

## Overview

- Outstanding reliability and unrivalled immunity against ambient light
- Focused laser beam for small objects or gaps
- 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	Background suppression
Version	IO-Link dual channel
Sensing distance Tw	20 ... 120 mm
Sensing range Tb	3 ... 132 mm
Smallest object recognizable typ.	0.05 mm at 40 mm
Power on indication	LED green
Alignment / soiled lens indicator	Flashing output indicator
Output indicator	LED yellow
Sensing distance adjustment	IO-Link
Distance to focus	40 mm
Suppression of reciprocal influence	Yes
Beam type	Point
Alignment optical axis	< 1,5°

### Light Source

Light source	Pulsed red laser diode
Laser class	1
Wave length	680 nm

### Electrical data

Response time / release time	< 0.4 ms (High Speed Mode)
Jitter	< 0.21 ms (High Speed Mode)
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
Output function	Light / dark operate

### Electrical data

Output circuit	Push-pull
Output current	50 mA (< 40 °C), sum of all outputs 20 mA (< 50 °C), sum of all outputs
Short circuit protection	Yes
Reverse polarity protection	Yes

### Communication interface

Interface	IO-Link V1.1
IO-Link port type	Class A
Baud rate	38,4 kBaud (COM 2)
Cycle time	≥ 2.7 ms
Process data length	32 Bit
Process data structure	Bit 0 = SSC1 (presence) Bit 2 = quality Bit 3 = alarm Bit 5 = SSC4 (counter) Bit 16-31 = 16 Bit measurement

### Adjustable parameters

Switching point  
Switching hysteresis  
Time filters  
LED status indicators  
Output logic  
Output circuit  
Counter  
Operation mode  
Deactivate the sensor element  
Find Me function  
Teach-in mode

### Additional data

Excess gain  
Operating cycles  
Device temperature

### Mechanical data

Width / diameter	8 mm
Height / length	25.1 mm

# O200.GL-GW2I.72CV/A014\_F040\_H006

Diffuse sensors with background suppression - miniature

Article number: 11231162

## Technical data

### Mechanical data

Depth	15.8 mm
Design	Rectangular
Mechanical mounting	Threaded sleeves M3 (stainless steel)
Housing material	Plastic (ASA, PMMA)
Front (optics)	PMMA

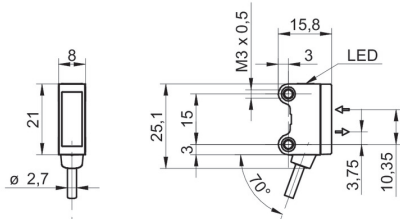
### Mechanical data

Connection types	Cable 4 pin, 2 m
Cable characteristics	PVC / PVC 4 x 0.08 mm <sup>2</sup>

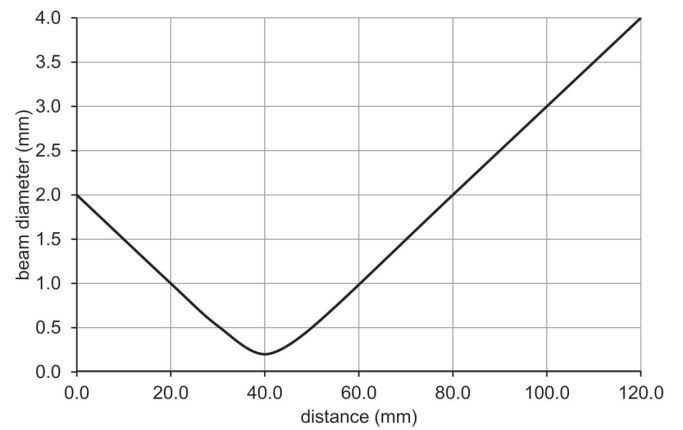
### Ambient conditions

Protection class	IP 67
Operating temperature	-20 ... +50 °C

## Dimension drawing



## Beam characteristic (typically)



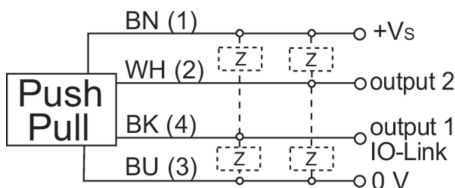
## Laser warning

**CLASS 1 LASER  
PRODUCT**

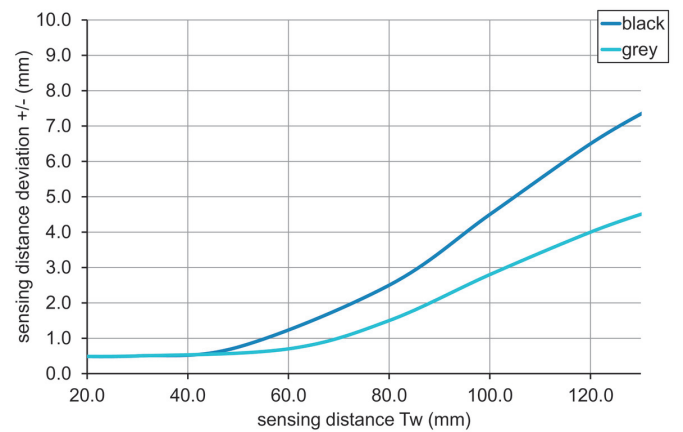
IEC 60825-1/2014

Complies with 21 CFR 1040.10 and 1040.11 except for conformance with IEC 60825-1 Ed. 3., as described in Laser Notice No. 56, dated May 8, 2019

## Connection diagram



## Sensing distance diagram



### Hysteresis curve

