



Operating instructions  
Diffuse reflection sensor with  
background suppression

**OGH7xx**

**UK**

11477281 / 00 04 / 2019



# 1 Preliminary note

## 1.1 Symbols used

- ▶ Instruction
- > Reaction, result
- [...] Designation of pushbuttons, buttons or indications
- Cross-reference



Important note

Non-compliance can result in malfunctions or interference.

## 2 Safety instructions

### According to the cULus approval

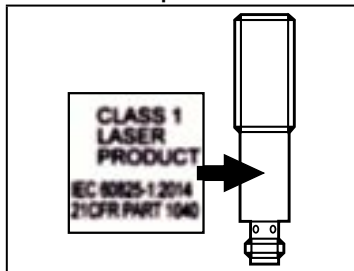
Caution - Use of controls or adjustments or procedures other than those specified herein may result in hazardous radiation exposure.



Visible laser light; CLASS 1 LASER PRODUCT.

EN/IEC 60825-1 : 2007 and EN/IEC 60825-1 : 2014 complies with 21 CFR 1040 except for deviations pursuant to Laser Notice No. 50, dated June 2007

### Position of the product label



### Additional label

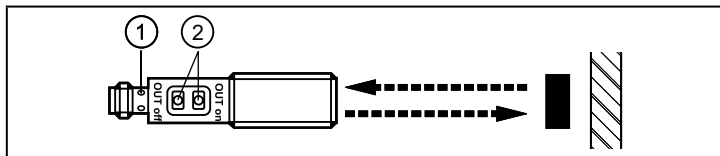


## 3 Functions and features

The diffuse reflection sensor detects objects and materials without contact and indicates their presence by a switching signal.

Range 20 ... 200 mm (on white paper 200 x 200 mm, 90 % remission)

## 4 Installation



1: LED

2: programming buttons

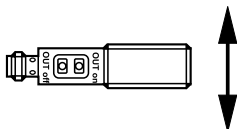
- ▶ Align the diffuse reflection sensor to the object to be detected.
- ▶ Secure it to a bracket.

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### Note:

The objects to be detected are to move transversally to the lens of the sensor.

- ▶ In case of other directions of movement it should be tested before whether safe switching is guaranteed.



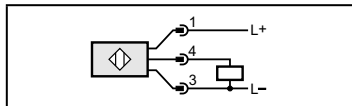
## 5 Electrical connection



The unit must be connected by a qualified electrician.

- ▶ The national and international regulations for the installation of electrical equipment must be adhered to.
  - ▶ Voltage supply according to EN 50178.
- ▶ Disconnect power.
- ▶ Connect the unit as follows:

### DC PNP



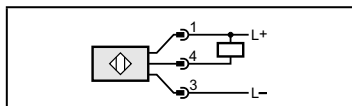
pin 1 = L+ ( 10...36 V DC )

pin 3 = L-

pin 4 = load (200 mA)

(pin 2 = not connected)

### DC NPN



pin 1 = L+ ( 10...36 V DC )

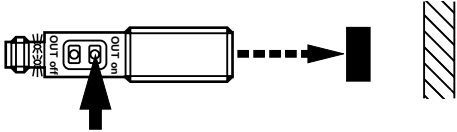
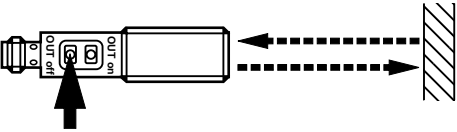
pin 3 = L-

pin 4 = load (200 mA)

(pin 2 = not connected)

## 6 Settings

### 6.1 The sensor is to switch when the object is detected

1	<p>▶ Position the object</p> 
	<p>▶ Press [OUT on] for 2 s.</p> <ul style="list-style-type: none"><li>&gt; The sensitivity is set to the object.</li><li>&gt; The LED flashes.</li></ul>
2	<p>▶ Remove the object</p> 
	<p>▶ Press [OUT off].</p> <ul style="list-style-type: none"><li>&gt; The sensitivity is set without object.</li><li>&gt; The LED goes out. The programming is finished.</li></ul>

### 6.2 The sensor is not to switch when the object is detected

▶ Position the object (see figure 1) and press [OUT off] for 2 s.

▶ Remove the object (see figure 2) and press [OUT on].

The setting can also be carried out first without object and then with object.

### 6.3 Setting of the maximum sensitivity

▶ Align the sensor so that no light is reflected.

**The sensor is to switch when the object is detected**

▶ First press [OUT on], then [OUT off].

**The sensor is to switch when the object is not detected**

▶ First press [OUT off], then [OUT on].

## 6.4 Programming unsuccessful

- > The LED flashes quickly, 8 Hz.
- Measured value difference too small
- Max. programming time (15 min.) exceeded.

## 6.5 Electronic lock

Lock or unlock the buttons

- ▶ Press [OUT on] and [OUT off] simultaneously for 10 s.
- > Acknowledgement is indicated by a change of the LED status.

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## 7 Operation

- ▶ Check whether the unit operates correctly.
- > The LED lights when the switching output is switched.

## 8 Maintenance, repair and disposal

- ▶ Keep the front pane of the sensor free from soiling.
- ▶ For cleaning do not use any solvents or cleaning agents which could damage the plastic material.
- ▶ Do not try to open the module enclosure. There are no user - serviceable components inside.