

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
- Quick mounting by means of M3 threaded bushes made of stainless steel



Picture similar



Technical data

General data		Electrical data	
Type	Light barrier	Output circuit	Push-pull
Version	Transparency object detection	Output current	50 mA
Background position Sde	15 ... 180 mm	Short circuit protection	Yes
Scanning range Sa	90% ... 85% Sde	Reverse polarity protection	Yes
Minimal signal attenuation	5 %	Communication interface	
Power on indication	LED green	Interface	IO-Link V1.1
Alignment / soiled lens indicator	Flashing output indicator	IO-Link port type	Class A
Output indicator	LED yellow	Baud rate	230,4 kBaud (COM 3)
Sensing distance adjustment	Teach-in and IO-Link	Cycle time	≥ 0.6 ms
Distance to focus	160 mm	Process data length	32 Bit
Suppression of reciprocal influence	Yes	Process data structure	Bit 0 = SSC1 (presence) Bit 2 = quality Bit 3 = alarm Bit 5 = SSC4 (counter) Bit 16-31 = 16 Bit measurement
Beam type	Point	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
Alignment optical axis	< 1,5°	Additional data	Signal attenuation Excess gain Operating cycles Device temperature
Light Source		Mechanical data	
Light source	Pulsed red laser diode	Width / diameter	8 mm
Laser class	1	Height / length	25.1 mm
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		

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

Technical data

Mechanical data

Depth	15.8 mm
Design	Rectangular
Mechanical mounting	Threaded sleeves M3 (stainless steel)
Housing material	Plastic (ASA, PMMA)
Front (optics)	PMMA

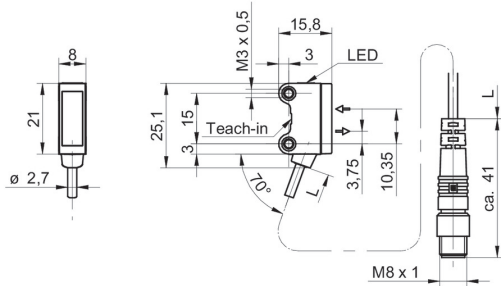
Mechanical data

Connection types	Flylead connector M8 4 pin, L=200 mm
Cable characteristics	PVC / PVC 4 x 0.08 mm ²

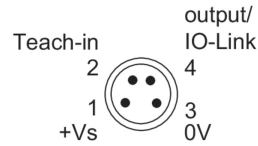
Ambient conditions

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

Dimension drawing



Pin assignment



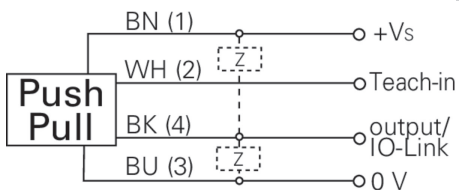
Laser warning

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)

