Product data sheet

WTT2SL-2N1192

PowerProx

MULTITASK PHOTOELECTRIC SENSORS

SICK
Sensor Intelligence.

Illustration may differ

Ordering information

Type	Part no.
WTT2SL-2N1192	1085601

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

Detailed technical data

Features

Functional principle	Photoelectric proximity sensor
Functional principle detail	Background suppression, Optical time-of-flight
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

[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] Teach-Offset 15 mm.

Mechanics/electronics

Supply voltage U_B	10 V DC ... 30 V DC [1]
Ripple	< 5 V_{pp} [2]
Current consumption	20 mA [3]
Switching output	NPN [4]
Switching mode	Light/dark switching
Output current $I_{max.}$	≤ 50 mA
Response time	Typ. 90 ms [5]
Switching frequency	5 Hz [6]
Analog output	-
Connection type	Cable, 4-wire, 2 m [7]
Cable material	PVC
Cable diameter	Ø 3 mm
Circuit protection	A [8] B [9] D [10]
Protection class	III
Housing material	Plastic, MABS, ABS
Optics material	Plastic, PMMA
Enclosure rating	IP67
Ambient operating temperature	–25 °C ... +50 °C
Ambient temperature, storage	–40 °C ... +75 °C
UL File No.	E181493

[1] Limit values. Operated in short-circuit protected network: max. 8 A.
[2] May not exceed or fall below U_V tolerances.
[3] Without load.
[4] Off-state current I_R ≤ 0,6 mA.
[5] Jitter +- 20 ms.
[6] With light/dark ratio 1:1.
[7] Do not bend below 0 °C.
[8] A = V_S connections reverse-polarity protected.
[9] B = output reverse-polarity protected.
[10] D = outputs overcurrent and short-circuit protected.

Safety-related parameters

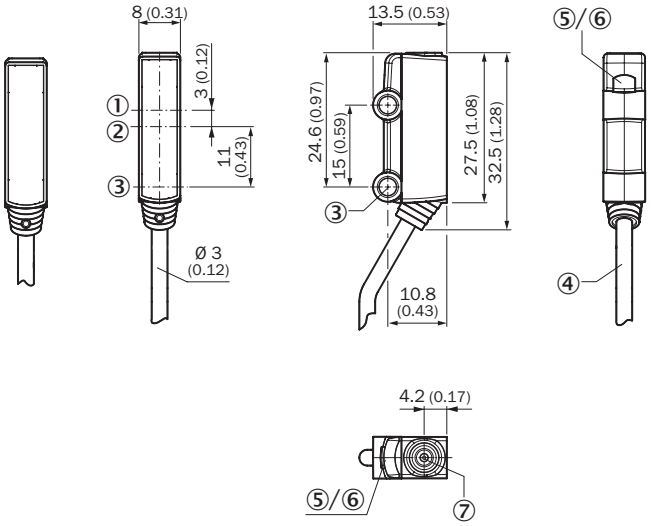
$MTTF_D$	925 years
DC_{avg}	0 %

Classifications

eCl@ss 5.0	27270904
eCl@ss 5.1.4	27270904
eCl@ss 6.0	27270904
eCl@ss 6.2	27270904
eCl@ss 7.0	27270904
eCl@ss 8.0	27270904

eCl@ss 8.1	27270904
eCl@ss 9.0	27270904
eCl@ss 10.0	27270904
eCl@ss 11.0	27270904
eCl@ss 12.0	27270903
ETIM 5.0	EC002719
ETIM 6.0	EC002719
ETIM 7.0	EC002719
ETIM 8.0	EC002719
UNSPSC 16.0901	39121528

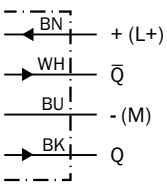
Dimensional drawing (Dimensions in mm (inch))



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

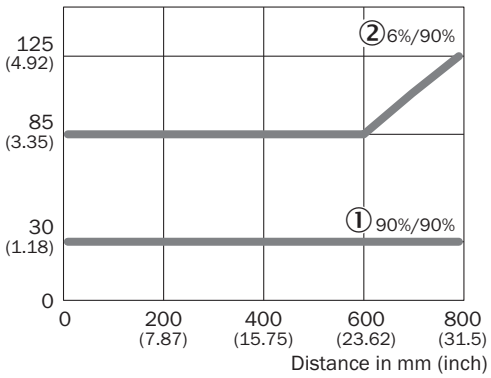
Connection diagram

Cd-095



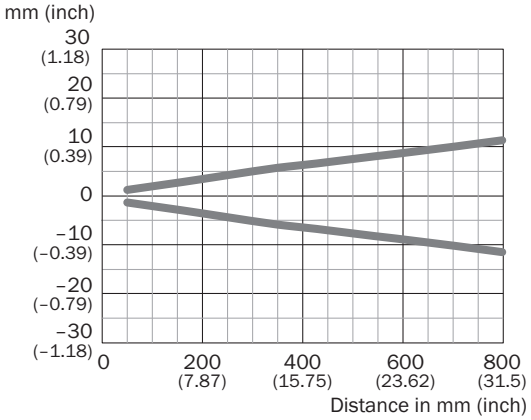
Characteristic curve

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/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
Plug connectors and cables			
	Head A: male connector, M12, 4-pin, straight Cable: unshielded	STE-1204-G	6009932

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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