Baumer
Passion for Sensors

Diffuse sensors with background suppression

OT300.GL-GLZZJ.72N

Diffuse sensors with background suppression - miniature

Article number: 11240057

Overview

- Measurement value via IO-Link
- Reliable also on very dark and shiny objects
- Manipulation-proof, simple teach-in via qTeach or line teach
- Extended parameterization options and additional diagnostic data
- Longest distances thanks to time of flight principle
- Laser performance for an accurate switching behavior
- Compact, miniaturized housing format

Picture similar

Technical data

General data	
Type	Background suppression
Version	Time of Flight
Sensing distance Tw	100 … 1800 mm
Sensing range Tb	70 … 1890 mm
Repeat accuracy	≤ 1400 … 5500 µm
Temperature drift	± 15 mm
Linearity error	± 10 mm
Power on indication	LED green
Output indicator	LED yellow
Sensing distance adjustment	Teach-in and IO-Link
Distance to focus	700 mm
Suppression of reciprocal influence	Yes
Beam type	Point
Alignment optical axis	< 2°
Light Source	
Light source	Pulsed red laser diode
Laser class	1
Wave length	680 nm
Electrical data	
Response time / release time	< 4 ms (High Speed Mode) < 8 ms (Standard Mode) < 50 ms (Long Range Mode)
Voltage supply range +Vs	12 … 30 VDC
Current consumption max. (no load)	60 mA
Voltage drop Vd	<2 VDC
Output function	Light operate, switchable
Output circuit	Push-pull / IO-Link

Electrical data	
Output current	50 mA
Short circuit protection	Yes
Reverse polarity protection	Yes
Communication interface	
Interface	IO-Link V1.1.3
Profile	DMSS
IO-Link port type	Class A
Baud rate	230.4 kBaud (COM 3)
Cycle time	≥ 2 ms
Process data length	32 Bit
Process data structure	Bit 0 = SSC1 (distance) Bit 1 = SSC2 (distance) Bit 2 = quality Bit 3 = alarm Bit 5 = SSC4 (counter) Bit 8-15 = scale factor Bit 16-31 = 16 Bit measurement
Adjustable parameters	Switching point Switching hysteresis Operation mode Time filters LED status indicators Output logic Output circuit Counter Deactivate the sensor element Find Me function Teach-in mode

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Technical data

Communication interface	
Additional data	Distance Excess gain Operating cycles Operating hours Boot cycles Operating voltage Device temperature Histograms

Mechanical data	
Width / diameter	12.9 mm
Height / length	32.3 mm
Depth	23 mm
Design	Rectangular
Housing material	Plastic (ASA, PMMA)

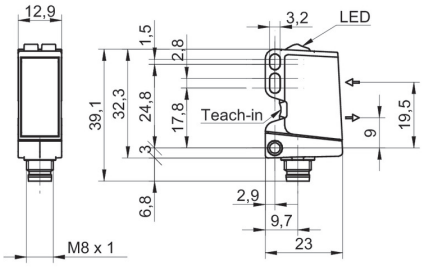
Mechanical data	
Front (optics)	PMMA
Connection types	Connector M8 4 pin

Ambient conditions	
Protection class	IP 67
Operating temperature	-20 … +50 °C
Storage temperature	-40 … +70 °C
Vibration (sinusoidal)	IEC 60068-2-6:2008 10 g at f = 10 - 2000 Hz, duration 150 min per axis
Shock (semi-sinusoidal)	IEC 60068-2-27:2009 50 g / 11 ms, 10 impulses per axis and direction

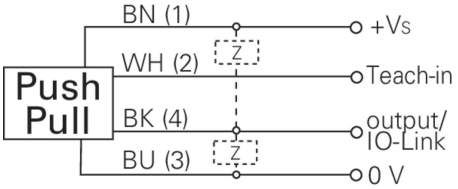
Remarks

- Measurement on 90% remission (white)

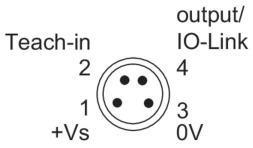
Dimension drawing



Connection diagram



Pin assignment

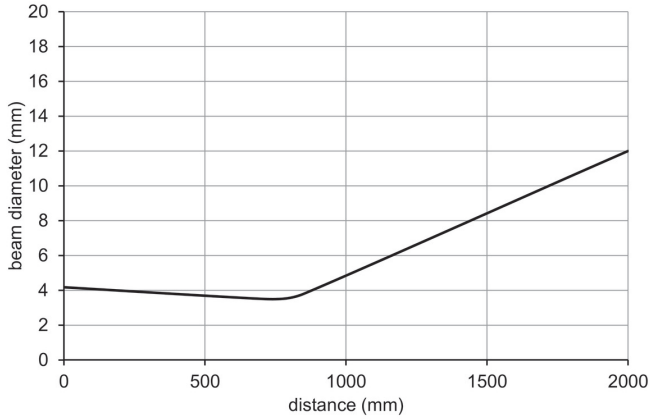


Laser warning

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)



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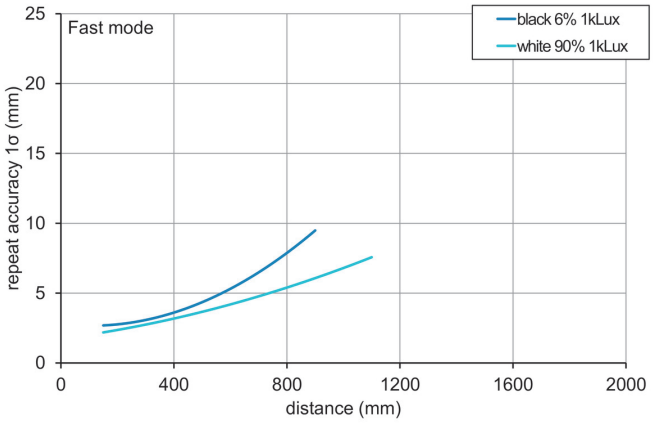
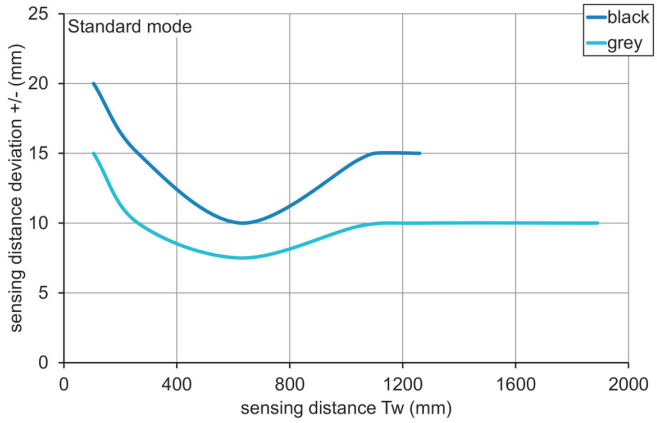
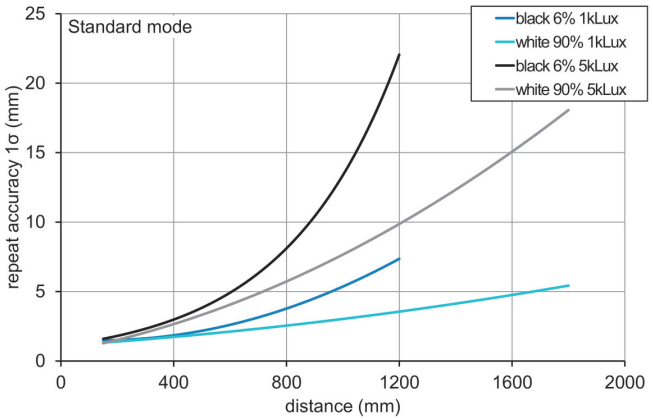
Repeat accuracy

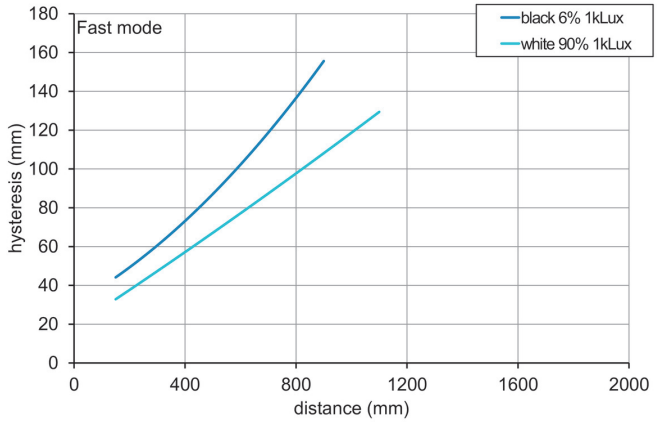


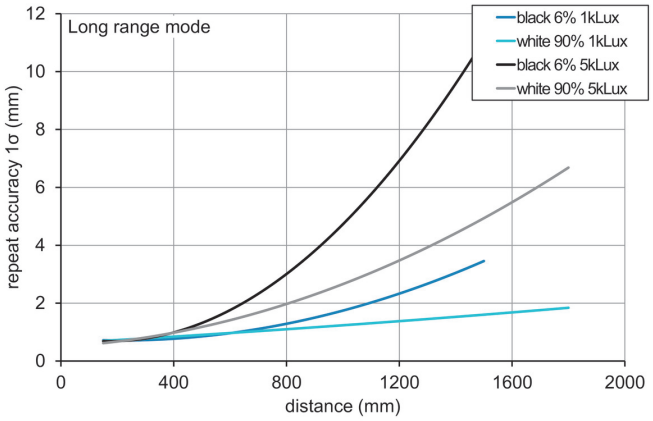
Sensing distance diagram

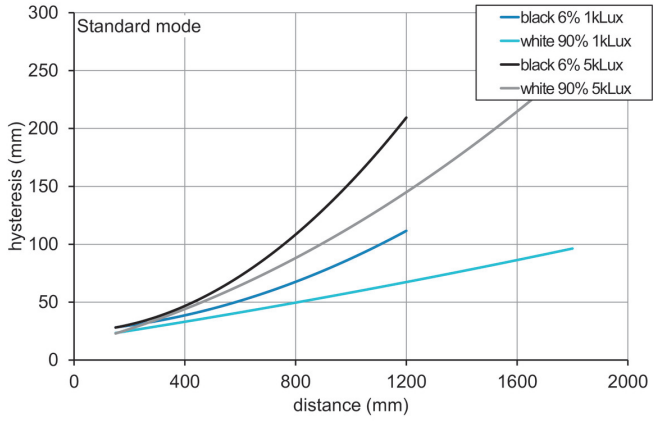




Hysteresis curve







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