

#### overview

- Outstanding reliability and unrivalled immunity against ambient light
- Linear beam for complete detection of irregular, perforated objects
- Precise detection thanks to laser light source
- qTeach - tamper-proof, simple teach-in with ferromagnetic tool
- Quick mounting by means of M3 threaded bushes made of stainless steel



#### Technical data

##### general data

type	background suppression
version	line beam
light source	pulsed red laser diode
sensing distance Tw	20 ... 120 mm
sensing range Tb	3 ... 122 mm
smallest object recognizable typ.	8 mm at 60 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	60 mm
wave length	680 nm
suppression of reciprocal influence	yes
beam type	line
alignment optical axis	< 1,5°

##### electrical data

response time / release time	≤ 2 ms
jitter	≤ 2 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

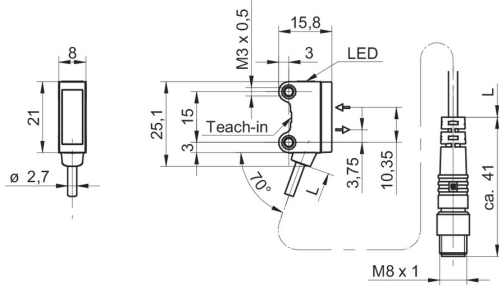
##### mechanical data

width / diameter	8 mm
height / length	25,1 mm
depth	15,8 mm
type	rectangular
mechanical mounting	threaded sleeves M3 (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 mm²

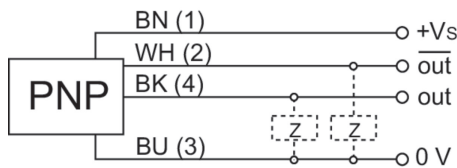
##### ambient conditions

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

#### dimension drawing



#### connection diagram

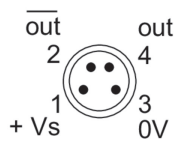


#### laser warning

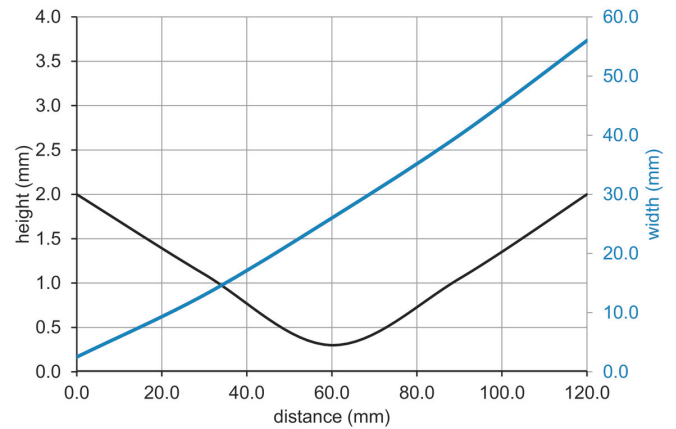
**CLASS 1 LASER  
PRODUCT**

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

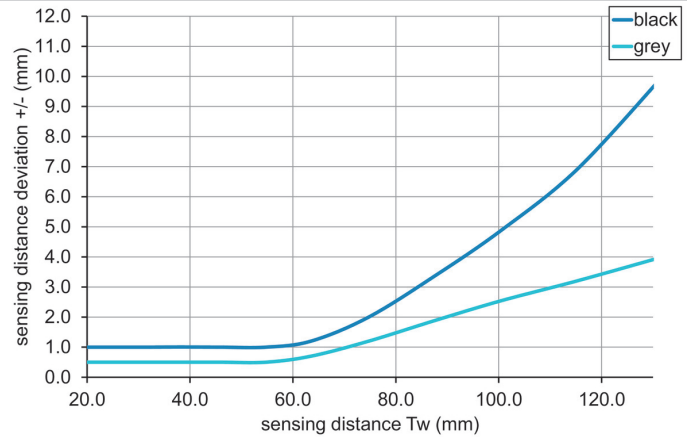
#### pin assignment



#### beam characteristic (typically)



#### sensing distance diagram



#### hysteresis curve

