

Overview

- Extended functional reserve capacities for maximum reliability
- Object detection through smallest holes and gaps without blind area thanks to single-lens optics
- Parallel laser beam for uniform detection over the measuring range
- 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		Electrical data	
Type	Retro-reflective sensor	Output current	50 mA (< 40 °C), sum of all outputs 20 mA (< 50 °C), sum of all outputs
Version	Single lens optics IO-Link dual channel	Short circuit protection	Yes
Light source	Pulsed red laser diode	Reverse polarity protection	Yes
Actual range Sb	0.8 m	Communication interface	
Nominal range Sn	1.2 m	Baud rate	38,4 kBaud (COM 2)
Smallest object recognizable typ.	3 mm at 500 mm	Adjustable parameters	Switching point Time filters LED status indicators Output logic Output circuit Counter Operation mode Deactivate the sensor element Find Me function Teach-in mode
Polarization filter	Yes	IO-Link port type	Class A
Alignment / soiled lens indicator	Flashing output indicator	Process data length	32 Bit
Output indicator	LED yellow	Process data structure	Bit 0 = SSC1 (presence) Bit 2 = quality Bit 3 = alarm Bit 5 = SSC4 (counter) Bit 16-31 = 16 Bit measurement
Power on indication	LED green	Interface	IO-Link V1.1
Sensitivity adjustment	IO-Link	Additional data	Signal strength Excess gain Operating cycles Device temperature
Laser class	1	Cycle time	≥ 2.7 ms
Distance to focus	Parallel beam	Mechanical data	
Wave length	680 nm	Width / diameter	8 mm
Suppression of reciprocal influence	Yes	Height / length	25.1 mm
Alignment optical axis	< 1,5°	Depth	15.8 mm
Electrical data			
Response time / release time	< 0.2 ms (High Speed Mode)		
Jitter	< 0.18 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		

Technical data

Mechanical data

Design	Rectangular
Mechanical mounting	Threaded sleeves M3 (stainless steel)
Housing material	Plastic (ASA, PMMA)
Front (optics)	PMMA
Connection types	Flylead connector M8 4 pin, L=200 mm

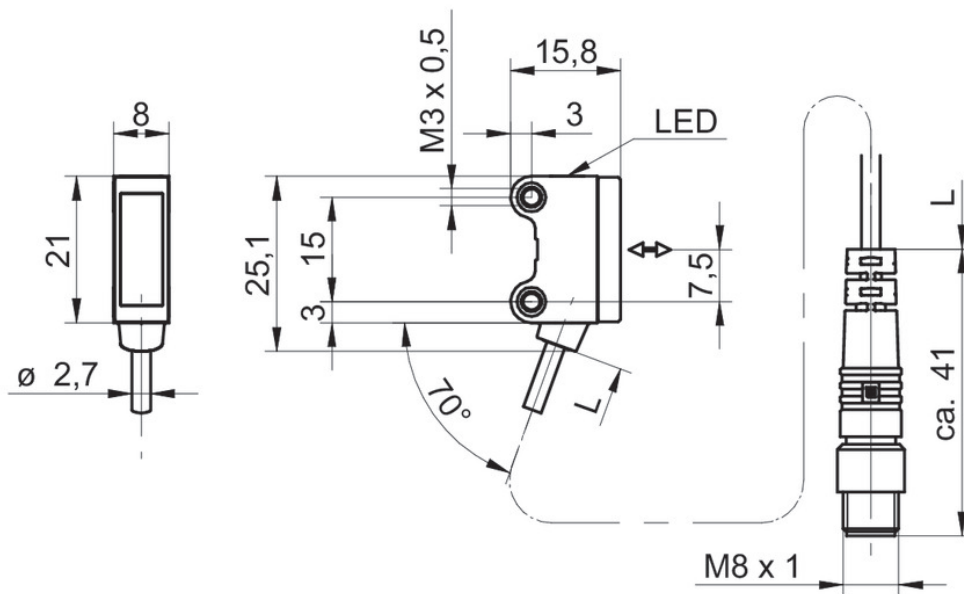
Mechanical data

Cable characteristics	PVC / PVC 4 x 0.08 mm ²
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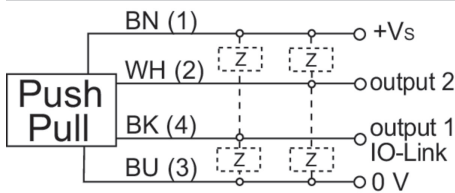
Ambient conditions

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

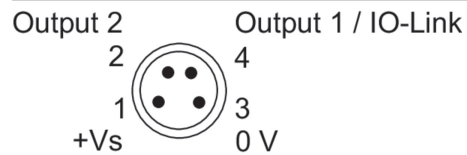
Technical drawings



Connection diagram



Pin assignment

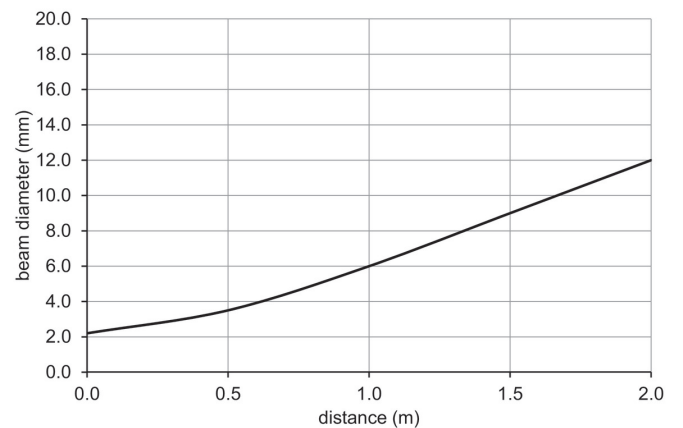


Laser warning

**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)



Excess gain curve

