

overview

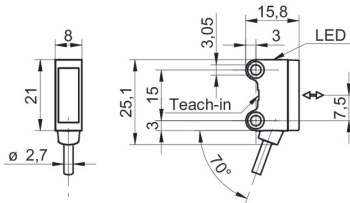
- Extended functional reserve capacities for maximum reliability
- Object detection through smallest holes and gaps without blind area thanks to single-lens optics
- Parallel laser beam for uniform detection over the measuring range
- qTeach - tamper-proof, simple teach-in with ferromagnetic tool
- Robust housing with stainless steel spacer sleeves



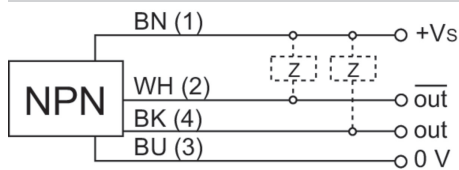
Technical data

general data		electrical data	
type	retro-reflective sensor	voltage supply range +Vs	10 ... 30 VDC
version	single lens optics	current consumption max. (no load)	20 mA (@ 10 VDC)
light source	pulsed red laser diode	current consumption typ.	10 mA (@ 24 VDC)
actual range Sb	0,8 m	voltage drop Vd	< 2 VDC
nominal range Sn	1,2 m	output function	light / dark operate
smallest object recognizable typ.	3 mm at 500 mm	output circuit	NPN complementary
polarization filter	yes	output current	< 50 mA
alignment / soiled lens indicator	flashing output indicator	short circuit protection	yes
output indicator	LED yellow	reverse polarity protection	yes
power on indication	LED green	mechanical data	
sensitivity adjustment	qTeach	width / diameter	8 mm
laser class	1	height / length	25,1 mm
distance to focus	parallel beam	depth	15,8 mm
wave length	680 nm	type	rectangular
suppression of reciprocal influence	yes	mechanical mounting	sleeve smooth (stainless steel)
alignment optical axis	< 1,5°	housing material	plastic (ASA, PMMA)
electrical data		front (optics)	PMMA
response time / release time	< 0,1 ms	connection types	cable 4 pin, 2 m
jitter	< 0,03 ms	cable characteristics	PVC / PVC 4 x 0,08 mm²
		ambient conditions	
		operating temperature	-20 ... +50 °C
		protection class	IP 67

dimension drawing



connection diagram



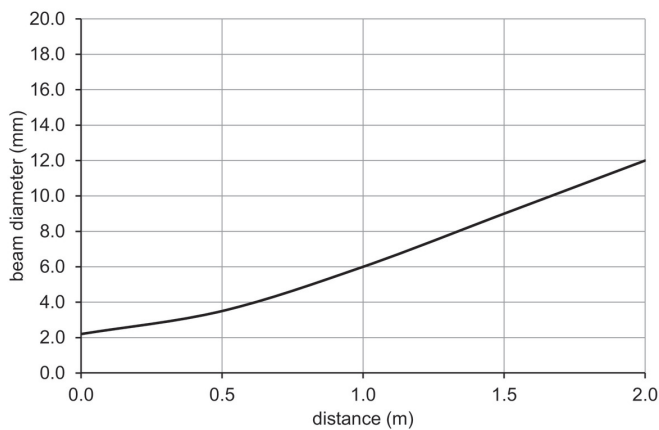
laser warning

**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

