

## Overview

- Outstanding reliability and unrivalled immunity against ambient light
- Manipulation-proof, simple teach-in via qTeach or line teach
- IO-Link for extended parameterization options and additional diagnostic data
- Robust housing with stainless steel spacer sleeves



Picture similar



## Technical data

### General data

|                                     |                           |
|-------------------------------------|---------------------------|
| Type                                | Background suppression    |
| Sensing distance Tw                 | 15 ... 72 mm              |
| Sensing range Tb                    | 7 ... 80 mm               |
| Smallest object recognizable typ.   | 0.25 mm at 40 mm          |
| Power on indication                 | LED green                 |
| Alignment / soiled lens indicator   | Flashing output indicator |
| Output indicator                    | LED yellow                |
| Sensing distance adjustment         | Teach-in and IO-Link      |
| Suppression of reciprocal influence | Yes                       |
| Alignment optical axis              | < 1,5°                    |

### Light Source

|              |                |
|--------------|----------------|
| Light source | Pulsed red LED |
| Wave length  | 644 nm         |

### Electrical data

|                                    |                             |
|------------------------------------|-----------------------------|
| Response time / release time       | < 0.25 ms (High Speed Mode) |
| Voltage supply range +Vs           | 10 ... 30 VDC               |
| Current consumption max. (no load) | 40 mA (@ 10 VDC)            |
| Current consumption typ.           | 16 mA (@ 24 VDC)            |
| Voltage drop Vd                    | <2 VDC                      |

### Electrical data

|                             |                      |
|-----------------------------|----------------------|
| Output function             | Light / dark operate |
| Output circuit              | Push-pull            |
| Output current              | 50 mA                |
| Short circuit protection    | Yes                  |
| Reverse polarity protection | Yes                  |

### Communication interface

|                        |                                                                                                                                                                                                     |
|------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Interface              | IO-Link V1.1                                                                                                                                                                                        |
| IO-Link port type      | Class A                                                                                                                                                                                             |
| Baud rate              | 230.4 kBaud (COM 3)                                                                                                                                                                                 |
| Cycle time             | ≥ 0.6 ms                                                                                                                                                                                            |
| 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                                                                             |
| Adjustable parameters  | Switching point<br>Switching hysteresis<br>Time filters<br>LED status indicators<br>Output logic<br>Counter<br>Operation mode<br>Deactivate the sensor element<br>Find Me function<br>Teach-in mode |

## O200.GR-GW1J.72NV/E026

Diffuse sensors with background suppression - miniature

Article number: 11210293

### Technical data

#### Communication interface

|                 |                    |
|-----------------|--------------------|
| Additional data | Excess gain        |
|                 | Operating cycles   |
|                 | Device temperature |

#### Mechanical data

|                     |                                 |
|---------------------|---------------------------------|
| Width / diameter    | 8 mm                            |
| Height / length     | 25.1 mm                         |
| Depth               | 14.1 mm                         |
| Design              | Rectangular                     |
| Mechanical mounting | Sleeve smooth (stainless steel) |

#### Mechanical data

|                       |                                      |
|-----------------------|--------------------------------------|
| 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>   |

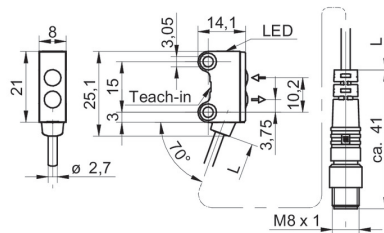
#### Ambient conditions

|                       |                |
|-----------------------|----------------|
| Protection class      | IP 67          |
| Operating temperature | -30 ... +50 °C |

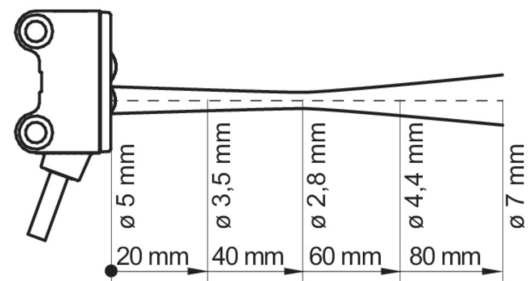
### Remarks

- qTeach

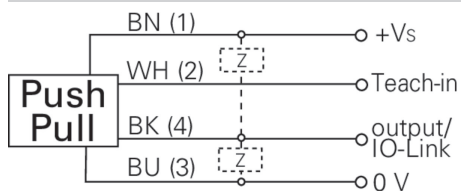
### Dimension drawing



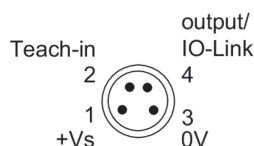
### Beam characteristic (typically)



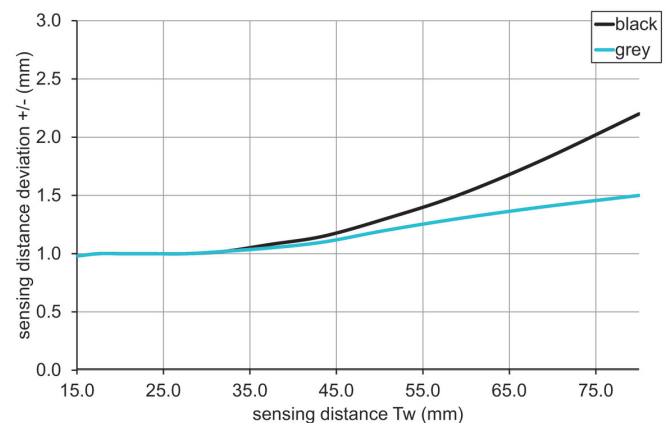
### Connection diagram



### Pin assignment



### Sensing distance diagram



#### Hysteresis curve

