

**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



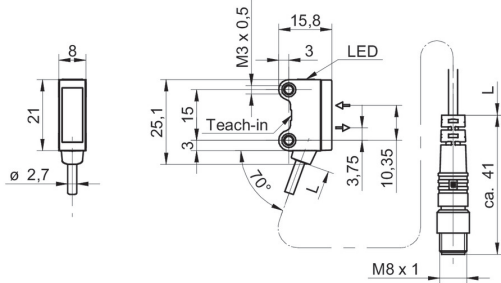
Picture similar



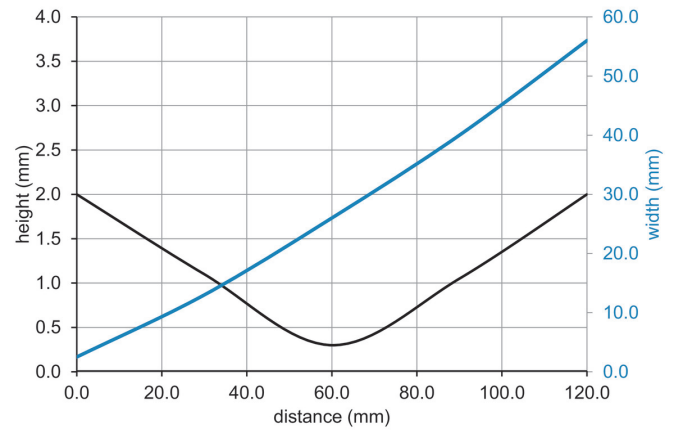
**Technical data**

General data		Electrical data	
Type	Background suppression	Voltage supply range +Vs	10 ... 30 VDC
Version	Line beam	Current consumption max. (no load)	20 mA (@ 10 VDC)
Light source	Pulsed red laser diode	Current consumption typ.	10 mA (@ 24 VDC)
Sensing distance Tw	20 ... 120 mm	Voltage drop Vd	< 2 VDC
Sensing range Tb	3 ... 122 mm	Output function	Light / dark operate
Smallest object recognizable typ.	8 mm at 60 mm	Output circuit	NPN complementary
Alignment / soiled lens indicator	Flashing output indicator	Output current	< 50 mA
Power on indication	LED green	Short circuit protection	Yes
Output indicator	LED yellow	Reverse polarity protection	Yes
Sensing distance adjustment	qTeach	Mechanical data	
Laser class	1	Width / diameter	8 mm
Distance to focus	60 mm	Height / length	25,1 mm
Wave length	680 nm	Depth	15,8 mm
Suppression of reciprocal influence	Yes	Type	Rectangular
Beam type	Line	Mechanical mounting	Threaded sleeves M3 (stainless steel)
Alignment optical axis	< 1,5°	Housing material	Plastic (ASA, PMMA)
Electrical data		Front (optics)	PMMA
Response time / release time	≤ 2 ms	Connection types	Flylead connector M8 4 pin, L=200 mm
Jitter	≤ 2 ms	Cable characteristics	PVC / PVC 4 x 0,08 mm <sup>2</sup>
		Ambient conditions	
		Protection class	IP 67
		Operating temperature	-20 ... +50 °C

**Dimension drawing**



**Beam characteristic (typically)**

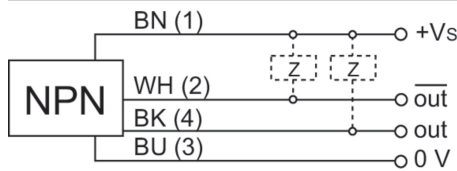


**Laser warning**

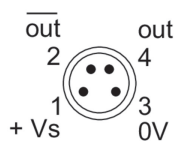
**CLASS 1 LASER PRODUCT**

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

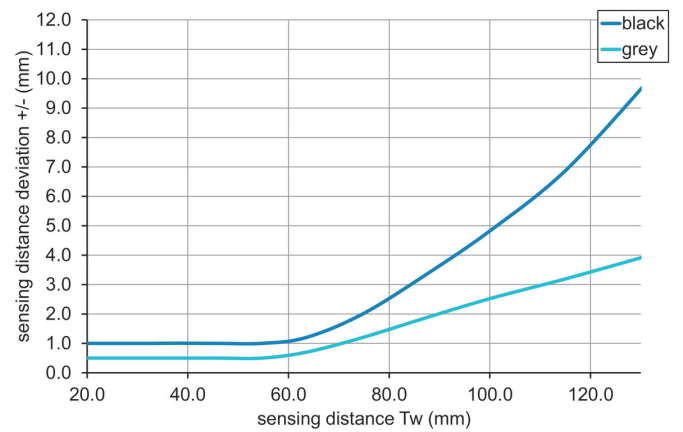
**Connection diagram**



**Pin assignment**



**Sensing distance diagram**



**Hysteresis curve**

