

overview

- Reliable intensity-based object detection
- 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

type	intensity difference
light source	pulsed red LED
sensing distance Tw	20 ... 200 mm
smallest object recognizable typ.	2 mm at 100 mm
alignment / soiled lens indicator	flashing output indicator
power on indication	LED green
output indicator	LED yellow
sensing distance adjustment	Teach-in and IO-Link
wave length	644 nm
suppression of reciprocal influence	yes
beam type	point
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)	40 mA (@ 10 VDC)
current consumption typ.	16 mA (@ 24 VDC)
voltage drop Vd	< 2 VDC
output function	light / dark operate

electrical data

output circuit	push-pull
output current	< 50 mA
short circuit protection	yes
reverse polarity protection	yes

communication interface

baud rate	230,4 kBaud (COM 3)
adjustable parameters	switching point time filters LED status indicators output logic counter deactivate the sensor element Find Me function Teach-in mode

IO-Link port type	Class A
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

interface	IO-Link V1.1
additional data	signal strength excess gain operating cycles device temperature

cycle time	≥ 0,6 ms
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Technical data

mechanical data

width / diameter	8 mm
height / length	25,1 mm
depth	15,8 mm
type	rectangular
mechanical mounting	sleeve smooth (stainless steel)
housing material	plastic (ASA, PMMA)

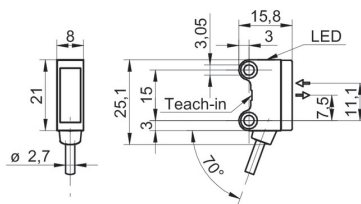
mechanical data

front (optics)	PMMA
connection types	cable 4 pin, 2 m
cable characteristics	PVC / PVC 4 x 0,08 mm ²

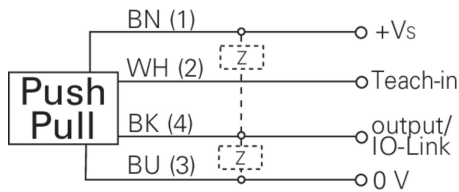
ambient conditions

operating temperature	-25 ... +50 °C
protection class	IP 67

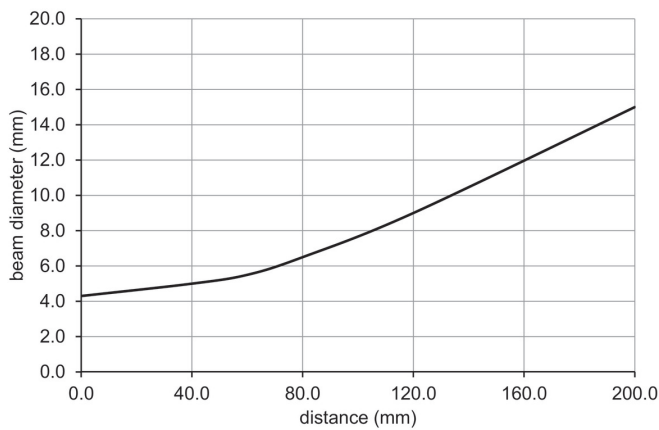
dimension drawing



connection diagram



beam characteristic (typically)



relative receiving signal

