



W4S-3 Glass

Slim photoelectric sensors reliably detect transparent objects

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 ... 5 m ¹⁾ (depending on type)
Light source	PinPoint LED
Type of light	Visible red light
Enclosure rating	IP67 IP66
Housing material	Plastic ABS
Adjustment	Single teach-in button Cable IO-Link

¹⁾ Reflector PL80A.

Product description

The WLG4S-3 is a retro-reflective sensor enclosed in a slim housing that reliably detects transparent objects. Even small gaps between objects, highly transparent thin films, and vials with flow marks and severe lens defects can be reliably detected. Setting the sensor requires a single press of the teach-in pushbutton. The sensor reliably adjusts for any changes to environmental conditions such as temperature, dust or dirt. The single-lens autocollimation system “sees” through even the smallest of openings. The Pin-Point LED's small but intense light spot enables quick and easy alignment even when using the smallest reflectors. Plus, variants with IO-Link provide continuous diagnostics data.

At a glance

- Continuous threshold adaption of the switching threshold compensates for environmental changes
- Single-lens autocollimation optics
- Simple setting either via teach-in pushbutton, cable or IO-Link
- PinPoint LED technology with a small, highly visible, well-defined light spot enables high reserve levels when using small reflectors
- Flexible sensor settings, monitoring, advanced diagnostics, and visualization thanks to IO-Link

Your benefits

- Optimal detection of any kind of transparent object
- Quick and easy operation via the push of a button – automatic setting of the correct switching threshold
- Less downtime due to a Continuous Threshold Adaption which compensates for changing environmental conditions, including temperature, dust and drift effects
- The well-defined, highly visible intense light spot provides quick and reliable alignment
- IO-Link provides easy data access from the PLC
- Quick and easy configuration
- Quick and easy integration using function blocks
- Easy device replacement and identification

Ordering information

Other models and accessories → www.sick.com/W4S-3_Glass

- **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.
0.01 m ... 5 m	NPN	Teach-in button	Cable, 3-wire, 2 m ¹⁾	WLG4S-3N1332	1046111
	PNP	Teach-in button	Cable with connector M8, 3-pin, 100 mm ¹⁾	WLG4S-3P3132	1043839
		Cable, Teach-in button	Cable with M12 male connector, 4-pin, 150 mm ¹⁾	WLG4S-3P3434	1046819
			Cable with M8 male connector, 4-pin, 100 mm ¹⁾	WLG4S-3P3234	1054098
			Male connector M8, 4-pin	WLG4S-3P2234	1052999

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.
0.01 m ... 5 m	NPN	Teach-in button	Cable with MOLEX-connector, 220 mm ¹⁾	WLG4S-3W3032S13	1091964
			Cable, 4-wire, 2 m ¹⁾	WLG4S-3W1132	1042086
			Cable with special connector, 3-wire, 300 mm ¹⁾	WLG4S-3E1334S03	1055060
		Cable, Teach-in button	Cable, 4-wire, 2 m ¹⁾	WLG4S-3E1134	1042085
	PNP	Teach-in button	Cable with connector M12, 3-pin, 150 mm ¹⁾	WLG4S-3F3332	1059718
			Cable with connector M8, 3-pin, 100 mm ¹⁾	WLG4S-3F3132	1043838
			Cable, 4-wire, 2 m ¹⁾	WLG4S-3V1132	1055895
			Male connector M8, 4-pin	WLG4S-3V2232	1042087
		Cable, Teach-in button	Cable with M8 male connector, 4-pin, 100 mm ¹⁾	WLG4S-3F3234	1043840
			Male connector M8, 4-pin	WLG4S-3F2234	1042084

¹⁾ Do not bend below 0 °C.

Sensing range max.	Switching output	Adjustment	Connection type	Type	Part no.
0 m ... 5 m	PNP	Cable, Teach-in button	Male connector M8, 4-pin	WLG4SC-3P2232S12	1080804

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.
0.01 m ... 5 m	NPN	Teach-in button	Cable with M12 male connector, 4-pin, 150 mm ¹⁾	WLG4S-3N3432	1052210
	PNP	Teach-in button		WLG4S-3K3432	1106887
				WLG4S-3P3432	1051097
			Cable with M8 male connector, 4-pin, 100 mm ¹⁾	WLG4S-3P3232	1052963
			Male connector M8, 4-pin	WLG4S-3K2232	1069998
				WLG4S-3P2232	1044186
0 m ... 5 m	PNP	Cable, Teach-in button	Cable with M8 male connector, 4-pin, 100 mm ¹⁾	WLG4SC-3P3232B01	1070334
			Male connector M8, 4-pin	WLG4SC-3P2232A00	1057177
				WLG4SC-3P2232A70	1067763
				WLG4SC-3P2232A71	1067765
				WLG4SC-3P2232A91	1067766

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.”

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