Baumer
Passion for Sensors

Diffuse sensors with background suppression

O200.GL-GW1J.72NV/F160_B005

Diffuse sensors with background suppression - miniature

Article number: 11224978

Overview

- Outstanding reliability and unrivalled immunity against ambient light
- Extra range - best-in-class
- 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	20 … 175 mm
Sensing range Tb	3 … 192 mm
Smallest object recognizable typ.	0.5 mm at 100 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	160 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
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

Electrical data	
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
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
Height / length	25.1 mm
Depth	15.8 mm
Design	Rectangular

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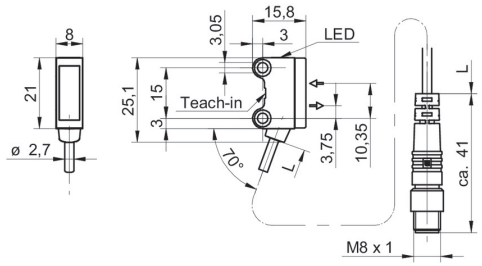
Technical data

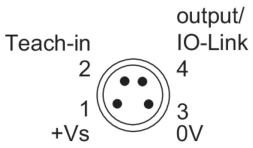
Mechanical data	
Mechanical mounting	Sleeve smooth (stainless steel)
Housing material	Plastic (ASA, PMMA)
Front (optics)	PMMA
Connection types	Flylead connector M8 4 pin, L=200 mm

Mechanical data	
Cable characteristics	PVC / PVC 4 x 0.08 mm²
Ambient conditions	
Protection class	IP 67
Operating temperature	-20 … +50 °C

Dimension drawing



Pin assignment

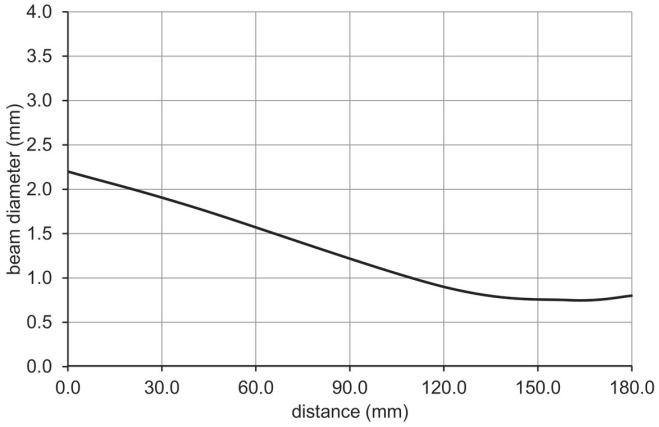


Laser warning

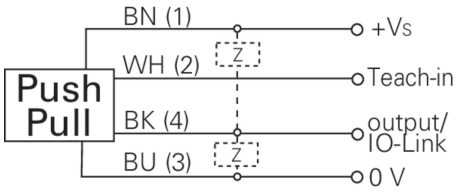
CLASS 1 LASER PRODUCT

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

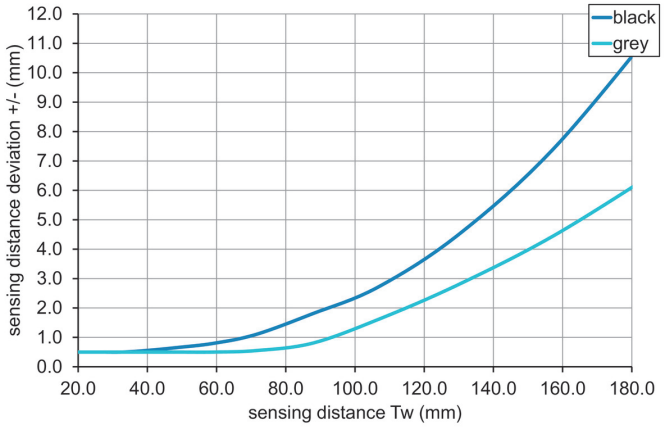
Beam characteristic (typically)



Connection diagram



Sensing distance diagram



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Hysteresis curve