

O200.GL-NV1T.72NV/F040

Diffuse sensors with background suppression - miniature

Article number: 11231118

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	NPN complementary
output current	< 50 mA
short circuit protection	yes
reverse polarity protection	yes

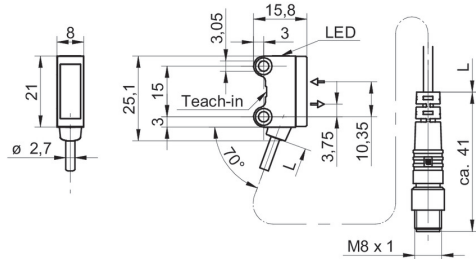
mechanical data

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	flylead connector M8 4 pin, L=200 mm
cable characteristics	PVC / PVC 4 x 0,08 mm ²

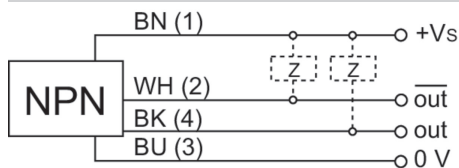
ambient conditions

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

dimension drawing



connection diagram



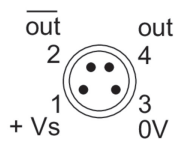
laser warning

**CLASS 1 LASER
PRODUCT**

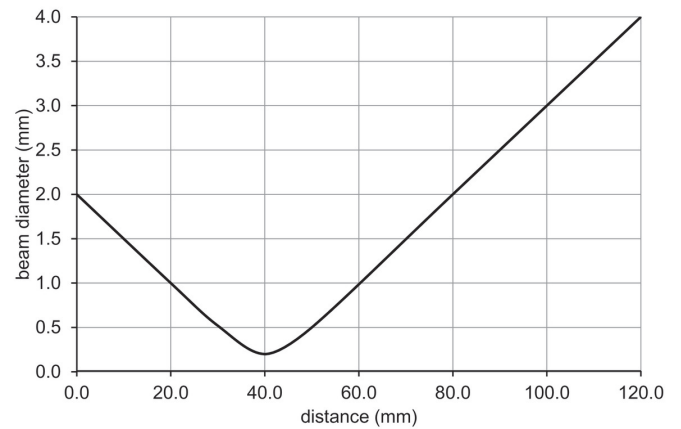
IEC 60825-1/2014

Complies with 21 CFR 1040.10 and 1040.11
except for deviations pursuant to laser
notice No. 50, dated June 24, 2007

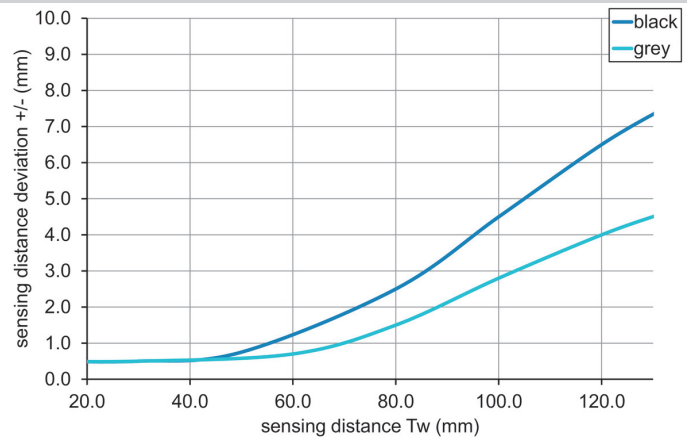
pin assignment



beam characteristic (typically)



sensing distance diagram



hysteresis curve

