Leuze electronic

# Label sensor

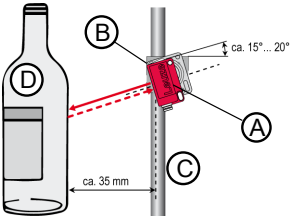
## HT3CI

We reserve the right to make changes – 2019/09/24 – 50142030

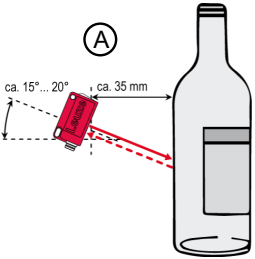
ПРОМЭЛЕКТРОНИКА / sales@prom-elec.com

Leuze electronic GmbH + Co. KG In der Braike 1 D-73277 Owen Tel.: +49 (0) 7021 573-0
info@leuze.com • www.leuze.com

# 1




# 2



## *Installation and setting*

The details on installation and on label sensor setting take into account a typical application for detecting the label on a transparent container, e.g., mineral water in a glass or PET bottle with paper label.

- Having a particularly strong influence on the function are color and surface structure of the container, container contents, the geometrical arrangement of the label sensor (angle to the horizontal as well as distance between label sensor and container) and especially the label.
- The label sensor evaluates signal differences between the bare container surface and the label surface. As long as there are clear signal differences between the container surface and the label surface, the label sensor functions very robustly. A predominantly white paper label on a white PET milk bottle can, under some circumstances, not be detected due to the low signal difference.

In the event of operating problems, change just one parameter and then observe the effect of the measure. Necessary changes could be:

- Adjust the sensitivity via operational control (multiturn potentiometer)
- Increase or decrease the angle to the horizontal
- Increase or reduce the distance between label sensor and container

### Mounting instructions

- Align the label sensor at an angle of approx. 15° … 20° to horizontal.
- If possible, use the BTU 200M-D12 mounting system (part no. 50117255).

**1**

**A** HT3CI label sensor

**B** BTU 200M-D12 mounting system

**C** Rod ⌀12 mm

**D** Container

### Adjustment and alignment

- Push the BTU 200M-D12 mounting system (B) without label sensor onto the rod (C). Lightly tighten both screws.
- Incline the mounting plate of the mounting system approx. 15° … 20°.
- Align the label sensor (A) so that the optical outlet falls centrally on the container (D).
- Securely tighten both screws on the mounting system.
- Screw down label sensor (A) to the mounting plate of the mounting system (B).
- Check clearance (approx. 35 mm) and setting of the label sensor.

## *Setting the label sensor*

**2**

**A** Aligning the label sensor

The label sensor evaluates the signal difference between a free glass surface (specular reflection) and a surface with a label (diffuse reflection). For optimum adaptation to the conditions, the sensitivity of the label sensor can be adjusted via the operational control.

| | | |
|---|---|---|
| Application (typical) | Clear signal difference between the free glass surface and the label surface, e.g., paper label | Small signal difference between the free glass surface and the label surface, e.g., foil label. |
| Adjustment via operational control | Gently turn the operational control (multiturn potentiometer) on the device until the yellow LED no longer illuminates. | |
| Observation | After adjustment, the label sensor is in a stable OFF state and shows no faulty switching on the bare glass surface without label.<br>If the label is turned into the detection range of the label sensor, the label sensor detects the label over the entire length of the label. | |

***NOTICE***

**Procedure in the event of faulty switching on the glass surface!**

- Repeat the adjustment.
- Check whether a stable switching behavior is achieved with a slightly changed inclination.

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