Diffuse sensors with background suppression

O200.GL-NV1T.72NV/F160_H006_B005

Diffuse sensors with background suppression - miniature

Article number: 11231160

Overview

- Outstanding reliability and unrivalled immunity against ambient light
- Extra range - best-in-class
- 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
Sensing distance Tw	20 … 175 mm
Sensing range Tb	3 … 192 mm
Smallest object recognizable typ.	0.5 mm at 100 mm
Power on indication	LED green
Alignment / soiled lens indicator	Flashing output indicator
Output indicator	LED yellow
Sensing distance adjustment	qTeach
Distance to focus	160 mm
Suppression of reciprocal influence	Yes
Beam type	Point
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	≤ 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
Design	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	
Protection class	IP 67
Operating temperature	-20 … +50 °C

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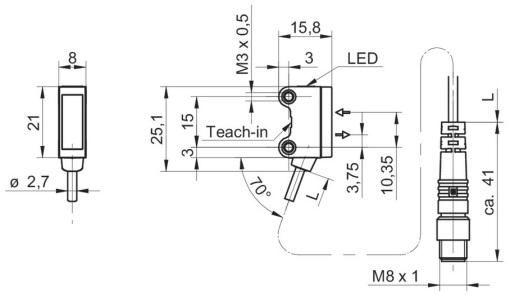
Dimension drawing

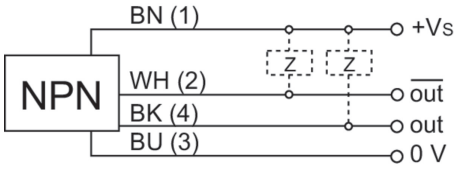


Laser warning

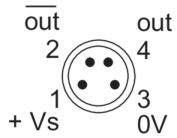
CLASS 1 LASER PRODUCT

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

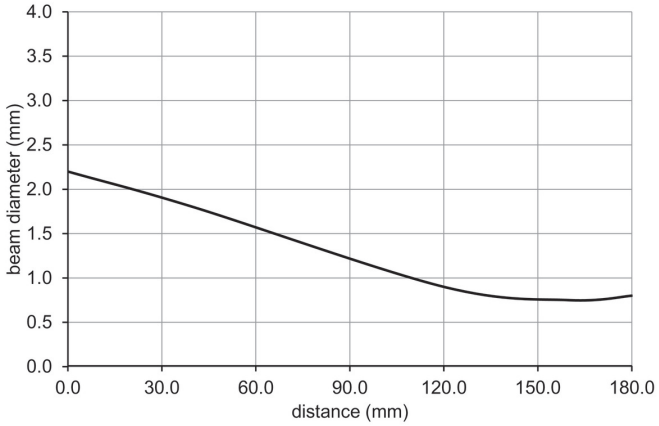
Connection diagram



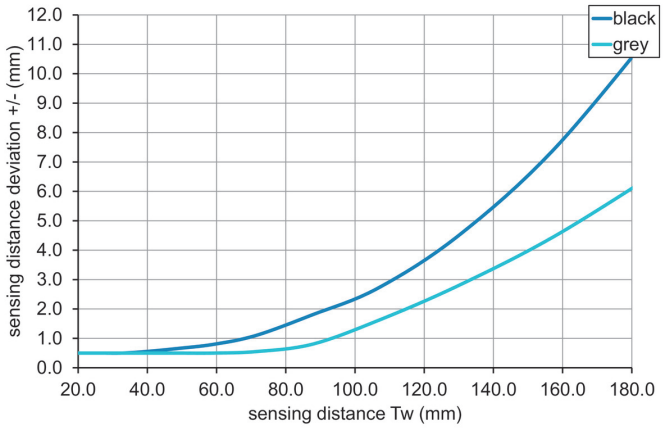
Pin assignment



Beam characteristic (typically)



Sensing distance diagram



Hysteresis curve