

overview

- Extended functional reserve capacities for maximum reliability
- Object detection through smallest holes and gaps without blind area thanks to single-lens optics
- 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
- Quick mounting by means of M3 threaded bushes made of stainless steel



Picture similar



Technical data

general data		electrical data	
type	retro-reflective sensor	current consumption max. (no load)	20 mA (@ 10 VDC)
version	single lens optics	current consumption typ.	10 mA (@ 24 VDC)
light source	pulsed red laser diode	voltage drop Vd	< 2 VDC
actual range Sb	0,8 m	output function	light / dark operate
nominal range Sn	1,2 m	output circuit	push-pull
smallest object recognizable typ.	3 mm at 500 mm	output current	< 50 mA
polarization filter	yes	short circuit protection	yes
alignment / soiled lens indicator	flashing output indicator	reverse polarity protection	yes
output indicator	LED yellow	communication interface	
power on indication	LED green	baud rate	230,4 kBaud (COM 3)
sensitivity adjustment	Teach-in and IO-Link	adjustable parameters	switching point time filters LED status indicators output logic counter operation mode deactivate the sensor element Find Me function Teach-in mode
laser class	1	IO-Link port type	Class A
distance to focus	parallel beam	process data length	32 Bit
wave length	680 nm	process data structure	Bit 0 = SSC1 (presence) Bit 2 = quality Bit 3 = alarm Bit 5 = SSC4 (counter) Bit 16-31 = 16 Bit measurement
suppression of reciprocal influence	yes		
alignment optical axis	< 1,5°		
electrical data			
response time / release time	< 0,05 ms (High Speed Mode)		
jitter	< 0,02 ms (High Speed Mode)		
voltage supply range +Vs	10 ... 30 VDC		

Technical data

communication interface

interface	IO-Link V1.1
additional data	signal strength 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

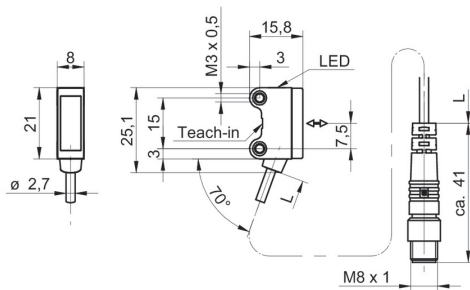
mechanical data

type	rectangular
mechanical mounting	threaded sleeves M3 (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

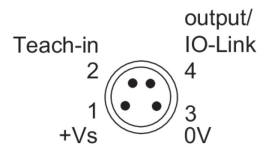
ambient conditions

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

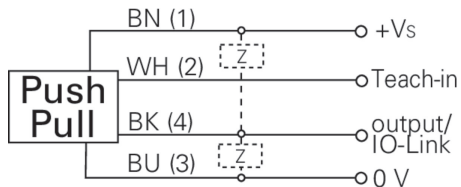
dimension drawing



pin assignment



connection diagram

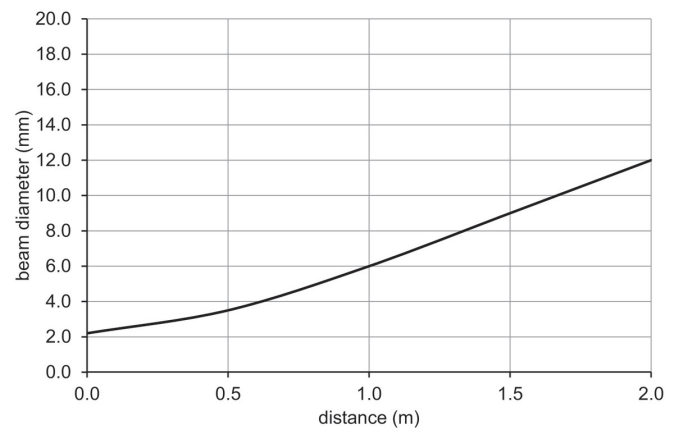


laser warning

**CLASS 1 LASER
PRODUCT**

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

