

overview

- Outstanding reliability and unrivalled immunity against ambient light
- Focused laser beam for small objects or gaps
- qTeach - tamper-proof, simple teach-in with ferromagnetic tool
- Robust housing with stainless steel spacer sleeves



Technical data

general data

type	background suppression
light source	pulsed red laser diode
sensing distance Tw	20 ... 120 mm
sensing range Tb	3 ... 132 mm
smallest object recognizable typ.	0,05 mm at 40 mm
alignment / soiled lens indicator	flashing output indicator
power on indication	LED green
output indicator	LED yellow
sensing distance adjustment	qTeach
laser class	1
distance to focus	40 mm
wave length	680 nm
suppression of reciprocal influence	yes
beam type	point
alignment optical axis	< 1,5°

electrical data

response time / release time	≤ 0,5 ms
jitter	≤ 0,12 ms

electrical data

voltage supply range +Vs	10 ... 30 VDC
current consumption max. (no load)	20 mA (@ 10 VDC)
current consumption typ.	10 mA (@ 24 VDC)
voltage drop Vd	< 2 VDC
output function	light / dark operate
output circuit	PNP complementary
output current	< 50 mA
short circuit protection	yes
reverse polarity protection	yes

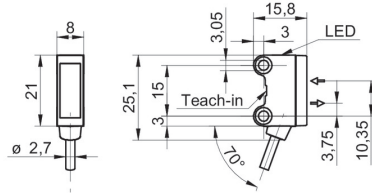
mechanical data

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

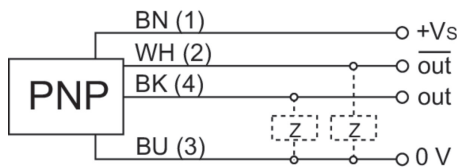
ambient conditions

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

dimension drawing



connection diagram



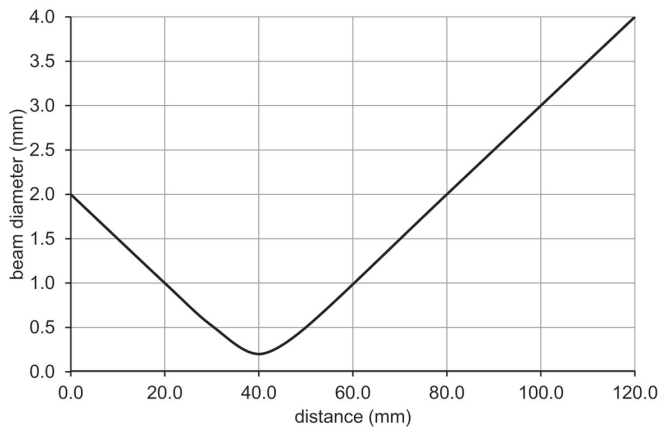
laser warning

**CLASS 1 LASER
PRODUCT**

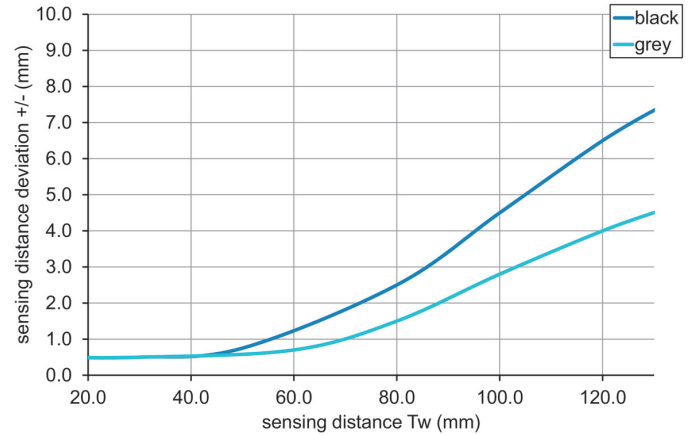
IEC 60825-1/2014

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)



sensing distance diagram



hysteresis curve

