

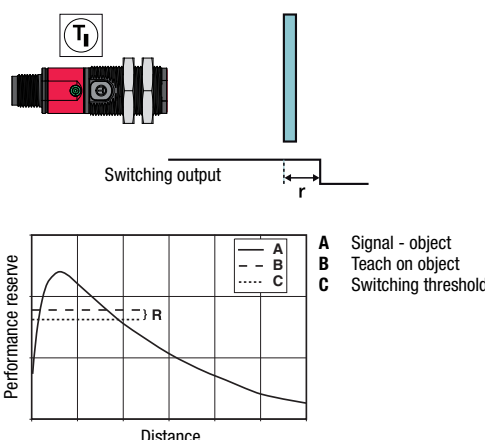
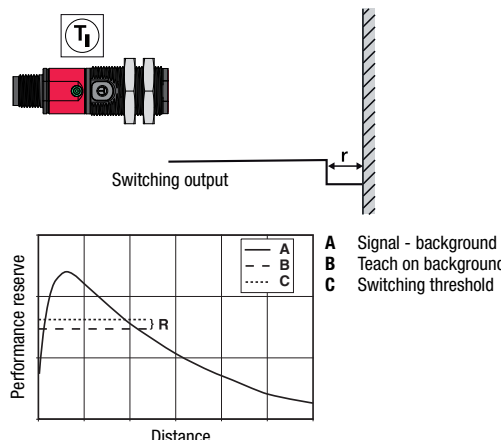
## Remarks

### Observe intended use!

- ⚠ This product is not a safety sensor and is not intended as personnel protection.
- ⚠ The product may only be put into operation by competent persons.
- ⚠ Only use the product in accordance with the intended use.

- You can find **detailed information** for your sensor at **www.leuze.com**. Enter the "**part no.**" for your sensor in the "**Enter search term**" field and click on the desired sensor in the search result list. The detailed information for your sensor and for the available downloads is displayed.

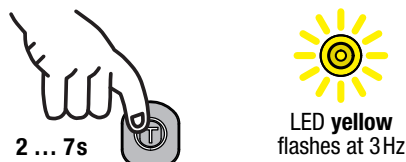
## Teach-in method

| Teach          | Operating level 1                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | Operating level 2                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
|----------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Standard Teach | <p><b>Teach on object:</b></p> <p>During this teach event, the object is located in front of the sensor. The switching threshold is set by the teach so that the object is detected with a tight signal reserve <b>R</b>. Thus, the object is detected even if the distance increases by the value <b>r</b> with respect to the distance during the teach.</p>  <p>Switching output</p> <p>Distance</p> <p> <b>A</b> Signal - object<br/> <b>B</b> Teach on object<br/> <b>C</b> Switching threshold         </p> | <p><b>Teach on background:</b></p> <p>This teach is only suitable for applications with a fixed background. The teach is performed directly on the background without an object. The switching threshold is set to a value that is just above the background signal (signal reserve <b>R</b>). Thus, objects can be detected up to a distance of <b>r</b> in front of the background.</p>  <p>Switching output</p> <p>Distance</p> <p> <b>A</b> Signal - background<br/> <b>B</b> Teach on background<br/> <b>C</b> Switching threshold         </p> |

## Operation via teach button

### Teach in operating level 1

- Press teach button until the LED flashes **yellow**.
- Release teach button.
- Ready.



### Teach in operating level 2

- Press teach button until the LED flashes **green** and **yellow** alternately.
- Release teach button.
- Ready.



## Adjusting the switching behavior of the switching output – light/dark switching

This function permits inversion of the sensors' switching logic.

- Press teach button until the LED flashes **green**.
- Release teach button.
- The LED then displays the changed switching logic for **2s**:  
**YELLOW Continuous light** = switching outputs **light switching** (in the case of complementary sensors, Q1 (pin 4) light switching, Q2 (pin 2) dark switching), this means output active when object is detected.  
**GREEN Flashing light** = switching outputs **dark switching** (in the case of complementary sensors, Q1 (pin 4) dark switching, Q2 (pin 2) light switching), this means output inactive when object is detected.

