



# WTT2SLC-2P3092B03

WTT2 PowerProx

TIME-OF-FLIGHT SENSORS

**SICK**  
Sensor Intelligence.



Illustration may differ



### Ordering information

Type	Part no.
WTT2SLC-2P3092B03	1102568

Other models and accessories → [www.sick.com/WTT2\\_PowerProx](http://www.sick.com/WTT2_PowerProx)

### Detailed technical data

#### Features

<b>Functional principle</b>	Photoelectric proximity sensor
<b>Functional principle detail</b>	Background suppression, Optical time-of-flight
<b>Housing design (light emission)</b>	Rectangular
<b>Sensing range max.</b>	50 mm ... 800 mm <sup>1)</sup>
<b>Sensing range</b>	50 mm ... 800 mm <sup>1)</sup>
<b>Distance value</b>	
Repeatability	2 mm ... 5 mm <sup>2)</sup>
Accuracy	± 20 mm
<b>Type of light</b>	Infrared light
<b>Light source</b>	Laser <sup>3)</sup>
<b>Light spot size (distance)</b>	Ø 10 mm (300 mm)
<b>Wave length</b>	940 nm
<b>Laser class</b>	1
<b>Adjustment</b>	Single teach-in button, IO-Link <sup>4)</sup>
<b>Special applications</b>	Detecting small objects
<b>Safety-related parameters</b>	
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>2)</sup> Equivalent to 1  $\sigma$ .

<sup>3)</sup> Average service life: 50,000 h at T<sub>U</sub> = +25 °C.

<sup>4)</sup> Teach-Offset 15 mm.

## Interfaces

<b>Communication interface</b>	IO-Link V1.1
<b>Communication Interface detail</b>	COM2 (38,4 kBaud)
<b>Cycle time</b>	5 ms
<b>Process data length</b>	4 Byte
<b>Process data structure</b>	Bit 0 = switching signal $Q_{L1}$ Bit 1 = switching signal $Q_{L2}$ Bit 2 = detection signal $Q_{int.1}$ Bit 3 = detection signal $Q_{int.2}$ Bit 4 ... 15 = empty Bit 16 ... 31 = distance value
<b>VendorID</b>	26
<b>DeviceID HEX</b>	0x8001B8
<b>DeviceID DEC</b>	8389048

## Electronics

<b>Supply voltage <math>U_B</math></b>	10 V DC ... 30 V DC <sup>1)</sup>
<b>Ripple</b>	< 5 V <sub>pp</sub> <sup>2)</sup>
<b>Current consumption</b>	20 mA <sup>3)</sup>
<b>Switching output</b>	PNP
<b>Switching mode</b>	Light/dark switching
<b>Output current <math>I_{max}</math></b>	≤ 50 mA
<b>Response time</b>	Typ. 95 ms <sup>4)</sup>
<b>Switching frequency</b>	5 Hz <sup>5)</sup>
<b>Analog output</b>	-
<b>Circuit protection</b>	A <sup>6)</sup> B <sup>7)</sup> D <sup>8)</sup>
<b>Protection class</b>	III
<b>Enclosure rating</b>	IP67

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

<sup>2)</sup> May not fall below or exceed  $U_y$  tolerances.

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

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

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

<sup>6)</sup> A =  $V_S$  connections reverse-polarity protected.

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

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

## Mechanics

<b>Dimensions (W x H x D)</b>	7.7 mm x 27.5 mm x 13.5 mm
<b>Housing material</b>	Plastic, MABS, ABS
<b>Optics material</b>	Plastic, PMMA
<b>Connection type</b>	Cable with JST-connector, 300 mm
<b>Connection type Detail</b>	
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
Smart Task	
Smart Task name	Base logics
Logic function	Direct AND OR WINDOW Hysteresis
Timer function	Deactivated Switch-on delay Off delay ON and OFF delay Impulse (one shot)
Inverter	Yes
Switching frequency	SIO Direct: 5 Hz <sup>1)</sup> SIO Logic: 5 Hz <sup>2)</sup> IOL: 5 Hz <sup>3)</sup>
Response time	SIO Direct: typ. 90 ms <sup>1)</sup> SIO Logic: typ. 90 ms <sup>2)</sup> IOL: typ. 95 ms <sup>3)</sup>
Repeatability	2) 3)

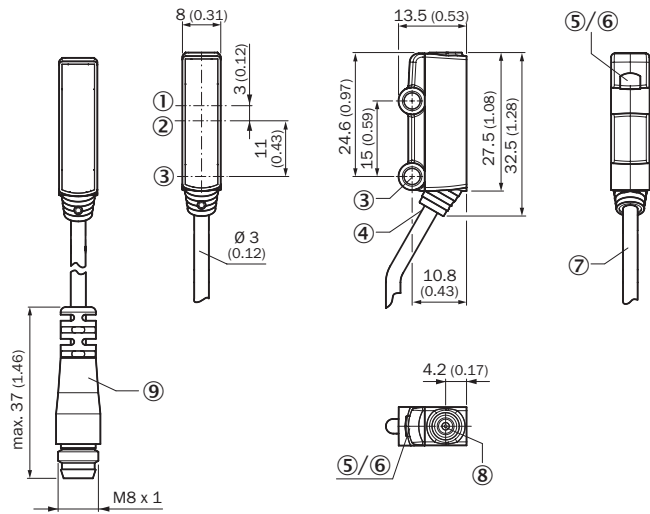
<sup>1)</sup> SIO Direct: sensor operation in standard I/O mode without IO-Link communication and without using internal sensor logic or time parameters (set to "direct"/"deactivated").

<sup>2)</sup> SIO Logic: Sensor operation in standard I/O mode without IO-Link communication. Sensor-internal logic or timing parameters plus Automation Functions used.

<sup>3)</sup> IOL: Sensor operation with full IO-Link communication and usage of logic, timing and Automation Function parameters.

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

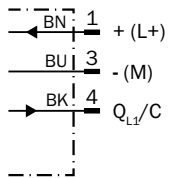
Dimensional drawing (Dimensions in mm (inch))



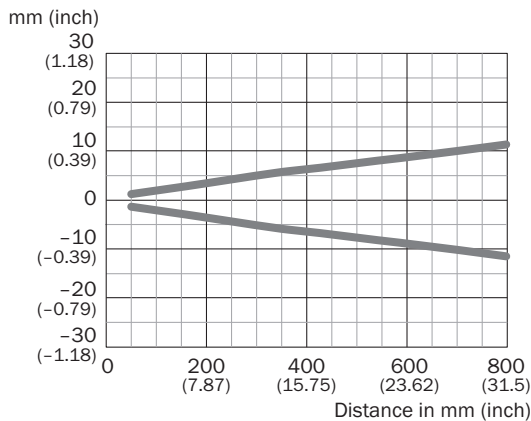
- ① Optical axis, receiver
- ② Optical axis, sender
- ③ Mounting hole, Ø 3.2 mm
- ④ Connection
- ⑤ LED indicator green: Supply voltage active
- ⑥ LED indicator yellow: Status of received light beam
- ⑦ Cable
- ⑧ Single teach-in button
- ⑨ Cable with JST-connector

Connection diagram

Cd-434

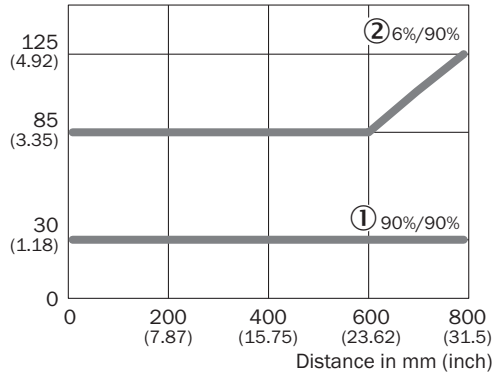


Light spot size



### Sensing distance


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

### Recommended accessories

Other models and accessories → [www.sick.com/WTT2\\_PowerProx](http://www.sick.com/WTT2_PowerProx)

	Brief description	Type	Part no.
Mounting brackets and plates			
	Mounting bracket for wall mounting, steel, zinc coated, without mounting hardware	BEF-W2S-B	4034749

### Recommended services

Additional services → [www.sick.com/WTT2\\_PowerProx](http://www.sick.com/WTT2_PowerProx)

	Type	Part no.
Function Block Factory		
<ul style="list-style-type: none"> <li>• <b>Description:</b> The Function Block Factory supports common programmable logic controllers (PLCs) from various manufacturers, such as Siemens, Beckhoff, Rockwell Automation and B&amp;R. More information on the FBF can be found &lt;a href="https://fbf.cloud.sick.com target="_blank"&gt; here&lt;/a&gt;.</li> <li>• <b>Note:</b> You can configure your function block at &lt;a href="https://fbf.cloud.sick.com target="_blank"&gt; Function Block Factory.&lt;/a&gt; As a login please use your SICK ID.</li> </ul>	Function Block Factory	On request

## SICK AT A GLANCE

SICK is one of the leading manufacturers of intelligent sensors and sensor solutions for industrial applications. A unique range of products and services creates the perfect basis for controlling processes securely and efficiently, protecting individuals from accidents and preventing damage to the environment.

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](http://www.sick.com)