Distance sensors

OT500.DL-GLUBJ.72F

Article number: 11235554

Overview

- Distance measurement via IO-Link or analog output
- 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

Picture similar

Technical data

General data	
Type	Distance measuring
Version	Time of Flight
Measuring distance Sd	150 … 2500 mm
Measuring range Mr	2350 mm
Focal distance	1500 mm
Adjustment	Teach-in and IO-Link
Power on indication	LED green
Output indicator	LED yellow
Repeat accuracy	≤ 1200 … 4300 µm
Linearity error	± 10 mm
Beam type	Point
Suppression of reciprocal influence	Yes
Alignment optical axis	< 1°
Temperature drift	± 15 mm
Light Source	
Light source	Pulsed red laser diode
Wave length	680 nm
Laser class	1
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 circuit	Analog 0 ... 10 VDC Push-pull / IO-Link
Output current	< 50 mA (push-pull)

Electrical data	
Switching output	Light operate, switchable
Short circuit protection	Yes
Reverse polarity protection	Yes, Vs to GND
Communication interface	
Interface	IO-Link V1.1.3
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 Analog output characteristic 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	18 mm
Height / length	45 mm
Depth	32 mm
Type	Rectangular
Housing material	Plastic (ASA, PMMA)

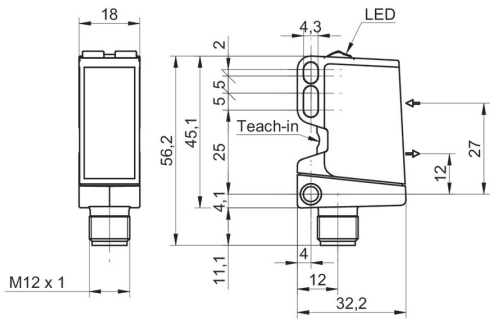
Mechanical data	
Front (optics)	PMMA
Connection types	Connector M12 5 pin

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

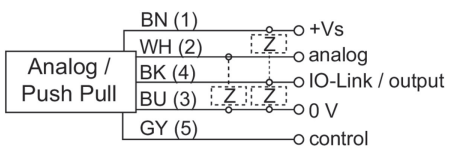


Laser warning

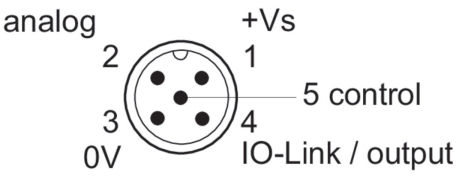
CLASS 1 LASER PRODUCT

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

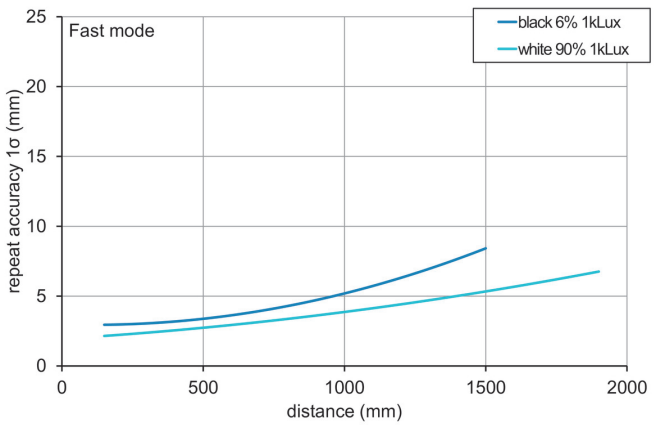
Connection diagram

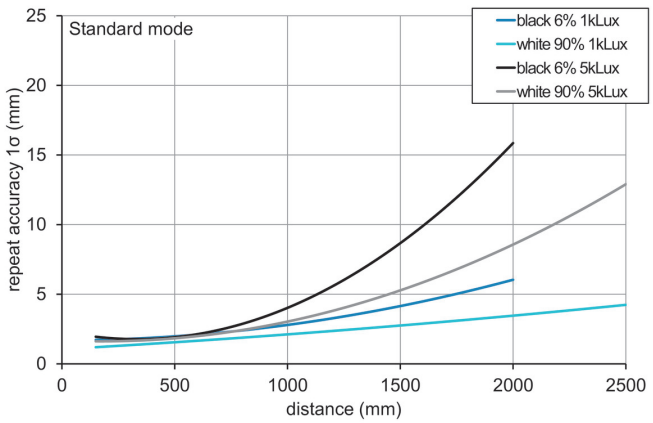


Pin assignment



Repeat accuracy





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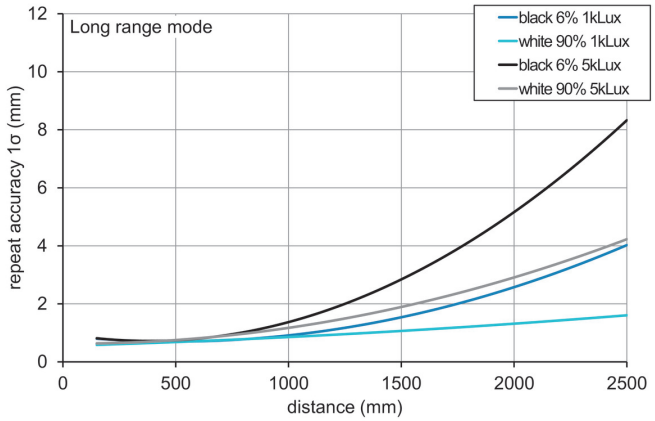
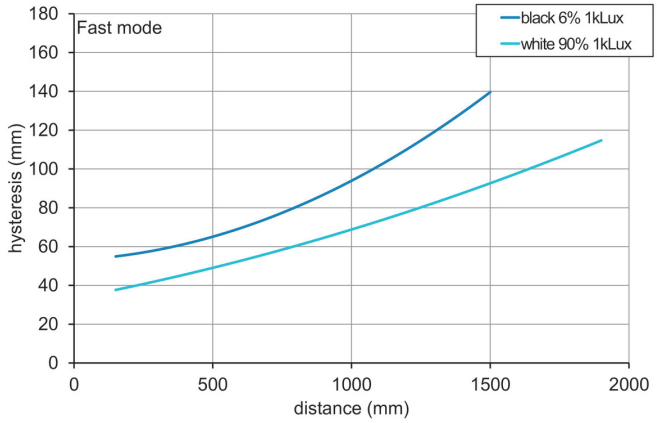
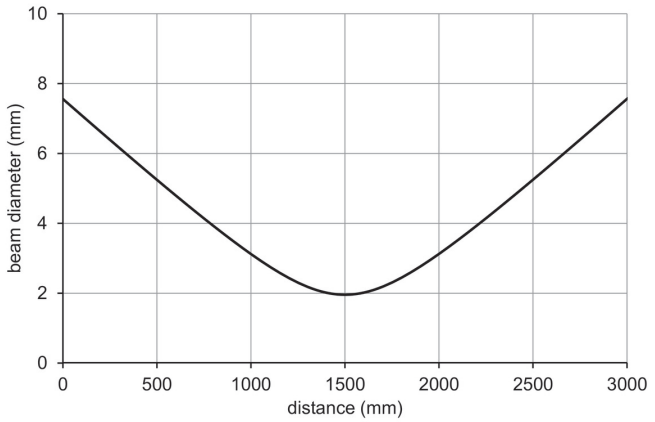
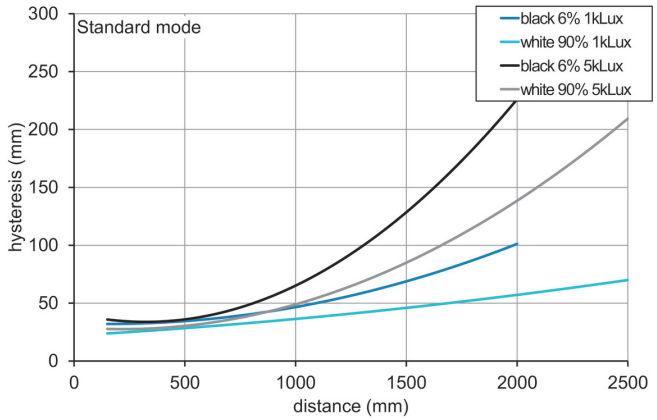


Hysteresis curve



Beam characteristic (typically)





Sensing distance diagram