



WL4SLG-3N1162P01

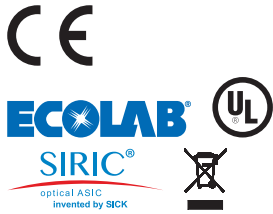
W4SLG-3

MINIATURE PHOTOELECTRIC SENSORS

SICK
Sensor Intelligence.



Illustration may differ



Ordering information

Type	Part no.
WL4SLG-3N1162P01	1101033

Included in delivery: P250F (1)

Other models and accessories → www.sick.com/W4SLG-3

Detailed technical data

Features

Dimensions (W x H x D)	12.2 mm x 41.8 mm x 17.3 mm
Housing design (light emission)	Rectangular
Mounting hole	M3
Sensing range max.	0 m ... 4.5 m ¹⁾
Sensing range	0 m ... 2 m ¹⁾
Type of light	Visible red light
Light source	Laser ²⁾
Light spot size (distance)	Ø 1 mm (300 mm) Ø 20 mm (4,000 mm)
Wave length	650 nm
Laser class	1 (EN 60825-1:2014, IEC 60825-1:2014 / CDRH 21 CFR 1040.10 & 1040.11)
Adjustment	Single teach-in button
AutoAdapt	✓
Special applications	Detecting transparent objects, Detecting small objects

¹⁾ Reflective tape REF-AC1000.

²⁾ Average service life: 50,000 h at T_U = +25 °C.

Mechanics/electronics

Supply voltage	10 V DC ... 30 V DC ¹⁾
Ripple	< 5 V _{pp} ²⁾
Switching output	NPN ³⁾
Output function	Complementary
Switching mode	Light/dark switching ³⁾
Output current I_{max.}	≤ 100 mA
Response time	≤ 0.5 ms ⁴⁾
Switching frequency	1,000 Hz ⁵⁾
Circuit protection	A ⁶⁾ B ⁷⁾ C ⁸⁾
Protection class	III
Weight	100 g
Polarisation filter	✓
Housing material	Plastic, Novodur
Optics material	Plastic, PMMA
Enclosure rating	IP66 IP67
Items supplied	Reflector P250F
Ambient operating temperature	-10 °C ... +50 °C
Ambient operating temperature extended	-30 °C ... +55 °C ^{10) 9)}
Ambient storage temperature	-30 °C ... +70 °C

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

²⁾ May not exceed or fall below U_v tolerances.

³⁾ Q = light switching.

⁴⁾ Signal transit time with resistive load.

⁵⁾ With light/dark ratio 1:1.

⁶⁾ A = V_S connections reverse-polarity protected.

⁷⁾ B = inputs and output reverse-polarity protected.

⁸⁾ C = interference suppression.

⁹⁾ As of T_a = 50 °C, a max. supply voltage V_{max.} = 24 V and a max. load current I_{max.} = 50 mA is permitted.

¹⁰⁾ Operation below Tu -10 °C is possible if the sensor is already switched on at Tu > -10 °C, then cools down, and the supply voltage is subsequently not switched off. Switching on below Tu -10 °C is not permissible.

Safety-related parameters

MTTF_D	647 years (EN ISO 13849-1) ¹⁾
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¹⁾ Mode of calculation: Parts-Count-calculation.

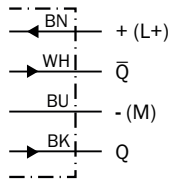
Classifications

ECl@ss 5.0	27270902
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ECl@ss 6.0	27270902
ECl@ss 6.2	27270902
ECl@ss 7.0	27270902

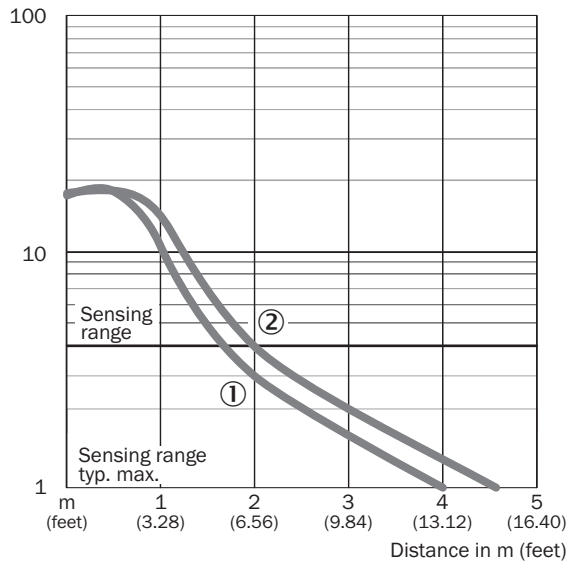
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ECl@ss 11.0	27270902
ETIM 5.0	EC002717
ETIM 6.0	EC002717
ETIM 7.0	EC002717
UNSPSC 16.0901	39121528

Connection diagram

Cd-094



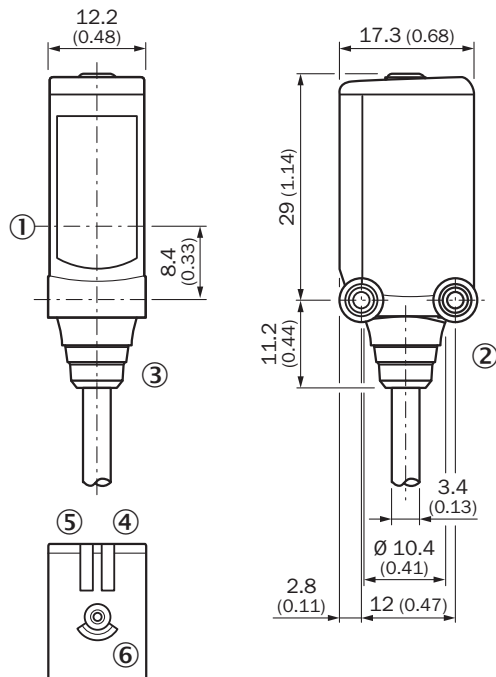
Characteristic curve



- ① Reflector PLV14-A / PLH25-M12 / PLH25-D12
- ② Reflector P41F / reflective tape REF-AC1000

Dimensional drawing (Dimensions in mm (inch))

WL4SL-3, WL4SLG-3, WSE4SL-3, cable



- ① Center of optical axis
- ② Threaded mounting hole M3
- ③ Connection
- ④ LED indicator green: Supply voltage active
- ⑤ LED indicator yellow: Status of received light beam
- ⑥ Single teach-in button

Recommended accessories

Mounting systems

Mounting brackets and plates

Mounting brackets

Reflectors and optics

Reflectors

Reflective tape

Plug connectors and cables

Plug connectors and cables

Field-attachable connectors

Other models and accessories → www.sick.com/W4SLG-3

Brief description	Type	Part no.
Mounting bracket for floor mounting, Stainless steel 1.4571, mounting hardware included	BEF-W4-B	2051630
Universal mounting bracket for reflectors, steel, zinc coated	BEF-WN-REFX	2064574

Brief description	Type	Part no.
Suitable for laser sensors, self-adhesive, cut, see alignment note, 56.3 mm x 56.3 mm, self-adhesive	REF-AC1000-56	4063030
Brief description	Type	Part no.
Head A: male connector, M8, 4-pin, straight Head B: - Cable: unshielded	STE-0804-G	6037323

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