SICK.COM



DATA SHEET

WTT2SL-2P3292

WTT2 PowerProx
Time-of-flight sensors

SICK Sensor Intelligence



Illustration may differ

TIME-OF-FLIGHT SENSORS

WTT2SL-2P3292

ORDERING INFORMATION

Type	part no.
WTT2SL-2P3292	1085602

Further device versions and accessories at www.sick.com/WTT2_PowerProx

DETAILED TECHNICAL DATA

FEATURES

Functional principle	Photoelectric proximity sensor
Functional principle detail	Background suppression, Optical time-of-flight
Housing design (light emission)	Rectangular
Sensing range max.	50 mm ... 800 mm [1]
Sensing range	50 mm ... 800 mm [1]
Type of light	Infrared light
Light source	Laser [2]
Light spot size (distance)	Ø 10 mm (300 mm)
Wave length	940 nm
Laser class	1 [3]
Adjustment	Single teach-in button [4]
Special applications	Detecting small objects
Safety-related parameters	
$MTTF_D$	925 years
DC_{avg}	0 %

[1] Object with 6 ... 90% remission (based on standard white, DIN 5033).

[2] Average service life: 50,000 h at T_U = +25 °C.

[3] Do not intentionally look into the laser beam. Never point the laser beam at people's eyes.

[4] Teach-Offset 15 mm.

ELECTRONICS

Supply voltage U_B	10 V DC ... 30 V DC [1]
Ripple	< 5 V_{pp} [2]
Current consumption	20 mA [3]
Switching output	PNP
Switching mode	Light/dark switching
Output current $I_{max.}$	≤ 50 mA
Response time	Typ. 90 ms [4]
Switching frequency	5 Hz [5]
Analog output	-
Circuit protection	A [6] B [7] D [8]
Protection class	III
Enclosure rating	IP67

[1] Limit values. Operated in short-circuit protected network: max. 8 A.

[2] May not fall below or exceed U_V tolerances.

[3] Without load.

[4] Jitter +- 20 ms.

[5] With light/dark ratio 1:1.

[6] A = V_S connections reverse-polarity protected.

[7] B = output reverse-polarity protected.

[8] D = outputs overcurrent and short-circuit protected.

MECHANICS

Dimensions (W x H x D)	7.7 mm x 27.5 mm x 13.5 mm
Housing material	Plastic, MABS ABS
Optics material	Plastic, PMMA
Connection type	Cable with M8 male connector, 4-pin, 200 mm
Connection type Detail	
Cable diameter	Ø 3 mm
Cable material	Plastic, PVC

AMBIENT DATA

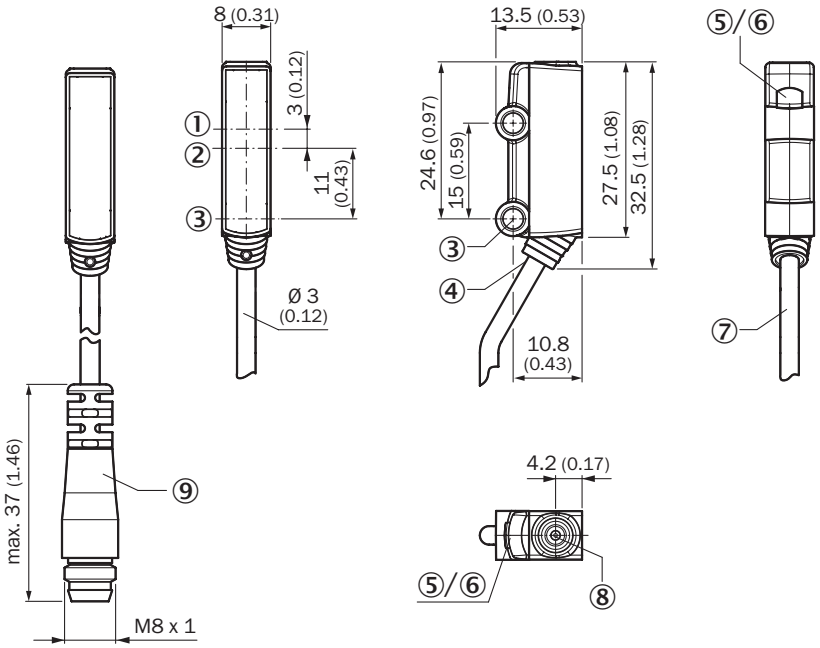
Ambient operating temperature	–25 °C ... +50 °C
Ambient temperature, storage	–40 °C ... +75 °C

CERTIFICATES

EU declaration of conformity	✓
UK declaration of conformity	✓
ACMA declaration of conformity	✓
Moroccan declaration of conformity	✓
China RoHS	✓
China Compulsory Product Certification (CCC) exempt	✓

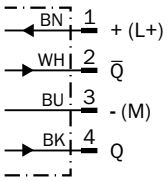
cULus certificate	✓
Laser safety (IEC 60825-1) certificate	✓

DIMENSIONAL DRAWING

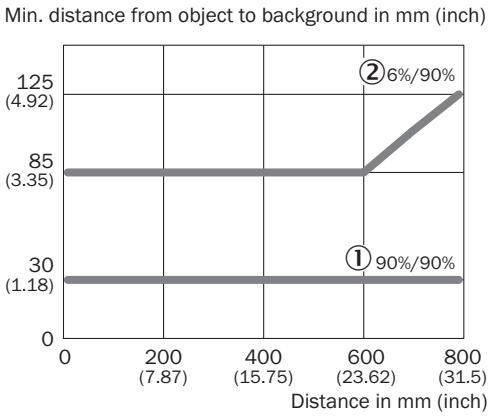


Dimensions in mm (inch)
① optical axis, receiver
② optical axis, sender
③ Mounting hole, Ø 3.2 mm
④ Connection
⑤ LED indicator green: Supply voltage active
⑥ LED indicator yellow: Status of received light beam
⑦ cable
⑧ single teach-in button
⑨ cable with connector M8

CONNECTION DIAGRAM CD-083

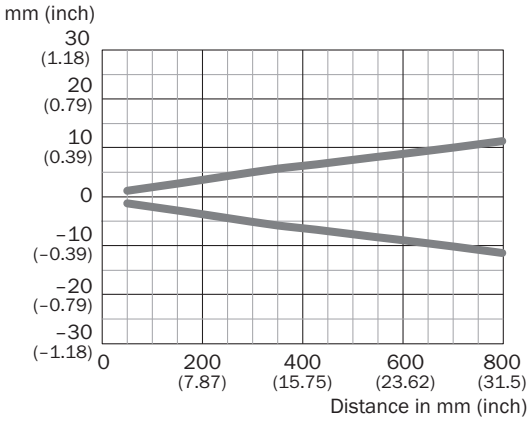


CHARACTERISTIC CURVE



① Sensing range on white, 90% remission factor
② Sensing range on black, 6% remission factor

LIGHT SPOT SIZE



Further information as well as suitable accessories, example applications and downloads such as CAD dimensional models, operating instructions and software can be found at www.sick.com/1085602

SICK AG
WALDKIRCH
GERMANY
SICK.COM

SICK AT A GLANCE

SICK is a leading global technology company for intelligent sensors and integrated solutions in industrial automation. Our technologies set benchmarks, making your industrial processes more efficient, safer and more sustainable – both in logistics and manufacturing operations.

SICK combines sensor intelligence with industry expertise and certified consulting services. We provide the ideal foundation for scalable as well as tailor-made automation solutions and create added value along the entire value chain. Our close partnerships with our customers are more than just a promise: Together, we optimize productivity, improve quality, protect health and safety, and help build a sustainable future. All with empathy and trust.

Since 1946, we have been developing innovative technologies with passion and a pioneering spirit. With a global network in around 40 countries, SICK has a global presence and is always close by. The company's headquarters are located in Waldkirch near Freiburg, Germany. Our customers benefit from our understanding of both local and global requirements, which enables us to deliver tailor-made solutions

SICK

Sensor Intelligence