

Overview

- SmartReflect - Safe barrier principle without reflector
- 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
Background position Sde	25 ... 180 mm
Scanning range Sa	90% ... 85% Sde
Smallest object recognizable typ.	0.5 mm
Power on indication	LED green
Alignment / soiled lens indicator	Flashing output indicator
Output indicator	LED yellow
Sensing distance adjustment	Teach-in and IO-Link
Distance to focus	160 mm
Suppression of reciprocal influence	Yes
Beam type	Point
Alignment optical axis	< 1,5°

Light Source

Light source	Pulsed red laser diode
Laser class	1
Wave length	680 nm

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
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

Electrical data

Output current	50 mA
Short circuit protection	Yes
Reverse polarity protection	Yes

Communication interface

Interface	IO-Link V1.1
IO-Link port type	Class A
Baud rate	230,4 kBaud (COM 3)
Cycle time	≥ 0.6 ms
Process data length	32 Bit
Process data structure	Bit 0 = SSC1 (presence) Bit 2 = quality Bit 3 = alarm Bit 5 = SSC4 (counter) Bit 16-31 = 16 Bit measurement

Adjustable parameters

Switching point	
Time filters	
LED status indicators	
Output logic	
Counter	
Operation mode	
Deactivate the sensor element	
Find Me function	
Teach-in mode	

Additional data

Excess gain	
Operating cycles	
Device temperature	

Mechanical data

Width / diameter	8 mm
Height / length	25.1 mm
Depth	15.8 mm
Design	Rectangular
Mechanical mounting	Sleeve smooth (stainless steel)

Technical data

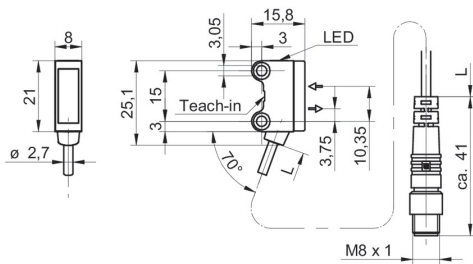
Mechanical data

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

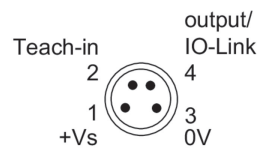
Ambient conditions

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

Dimension drawing



Pin assignment



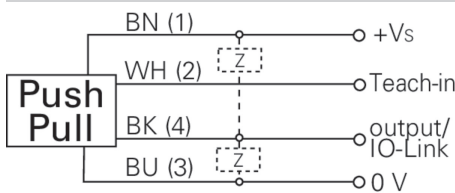
Laser warning

**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)

