IPF ELECTRONIC

OE705906

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 DATA

Ambient temperature	-20 °C 60 °C
Degree of protection (IP)	IP67
Housing design	Cuboid
Housing material	Zinc die-cast
Material of optical surface	Glass
Sensor height	90 mm
Sensor length	70 mm
Sensor width	30 mm
Storage temperature	70 °C
Storage temperature	-40 °C
ELECTRICAL DATA	
Decay time	25 ms
IO-Link compatible	No
Measuring range	120 m
Number of pins	5
Operating voltage	20 V 230 V
Power consumption	1.5 VA
Rated switching distance	120000 mm
Readiness delay	200 ms
Response time	25 ms
Reverse polarity protection	Yes
Scanning function	Light-/dark-on mode
Setting procedure	Manual adjustment
Switching frequency	20 Hz
Type of electrical connection	Clamp
Type of input voltage	AC/DC

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ELECTRICAL DATA

Type of switching function	Change-over contact (NO/NC)
Type of switching output	Relay contact
Voltage type	AC/DC
With LED display	Yes
With LED display (functional reserve)	Yes
With LED display (signal)	Yes
With time function	No
OPTICAL DATA	
Light beam form	Point
Light source	Infrared light
Wavelength of the sensor	880 nm

OTHER DATA

Scope of delivery of the one-way system

DIMENSIONAL DRAWING

INSTALLATION



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



Receiver



SAFETY WARNINGS

Before initial operation, please make sure to follow all safety instructions that may be provided in the product information!