

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
- qTeach - tamper-proof, simple teach-in with ferromagnetic tool
- Robust housing with stainless steel spacer sleeves



Technical data

general data

type	retro-reflective sensor
version	single lens optics
light source	pulsed red laser diode
actual range Sb	0,8 m
nominal range Sn	1,2 m
smallest object recognizable typ.	3 mm at 500 mm
polarization filter	yes
alignment / soiled lens indicator	flashing output indicator
output indicator	LED yellow
power on indication	LED green
sensitivity adjustment	qTeach
laser class	1
distance to focus	parallel beam
wave length	680 nm
suppression of reciprocal influence	yes
alignment optical axis	< 1,5°

electrical data

response time / release time	< 0,1 ms
jitter	< 0,03 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

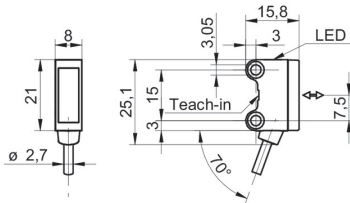
mechanical data

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

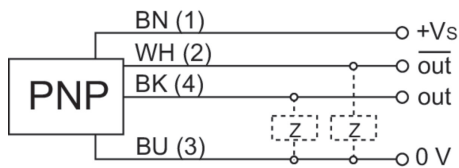
ambient conditions

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

dimension drawing



connection diagram



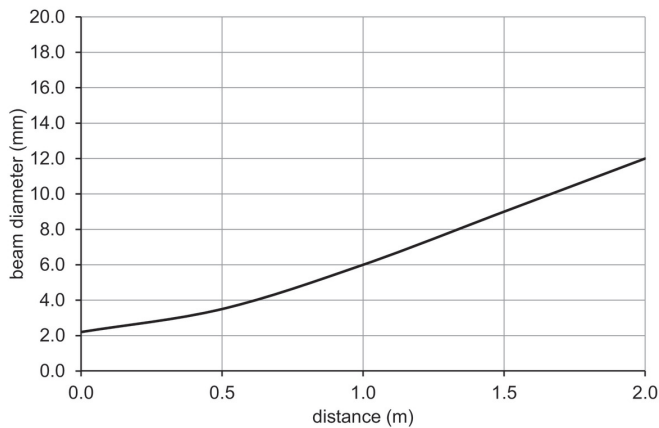
laser warning

**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)



excess gain curve

