Operating instructions
Diffuse reflection sensor with background suppression

OGH3xx
OGH5xx
1 Functions and features

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

For the range see the type label (on white paper 200x200 mm, 90 % remission).

2 Installation

► Align the diffuse reflection sensor to the object to be detected.
► Secure the unit to a bracket.

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 the switching function is guaranteed.

3 Electrical connection

► Disconnect power.
► Connect the unit as follows.

<table>
<thead>
<tr>
<th>Cable</th>
<th>Connector</th>
<th>Pin connection</th>
</tr>
</thead>
<tbody>
<tr>
<td>L+</td>
<td>BN</td>
<td>pin 1</td>
</tr>
<tr>
<td>L-</td>
<td>BU</td>
<td>pin 3</td>
</tr>
<tr>
<td>load</td>
<td>BK</td>
<td>pin 4</td>
</tr>
<tr>
<td>load *)</td>
<td>WH *)</td>
<td>pin 2 *)</td>
</tr>
</tbody>
</table>

Core colours  BN = brown, BU = blue, BK = black

*) Seulement pour des appareils avec sortie antivalente.
4 Operating and display elements

1: LED  
2: [OUT off]  
3: [OUT on]

### 4 Settings

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

<p>| | |</p>
<table>
<thead>
<tr>
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<th></th>
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</table>
| 1 | Position the object.  
   | | ![Diagram](image1)
   | Press [OUT on] for 2 s.  
   | The sensitivity is set to the object.  
   | The LED flashes.  
|   | Remove the object.  
   | | ![Diagram](image2)
   | Press [OUT off].  
   | The sensitivity is set without object.  
   | The LED goes out. The programming is finished.

#### 4.2 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 settings can also be carried out first without object and then with object.
4.3 Programming unsuccessful
>
LED flashes quickly, 8 Hz.

Possible causes
• Measured value difference too small.
• Max. programming time of 15 min. exceeded.

4.4 Setting of 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] and then [OUT off].

The sensor is to switch when the object is not detected
► First press [OUT off], then [OUT on].

4.5 Locking or unlocking the buttons

The unit can be locked electronically to prevent unintentional settings.

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

5 Operation
► Check whether the unit operates correctly.
>
The LED lights when the switching output is switched.

6 Maintenance
► Keep the lens of the sensor free from soiling.
► For cleaning do not use any solvents or cleaning agents which could damage the plastic lens.