

# WTT2SLC-2P3292A00

PowerProx

**MULTITASK PHOTOELECTRIC SENSORS** 





# Ordering information

Туре	Part no.
WTT2SLC-2P3292A00	1090486

Other models and accessories → www.sick.com/PowerProx

Illustration may differ



#### Detailed technical data

#### **Features**

Sensor/ detection principle	Photoelectric proximity sensor, Background suppression
Dimensions (W x H x D)	7.7 mm x 27.5 mm x 13.5 mm
Housing design (light emission)	Rectangular
Sensing range max.	50 mm 800 mm <sup>1)</sup>
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Distance value	
Repeatability	2 mm 5 mm <sup>2)</sup>
Accuracy	± 20 mm
Type of light	Infrared light
Light source	Laser <sup>3)</sup>
Light spot size (distance)	Ø 10 mm (300 mm)
Wave length	940 nm
Laser class	1
Adjustment	Single teach-in button <sup>4)</sup> IO-Link
Pin 2 configuration	External input, Teach-in input, Sender off input, Detection output, logic output
Special applications	Detecting small objects

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

 $<sup>^{2)}</sup>$  Equivalent to 1  $\sigma$ .

 $<sup>^{3)}</sup>$  Average service life: 50,000 h at  $T_U$  = +25 °C.

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

# Mechanics/electronics

Supply voltage	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. 95 ms <sup>4)</sup>
Switching frequency	5 Hz <sup>5)</sup>
Analog output	-
Input	MF <sub>in</sub> = multifunctional input programmable
Connection type	Cable with M8 male connector, 4-pin, 200 mm <sup>6)</sup>
Cable material	PVC
Cable diameter	Ø 3 mm
Circuit protection	A <sup>7)</sup> B <sup>8)</sup> D <sup>9)</sup>
Protection class	III
Housing material	Plastic, MABS ABS
Optics material	Plastic, PMMA
Enclosure rating	IP67
Ambient operating temperature	-25 °C +50 °C
Ambient storage temperature	-40 °C +75 °C
UL File No.	E181493

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

# Safety-related parameters

MTTF <sub>D</sub>	925 years
DC <sub>avg</sub>	0%

## Communication interface

Communication interface	IO-Link V1.1
Communication Interface detail	COM2 (38,4 kBaud)
Cycle time	5 ms
Process data length	4 Byte
Process data structure	Bit 0 = switching signal Q <sub>L1</sub>

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

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

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

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

<sup>6)</sup> Do not bend below 0 °C.

 $<sup>^{7)}</sup>$  A = V<sub>S</sub> connections reverse-polarity protected.

<sup>8)</sup> B = output reverse-polarity protected.

 $<sup>^{9)}</sup>$  D = outputs overcurrent and short-circuit protected.

	Bit 1 = switching signal $Q_{L2}$ Bit 2 = switching signal $Q_{Int1}$ Bit 3 = switching signal $Q_{Int2}$ Bit 4 15 = empty
Process data structure A	Bit 16 31 = distance value
VendorID	26
DeviceID HEX	0x8001B8
DeviceID DEC	8389048

## Smart Task

Smart Task name	Base logics
Logic function	Direct AND OR WINDOW Hysteresis
Timer function	Deactivated 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").

### Classifications

ECI@ss 5.0	27270904
ECI@ss 5.1.4	27270904
ECI@ss 6.0	27270904
ECI@ss 6.2	27270904
ECI@ss 7.0	27270904
ECI@ss 8.0	27270904
ECI@ss 8.1	27270904
ECI@ss 9.0	27270904
ECI@ss 10.0	27270904
ECI@ss 11.0	27270904
ETIM 5.0	EC002719
ETIM 6.0	EC002719
ETIM 7.0	EC002719
UNSPSC 16.0901	39121528

<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.

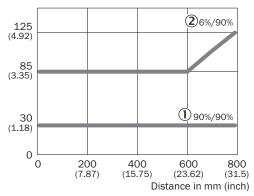
# Connection diagram

Cd-367



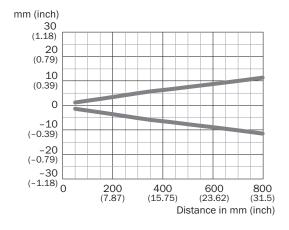
#### Characteristic curve

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

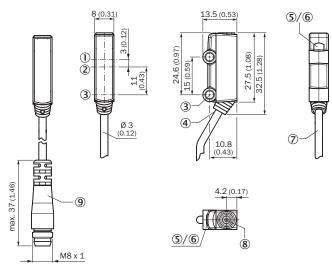


- ① Sensing range on white, 90% remission
- ② Sensing range on black, 6% remission

# Light spot size



# 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
- ® Single teach-in button
- © Cable with connector M8

#### Recommended accessories

Other models and accessories → www.sick.com/PowerProx

	Brief description	Туре	Part no.
Mounting bra	ckets and plates		
	Mounting bracket for wall mounting, steel, zinc coated, without mounting hardware	BEF-W2S-B	4034749
Plug connecte	ors and cables		
	Head A: female connector, M8, 4-pin, straight, A-coded Head B: Flying leads Cable: Sensor/actuator cable, PVC, unshielded, 5 m	YF8U14- 050VA3XLEAX	2095889
	Head A: male connector, M8, 4-pin, straight Head B: - Cable: unshielded	STE-0804-G	6037323

## Recommended services

Additional services → www.sick.com/PowerProx

	Туре	Part no.
Function Block Factory		
• <b>Description:</b> The Function Block Factory supports common programmable logic controllers (PLCs) from various manufacturers, such as Siemens, Beckhoff, Rockwell Automation and B&R. More information on the FBF can be found <a href="https://fbf.cloud.sick.com" target="_blank"> here</a> .	Function Block Factory	On request

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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

