

O200.GL-GW1J.72CV/F040_H006

Diffuse sensors with background suppression - miniature

Article number: 11230772

Overview

- Outstanding reliability and unrivalled immunity against ambient light
- Focused laser beam for small objects or gaps
- Manipulation-proof, simple teach-in via qTeach or line teach
- IO-Link for 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
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	Teach-in and 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	≤ 0.25 ms (High Speed Mode)
Jitter	≤ 0.06 ms (High Speed Mode)
Voltage supply range +Vs	10 ... 30 VDC

Electrical data

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
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) Bit 2 = quality Bit 3 = alarm Bit 5 = SSC4 (counter) Bit 16-31 = 16 Bit measurement

Technical data

Communication interface

Adjustable parameters	Switching point
	Switching hysteresis
	Time filters
	LED status indicators
	Output logic
	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
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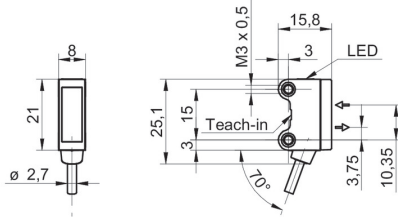
Mechanical data

Height / length	25.1 mm
Depth	15.8 mm
Design	Rectangular
Mechanical mounting	Threaded sleeves M3 (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 ²

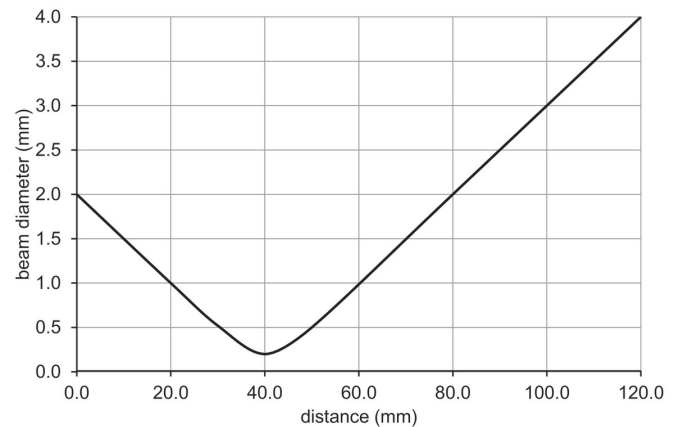
Ambient conditions

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

Dimension drawing



Beam characteristic (typically)

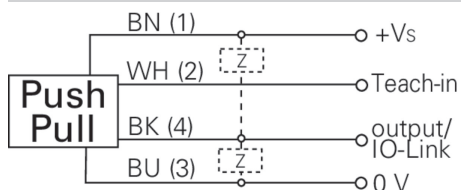


Laser warning

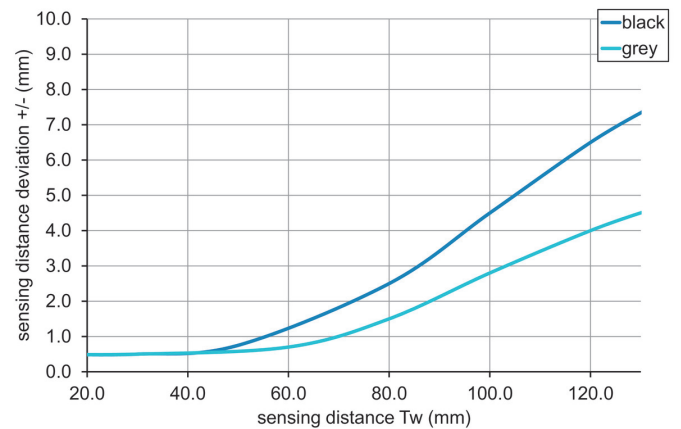
CLASS 1 LASER PRODUCT

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

