

## OT255800

### 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

Ambient temperature	-20 °C ... 70 °C
Degree of protection (IP)	IP65
Housing design	Cuboid
Housing material	PA 6.6 (synthetic)
Increased ambient temperatures >70°C	Yes
Material of optical surface	Plastic
Reflector included in the scope of delivery	No
Sensor height	88 mm
Sensor length	63 mm
Sensor width	24 mm
With interchangeable lens	No

#### ELECTRICAL DATA

Alarm output	No
Decay time	6 ms
High repeat accuracy	No
Hysteresis	10 %
Interference suppression	No
Max. output current	3000 mA
Max. switching distance	1500 mm
No-load current	35 mA
Number of pins	5
Operating voltage	12 V ... 264 V
Pre-failure message	No
Relative repeat accuracy	10 %
Response time	6 ms
Reverse polarity protection	Yes

## ELECTRICAL DATA

Scanning function	Light-/dark-on mode
Sensing range	0 mm ... 1500 mm
Setting procedure	Manual adjustment
Suitable for safety functions	No
Switching frequency	50 Hz
Turn-off delay	8 s
Turn-on delay	10 s
Type of electrical connection	Clamp
Type of switching function	Change-over contact (NO/NC)
Type of switching output	Relay contact
Voltage type	AC/DC
With communication interface, RS-232	No
With LED display	Yes
With monitoring function of downstream devices	No
With other analog output	No
With restart lock	No
With time function	Yes

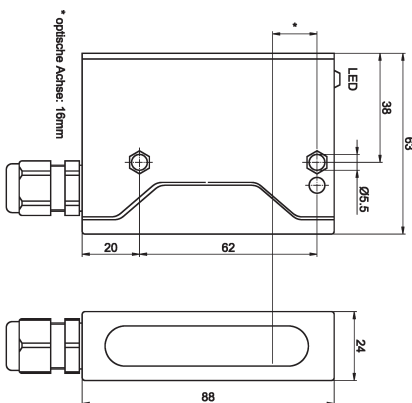
## OPTICAL DATA

Light beam form	Point
Light exit	IV000197
Light source	Infrared light
Line scanner	No
Small light beam diameter	No
Wavelength of the sensor	880 nm

## OTHER DATA

	No
	No
Feeding technology	Yes

## DIMENSIONAL DRAWING



## INSTALLATION

## DISPOSAL



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



**SAFETY WARNINGS**

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