

overview

- Extended functional reserve capacities for maximum reliability
- Long-term stable detection of transparent objects thanks to compensation of environmental influences
- Parallel laser beam for uniform detection over the measuring range
- 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



Technical data

general data		electrical data	
type	retro-reflective sensor	current consumption typ.	10 mA (@ 24 VDC)
version	transparency object detection	voltage drop Vd	< 2 VDC
light source	pulsed red laser diode	output function	light / dark operate
actual range Sb	0,8 m	output circuit	push-pull
nominal range Sn	1,2 m	output current	< 50 mA
polarization filter	yes	short circuit protection	yes
minimal signal attenuation	5 %	reverse polarity protection	yes
alignment / soiled lens indicator	flashing output indicator	communication interface	
output indicator	LED yellow	baud rate	230,4 kBaud (COM 3)
power on indication	LED green	adjustable parameters	switching point switching hysteresis time filters LED status indicators output logic counter deactivate the sensor element Find Me function Teach-in mode background tracking
sensitivity adjustment	Teach-in and IO-Link	IO-Link port type	Class A
laser class	1	process data length	32 Bit
distance to focus	parallel beam	process data structure	Bit 0 = SSC1 (presence) Bit 2 = quality Bit 3 = alarm Bit 5 = SSC4 (counter) Bit 16-31 = 16 Bit measurement
wave length	680 nm	interface	IO-Link V1.1
suppression of reciprocal influence	yes		
alignment optical axis	< 1,5°		
electrical data			
response time / release time	< 0,25 ms		
jitter	< 0,06 ms		
voltage supply range +Vs	10 ... 30 VDC		
current consumption max. (no load)	20 mA (@ 10 VDC)		

Technical data

communication interface

additional data	signal attenuation 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

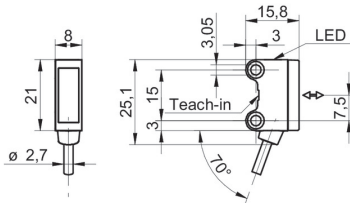
mechanical data

mechanical mounting	sleeve smooth (stainless steel)
housing material	plastic (ASA, PMMA)
front (optics)	PMMA
connection types	cable 4 pin, 2 m
cable characteristics	PVC / PVC 4 x 0,08 mm ²

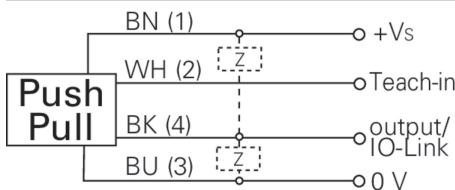
ambient conditions

operating temperature	-20 ... +50 °C
protection class	IP 67

dimension drawing



connection diagram

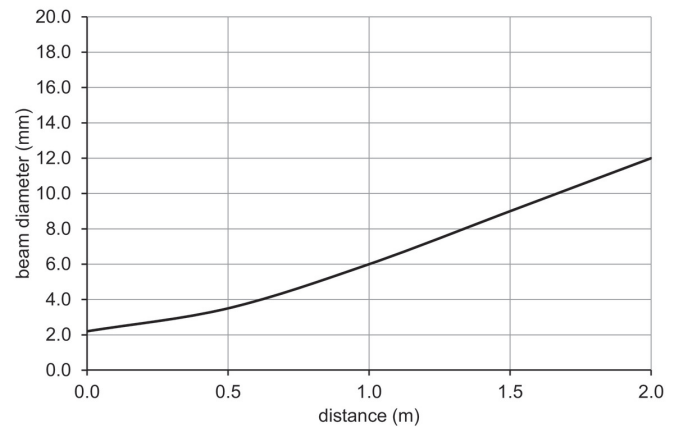


laser warning



IEC 60825-1/2014
Complies with 21 CFR 1040.10 and 1040.11
except for deviations pursuant to laser
notice No. 50, dated June 24, 2007

beam characteristic (typically)



excess gain curve

