

WL12G-3V2572S07

W12G

SMALL PHOTOELECTRIC SENSORS



Illustration may differ

Ordering information

Туре	Part no.
WL12G-3V2572S07	1069341

Other models and accessories → www.sick.com/W12G



Features

PinPoint by SICK

SIRIC[©]

Functional principle	Photoelectric retro-reflective sensor
Functional principle detail	Autocollimation
Sensing range max.	0 m 1.5 m ¹⁾
Polarisation filters	Yes
Emitted beam	
Light source	PinPoint LED ²⁾
Type of light	Visible red light
Light spot size (distance)	Ø 25 mm (1.5 m)
Key LED figures	
Wave length	660 nm
Adjustment	Single teach-in button ³⁾
Special features	Mode III, 40 % attenuation
Special applications	Detecting transparent objects
AutoAdapt	√

¹⁾ Reflector PL80A.

 $^{^{2)}}$ Average service life: 100,000 h at TU = +25 °C.

 $^{^{3)}}$ Mode I, 10 % attenuation.

Electrical data

Supply voltage \mathbf{U}_{B}	10 V DC 30 V DC ¹⁾
Ripple	< 5 V _{pp} ²⁾
Current consumption	40 mA ³⁾
Protection class	III
Digital output	
Туре	PNP
Switching mode	Light switching
Signal voltage PNP HIGH/LOW	Approx. V _S – 2.5 V / 0 V
Output current I _{max.}	≤ 100 mA
Response time	≤ 333 μs ⁴⁾
Switching frequency	1,500 Hz ⁵⁾
Circuit protection	A ⁶⁾ B ⁷⁾ C ⁸⁾ D ⁹⁾
Special feature	Detecting transparent objects
Operating mode	Mode I, 10 $\%$ attenuation, Mode II, 18 $\%$ attenuation
Plausibility output, stable detection	Approx. 0 V
Plausibility output, unstable detection	V _S - 2.5 V

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

Mechanical data

Housing	Rectangular
Dimensions (W x H x D)	15.5 mm x 48.5 mm x 42 mm
Connection	Male connector M12, 5-pin
Material	
Housing	Metal, zinc diecast
Front screen	Plastic, PMMA
Weight	120 g

Ambient data

Enclosure rating	IP66 IP67
Ambient operating temperature	-40 °C +60 °C
Ambient temperature, storage	-40 °C +75 °C
UL File No.	NRKH.E181493 & NRKH7.E181493

²⁾ May not exceed or fall below U_V tolerances.

³⁾ Without load.

 $^{^{4)}}$ 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⁾ D = outputs overcurrent and short-circuit protected.

Classifications

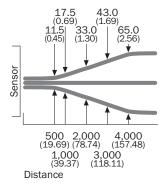
ECLASS 5.0	27270902
ECLASS 5.1.4	27270902
ECLASS 6.0	27270902
ECLASS 6.2	27270902
ECLASS 7.0	27270902
ECLASS 8.0	27270902
ECLASS 8.1	27270902
ECLASS 9.0	27270902
ECLASS 10.0	27270902
ECLASS 11.0	27270902
ECLASS 12.0	27270902
ETIM 5.0	EC002717
ETIM 6.0	EC002717
ETIM 7.0	EC002717
ETIM 8.0	EC002717
UNSPSC 16.0901	39121528

Connection diagram

Cd-147

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Light spot size



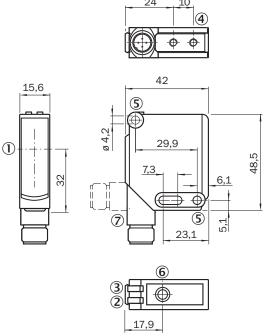
All dimensions in mm (inch)

Functions

Teach-in-Modus für Ob- jekte / Teach-in mode for objects	Lichtdämpfung/	Objekttyp /	Teach-in-Zeit / Teach-in time	Ext. Teach-in über Lei- tung / Ext. cable teach-in	Anzeige-LED / LED indicator
I	10 %	PET-Flasche / Folie / Glas / PET-Flasche / Folie / glas	15s	30 100 ms	grün / green
II	18 %	Farbglasflaschen/ Colored glass bottles	510s	100 200 ms	blau / blue

Mode	I	II	III
Light attenuation	10 %	18 %	40%
Object Typ	PET-bottle / foil	Glass / white Glass bottle	Colored glass bottle
Teach time button / (s)	25	510	> 10
Teach time Extern (ET) / (ms)	3099	100199	> 200
Color Status LED	Green	Blue	Bright blue

Dimensional drawing (Dimensions in mm (inch))



- Optical axis
- ② LED indicator yellow: Status of received light beam
- 3 Green LED indicator: supply voltage active, mode I is set, blue LED indicator: mode II is set, bright blue indicator: mode III is set
- ④ M4 threaded mounting hole, 4 mm deep
- ⑤ Mounting hole, Ø 4.2 mm
- ® Sensitivity setting: single teach-in button
- ⑦ Connection

Recommended accessories

Other models and accessories → www.sick.com/W12G

	Brief description	Туре	Part no.		
Mounting brackets and plates					
	Universal mounting bracket for reflectors, steel, zinc coated	BEF-WN-REFX	2064574		
Reflectors					
	Fine triple reflector, screw connection, suitable for laser sensors, $52 \text{ mm} \times 62 \text{ mm}$, PM-MA/ABS, Screw-on, 2 hole mounting	P250F	5308843		

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For us, that is "Sensor Intelligence."

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