

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



## 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

### Technical data

#### mechanical data

width / diameter	8 mm
height / length	25,1 mm
depth	15,8 mm
type	rectangular
mechanical mounting	threaded sleeves M3 (stainless steel)
housing material	plastic (ASA, PMMA)

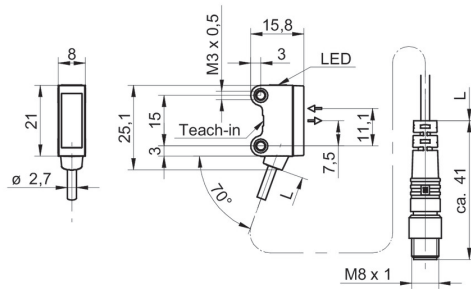
#### mechanical data

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>

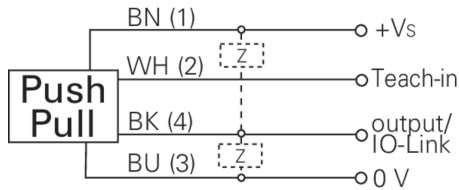
#### ambient conditions

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

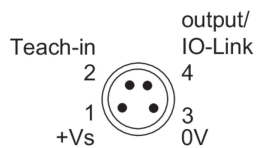
### dimension drawing



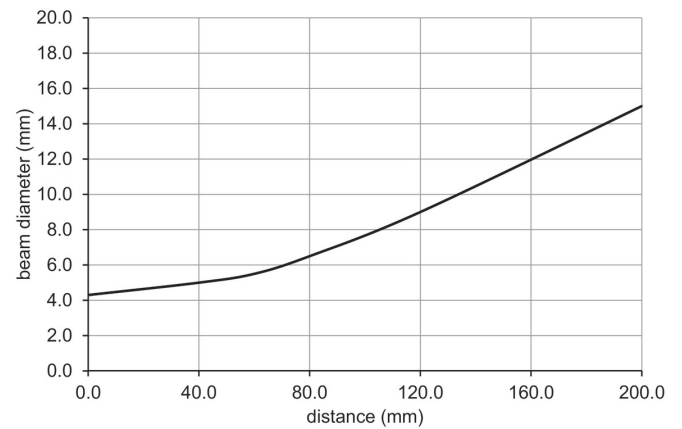
### connection diagram



### pin assignment



### beam characteristic (typically)



### relative receiving signal

