

overview

- SmartReflect - Safe barrier principle without reflector
- 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



Technical data

general data

|                                     |                           |
|-------------------------------------|---------------------------|
| type                                | light barrier             |
| light source                        | pulsed red laser diode    |
| background position Sde             | 25 ... 180 mm             |
| scanning range Sa                   | 90% ... 85% Sde           |
| smallest object recognizable typ.   | 0,5 mm                    |
| alignment / soiled lens indicator   | flashing output indicator |
| power on indication                 | LED green                 |
| output indicator                    | LED yellow                |
| sensing distance adjustment         | Teach-in and IO-Link      |
| laser class                         | 1                         |
| distance to focus                   | 160 mm                    |
| wave length                         | 680 nm                    |
| suppression of reciprocal influence | yes                       |
| beam type                           | point                     |
| alignment optical axis              | < 1,5°                    |

electrical data

|                                    |                             |
|------------------------------------|-----------------------------|
| response time / release time       | < 0,25 ms (High Speed Mode) |
| jitter                             | < 0,06 ms (High Speed Mode) |
| voltage supply range +Vs           | 10 ... 30 VDC               |
| current consumption max. (no load) | 20 mA (@ 10 VDC)            |

electrical data

|                             |                      |
|-----------------------------|----------------------|
| current consumption typ.    | 10 mA (@ 24 VDC)     |
| voltage drop Vd             | < 2 VDC              |
| output function             | light / dark operate |
| output circuit              | push-pull            |
| output current              | < 50 mA              |
| short circuit protection    | yes                  |
| reverse polarity protection | yes                  |

communication interface

|                       |                                                                                                                                                                             |
|-----------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| baud rate             | 230,4 kBaud (COM 3)                                                                                                                                                         |
| adjustable parameters | switching point<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 |

|                        |                                                                                                                         |
|------------------------|-------------------------------------------------------------------------------------------------------------------------|
| 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                                                                                                            |

## O200.SL-GW1J.72NV/F160

SmartReflect Light barriers - miniature

Article number: 11224790

### Technical data

#### communication interface

|                 |                    |
|-----------------|--------------------|
| additional data | excess gain        |
|                 | operating cycles   |
|                 | device temperature |

|            |          |
|------------|----------|
| cycle time | ≥ 0,6 ms |
|------------|----------|

#### mechanical data

|                  |             |
|------------------|-------------|
| width / diameter | 8 mm        |
| height / length  | 25,1 mm     |
| depth            | 15,8 mm     |
| type             | rectangular |

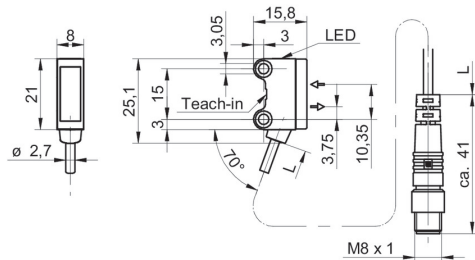
#### mechanical data

|                       |                                      |
|-----------------------|--------------------------------------|
| mechanical mounting   | sleeve smooth (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>   |

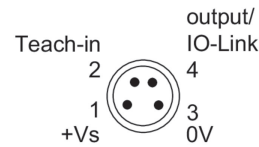
#### ambient conditions

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

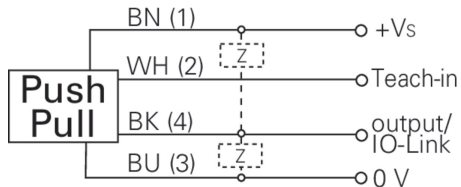
### dimension drawing



### pin assignment



### 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)

