

OTSI0090

OPTICAL SENSORS • DIFFUSE REFLECTION SENSORS WITH INTENSITY DIFFERENCIATION

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

Housing coating	Anodised
Housing design	Cylinder plain
Reflector included in the scope of delivery	No
Sensor length	120 mm
With interchangeable lens	No

ELECTRICAL DATA

Alarm output	No
High repeat accuracy	No
Interference suppression	No
Max. output current	100 mA
Max. switching distance	150 mm
Number of switching outputs	5
Operating voltage (MAX)	24 V
Operating voltage (MIN)	24 V
Pre-failure message	No
Scanning function	Light-/dark-on mode
Sensing range (MAX)	150 mm
Setting procedure	Parameterization
Suitable for safety functions	No
Type of analog output	0 V ... 10 V / 4 mA ... 20 mA
Type of communication interface	Connector M5
Type of plug-in contact, communication interface	Female (socket)
Type of switching function	Programmable/configurable
Type of switching output	PNP/NPN
Voltage type	DC
With communication interface, RS-232	Yes

ELECTRICAL DATA

With monitoring function of downstream devices	No
With other analog output	No
With restart lock	No
With time function	No

OPTICAL DATA

Light beam form	Point
Light exit	Axial
Line scanner	No
Small light beam diameter	No

OTHER DATA

Feeding technology	Yes
For gloss queries	Yes
Is line scan camera	No

DIMENSIONAL DRAWING

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.