

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
- 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		Electrical data	
Type	Retro-reflective sensor	Output current	50 mA
Version	Single lens optics	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	230,4 kBaud (COM 3)
Smallest object recognizable typ.	3 mm at 500 mm	Adjustable parameters	Switching point Time filters LED status indicators Output logic 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	Teach-in and IO-Link	Additional data	Signal strength Excess gain Operating cycles Device temperature
Laser class	1	Cycle time	≥ 0.6 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		Design	Rectangular
Response time / release time	< 0.05 ms (High Speed Mode)		
Jitter	< 0.02 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		

2024-02-16 The product features and technical data specified do not express or imply any warranty. Technical modifications subject to change.

Technical data

Mechanical data

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

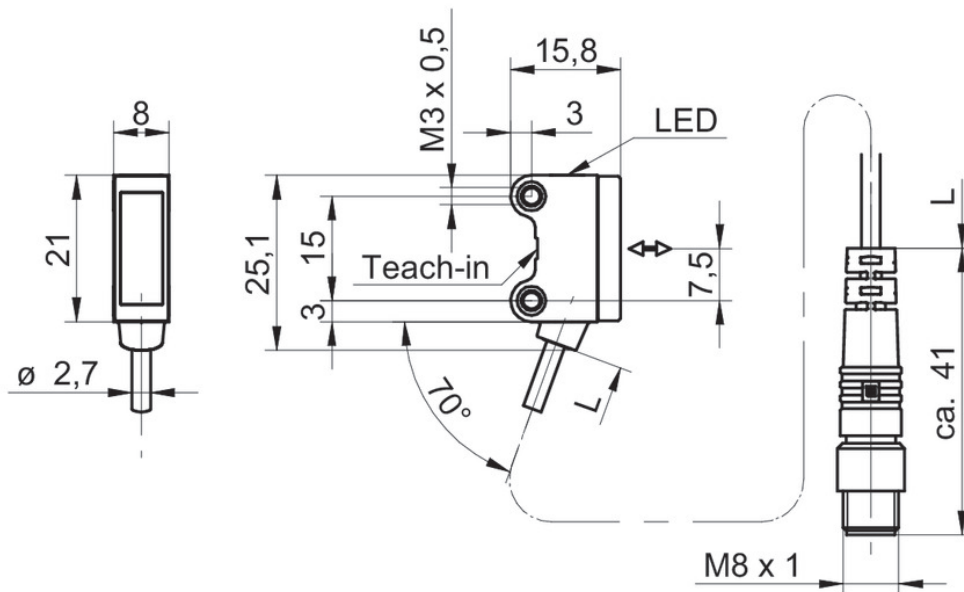
Mechanical data

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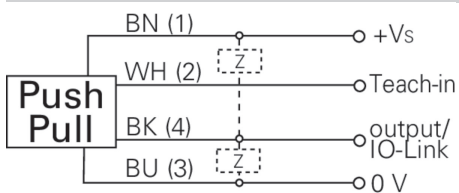
Ambient conditions

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

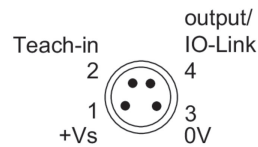
Technical drawings



Connection diagram



Pin assignment



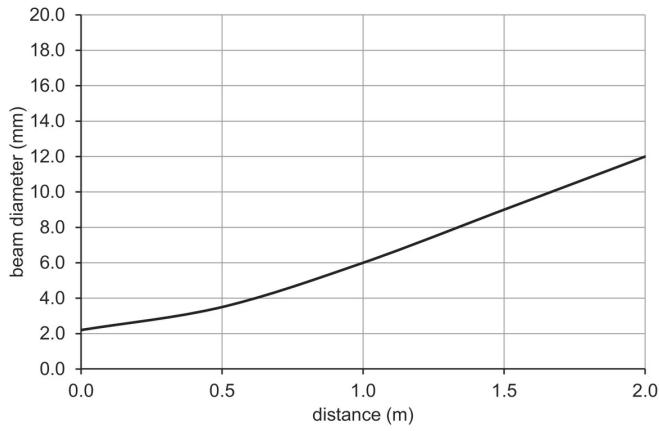
Laser warning

**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

