



W2SG-2

Powerful clear material detection in an ultra-compact housing

PHOTOELECTRIC SENSORS

SICK
Sensor Intelligence.



Technical data overview

Dimensions (W x H x D)	7.7 mm x 21.8 mm x 13.5 mm
Sensing range max.	0 m ... 1.2 m ¹⁾
Light source	PinPoint LED
Type of light	Visible red light
Enclosure rating	IP67
Housing material	Plastic ABS/PC
Adjustment	Cable / IO-Link (depending on type)

¹⁾ Reflector P250F.



Product description

New possibilities in machine construction: the ultra-compact WL2SG-2 miniature photoelectric sensor for detecting transparent objects offers features that were previously only available with much larger sensors. Ampules, foil and glass are reliably detected in the most confined of spaces.

The WL2SG-2 is adaptable: dust on the reflector or wear is compensated for in the same way as temperature changes and changes in light intensity. The WL2SG-2 is not only adaptable with regard to harsh industrial environments – settings for the respective application can also be selected via IO-Link.

Special operating modes for gaps in the bottle flow or for foil tear monitoring are available for extreme operating conditions. The W2S-2 offers optimal performance with an ultra-compact design for use in both pharmaceutical or automatic assembly machines. The newest automation innovation is already on board. Configuration and diagnostics are set via the control in the same way as continuous monitoring.

At a glance

- Extremely high sensor size to sensing distance ratio
- High switching point accuracy
- Teach-in functions enable reliable settings
- Automatic switching threshold adaption
- Single-lens autocollimation for visibility through apertures and drill holes
- Flexible sensor settings, monitoring, advanced diagnostics, and display thanks to IO-Link

Your benefits

- Machine design flexibility: the ultra-compact sensors offer above-average sensing distances and provide space-saving installation
- Remote setup: sensors installed in confined spaces can be set and monitored remotely via IO-Link.
- High operational reliability and system throughput: all familiar, highly-transparent objects are reliably detected
- Precise switching characteristics and a high detection quality guarantee an universal object detecting
- Universal use: conventional mounting and housing design
- The precise light spot of the PinPoint 2.0 LED enables the use of very small reflectors and reflector surfaces

Fields of application

- Detection of transparent ampules and vials in the pharmaceutical industry
- Detection of glass in window production
- Detection of displays throughout the entire production process, from the pure, highly-transparent substrate to the finished display
- Detection of preforms in beverage technology and of the smallest gaps between preforms for counting purposes

Ordering information

Other models and accessories → www.sick.com/W2SG-2

- **Sensor principle:** Photoelectric retro-reflective sensor
- **Detection principle:** autocollimation
- **Light source:** PinPoint LED
- **Voltage type:** DC
- **Switching mode:** Light switching
- **Type of light:** visible red light

Sensing range max.	Switching output	Adjustment	Connection type	Type	Part no.
0 m ... 1.2 m	NPN	Cable	Cable, 4-wire, 2 m ¹⁾	WL2SG-2N1135	1065934
	PNP	Teach-in button	Cable with M8 male connector, 4-pin, 355 mm ¹⁾	WL2SG-2P3236	1098619
		Cable	Cable with M8 male connector, 4-pin, 200 mm ¹⁾	WL2SG-2P3235	1065929
			Cable with M8 male connector, 4-pin, 350 mm ¹⁾	WL2SG-2P3235S07	1104588

¹⁾ Do not bend below 0 °C.

- **Sensor principle:** Photoelectric retro-reflective sensor
- **Detection principle:** autocollimation
- **Light source:** PinPoint LED
- **Voltage type:** DC
- **Switching mode:** Dark switching
- **Type of light:** visible red light

Sensing range max.	Switching output	Adjustment	Connection type	Type	Part no.
0 m ... 1.2 m	NPN	Cable	Cable with M8 male connector, 4-pin, 200 mm ¹⁾	WL2SG-2E3235	1065936
			Cable, 4-wire, 2 m ¹⁾	WL2SG-2E1135	1065930
	PNP	Cable	Cable with M8 male connector, 4-pin, 200 mm ¹⁾	WL2SG-2F3235	1063647
			Cable, 4-wire, 5 m ¹⁾	WL2SG-2F1235	1077099

¹⁾ Do not bend below 0 °C.

- **Sensor principle:** Photoelectric retro-reflective sensor
- **Detection principle:** autocollimation
- **Light source:** PinPoint LED
- **Voltage type:** DC
- **Switching mode:** Light/dark switching
- **Type of light:** visible red light

Sensing range max.	Switching output	Adjustment	Connection type	Type	Part no.
0 m ... 1.2 m	PNP	Cable	Cable with M8 male connector, 4-pin, 200 mm ¹⁾	WL2SGC-2P3234A00	1063648
				WL2SGC-2P3234B01	1106695

¹⁾ Do not bend below 0 °C.

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