

## Overview

- Most secure object detection due to the barrier principle
- IO-Link interface independent of the switching output (Dual Channel)
- Extended parameterization options and additional diagnostic data
- Quick mounting by means of M3 threaded bushes made of stainless steel



Picture similar



## Technical data

### General data

|                                     |                                 |
|-------------------------------------|---------------------------------|
| Type                                | Through beam sensor             |
| Version                             | IO-Link dual channel            |
| Emitter / receiver                  | Receiver                        |
| Light source                        | Use with pulsed red laser diode |
| Actual range Sb                     | 5 m                             |
| Nominal range Sn                    | 6 m                             |
| Smallest object recognizable typ.   | 3 mm (0,5 mm with aperture)     |
| Alignment / soiled lens indicator   | Flashing output indicator       |
| Output indicator                    | LED yellow                      |
| Power on indication                 | LED green                       |
| Sensitivity adjustment              | IO-Link                         |
| Suppression of reciprocal influence | Yes                             |

### Electrical data

|                                    |                        |
|------------------------------------|------------------------|
| Response time / release time       | < 0.1 ms<br>< 0.12 ms  |
| Jitter                             | < 0.03 ms<br>< 0.05 ms |
| Voltage supply range +Vs           | 10 ... 30 VDC          |
| Current consumption max. (no load) | 20 mA (@ 10 VDC)       |
| Current consumption typ.           | 10 mA (@ 24 VDC)       |
| Voltage drop Vd                    | <2 VDC                 |

### Electrical data

|                             |                           |
|-----------------------------|---------------------------|
| Output function             | Light / dark operate      |
| Output circuit              | Push-pull                 |
| Output current              | 50 mA, sum of all outputs |
| Short circuit protection    | Yes                       |
| Reverse polarity protection | Yes                       |

### Communication interface

|                        |   |
|------------------------|---|
| Baud rate              | 38,4 kBaud (COM 2)  |
| Adjustable parameters  | Switching point<br>Time filters<br>LED status indicators<br>Output logic<br>Output circuit<br>Counter<br>Deactivate the sensor element<br>Find Me function<br>Teach-in mode |
| IO-Link port type      | Class A   |
| Process data length    | 32 Bit  |
| Process data structure | Bit 0 = SSC1 (presence)<br>Bit 2 = quality<br>Bit 3 = alarm<br>Bit 5 = SSC4 (counter)<br>Bit 16-31 = 16 Bit measurement   |
| Interface              | IO-Link V1.1  |

**Technical data**

**Communication interface**

|                 |                    |
|-----------------|--------------------|
| Additional data | Signal strength    |
|                 | Excess gain        |
|                 | Operating cycles   |
|                 | Device temperature |
| Cycle time      | ≥ 2.7 ms           |

**Mechanical data**

|                  |             |
|------------------|-------------|
| Width / diameter | 8 mm        |
| Height / length  | 25.1 mm     |
| Depth            | 14.1 mm     |
| Design           | Rectangular |

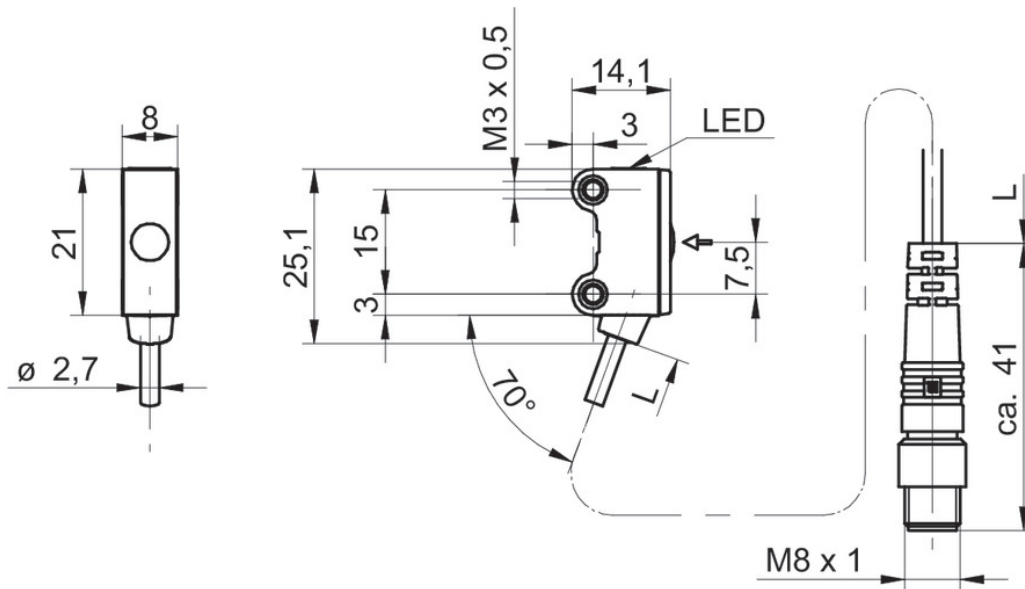
**Mechanical data**

|                       |                                       |
|-----------------------|---------------------------------------|
| Mechanical mounting   | Threaded sleeves M3 (stainless steel) |
| Housing material      | Plastic (ASA, PMMA)                   |
| Front (optics)        | PMMA                                  |
| Connection types      | Flylead connector M8 4 pin, L=200 mm  |
| Cable characteristics | PVC / PVC 4 x 0.08 mm <sup>2</sup>    |

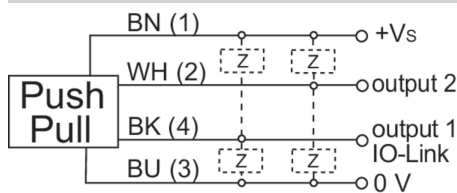
**Ambient conditions**

|                       |                |
|-----------------------|----------------|
| Operating temperature | -25 ... +50 °C |
| Protection class      | IP 67          |

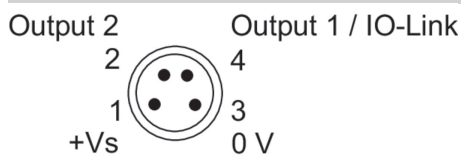
**Technical drawings**



**Connection diagram**



**Pin assignment**



**Excess gain curve**

