

Overview

- SmartReflect - Safe barrier principle without reflector
- Long-term stable detection of transparent objects thanks to compensation of environmental influences
- Manipulation-proof, simple teach-in via qTeach or line teach
- IO-Link for extended parameterization options and additional diagnostic data
- Robust housing with stainless steel spacer sleeves



Picture similar



Technical data

General data

Type	Light barrier
Version	Transparency object detection
Light source	Pulsed red laser diode
Background position Sde	15 ... 180 mm
Scanning range Sa	90% ... 85% Sde
Minimal signal attenuation	5 %
Alignment / soiled lens indicator	Flashing output indicator
Power on indication	LED green
Output indicator	LED yellow
Sensing distance adjustment	Teach-in and IO-Link
Laser class	1
Distance to focus	160 mm
Wave length	680 nm
Suppression of reciprocal influence	Yes
Beam type	Point
Alignment optical axis	< 1,5°

Electrical data

Response time / release time	< 0,25 ms (High Speed Mode)
Jitter	< 0,06 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
Short circuit protection	Yes
Reverse polarity protection	Yes

Communication interface

Baud rate	230,4 kBaud (COM 3)
Adjustable parameters	Switching point Switching hysteresis Time filters LED status indicators Output logic Counter Operation mode Deactivate the sensor element Find Me function Teach-in mode Background tracking
IO-Link port type	Class A
Process data length	32 Bit

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 attenuation Excess gain Operating cycles Device temperature
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Cycle time	≥ 0,6 ms
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Mechanical data

Width / diameter	8 mm
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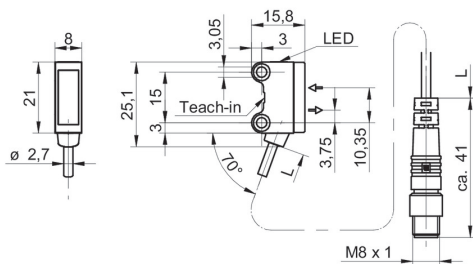
Mechanical data

Height / length	25,1 mm
Depth	15,8 mm
Type	Rectangular
Mechanical mounting	Sleeve smooth (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

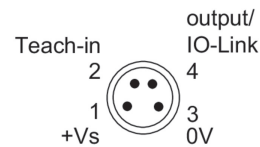
Ambient conditions

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

Dimension drawing



Pin assignment

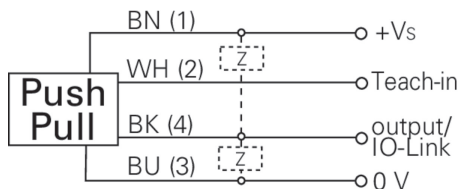


Laser warning

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

Connection diagram



Beam characteristic (typically)

