

WTT2SL-2N3492S02

PowerProx

MULTITASK PHOTOELECTRIC SENSORS





Ordering information

Туре	Part no.
WTT2SL-2N3492S02	1102712

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 ¹⁾
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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
Adjustment	Single teach-in button ³⁾
Special applications	Detecting small objects
Special features	Extended supply voltage range 10 31.5 V DC continuous Overvoltage up to 36 V DC allowed for \leq 5 seconds Sensing range pre adjusted at 340 mm

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

 $^{^{2)}}$ Average service life: 50,000 h at $\rm T_U$ = +25 °C.

³⁾ Teach-Offset 15 mm.

Mechanics/electronics

Supply voltage	10 V DC 30 V DC ^{1) 2)}
Ripple	≤ 5 V _{pp} ³⁾
Current consumption	20 mA ⁴⁾
Switching output	NPN ⁵⁾
Switching mode	Light/dark switching
Output current I _{max.}	< 50 mA
Response time	Typ. 90 ms ⁶⁾
Switching frequency	5 Hz ⁷⁾
Analog output	-
Connection type	Cable with M12 male connector, 4-pin ⁸⁾
Cable material	PVC
Cable diameter	Ø 3 mm
Circuit protection	A ⁹⁾ B ¹⁰⁾ D ¹¹⁾
Protection class	III
Special device	✓
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

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

Safety-related parameters

MTTF _D	925 years
DC _{avg}	0%

Classifications

ECI@ss 5.0	27270904
ECI@ss 5.1.4	27270904
ECI@ss 6.0	27270904

 $^{^{2)}}$ Extended supply voltage range 10 ... 31.5 V DC continuous, overvoltage up to 36 V DC permitted for <= 5 seconds.

 $^{^{3)}}$ May not exceed or fall below U_{V} tolerances.

⁴⁾ Without load.

⁵⁾ Off-state current $I_R \le 0.6$ mA.

⁶⁾ Jitter +- 20 ms.

 $^{^{7)}}$ With light/dark ratio 1:1.

 $^{^{8)}}$ Do not bend below 0 $^{\circ}\text{C}.$

 $^{^{9)}}$ A = V_S connections reverse-polarity protected.

 $^{^{10)}}$ B = output reverse-polarity protected.

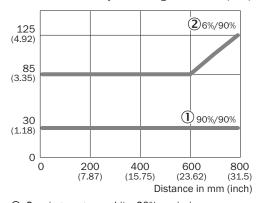
 $^{^{11)}}$ D = outputs overcurrent and short-circuit protected.

Connection diagram

Cd-083

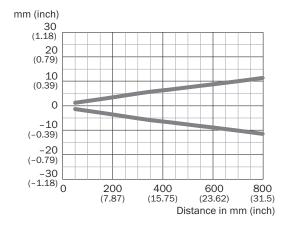
Characteristic curve

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

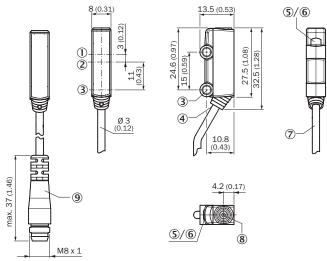


- $\ \, \textcircled{\scriptsize 1}$ Sensing range on white, 90% remission
- ② Sensing range on black, 6% remission

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 brackets and plates				
	Mounting bracket for wall mounting, steel, zinc coated, without mounting hardware	BEF-W2S-B	4034749	
Plug connectors and cables				
	Head A: female connector, M12, 4-pin, straight, A-coded Head B: Flying leads Cable: Sensor/actuator cable, PVC, unshielded, 5 m	YF2A14- 050VB3XLEAX	2096235	
Who was	Head A: male connector, M12, 4-pin, straight Head B: - Cable: unshielded	STE-1204-G	6009932	

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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."

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