



WL4SLG-3K2432VS01

W4SLG-3V

MINIATURE PHOTOELECTRIC SENSORS

SICK
Sensor Intelligence.



Illustration may differ



Ordering information

Type	Part no.
WL4SLG-3K2432VS01	1065697

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

Detailed technical data

Features

Dimensions (W x H x D)	15.3 mm x 55.4 mm x 22.2 mm
Housing design (light emission)	Rectangular
Mounting hole	M3
Sensing range max.	0 m ... 4.5 m ^{1) 2)}
Sensing range	0 m ... 2 m ^{1) 2)}
Type of light	Visible red light
Light source	Laser ³⁾
Light spot size (distance)	Ø 1 mm (500 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
Off delay	16 ms
Special applications	Hygienic and washdown zones, Detecting transparent objects, Detecting small objects
Special features	Deactivation delay, 15 ms (± 5 %)

¹⁾ Reflective tape REF-AC1000.

²⁾ To ensure reliable operation, we recommend using REF-AC1000 reflective tape or reflective-tap reflectors such as P41F, PLV14-A, PLH25-M12, or PLH25-D12. Reflectors with large-scale triple structures must only be used if deemed suitable for the application.

³⁾ Average service life: 50,000 h at T_U = +25 °C.

Mechanics/electronics

Supply voltage	10 V DC ... 24 V DC ¹⁾
Ripple	< 5 V _{pp} ²⁾
Current consumption	30 mA ³⁾
Switching output	PNP ⁴⁾
Output function	Complementary
Switching mode	Light/dark switching ⁴⁾
Output current I_{max.}	≤ 50 mA
Response time	≤ 0.33 ms ⁵⁾
Switching frequency	1,500 Hz ⁶⁾
Circuit protection	A ⁷⁾ B ⁸⁾ C ⁹⁾
Protection class	III
Weight	100 g
Polarisation filter	✓
Housing material	Stainless steel, Stainless steel V4A (1.4404, 316L)
Optics material	Plastic, PMMA
Enclosure rating	IP66 IP67 IP68 IP69K ¹⁰⁾
Ambient operating temperature	-10 °C ... +50 °C
Ambient operating temperature extended	-30 °C ... +55 °C ^{11) 12)}
Ambient temperature, storage	-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⁾ Without load.

⁴⁾ Q = light switching.

⁵⁾ Signal transit time with resistive load.

⁶⁾ With light/dark ratio 1:1.

⁷⁾ A = V_S connections reverse-polarity protected.

⁸⁾ B = inputs and output reverse-polarity protected.

⁹⁾ C = interference suppression.

¹⁰⁾ Only in case of correctly mounted IP69K connecting cable.

¹¹⁾ 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.

¹²⁾ Operation below T_u -10 °C is possible if the sensor is already switched on at T_u > -10 °C, then cools down, and the supply voltage is subsequently not switched off. Switching on below T_u -10 °C is not permissible.

Safety-related parameters

MTTF_D	655 years (EN ISO 13849-1) ¹⁾
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¹⁾ Mode of calculation: Parts-Count-calculation.

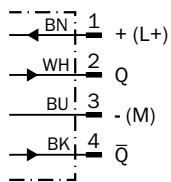
Classifications

ECI@ss 5.0	27270902
ECI@ss 5.1.4	27270902

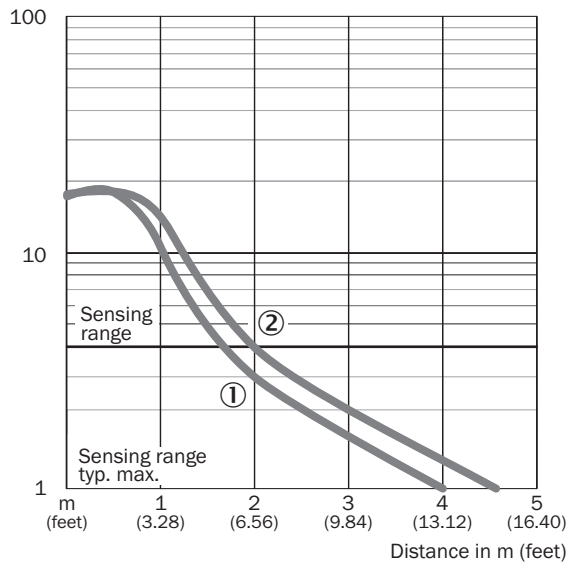
ECl@ss 6.0	27270902
ECl@ss 6.2	27270902
ECl@ss 7.0	27270902
ECl@ss 8.0	27270902
ECl@ss 8.1	27270902
ECl@ss 9.0	27270902
ECl@ss 10.0	27270902
ECl@ss 11.0	27270902
ETIM 5.0	EC002717
ETIM 6.0	EC002717
ETIM 7.0	EC002717
ETIM 8.0	EC002717
UNSPSC 16.0901	39121528

Connection diagram

Cd-101



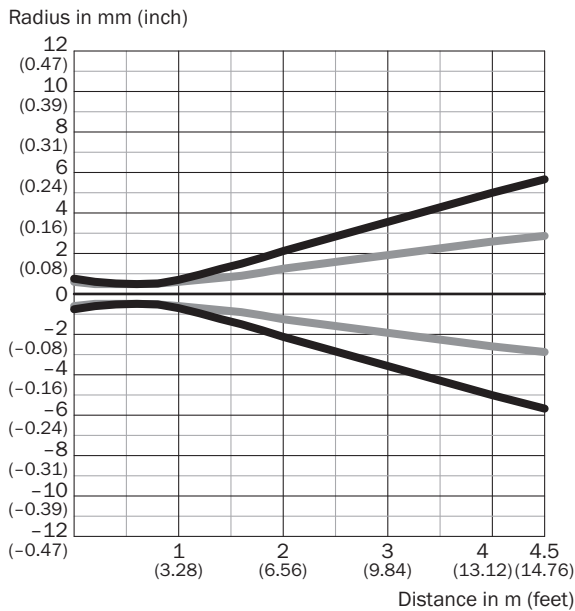
Characteristic curve



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

Light spot size

Overview

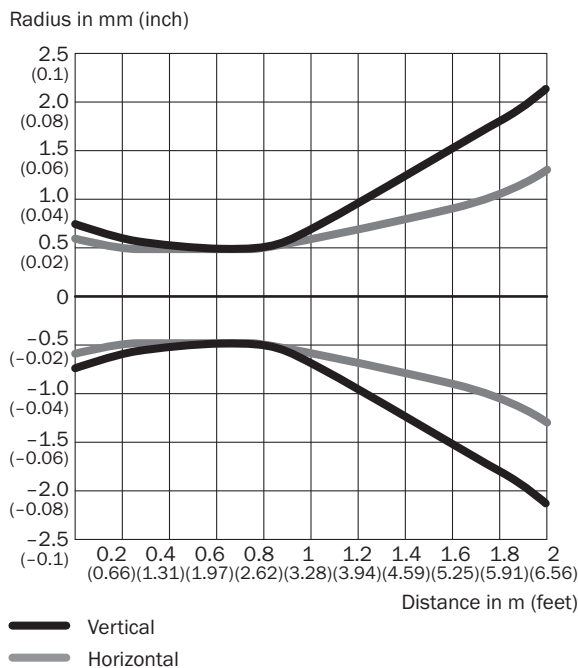


Dimensions in mm (inch)

Sensing range	Vertical	Horizontal
0.5 m (1.64 feet)	< 1.0 (0.04)	< 1.0 (0.04)
1 m (3.28 feet)	1.5 (0.06)	1.2 (0.05)
2 m (6.56 feet)	4.3 (0.17)	2.6 (0.10)
4.5 m (14.76 feet)	11.3 (0.44)	5.6 (0.22)

— Vertical
— Horizontal

Light spot size (detailed view)



— Vertical
— Horizontal

Brief description	Type	Part no.
<ul style="list-style-type: none"> • Connection type head A: Female connector, M12, 4-pin, straight • Connection type head B: Flying leads • Authorizations: Ecolab, UL • Signal type: Sensor/actuator cable • Cable: 5 m, 4-wire, PVC • Description: Sensor/actuator cable, unshielded • Connection systems: Flying leads • Note: This product is generally resistant to chemical cleaning agents (see ECOLAB). Please do not use cleaning agents of any other Kind., Not resistant against lactic acid & hydrogen peroxide (H2O2) • Application: Hygienic and washdown zones 	DOL-1204-G05MNI	6052615
Brief description	Type	Part no.
<ul style="list-style-type: none"> • Description: Stainless steel reflector, washdown design, chemically resistant, IP 69K enclosure rating, screw connection, PMMA front screens • Dimensions: 14 mm • Ambient operating temperature: -20 °C ... +60 °C 	PLV14-A	2063405

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