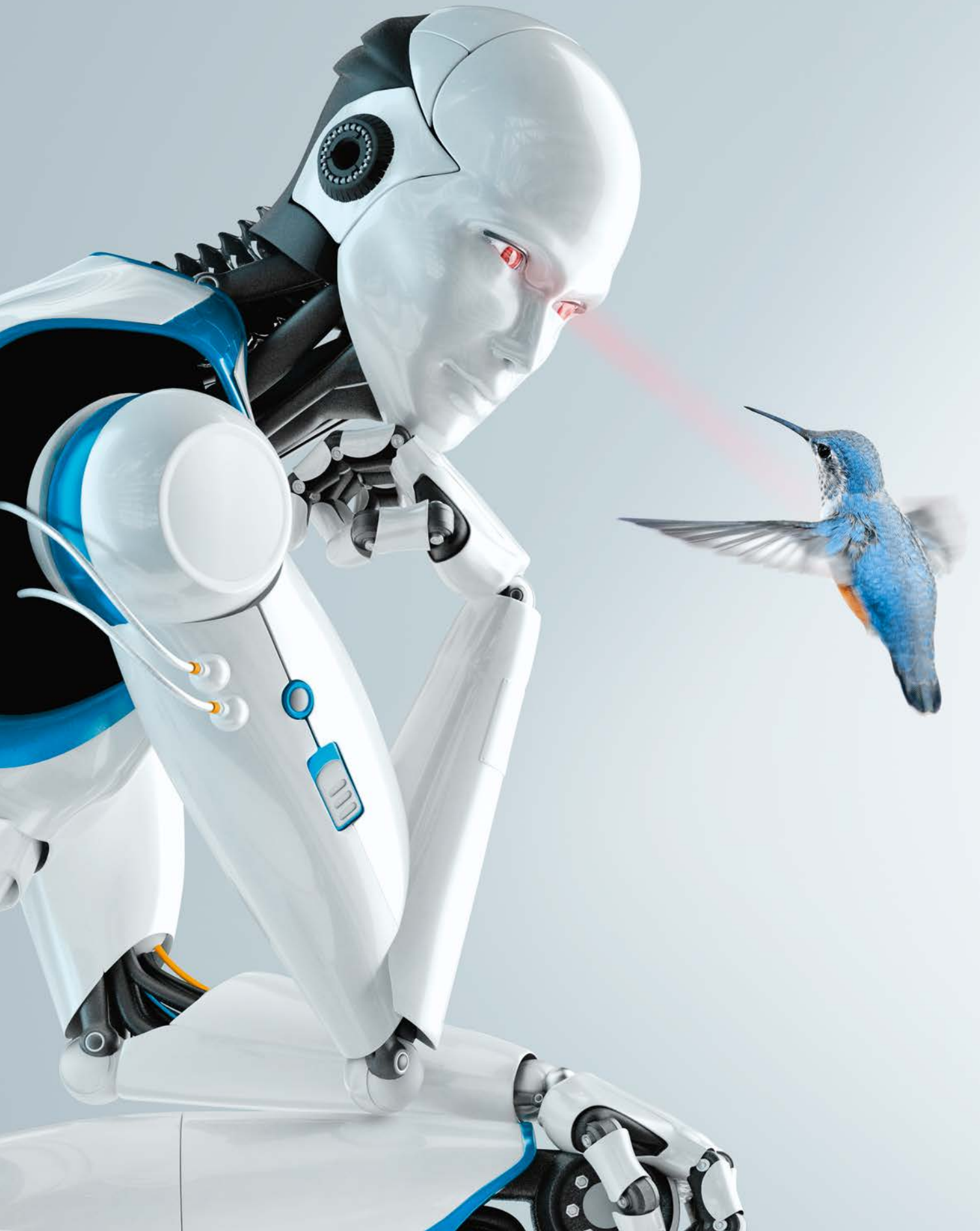




# Photoelectric sensors

PRODUCTS AT A GLANCE

**SICK**  
Sensor Intelligence.



# THE HIGHEST STANDARDS. PRECISE DETECTION.

High-tech automation requires intelligent object detection. No matter what challenges you are faced with, photoelectric sensors from SICK are the reliable solution for a broad and demanding range of applications. The high detection quality of sensors from SICK increases the productivity of machines along with the quality of results.

## YOUR ADVANTAGES AT A GLANCE

- Comprehensive detection
- All conditions; all standards
- For every type of machine
- Intelligent communication
- Complete and customized to your needs

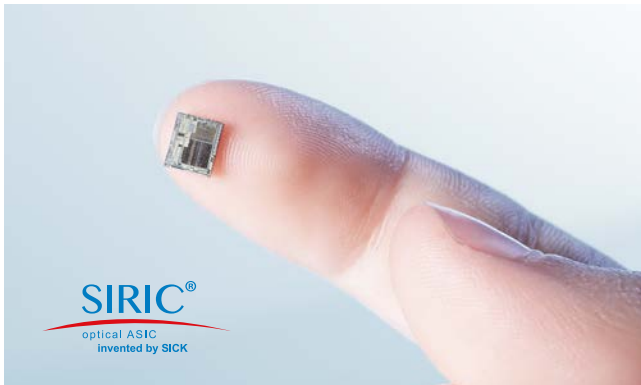


## VERSATILE, RELIABLE, FIRST-CLASS

The wide selection of photoelectric sensors from SICK ensures that numerous automation engineering applications around the world can be implemented both effectively and efficiently. Photoelectric sensors from SICK are available as standard in a wide range of designs and materials. Thanks to the use of SIRIC®, SICK's very own ASIC, combined with modern optical technologies, they offer the highest in operational safety, regardless of any on-site interference. Additional sensor information via IO-Link helps to cut the complexity of modern production processes.

Because SICK handles all its own engineering, from the design of microchips to implementation in photoelectric sensors, customization for special applications or customer requirements can be achieved quickly and tailored to your needs.





## COMPREHENSIVE DETECTION

Photoelectric sensors from SICK detect objects of various types and qualities thanks to SIRIC® – SICK's very own ASIC. With SIRIC®, digital signal processing methods can be incorporated into the world of photoelectric sensors. Sensors equipped with this technology are more powerful than ever before and are highly resistant to all known optical or electromagnetic influences. Thanks to modern communication methods, they can be integrated seamlessly into automation networks.

Sensors from SICK reliably detect every type of object – whether transparent or opaque, small or fast, perforated or shiny, uneven or wrapped in film, near or far. You can rely on the very best in quality.

## ALL CONDITIONS; ALL NORMS AND STANDARDS

Regardless of what the conditions are, photoelectric sensors from SICK operate reliably. They deliver safe detection results even under intense ambient light or disruptive background reflections. Thanks to their rugged design, they can withstand high mechanical stresses due to shock or vibration and are also secure against electromagnetic interference. Whether there is dust, extreme temperatures or temperature change, damp or wet conditions, or contact with chemicals such as cleaning agents, sensors from SICK can be relied on. They comply with all relevant norms and standards that are required in industry today. This includes EU conformity, UL, and also RoHS. SICK's in-house test guidelines often go much further than the statutory specifications and common industry standards.



## FOR EVERY TYPE OF MACHINE

From miniature to large: Thanks to their variety of housing and operating options, photoelectric sensors from SICK can fit in any machine type. For the housing materials you have the choice between stainless steel, VISTAL™, metal, plastic, or Teflon® coating. You also have numerous options when it comes to connecting and operating the sensors. All sensors from SICK are easy to set up and mount.



## INTELLIGENT COMMUNICATION




More than just a switching signal: Photoelectric sensors from SICK offer intelligent automation functions in the sensor and enable modern integration into the automation network. On the basis of state-of-the-art sensor technology, they can be integrated into automation networks and, thanks to their innovative functions, can help boost the productivity of machines.



## COMPLETE AND CUSTOMIZED

The extensive portfolio of photoelectric sensors from SICK covers the entire spectrum of industry-standard application requirements. Light sources such as PinPoint, lasers, infrared, or blue light are as much a part of this portfolio as the wide variety of available detection principles. This includes background and foreground suppression or autocollimation for avoiding blind zones. The product range is made complete with the addition of innovative functions such as ClearSense or AutoAdapt for detecting transparent objects. An extensive range of accessories is also available for all sensors.

But if this doesn't contain the perfect solution, light sources and detection principles can be customized on request with special object properties relating to material, surface, or form, for instance.









		
<b>W2S-2</b>	<b>W2SG-2</b>	<b>W4-3</b>
Incredibly small, yet powerful	Can detect even the absence of objects	Entire product family with best-in-class performance

<b>Technical data overview</b>			
<b>Dimensions (W x H x D)</b>	7.7 mm x 27.5 mm x 13.5 mm	7.7 mm x 21.8 mm x 13.5 mm	16 mm x 39.5 mm x 12 mm
<b>Max. sensing range</b>			
Photoelectric proximity sensor	1 mm ... 150 mm	-	3 mm ... 150 mm
Photoelectric retro-reflective sensor	0 m ... 1.2 m	0 m ... 1.2 m	0.01 m ... 4.5 m
Through-beam photoelectric sensor	0 m ... 2.5 m	-	0 m ... 4 m
<b>Light sender</b>	PinPoint LED / LED	PinPoint LED	PinPoint LED / LED
<b>Type of light</b>	Visible red light / visible blue light	Visible red light	Visible red light / infrared light
<b>Enclosure rating</b>	IP 67	IP 67	IP 66 / IP 67
<b>Housing material</b>	Plastic	Plastic	Plastic

<b>At a glance</b>			
	<ul style="list-style-type: none"> <li>• Sensor with background suppression and without any significant black/white shift</li> <li>• PinPoint 2.0 LED with extended sensing ranges and high operating reserves</li> <li>• A variety of application possibilities thanks to clearly-defined laser-like or line-shaped light spots</li> <li>• Detection of highly-transparent and reflective objects using sensors with V-optics</li> <li>• Photoelectric retro-reflective sensor with autocollimation and a clearly visible light spot</li> </ul>	<ul style="list-style-type: none"> <li>• Extremely high sensor size to sensing range ratio</li> <li>• High switching point accuracy</li> <li>• Teach-in functions enable reliable and stable settings</li> <li>• Continuous threshold adaptation (AutoAdapt)</li> <li>• Single-lens autocollimation for visibility through masks and drill holes</li> <li>• Flexible sensor settings, monitoring, advanced diagnostics, and visualization thanks to IO-Link</li> </ul>	<ul style="list-style-type: none"> <li>• Best background suppression sensor in its class</li> <li>• Universal use of PinPoint technology in all variants</li> <li>• BGS proximity sensor with laser-like light spot for precise detection tasks</li> <li>• Reliable setting via 5-turn potentiometer, teach-in button, teach-in via cable or IO-Link</li> <li>• Flexible sensor settings, monitoring, advanced diagnostics, and visualization thanks to IO-Link</li> </ul>
			

Detailed information	→ <a href="http://www.sick.com/W2S-2">www.sick.com/W2S-2</a>	→ <a href="http://www.sick.com/W2SG-2">www.sick.com/W2SG-2</a>	→ <a href="http://www.sick.com/W4-3">www.sick.com/W4-3</a>
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 <p><b>W4-3 Glass</b></p>	 <p><b>W4-3 PTFE</b></p>	 <p><b>W4S-3</b></p>	 <p><b>W4S-3 Glass</b></p>
<p>Reliable detection of transparent objects</p>	<p>Because it's better to be safe than sorry. The Teflon®-coated all-round protection for sensors and cables</p>	<p>Entire product family with best-in-class performance</p>	<p>No objects will go undetected by the sensor</p>
<p>16 mm x 39.5 mm x 12 mm</p>	<p>22 mm x 42 mm x 21.8 mm</p>	<p>12.2 mm x 41.8 mm x 17.3 mm</p>	<p>12.2 mm x 41.8 mm x 17.3 mm</p>
<p>-</p>	<p>4 mm ... 120 mm</p>	<p>4 mm ... 180 mm</p>	<p>-</p>
<p>0.01 m ... 4.5 m</p>	<p>-</p>	<p>0 m ... 5 m</p>	<p>0.01 m ... 5 m</p>
<p>-</p>	<p>0 m ... 3 m</p>	<p>0 m ... 5 m</p>	<p>-</p>
<p>PinPoint LED Visible red light</p>	<p>PinPoint LED Visible red light</p>	<p>PinPoint LED Visible red light</p>	<p>PinPoint LED Visible red light</p>
<p>IP 66 / IP 67 Plastic</p>	<p>IP 68 / IP 69K PTFE</p>	<p>IP 66 / IP 67 Plastic</p>	<p>IP 66 / IP 67 Plastic</p>
<ul style="list-style-type: none"> <li>• Fast and reliable setup via teach-in button</li> <li>• Continuous threshold adaptation technology to detect objects in constantly changing conditions such as temperature, contamination, and reflector wear</li> <li>• Variants without polarizing filters to better detect depolarizing objects such as PET bottles, CD sleeves and shrink-wrapped, glossy objects</li> </ul> 	<ul style="list-style-type: none"> <li>• Sensor and cable have a rugged Teflon® coating for use in the most aggressive environments</li> <li>• Suitable for use in the food industry</li> <li>• Sensing range adjustable via teach cable</li> <li>• Background suppression and through-beam types available</li> </ul> 	<ul style="list-style-type: none"> <li>• Best background suppression sensor in its class</li> <li>• Universal use of PinPoint technology in all variants</li> <li>• BGS proximity sensor with laser-like light spot for precise detection tasks</li> <li>• Reliable setting via 5-turn potentiometer, teach-in button, teach-in via cable or IO-Link</li> <li>• Flexible sensor settings, monitoring, advanced diagnostics, and visualization thanks to IO-Link</li> </ul> 	<ul style="list-style-type: none"> <li>• Continuous adaptation of the switching threshold when there is contamination</li> <li>• Single-lens autocollimation optics</li> <li>• Simple setting either via teach-in button, cable, or IO-Link</li> <li>• PinPoint LED technology with a small, highly visible, well-defined light spot enables high reserve levels when using small reflectors</li> <li>• Flexible sensor settings, monitoring, advanced diagnostics, and visualization thanks to IO-Link</li> </ul> 
<p>→ <a href="http://www.sick.com/W4-3_Glass">www.sick.com/W4-3_Glass</a></p>	<p>→ <a href="http://www.sick.com/W4-3_PTFE">www.sick.com/W4-3_PTFE</a></p>	<p>→ <a href="http://www.sick.com/W4S-3">www.sick.com/W4S-3</a></p>	<p>→ <a href="http://www.sick.com/W4S-3_Glass">www.sick.com/W4S-3_Glass</a></p>

			
	<b>W4SL-3</b>	<b>W4SLG-3</b>	<b>W4S-3 Inox</b>
	Laser precision for very small or transparent objects	Switchable for all objects	Reliable, rugged, and versatile

## Technical data overview

<b>Dimensions (W x H x D)</b>	12.2 mm x 41.8 mm x 17.3 mm	12.2 mm x 41.8 mm x 17.3 mm	15.25 mm x 49.2 mm x 22.2 mm
<b>Housing design</b>	-	-	Washdown
<b>Max. sensing range</b>			
Photoelectric proximity sensor	25 mm ... 300 mm	-	4 mm ... 500 mm
Photoelectric retro-reflective sensor	0 m ... 12 m	0 m ... 4.5 m	0 m ... 5 m
Through-beam photoelectric sensor	0 m ... 60 m	-	0 m ... 5 m
<b>Light sender</b>	Laser	Laser	PinPoint LED / LED
<b>Type of light</b>	Visible red light	Visible red light	Visible red light
<b>Enclosure rating</b>	IP 66 / IP 67	IP 66 / IP 67	IP 66 / IP 67 / IP 68 / IP 69K
<b>Housing material</b>	Plastic	Plastic	Stainless steel

## At a glance

- Precise laser light spot, laser class 1
- Teach-in button can be switched between detection of transparent and non-transparent objects
- Sensing ranges from 25 mm to 60 m
- Latest SICK proprietary ASIC and laser technologies with second emitter LED to provide outstanding background suppression and ambient light immunity
- Choice of adjustment via teach-in button, potentiometer, cable, or IO-Link



- Precise laser light spot, laser class 1
- Teach-in button can be switched between detection of transparent and smallest non-transparent objects
- Continuous threshold adaptation provides automated 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



- IP 66, IP 67, IP 68, and IP 69K enclosure rating and Ecolab certified
- Rugged, rust-free stainless-steel housing (316L/1.4404)
- Resistant to a variety of common cleaning and disinfection agents
- Laser-like light spot thanks to PinPoint technology
- Adjustment via a new revolutionary teach-in button consisting of a sealed stainless-steel membrane
- Flexible sensor settings, monitoring, advanced diagnostics, and visualization thanks to IO-Link



Detailed information	→ <a href="http://www.sick.com/W4SL-3">www.sick.com/W4SL-3</a>	→ <a href="http://www.sick.com/W4SLG-3">www.sick.com/W4SLG-3</a>	→ <a href="http://www.sick.com/W4S-3_Inox">www.sick.com/W4S-3_Inox</a>
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**W4S-3 Inox Glass**

Reliable glass detection



**W4S-3 Inox Hygiene**

Reliable, rugged, and versatile



**W4S-3 Inox Hygiene Glass**

Reliable glass detection

15.25 mm x 49.2 mm x 22.2 mm

Washdown

–  
0 m ... 4.5 m

–

PinPoint LED  
Visible red light

IP 66 / IP 67 / IP 68 / IP 69K

Stainless steel

15.25 mm x 63.2 mm x 22.15 mm

Hygiene

4 mm ... 500 mm  
0 m ... 5 m

0 m ... 5 m

PinPoint LED  
Visible red light

IP 66 / IP 67 / IP 68 / IP 69K

Stainless steel

15.25 mm x 63.2 mm x 22.15 mm

Hygiene

–  
0 m ... 5 m

–

PinPoint LED  
Visible red light

IP 66 / IP 67 / IP 68 / IP 69K

Stainless steel

- IP 66, IP 67, IP 68, and IP 69K enclosure rating and Ecolab certified
- Rugged, rust-free stainless-steel housing (316L/1.4404)
- Resistant to a variety of common cleaning and disinfection agents
- State-of-the-art electrical connections, e.g., a 100% sealed M12 male connector with cast pins
- All variants have a laser-like light spot provided by PinPoint technology
- Adjustment via a new revolutionary teach-in button consisting of a sealed stainless-steel membrane
- Continuous threshold adjustment technology reliably detects objects in constantly changing conditions



→ [www.sick.com/W4S-3\\_Inox\\_Glass](http://www.sick.com/W4S-3_Inox_Glass)

- Hygienic stainless-steel housing (316L/1.4404)
- Hygienic mounting using M12-adaptor thread or D12-adaptor shaft
- IP 66, IP 67, IP 68, and IP 69K enclosure rating and Ecolab certified
- Resistant to a variety of common cleaning and disinfection agents
- Laser-like light spot thanks to PinPoint technology
- Adjustment via a new revolutionary teach-in button consisting of a sealed stainless-steel membrane
- Flexible sensor settings, monitoring, advanced diagnostics, and visualization thanks to IO-Link



→ [www.sick.com/W4S-3\\_Inox\\_Hygiene](http://www.sick.com/W4S-3_Inox_Hygiene)

- Hygienic stainless-steel housing and accessories (316L/1.4404)
- Hygienic mounting using M12-adaptor thread or D12-adaptor shaft
- IP 66, IP 67, IP 68, and IP 69K enclosure rating and Ecolab certified
- Resistant to a variety of common cleaning and disinfection agents
- All variants have a laser-like light spot provided by PinPoint technology
- Adjustment via a new revolutionary teach-in button consisting of a sealed stainless-steel membrane



→ [www.sick.com/W4S-3\\_Inox\\_Hygiene\\_Glass](http://www.sick.com/W4S-3_Inox_Hygiene_Glass)



**W4SL-3V**

The new benchmark for optical and mechanical reliability



**W4SLG-3V**

Detects all objects in the harshest environments

**Technical data overview**

<b>Dimensions (W x H x D)</b>	15.3 mm x 55.4 mm x 22.2 mm	15.3 mm x 55.4 mm x 22.2 mm
<b>Housing design</b>	Washdown	Washdown
<b>Max. sensing range</b>		
Photoelectric proximity sensor	25 mm ... 300 mm	-
Photoelectric retro-reflective sensor	-	0 m ... 4.5 m
Through-beam photoelectric sensor	0 m ... 60 m	-
<b>Light sender</b>	Laser	Laser
<b>Type of light</b>	Visible red light	Visible red light
<b>Enclosure rating</b>	IP 66 / IP 67 / IP 68 / IP 69K	IP 66 / IP 67 / IP 68 / IP 69K
<b>Housing material</b>	Stainless steel	Stainless steel

**At a glance**

- Precise laser light spot, laser class 1
- Stainless-steel housing with washdown design
- Latest SICK proprietary ASIC and laser technology to provide outstanding background suppression and ambient light immunity
- Teach-in button can be switched between detection of transparent and the tiniest non-transparent objects
- IP 66, IP 67, IP 68, and IP 69K enclosure rating and Ecolab certified
- IO-Link (optional)



- Precise laser light spot, laser class 1, without blind spot
- Stainless-steel housing with washdown design
- Latest SICK proprietary ASIC and laser technology to provide very good background suppression and ambient light immunity
- IP 66, IP 67, IP 68, and IP 69K enclosure rating and Ecolab certified
- Teach-in button can be switched between detection of transparent and the tiniest non-transparent objects
- IO-Link (optional)



Detailed information

→ [www.sick.com/W4SL-3V](http://www.sick.com/W4SL-3V)

→ [www.sick.com/W4SLG-3V](http://www.sick.com/W4SLG-3V)



**W4SL-3H**

Laser technology and stainless steel,  
a great combination



**W4SLG-3H**

Detects all objects in  
the harshest environments

15.3 mm x 63.2 mm x 22.2 mm

Hygiene

25 mm ... 300 mm

-

-

Laser

Visible red light

IP 66 / IP 67 / IP 68 / IP 69K

Stainless steel

15.3 mm x 63.2 mm x 22.2 mm

Hygiene

-  
0 m ... 4.5 m

-

Laser

Visible red light

IP 66 / IP 67 / IP 68 / IP 69K

Stainless steel

- Stainless-steel housing with hygienic design
- Precise laser light spot, laser class 1
- Latest SICK proprietary ASIC and laser technology to provide outstanding background suppression and ambient light immunity
- Teach-in button can be switched between detection of transparent and the tiniest non-transparent objects
- IP 66, IP 67, IP 68, and IP 69K enclosure rating and Ecolab certified
- IO-Link (optional)



→ [www.sick.com/W4SL-3H](http://www.sick.com/W4SL-3H)

- Stainless-steel housing with hygienic design
- Precise laser light spot, laser class 1, without blind spot
- Latest SICK proprietary ASIC and laser technology to provide outstanding background suppression and ambient light immunity
- IP 66, IP 67, IP 68, and IP 69K enclosure rating and Ecolab certified
- Teach-in button can be switched between detection of transparent and the tiniest non-transparent objects
- IO-Link (optional)



→ [www.sick.com/W4SLG-3H](http://www.sick.com/W4SLG-3H)



**W9-3**

High performance in the VISTAL® housing



**W9-3 Glass**

High performance in the VISTAL® housing for detecting transparent objects

**Technical data overview**

<b>Dimensions (W x H x D)</b>	12.2 mm x 52.5 mm x 23.6 mm	12.2 mm x 52.2 mm x 23.6 mm
<b>Max. sensing range</b>		
Photoelectric proximity sensor	20 mm ... 800 mm	-
Photoelectric retro-reflective sensor	0 m ... 5 m	0 m ... 5 m
Through-beam photoelectric sensor	0 m ... 10 m	-
<b>Light sender</b>	PinPoint LED / LED	PinPoint LED
<b>Type of light</b>	Visible red light/infrared	Visible red light
<b>Enclosure rating</b>	IP 66 / IP 67 / IP 69K	IP 66 / IP 67 / IP 69K
<b>Housing material</b>	Plastic	Plastic

**At a glance**

- High performance in an ultra-rugged VISTAL® housing
- PinPoint LED for highly visible and precise light spot or infrared LED for the longest sensing ranges
- Second emitter LED for best-in-class background suppression
- Variable mounting with M3 or M4 hole pattern
- Wide range of facilities for connecting



- High performance in an ultra-rugged VISTAL® housing
- Best-in-class for transparent objects
- Continuous threshold adaptation
- PinPoint LED for highly visible and precise light spot
- Variable mounting with M3 or M4 hole pattern
- Wide range of facilities for connecting



Detailed information

→ [www.sick.com/W9-3](http://www.sick.com/W9-3)

→ [www.sick.com/W9-3\\_Glass](http://www.sick.com/W9-3_Glass)



**W9L-3**

Pinpoint laser precision in the rugged VISTAL® housing



**W9LG-3**

Pinpoint laser precision in the rugged VISTAL® housing for detecting transparent objects

12.2 mm x 52.2 mm x 23.6 mm

12.2 mm x 52.2 mm x 23.6 mm

25 mm ... 400 mm

-

0 m ... 12 m

0 m ... 4.5 m

0 m ... 60 m

-

Laser

Laser

Visible red light

Visible red light

IP 66 / IP 67 / IP 69K

IP 66 / IP 67 / IP 69K

Plastic

Plastic

- Rugged VISTAL® housing
- Very small, precise laser light spot
- Photoelectric proximity sensor in laser classes 1 and 2
- Photoelectric retro-reflective sensors with autocollimation optics and polarizing filter; variant available for clear material detection
- Through-beam photoelectric sensors with sensing ranges of up to 60 m
- SIRIC technology from SICK
- Connections: M8 and M12 male connector, cable as well as cable with male connector
- M3 and M4 hole pattern





→ [www.sick.com/W9L-3](http://www.sick.com/W9L-3)



- Rugged VISTAL® housing
- Very small, precise laser light spot, laser class 1
- Continuous threshold adaptation (CTA)
- Autocollimation optics and polarizing filter
- Teach-in
- SIRIC technology from SICK
- Connections: M8 and M12 male connector, cable as well as cable with male connector
- M3 and M4 hole pattern



→ [www.sick.com/W9LG-3](http://www.sick.com/W9LG-3)

	 <b>W12-3</b>	 <b>W12G</b>
	The universal product platform for demanding applications	Glass performance in a metal housing: from PET bottles to transparent foil

Technical data overview		
<b>Dimensions (W x H x D)</b>	15.6 mm x 48.5 mm x 42 mm	15.6 mm x 48.5 mm x 42 mm
<b>Max. sensing range</b>		
Photoelectric proximity sensor	20 mm ... 800 mm	-
Photoelectric retro-reflective sensor	0 m ... 7 m	0 m ... 4 m
Through-beam photoelectric sensor	0 m ... 20 m	-
<b>Light sender</b>	PinPoint-LED / LED	PinPoint-LED / LED
<b>Type of light</b>	Visible red light/infrared	Visible red light/infrared
<b>Enclosure rating</b>	IP 66 / P 67 / IP 69K	IP 66 / IP 67 / IP 69K
<b>Housing material</b>	Metal / PTFE	Metal / PTFE

At a glance		
	<ul style="list-style-type: none"> <li>• Best-in-class optical performance thanks to superior OES technology</li> <li>• Autocollimation optics on photoelectric retro-reflective sensors</li> <li>• Background and foreground suppression with second emitter LED on photoelectric proximity sensors</li> <li>• Highly visible, precise PinPoint light spot and high-energy IR senders</li> <li>• Rugged metal housing with optional Teflon® coating</li> <li>• Mounting options with through holes, blind holes, oblong holes, and dovetail</li> <li>• Flexible sensor settings, monitoring, advanced diagnostics, and visualization thanks to IO-Link</li> </ul> <div style="text-align: center;">  </div>	<ul style="list-style-type: none"> <li>• Rugged metal housing with optional Teflon® coating</li> <li>• Reliable detection of transparent objects</li> <li>• Precise autocollimation optics</li> <li>• Rugged sensors for industrial use</li> <li>• PinPoint technology</li> <li>• Versatile mounting options due to dovetail mounting – mounting holes and oblong holes</li> <li>• Highly visible status LEDs</li> <li>• Flexible sensor settings, monitoring, advanced diagnostics, and visualization thanks to IO-Link</li> </ul> <div style="text-align: center;">  </div>
Detailed information	→ <a href="http://www.sick.com/W12-3">www.sick.com/W12-3</a>	→ <a href="http://www.sick.com/W12G">www.sick.com/W12G</a>





**W12-2 laser**

A strong laser performance in a metal housing



**W18-3**

For demanding industry applications

15 mm x 49 mm x 41.5 mm

17.6 mm x 75.5 mm x 33.5 mm

20 mm ... 50 mm  
30 mm ... 200 mm

10 mm ... 1,000 mm

0 m ... 18 m

0 m ... 7 m

0 m ... 80 m

0 m ... 20 m

Laser

LED

Visible red light

Visible red light/infrared

IP 67 / IP 69K

IP 65 / IP 67

Metal / PTFE

Plastic

- Best-in-class laser performance in a metal housing
- Teflon® coating available
- Precise autocollimation optics
- Adjustable focus on photoelectric retro-reflective sensor
- High switching frequency of 2.5 kHz
- Connection via cable or rotatable male connector
- Mounting options with through holes, blind holes, oblong holes, and dovetail
- Laser class 1 or 2



→ [www.sick.com/W12-2\\_Laser](http://www.sick.com/W12-2_Laser)

- Best-in-class optical performance thanks to superior OES technology
- Autocollimation optics
- Background suppression with second sender LED
- Slim, rugged plastic housing
- Operation via double teach-in or potentiometer
- Exceptionally diverse product range for operation, connection, and optics
- Flexible sensor settings, monitoring, advanced diagnostics, and visualization



→ [www.sick.com/W18-3](http://www.sick.com/W18-3)



**W27-3**

The all-rounder: Precise, rugged, and powerful solution for a wide range of applications

**Technical data overview**

<b>Dimensions (W x H x D)</b>	24.6 mm x 80.6 mm x 54 mm
<b>Max. sensing range</b>	
Photoelectric proximity sensor	30 mm ... 2,000 mm
Photoelectric retro-reflective sensor	0.1 m ... 19 m
Through-beam photoelectric sensor	0 m ... 35 m
<b>Light sender</b>	PinPoint-LED / LED
<b>Type of light</b>	Infrared / visible red light
<b>Enclosure rating</b>	IP 65 / P 66 / IP 67 / IP 69K
<b>Housing material</b>	Plastic

**At a glance**

- Variant with PinPoint technology: intense visible red sender LED with uniform light spot
- Long sensing distances of up to 2,500 mm with infrared LED
- Precise background suppression with no sensing distance drift
- Universal voltage supply (DC, DC/AC)
- Ambient temperature: -40 °C to +60 °C
- Flexible sensor settings, monitoring, advanced diagnostics, and visualization



Detailed information

→ [www.sick.com/W27-3](http://www.sick.com/W27-3)



**W27-2 laser**

Super small laser light spot with large sensing distance



**W27-3 Ex**

Ready-to-install sensors compliant with ATEX category 3G/3D

24.6 mm x 80 mm x 53.5 mm

31.4 mm x 112.3 mm x 70.4 mm

100 mm ... 800 mm

30 mm ... 1,600 mm

-

0.1 m ... 15 m

-

0 m ... 35 m

Laser

PinPoint-LED / LED

Visible red light

Infrared / visible red light

IP 65 / IP 67

IP 67

Plastic

Metal / plastic / stainless steel

- 2 mm diameter light spot at a distance of 400 mm
- Precise and adjustable background suppression
- Laser LED with visible red light
- Simple sensing distance adjustment via potentiometer
- UL approval



→ [www.sick.com/W27-2\\_Laser](http://www.sick.com/W27-2_Laser)

- Label: EX II 3G EX nA op is IIB T4 Gc X, EX II 3D EX tc IIIB T135 °C Dc IP67 X as per Directive 94/9/EC (ATEX)
- Corresponds to category 3D/3G
- Compliant with standard and ready to install: Sensor and additional protective housing (stainless steel 1.4301)
- Long sensing distances with infrared LED
- Large sensing ranges with a high operating reserve
- Reliable operation in industrial environments – with ambient light, optical reflections, and when devices are mounted opposite one another



→ [www.sick.com/W27-3\\_Ex](http://www.sick.com/W27-3_Ex)

## SICK AT A GLANCE

SICK is a leading manufacturer of intelligent sensors and sensor solutions for industrial applications. With almost 7,000 employees and over 50 subsidiaries and equity investments as well as numerous representative offices worldwide, we are always close to our customers. 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 various 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 round out 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:**

Australia, Austria, Belgium, Brazil, Canada, Chile, China, Czech Republic, Denmark, Finland, France, Germany, Great Britain, Hungary, India, Israel, Italy, Japan, Malaysia, Mexico, Netherlands, New Zealand, Norway, Poland, Romania, Russia, Singapore, Slovakia, Slovenia, South Africa, South Korea, Spain, Sweden, Switzerland, Taiwan, Thailand, Turkey, United Arab Emirates, USA, Vietnam.

Detailed addresses and additional representatives → [www.sick.com](http://www.sick.com)