

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

Type	Retro-reflective sensor
Version	Single lens optics IO-Link dual channel
Light source	Pulsed red laser diode
Actual range Sb	0,8 m
Nominal range Sn	1,2 m
Smallest object recognizable typ.	3 mm at 500 mm
Polarization filter	Yes
Alignment / soiled lens indicator	Flashing output indicator
Output indicator	LED yellow
Power on indication	LED green
Sensitivity adjustment	IO-Link
Laser class	1
Distance to focus	Parallel beam
Wave length	680 nm
Suppression of reciprocal influence	Yes
Alignment optical axis	< 1,5°

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

Electrical data

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
Output current	< 50 mA (< 40 °C), sum of all outputs < 20 mA (< 50 °C), sum of all outputs
Short circuit protection	Yes
Reverse polarity protection	Yes

Communication interface

Baud rate	38,4 kBaud (COM 2)
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
IO-Link port type	Class A
Process data length	32 Bit

2021-05-06 The product features and technical data specified do not express or imply any warranty. Technical modifications subject to change.

Technical data

Communication interface

Process data structure	Bit 0 = SSC1 (presence) Bit 2 = quality Bit 3 = alarm Bit 5 = SSC4 (counter) Bit 16-31 = 16 Bit measurement
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Interface	IO-Link V1.1
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Additional data	Signal strength Excess gain Operating cycles Device temperature
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Cycle time	≥ 2,7 ms
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Mechanical data

Width / diameter	8 mm
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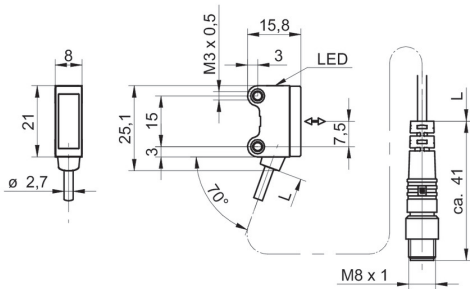
Mechanical data

Height / length	25,1 mm
Depth	15,8 mm
Type	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
Cable characteristics	PVC / PVC 4 x 0,08 mm ²

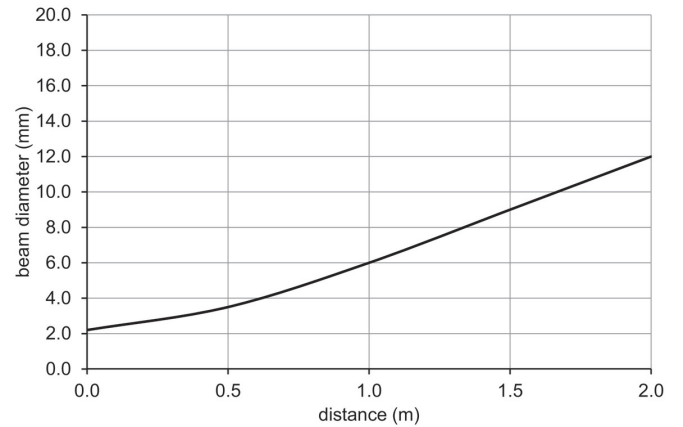
Ambient conditions

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

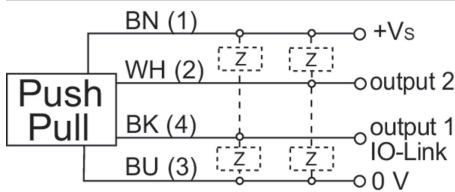
Dimension drawing



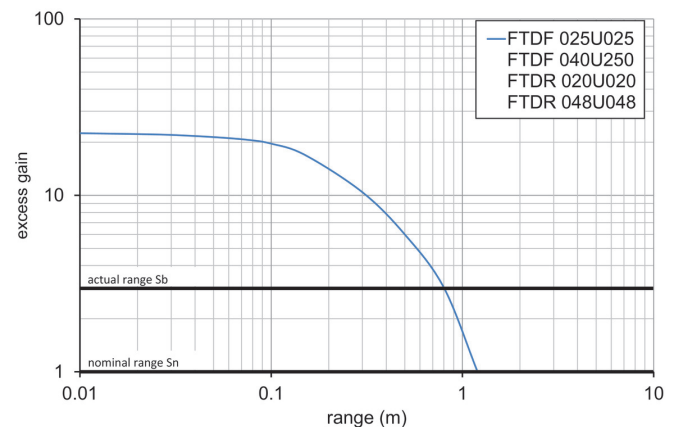
Beam characteristic (typically)



Connection diagram



Excess gain curve



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

Pin assignment

