Diffuse sensors with background suppression

O200.GL-NV1T.72CV/E022_F060_H006

Diffuse sensors with background suppression - miniature

Article number: 11231154

Overview

- Outstanding reliability and unrivalled immunity against ambient light
- Line 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

Picture similar

Technical data

General data

Type	Background suppression
Version	Line beam
Sensing distance Tw	20 … 120 mm
Sensing range Tb	3 … 122 mm
Smallest object recognizable typ.	8 mm at 60 mm
Power on indication	LED green
Alignment / soiled lens indicator	Flashing output indicator
Output indicator	LED yellow
Sensing distance adjustment	qTeach
Distance to focus	60 mm
Suppression of reciprocal influence	Yes
Beam type	Line
Alignment optical axis	< 1,5°

Light Source

Light source	Pulsed red laser diode
Laser class	1
Wave length	680 nm

Electrical data

Response time / release time	≤ 2 ms

Electrical data

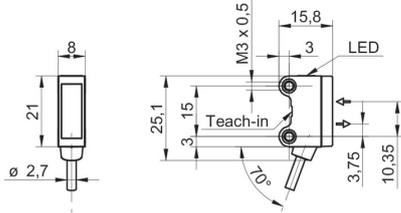|	
Jitter	≤ 2 ms
Voltage supply range +Vs	10 … 30 VDC
Current consumption max. (no load)	20 mA (@ 10 VDC)
Current consumption typ.	10 mA (@ 24 VDC)
Voltage drop Vd	<2 VDC
Output function	Light / dark operate
Output circuit	NPN complementary
Output current	50 mA
Short circuit protection	Yes
Reverse polarity protection	Yes

Mechanical data

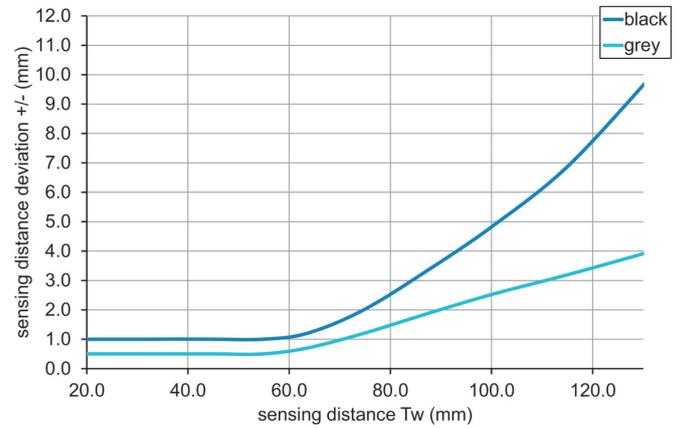|	
Width / diameter	8 mm
Height / length	25.1 mm
Depth	15.8 mm
Design	Rectangular
Mechanical mounting	Threaded sleeves M3 (stainless steel)
Housing material	Plastic (ASA, PMMA)
Front (optics)	PMMA
Connection types	Cable 4 pin, 2 m
Cable characteristics	PVC / PVC 4 x 0.08 mm²

Ambient conditions

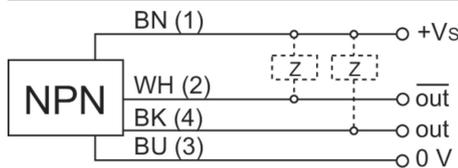|	
Protection class	IP 67
Operating temperature	-20 … +50 °C

2024-02-16

Dimension drawing
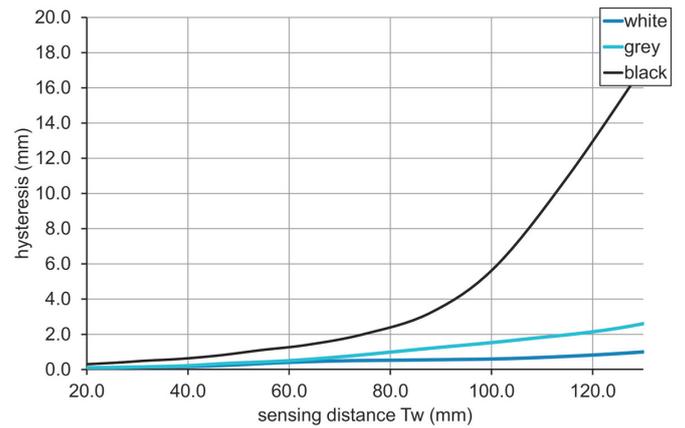

Laser warning

CLASS 1 LASER PRODUCT

IEC 60825-1/2014
Complies with 21 CFR 1040.10 and
1040.11 except for conformance with
IEC 60825-1 Ed. 3., as described in
Laser Notice No. 56, dated May 8, 2019

Connection diagram

Beam characteristic (typically)

Sensing distance diagram

Hysteresis curve