

PT370521

Laser sensors • Diffuse reflection sensors with background suppression

Sensor laser, diffuse reflection sensor, 36x25x14mm, Sn: 20-400, 10-30V diagnostic coverage, -40-70°C, 2x PNP/NPN push-pull, M12 cable connector 4-pin, IP67 / IP69k, V4A+PMMA, 2kHz, laser diode, red light, dot, manual setting

- / scratch resistant front screen
- / Push-pull switching outputs
- / Setting of sensing range with multi-turn spindle
- / Connection with ... M12 cable connector



Stainless steel housing Laser class 1

Optical sensors work contactless. They detect objects, regardless of their properties (e.g. shape, color, surface structure, material). The basic mode of operation is based on the transmitter and receiver of light. There are three different versions: 1. the through-beam sensor consists of two separate devices, a transmitter and a receiver, which are aligned with each other. If the light beam between the two devices is interrupted, the switching output integrated in the receiver changes its status. 2. in 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. 3. the diffuse reflection sensor has a transmitter and receiver 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

Response/decay time	0.16ms
Number of switching outputs	2
Display	LED display
Type of switching function	Schließer (NO bei PNP) Öffner (NC bei NPN)
Type of electrical connection	Cable connector M12
Type of switching output	Push-pull
Rated switching current	100mA
Readiness delay	300ms
Setting procedure	Manual adjustment
Short-circuit protection	Yes
Laser power	1.8mW
No-load current	20mA
Number of pins	4
Residual ripple	10%
Switching distance	20 - 400mm
Switching frequency	3000Hz
Voltage drop	2V
Reverse polarity protection	Yes
Operating voltage (DC)	10 - 30V

Mechanical features

Number of cores	4
Wire cross section	0,2mm ²
Design	Cuboid
Width	14mm
Height	35.5mm
Storage temperature	-40 - 70°C
Length	25mm
Degree of protection (IP)	IP67 / IP69k
Volume	Small
Active area material of sensor	Plastic (PMMA)
Housing material	Stainless steel 1.4404
Material of cable sheath	Plastic (PVC)
Ambient temperature	-40 - 70°C

Optical features

Laser class	Class 1
Light source	Laser diode, red light
Light beam form	Point
Wavelength of the sensor	650nm

Other features

Operational mode	Background suppression
Reference medium / object	Material with 90% reflectivity
Ambient temperature	-40 - 70°C

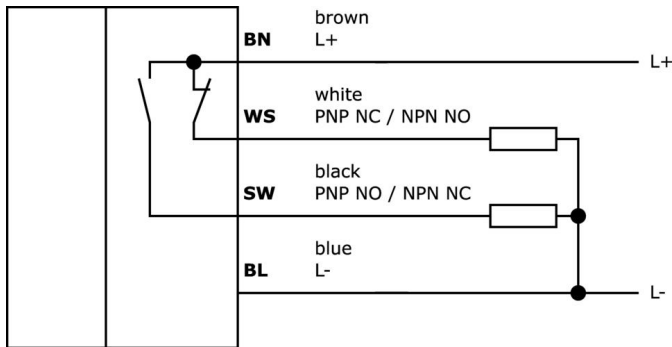
Classification

ETIM 8

More

IPF Product Group	160 laser sensor
packaging dimensions	123 x 77 x 25 mm
gross weight	80 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.

Dimensional drawing

