

PT499370

Laser sensors • Diffuse reflection sensors with background suppression

Sensor Laser, push button, 49x40x14mm, Sn: 50-550, 12-28V DC, 1x PNP NC/NO, M8 connector 4pin, IP67, aluminum+glass, laser diode, red light, dot, teach-in

- / Laser class 2
- / Metal housing
- / small light spot



background suppression Setting via teach-in

Optical sensors operate without contact. They detect objects, regardless of their nature (e.g. shape, color, surface structure, material). The basic mode of operation is based on the transmission and reception of light. Three variants are distinguished: 1. the through-beam sensor consists of two separate devices, a transmitter and a receiver, which are aligned with each other. When the light beam between the two devices is interrupted, the switching output integrated in the receiver changes its status. 2. in the case of the reflex light barrier, the transmitter and receiver are located in one device. The transmitted light beam is reflected onto the receiver by a reflector to be mounted opposite. As soon as the light beam is interrupted, the switching output integrated in the device changes its status. With the diffuse reflection sensor, the transmitter and receiver are located in one device. The transmitted light beam is reflected by the object to be detected. As soon as the receiver detects the reflected light, the switching output integrated in the device changes its status.

Electrical features

Number of switching outputs	1
Display	LED display
Type of switching function	Normally closed contact/normally open contact
Type of electrical connection	Connector M8
Type of switching output	PNP
Rated switching current	100mA
Setting procedure	Teach-In
Laser power	1mW
No-load current	50mA
Number of pins	4
Switching distance	50 - 550mm
Voltage drop	2.8V
Scanning function	Light-/dark-on mode
Reverse polarity protection	Yes
Measurement principle	triangulation
Operating voltage (DC)	12 - 28V

Mechanical features

Design	Cuboid
Width	13.6mm
Height	49mm
Storage temperature	-20 - 60°C
Length	40.3mm
Degree of protection (IP)	IP67
Volume	Medium
Active area material of sensor	glass
Housing material	Zinc die-cast
Ambient temperature	-10 - 50°C

Optical features

Laser class	Class 2
Light source	Laser diode, red light
Light beam form	Point
Triangulation	Background suppression
Wavelength of the sensor	660nm
Light spot diameter at focal point	0.5mm

Other features

Operational mode	Background suppression
Reference medium / object	Material with 90% reflectivity
Ambient temperature	-10 - 50°C

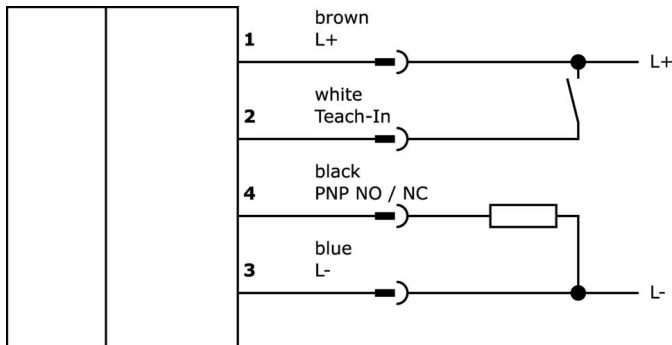
Classification

ETIM 8	EC002719 Photoelectric proximity switch with background suppression
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More

IPF Product Group	160 laser sensor
packaging dimensions	160 x 99 x 60 mm
gross weight	101 g
Customs tariff number	85365019
WEEE number	40951076
OzDS-compliant	Yes
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.

Dimensional drawing

