

**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		Electrical data	
Type	Light barrier	Current consumption max. (no load)	20 mA (@ 10 VDC)
Light source	Pulsed red laser diode	Current consumption typ.	10 mA (@ 24 VDC)
Background position Sde	25 ... 180 mm	Voltage drop Vd	< 2 VDC
Scanning range Sa	90% ... 85% Sde	Output function	Light / dark operate
Smallest object recognizable typ.	0,5 mm	Output circuit	Push-pull
Alignment / soiled lens indicator	Flashing output indicator	Output current	< 50 mA
Power on indication	LED green	Short circuit protection	Yes
Output indicator	LED yellow	Reverse polarity protection	Yes
Sensing distance adjustment	Teach-in and IO-Link	Communication interface	
Laser class	1	Baud rate	230,4 kBaud (COM 3)
Distance to focus	160 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
Wave length	680 nm	IO-Link port type	Class A
Suppression of reciprocal influence	Yes	Process data length	32 Bit
Beam type	Point	Process data structure	Bit 0 = SSC1 (presence) Bit 2 = quality Bit 3 = alarm Bit 5 = SSC4 (counter) Bit 16-31 = 16 Bit measurement
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		

**Technical data**

**Communication interface**

Interface	IO-Link V1.1
Additional data	Excess gain Operating cycles Device temperature
Cycle time	≥ 0,6 ms

**Mechanical data**

Width / diameter	8 mm
Height / length	25,1 mm
Depth	15,8 mm
Type	Rectangular

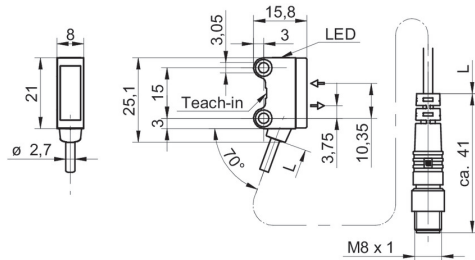
**Mechanical data**

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 <sup>2</sup>

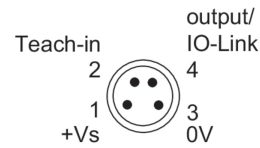
**Ambient conditions**

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

**Dimension drawing**



**Pin assignment**

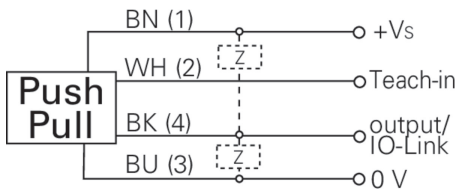


**Laser warning**

**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)**

