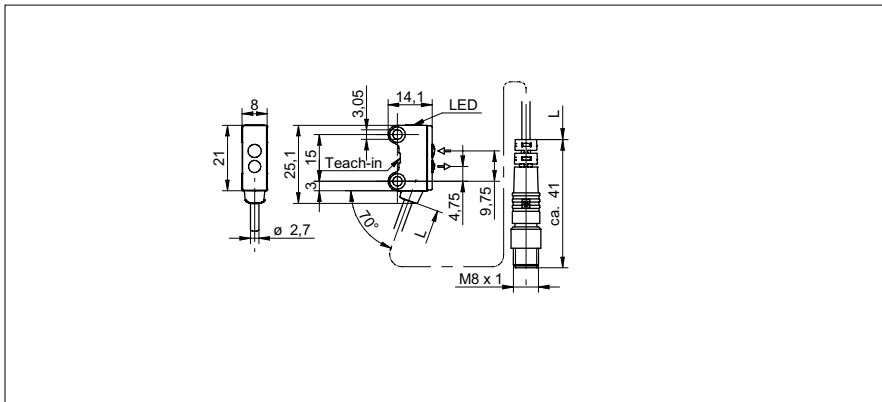


# Diffuse sensors with background suppression

**O200.GR.F-11210291**

**dimension drawing**



**general data**

type	background suppression
version	fixed focus
light source	pulsed red LED
sensing distance Tw	8 ... 13,5 mm
sensing range Tb	3 ... 15 mm
smallest object recognizable typ.	0,05 mm at 10 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
alignment optical axis	< 1,5°

**electrical data**

response time / release time	< 0,25 ms (High Speed Mode)
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
output circuit	push-pull
output current	< 50 mA
short circuit protection	yes
reverse polarity protection	yes

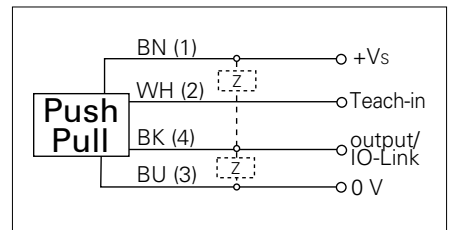
**mechanical data**

width / diameter	8 mm
height / length	25,1 mm
depth	14,1 mm
type	rectangular
mechanical mounting	sleeve smooth (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 <sup>2</sup>

**photo**



**connection diagram**



**IO-Link**



• qTeach

## Diffuse sensors with background suppression

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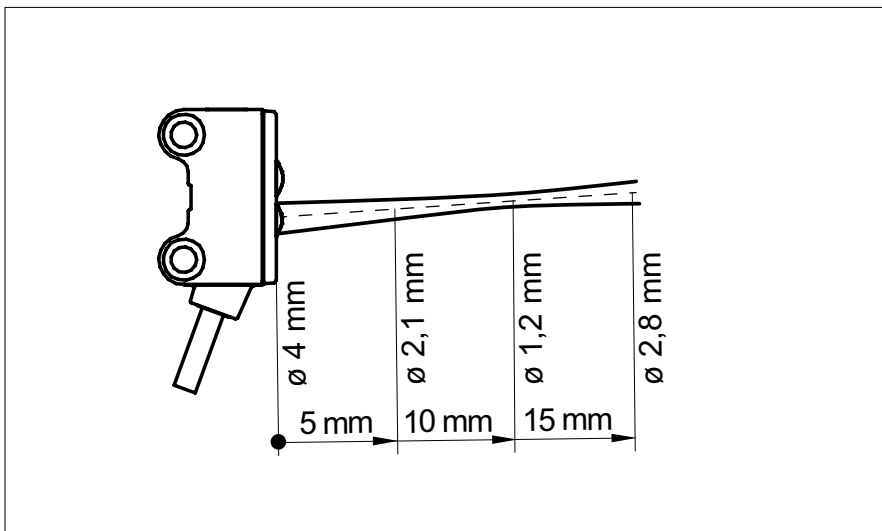
### ambient conditions

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

### communications interface

baud rate	230,4 kBaud (COM 3)
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
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	excess gain operating cycles device temperature
cycle time	≥ 0,6 ms

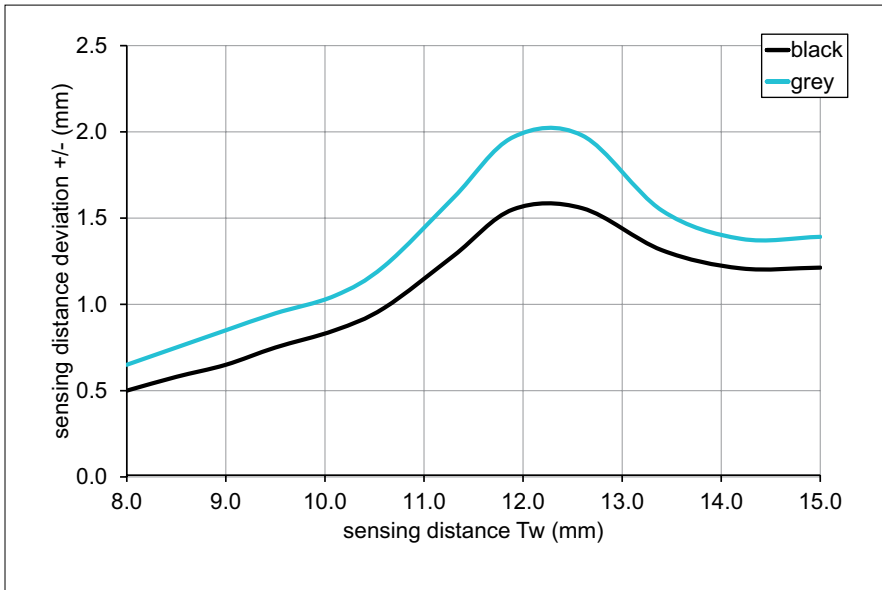
### beam characteristic (typically)



**Diffuse sensors with background suppression**

**O200.GR.F-11210291**

sensing distance diagram



hysteresis curve

