

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
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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	PNP complementary
Output current	50 mA
Short circuit protection	Yes
Reverse polarity protection	Yes

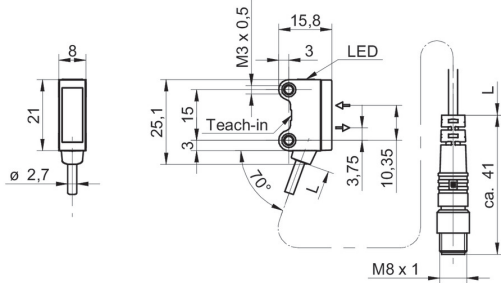
Mechanical data

Width / diameter	8 mm
Height / length	25.1 mm
Depth	15.8 mm
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 mm ²

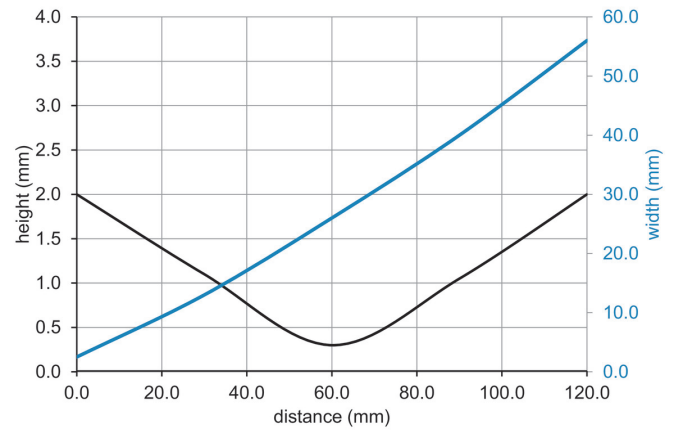
Ambient conditions

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

Dimension drawing



Beam characteristic (typically)

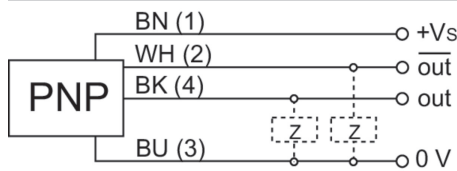


Laser warning

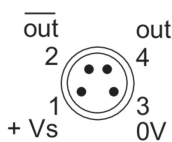
CLASS 1 LASER PRODUCT

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

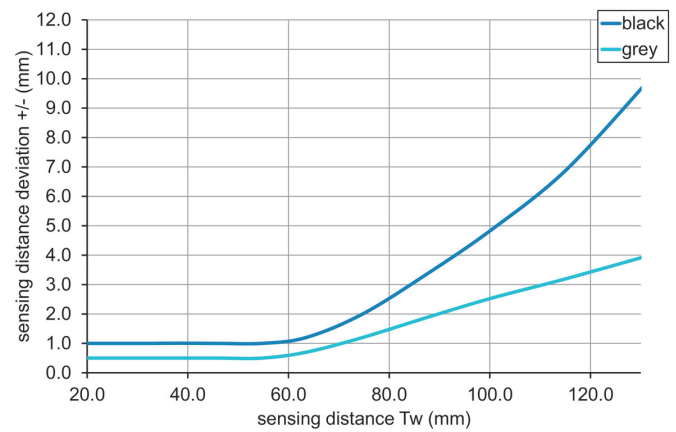
Connection diagram



Pin assignment



Sensing distance diagram



Hysteresis curve

