

## overview

- Most secure object detection due to the barrier principle
- Parallel laser beam for uniform detection over the measuring range
- Deactivation of the transmitter diode via test input or IO-Link
- Robust housing with stainless steel spacer sleeves



## Technical data

### general data

|                        |                        |
|------------------------|------------------------|
| type                   | through beam sensor    |
| emitter / receiver     | emitter                |
| light source           | pulsed red laser diode |
| actual range Sb        | 5 m                    |
| nominal range Sn       | 6 m                    |
| power on indication    | LED green              |
| laser class            | 1                      |
| distance to focus      | parallel beam          |
| wave length            | 680 nm                 |
| alignment optical axis | < 1,5°                 |

### electrical data

|                                    |                  |
|------------------------------------|------------------|
| voltage supply range +Vs           | 10 ... 30 VDC    |
| current consumption max. (no load) | 20 mA (@ 10 VDC) |
| current consumption typ.           | 10 mA (@ 24 VDC) |
| output function                    | by IO-Link only  |
| output circuit                     | push-pull        |
| short circuit protection           | yes              |
| reverse polarity protection        | yes              |

### communication interface

|                        |                     |
|------------------------|---------------------|
| baud rate              | 230,4 kBaud (COM 3) |
| IO-Link port type      | Class A             |
| process data length    | 8 Bit               |
| process data structure | Bit 3 = alarm       |
| interface              | IO-Link V1.1        |
| additional data        | device temperature  |
| cycle time             | ≥ 0,6 ms            |

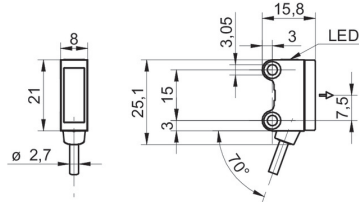
### mechanical data

|                       |                                    |
|-----------------------|------------------------------------|
| width / diameter      | 8 mm                               |
| height / length       | 25,1 mm                            |
| depth                 | 15,8 mm                            |
| type                  | rectangular                        |
| mechanical mounting   | sleeve smooth (stainless steel)    |
| housing material      | plastic (ASA, PMMA)                |
| front (optics)        | PMMA                               |
| connection types      | cable 4 pin, 2 m                   |
| cable characteristics | PVC / PVC 4 x 0,08 mm <sup>2</sup> |

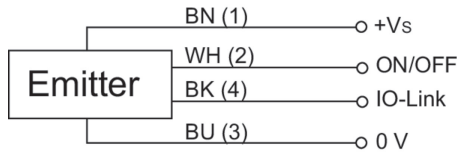
### ambient conditions

|                       |                |
|-----------------------|----------------|
| operating temperature | -20 ... +50 °C |
| protection class      | IP 67          |

#### dimension drawing



#### connection diagram



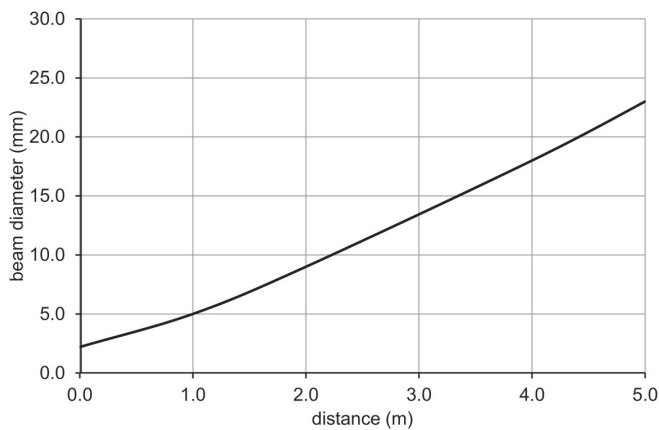
#### laser warning

**CLASS 1 LASER  
PRODUCT**

IEC 60825-1/2014

Complies with 21 CFR 1040.10 and 1040.11  
except for deviations pursuant to laser  
notice No. 50, dated June 24, 2007

#### beam characteristic (typically)



#### excess gain curve

