

**Overview**

- Reliable also on very dark and shiny objects
- Manipulation-proof, simple teach-in via qTeach or line teach
- Longest distances thanks to time of flight principle
- Laser light source for an accurate switching behavior



Picture similar



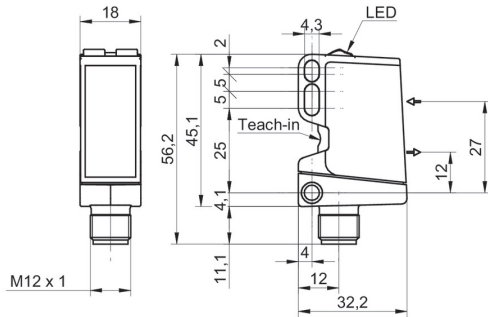
**Technical data**

General data		Electrical data	
Type	Background suppression	Voltage drop Vd	< 2 VDC
Version	Time of Flight	Output function	Light operate, complementary
Light source	Pulsed red laser diode	Output circuit	NPN
Sensing distance Tw	150 ... 2500 mm	Output current	< 50 mA, sum of all outputs
Sensing range Tb	100 ... 2625 mm	Short circuit protection	Yes
Repeat accuracy	≤ 1200 ... 4300 μm	Reverse polarity protection	Yes
Temperature drift	± 15 mm	Mechanical data	
Power on indication	LED green	Width / diameter	18 mm
Output indicator	LED yellow / LED red	Height / length	45 mm
Sensing distance adjustment	qTeach / external	Depth	32 mm
Laser class	1	Type	Rectangular
Distance to focus	1500 mm	Housing material	Plastic (ASA, PMMA)
Wave length	680 nm	Front (optics)	PMMA
Suppression of reciprocal influence	Yes	Connection types	Connector M12 5 pin
Beam type	Point	Ambient conditions	
Alignment optical axis	< 1°	Protection class	IP 67
Electrical data		Operating temperature	-20 ... +50 °C
Response time / release time	< 8 ms	Storage temperature	-40 ... +70 °C
Voltage supply range +Vs	12 ... 30 VDC	Vibration (sinusoidal)	IEC 60068-2-6:2008 10 g at f = 10 - 2000 Hz, duration 150 min per axis
Current consumption max. (no load)	60 mA	Shock (semi-sinusoidal)	IEC 60068-2-27:2009 50 g / 11 ms, 10 impulses per axis and direction

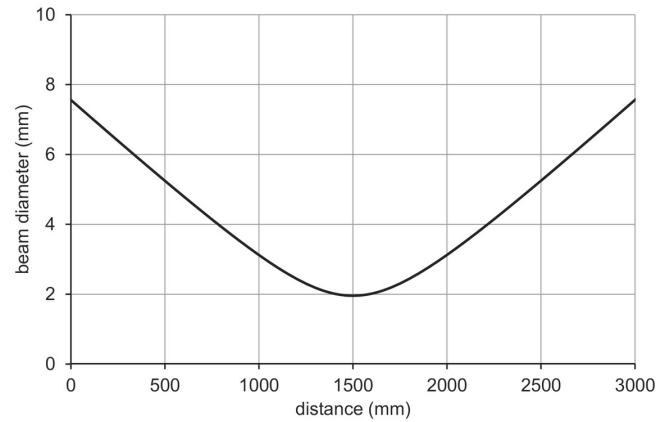
**Remarks**

- Measurement on 90% remission (white)

**Dimension drawing**



**Beam characteristic (typically)**

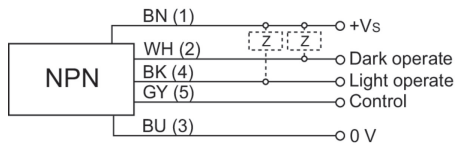


**Laser warning**

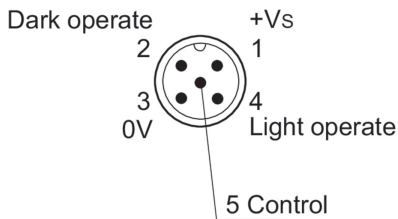
**CLASS 1 LASER  
PRODUCT**

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

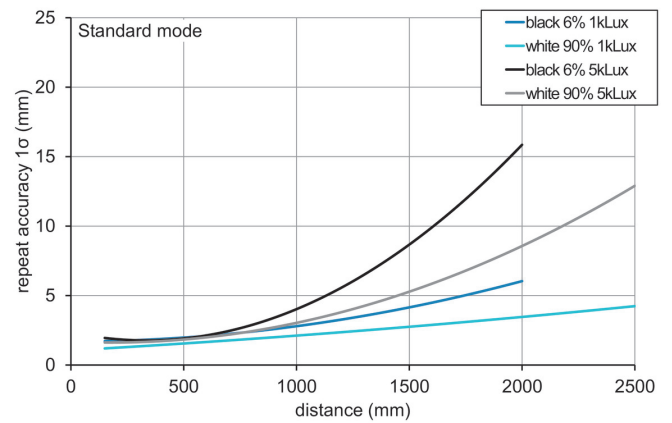
**Connection diagram**



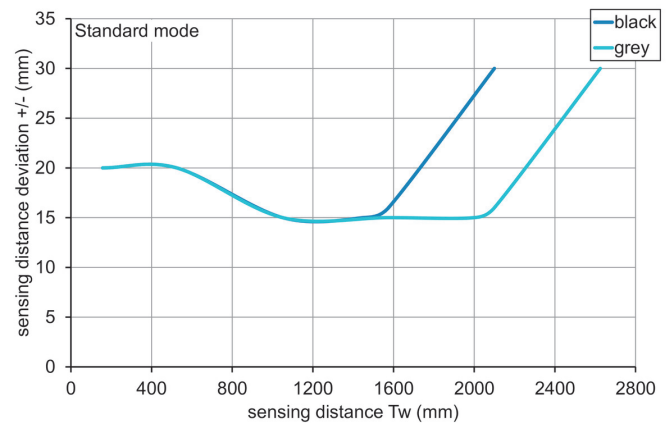
**Pin assignment**



**Repeat accuracy**



**Sensing distance diagram**



**Hysteresis curve**

