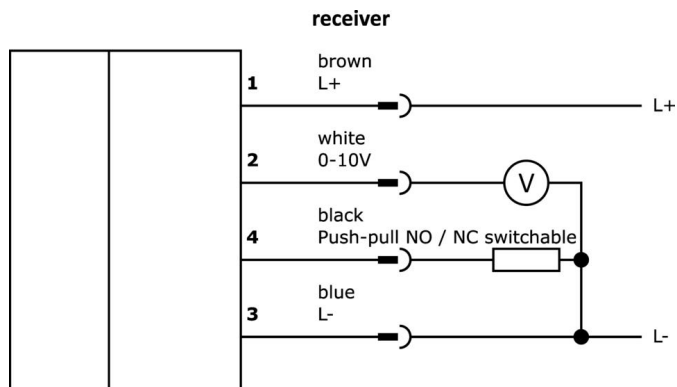
Classification

ETIM 8	EC002716 Through-beam photoelectric sensor
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More

IPF Product Group	705 special devices (SI)
packaging dimensions	160 x 99 x 60 mm
gross weight	210 g
Customs tariff number	85365019
WEEE number	40951076
POP-compliant	Yes
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.