

OE505800 OPTICAL SENSORS • THROUGH-BEAM SENSORS RECEIVERS

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.



MECHANICAL FEATURES

Ambient temperature	-25 °C ... 55 °C
Cable length	2 m
Degree of protection (IP)	IP65
Housing design	Cuboid
Housing material	Plastic ABS
Material of cable sheath	PVC
Material of optical surface	PMMA
Sensor height	50 mm
Sensor length	50 mm
Sensor width	18 mm
Storage temperature	70 °C
Storage temperature	-25 °C
Version	IV001911
Wire cross section	0.5 mm ²

ELECTRICAL FEATURES

Connection to amplifier	-
Decay time	30 ms
Max. output current	3000 mA
Measuring range	5 m
No-load current	40 mA
No-load current, receiver	40 mA
Number of pins	5
Operating voltage	15 V ... 264 V
Rated switching distance	20000 mm
Response time	30 ms
Reverse polarity protection	+
Scanning function	Light-/dark-on mode
Setting procedure	Manual adjustment
Suitable for safety functions	-
Switching frequency	16 Hz
Type of electrical connection	Cable
Type of input voltage	AC/DC

ELECTRICAL FEATURES

Type of switching function	Change-over contact (NO/NC)
Type of switching output	Relay contact
Voltage type	AC/DC
With LED display	+
With LED display (signal)	+
With time function	-

OPTICAL FEATURES

Light source	Infrared light
Wavelength of the sensor	880 nm
Light beam form	Point

OTHER FEATURES

Scope of delivery of the one-way system	Receiver
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Other

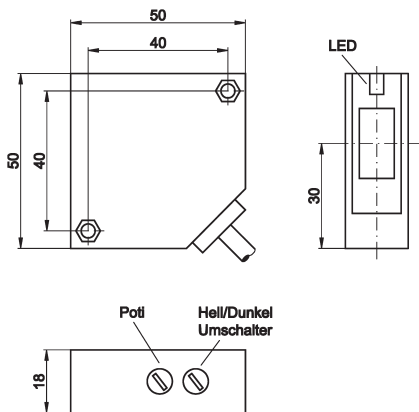
Packaging dimensions	124.0mm x 28.0mm x 149.0mm
Shipping weight	0.24kg
Tariff code	85365080

Classification

ipf product group	999
eClass 8.0	27270901
eClass 9.0	27270901
eClass 9.1	27270901
ETIM-5.0	EC002716
ETIM-6.0	EC002716
ETIM-7.0	EC002716

Connection

Dimensional drawing



Installation



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

Disposal



Software

Please download the software or driver required for operating your new device on our homepage: www.ipf.de

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.

LED lighting systems can generate intensive UV radiation, which can damage your eyes in case of improper use. The manufacturer cannot be held responsible for damages that result from improper use or connection.