W4SLG-3

Detect all objects with one device - Change mode via teach button

MINIATURE PHOTOELECTRIC SENSORS

SICK
Sensor Intelligence.

Technical data overview

Dimensions (W x H x D)	12.2 mm x 41.8 mm x 17.3 mm
Sensing range max.	0 m ... 4.5 m [1] [2]
Light source	Laser
Type of light	Visible red light
Enclosure rating	IP66 IP67
Housing material	Plastic Novodur
Adjustment	Single teach-in button IO-Link

[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.
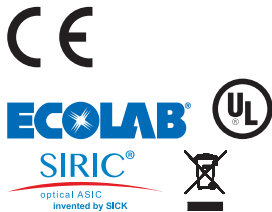
Product description

The WL4SLG-3 detects all types of objects, including transparent vials, PET bottles, metallic needles, and wires, The precise, highly visible laser light spot ensures a high level of detection quality and facilitates sensor alignment. Autocollimation technology ensures that the sensor reliably detects objects at close range and through small drilled holes. The sensor uses automatic switching threshold adaptation to adjust automatically to changing light conditions, helping ensure maintenance-free system operation. The photoelectric sensors also provide an IO-Link interface to allow performing initial system performance diagnostics. In addition, IO-Link permits the integration of additional functions such as meters directly into the sensor. There is no need for complex control programming.

At a glance

- Precise laser light spot, laser class 1
- Teach-in button can be switched between detection of transparent and smallest non-transparent objects
- Automatic switching threshold adaptation provides automatic adjustment to changes in light conditions
- Sensing ranges up to 4.5 m
- Autocollimation optics prevent blind spots
- Choice of adjustment via teach-in button, potentiometer, cable, or IO-Link

Your benefits

- One device for detecting both transparent objects and the smallest non-transparent objects at sensing ranges up 4.5 m, thus reducing the variety of sensors and saving on storage costs.
- Highly visible, even laser light spot with a sharp contour to facilitate alignment
- The highest degree of machine design flexibility. Autocollimation permits detection even through small drilled holes.
- High-quality sensor manufacturing and testing reduce maintenance costs
- Established and proven housing design for easy installation
- IO-Link facilitates initial system performance diagnostics and uses additional sensor functions to reduce complex control programming

Fields of application

- Overhang control – sensor avoids overhanging panels
- Precise object positioning – Monitoring the exact position of a part in order to prepare a quality check
- Precise edge detection of glass panel
- Monitoring additional features of a part such as boreholes
- Check whether a part is located in the gripper of the robot
- Application are, e.g. at the packaging, automotive and part supplier, electronic and solar industry, machine building and the industries of commercial goods

Ordering information

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

- **Sensor principle:** Photoelectric retro-reflective sensor
- **Detection principle:** autocollimation
- **Switching mode:** Light/dark switching

Sensing range max.	Type of light	Light source	Adjustment	Switching output	Connection type	Type	Part no.
0 m ... 3.5 m	Visible red light	Laser	Single teach-in button	NPN	Cable, 4-wire 2 m	WL4SLG-3N1152	1076053
				PNP	Male connector M8, 4-pin	WL4SLG-3P2252	1076046
0 m ... 4.5 m	Visible red light	Laser	Single teach-in button	NPN	Cable, 4-wire 2 m [1]	WL4SLG-3N1132	1058247
						WL4SLG-3N1162P01	1101033
				PNP	Male connector M8, 4-pin	WL4SLG-3P2232	1058243

[1] Do not bend below 0 °C.

- **Sensor principle:** Photoelectric retro-reflective sensor
- **Detection principle:** autocollimation
- **Switching mode:** Light/dark switching
- **Smart Task name:** base logics

Sensing range max.	Type of light	Light source	Adjustment	Switching output	Connection type	Type	Part no.
0 m ... 3.5 m	Visible red light	Laser	IO-Link, Single teach-in button	PNP	Male connector M8, 4-pin	WL4SLGC-3P2252A00	1080951

- **Sensor principle:** Photoelectric retro-reflective sensor
- **Detection principle:** autocollimation
- **Switching mode:** Light/dark switching
- **Smart Task name:** Time measurement + debouncing

Sensing range max.	Type of light	Light source	Adjustment	Switching output	Connection type	Type	Part no.
0 m ... 3.5 m	Visible red light	Laser	IO-Link, Single teach-in button	PNP	Male connector M8, 4-pin	WL4SLGC-3P2252A70	1080953

- **Sensor principle:** Photoelectric retro-reflective sensor
- **Detection principle:** autocollimation
- **Switching mode:** Light/dark switching
- **Smart Task name:** Counter + debouncing

Sensing range max.	Type of light	Light source	Adjustment	Switching output	Connection type	Type	Part no.
0 m ... 3.5 m	Visible red light	Laser	IO-Link, Single teach-in button	PNP	Male connector M8, 4-pin	WL4SLGC-3P2252A71	1080955

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."

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