

PE991413

Laser sensors • Through-beam sensors receivers

sensor laser, Through-beam sensor receiver, 94x50x34mm, aperture 30x0.5mm, Sn: 5m, 12-32V DC, PNP/NPN Push-pull, 0-10V, Connector M12 4pin, IP65, Aluminum+Glass, 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

Display	LED display
Resolution	0.15 mm
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	Parameterization Teach-In
Short-circuit protection	Yes
No-load current	30 mA
No-load current, receiver	30 mA
Number of pins	4
Switching distance	0 - 5000 mm
Switching frequency	25000 Hz
Scanning function	Light-/dark-on mode
Reverse polarity protection	Yes
Absolute repeat accuracy	0.015 mm
Operating voltage (DC)	12 - 32 V
Measurement frequency	300 Hz

Mechanical features

Design	Cuboid
Width	34 mm
Height	94 mm
Storage temperature	85 °C
Length	50 mm
Degree of protection (IP)	IP65
Active area material of sensor	glass
Housing material	Aluminum
Ambient temperature	-20 - 50 °C

Optical features

Aperture width	0.5 mm
Aperture length	30 mm
Filter	Interference / polarizing filter
Light source	Laser diode, red light
Light beam form	Line
Wavelength of the sensor	670 nm

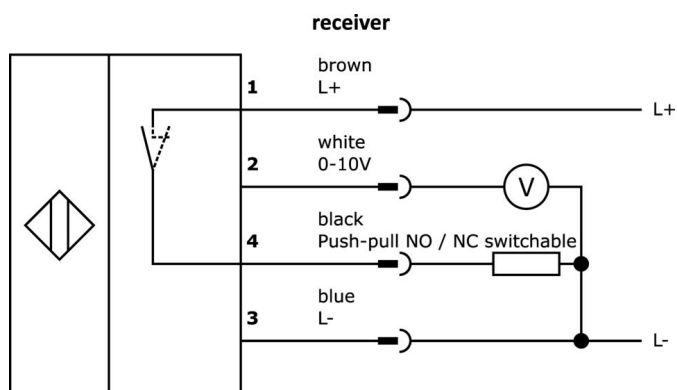
Classification

ETIM 8	EC002716 Through-beam photoelectric sensor
--------	--

More

IPF Product Group	705 special devices (SI)
packaging dimensions	160 x 99 x 60 mm
gross weight	310 g
Customs tariff number	85365019
WEEE number	40951076
POP-compliant	Yes
Reach-compliant	Yes
RoHS-compliant	Yes

Connection



Extract accessories program

AY98A607



accessories sensor, Teflon cap,
Ø16mm 16long, inner thread 12,
Polytetrafluorethylene (PTFE)

PS991412



sensor laser, Through-beam
sensor transmitter, 94x50x34mm,
aperture 30x2mm, Sn: 5m, 12-32V
DC, Connector M12 4pin, IP67,
Aluminum+Glass, Laser diode, red
light

VK205621



Connection cable, 2m, M12
Female (socket) 5pin Angular, Free
conductor end, 5x0.34mm², PUR
(Polyurethane), Ø6mm, 60V, -25-
90°C, IP67, Shielded, Suitable for
trailing chain and torsion resistant,
Oil and cooling lubricants, Welding
area, Silicone-free

VK205625



Connection cable, 2m, M12
Female (socket) 5pin Straight, Free
conductor end, 5x0.34mm², PUR
(Polyurethane), Ø6mm, 60V, -25-
90°C, IP67, Shielded, Suitable for
trailing chain and torsion resistant,
Oil and cooling lubricants, Welding
area, Silicone-...

VK205321



Connection cable, 2m, M12
Female (socket) 4pin Angular, Free
conductor end, 4x0.34mm², PUR
(Polyurethane), Ø5.5mm, 250V, -
25-90°C, IP67, Shielded, Suitable
for trailing chain and torsion
resistant, Oil and cooling
lubricants, Welding area, Silicon...

VK205325



Connection cable, 2m, M12
Female (socket) 4pin Straight, Free
conductor end, 4x0.34mm², PUR
(Polyurethane), Ø5.5mm, 250V, -
25-90°C, IP67, Shielded, Suitable
for trailing chain and torsion
resistant, Oil and cooling
lubricants, Welding area, Silico...

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.