

# WTT2SL-2P3492S01

WTT2 PowerProx

**TIME-OF-FLIGHT SENSORS** 





## Ordering information

Туре	part no.
WTT2SL-2P3492S01	1088393

Other models and accessories → www.sick.com/WTT2\_PowerProx

Illustration may differ



## 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 <sup>1)</sup>	
Sensing range	50 mm 800 mm <sup>1)</sup>	
Type of light	Infrared light	
Light source	Laser <sup>2)</sup>	
Light spot size (distance)	Ø 10 mm (300 mm)	
Wave length	940 nm	
Laser class	1	
Adjustment	Single teach-in button <sup>3)</sup>	
Special applications	Detecting small objects	
Safety-related parameters		
MTTF <sub>D</sub>	925 years	
DC <sub>avg</sub>	0 %	

 $<sup>^{1)}</sup>$  Object with 6 ... 90% remission (based on standard white, DIN 5033).

<sup>&</sup>lt;sup>2)</sup> Average service life: 50,000 h at  $T_U$  = +25 °C.

<sup>3)</sup> Teach-Offset 15 mm.

#### Electronics

Supply voltage $\mathbf{U}_{\mathrm{B}}$	10 V DC 30 V DC <sup>1)</sup>
Ripple	< 5 V <sub>pp</sub> <sup>2)</sup>
Current consumption	20 mA <sup>3)</sup>
Switching output	PNP
Switching mode	Light/dark switching
Output current I <sub>max.</sub>	≤ 50 mA
Response time	Typ. 90 ms <sup>4)</sup>
Switching frequency	5 Hz <sup>5)</sup>
Analog output	-
Circuit protection	A <sup>6)</sup> B <sup>7)</sup> D <sup>8)</sup>
Protection class	III
Enclosure rating	IP67

 $<sup>^{1)}</sup>$  Limit values. Operated in short-circuit protected network: max. 8 A.

#### 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 M12 male connector, 4-pin, 300 mm
Connection type Detail	
Cable diameter	Ø 3 mm
Cable materia	Plastic, PVC

## Ambient data

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

## Certificates

EU declaration of conformity	1
UK declaration of conformity	1
ACMA declaration of conformity	1
Moroccan declaration of conformity	1
China-RoHS	<b>√</b>
cULus certificate	<b>√</b>

 $<sup>^{2)}</sup>$  May not fall below or exceed U<sub>V</sub> tolerances.

<sup>3)</sup> Without load.

<sup>&</sup>lt;sup>4)</sup> Jitter +- 20 ms.

<sup>&</sup>lt;sup>5)</sup> With light/dark ratio 1:1.

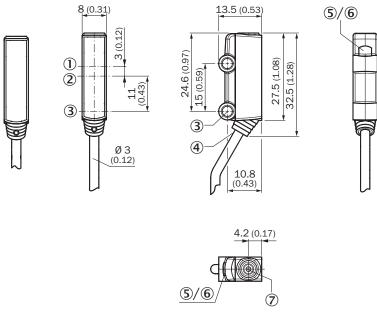
 $<sup>^{6)}</sup>$  A = V<sub>S</sub> connections reverse-polarity protected.

<sup>7)</sup> B = output reverse-polarity protected.

<sup>8)</sup> D = outputs overcurrent and short-circuit protected.

Laser safety (IEC 60825-1) certificate	✓
Classifications	
ECLASS 5.0	27270904
ECLASS 5.1.4	27270904
ECLASS 6.0	27270904
ECLASS 6.2	27270904
ECLASS 7.0	27270904
ECLASS 8.0	27270904
ECLASS 8.1	27270904
ECLASS 9.0	27270904
ECLASS 10.0	27270904
ECLASS 11.0	27270904
ECLASS 12.0	27270903
ETIM 5.0	EC002719
ETIM 6.0	EC002719
ETIM 7.0	EC002719
ETIM 8.0	EC002719
UNSPSC 16.0901	39121528

## Dimensional drawing



Dimensions in mm (inch)

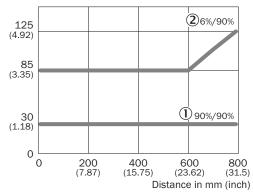
- ① optical axis, receiver
- ② optical axis, sender
- 3 Mounting hole, Ø 3.2 mm
- 4 Connection
- ⑤ LED indicator green: Supply voltage active
- $\ensuremath{\mathfrak{G}}$  LED indicator yellow: Status of received light beam

⑦ single teach-in button

## Connection diagram Cd-083

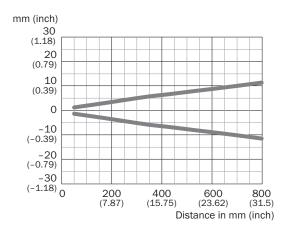
## Characteristic curve

Min. distance from object to background in mm (inch)



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

## Light spot size



## Recommended accessories

Other models and accessories → www.sick.com/WTT2\_PowerProx

	Brief description	Туре	part no.	
connectors an	connectors and cables			
	<ul> <li>Connection type head A: Female connector, M12, 4-pin, straight, A-coded</li> <li>Connection type head B: Flying leads</li> <li>Signal type: Sensor/actuator cable</li> <li>Cable: 5 m, 4-wire, PVC</li> <li>Description: Sensor/actuator cable, unshielded</li> <li>Application: Zones with chemicals, Uncontaminated zones</li> </ul>	YF2A14-050VB3XLEAX	2096235	
	<ul> <li>Connection type head A: Male connector, M12, 4-pin, straight, A-coded</li> <li>Description: Unshielded</li> <li>Connection systems: Screw-type terminals</li> <li>Permitted cross-section: ≤ 0.75 mm²</li> </ul>	STE-1204-G	6009932	
Mounting systems				
1 3/2	<ul> <li>Description: Mounting bracket for wall mounting</li> <li>Material: Steel</li> <li>Details: Steel, zinc coated</li> <li>Items supplied: Without mounting hardware</li> <li>Suitable for: W2S-2</li> </ul>	BEF-W2S-B	4034749	

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We have extensive experience in a wide range of industries and understand their processes and requirements. With intelligent sensors, we can deliver exactly what our customers need. In application centers in Europe, Asia and North America, system solutions are tested and optimized in accordance with customer specifications. All this makes us a reliable supplier and development partner.

Comprehensive services complete our offering: SICK LifeTime Services provide support throughout the machine life cycle and ensure safety and productivity.

For us, that is "Sensor Intelligence."

## **WORLDWIDE PRESENCE:**

Contacts and other locations -www.sick.com

