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Outstanding Performance

GM04 Gloss Sensors

Product Highlights

High Reliability

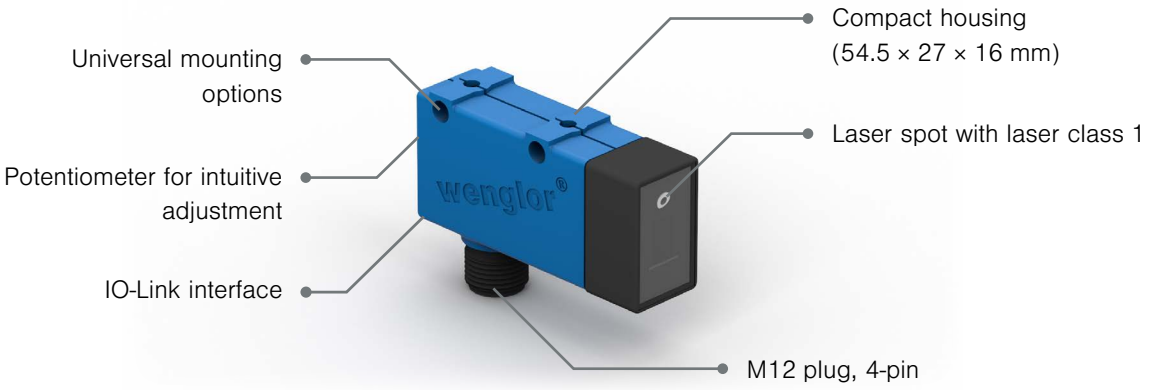
- Adaptability to different materials
- Reliable in vibrations or tilts

Versatile Application

- Working range of 5 to 40 mm
- Temperature range: –25 to 60 °C
- IP67 protection

Additional Functions via IO-Link

- Gloss intensity output
- Condition monitoring
- Convenient remote configuration



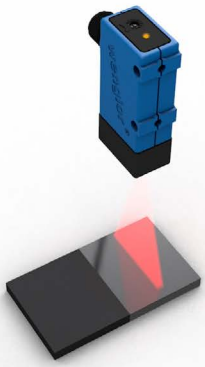
You can find all the details and even more highlights of gloss sensors on our website.

How Gloss Sensors Work

Gloss sensors detect the degree of gloss of a surface, i.e. the proportion of light reflected by the surface. The mode of operation is based on the reflection and remission of light, in particular on the polarization of the light. The two photodiodes in the receiver evaluate the light conditions and thus determine the degree of gloss.

Glossy Surfaces:
Glossy surfaces reflect light directly in a specific direction. The polarization direction of the light is retained.

Matt Surfaces:
Matt surfaces diffuse the light, which means that it is scattered in many different directions. No polarization direction identifiable.



Sectors and Applications

Pharmaceutical industry

Automotive industry

Machinery manufacturing

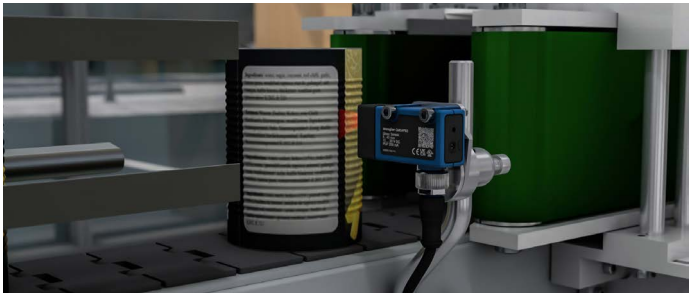
Woodworking industry

Food industry

Electronics and solar industry

Presence Check of Labels on Shiny Cans

In the packaging industry, labels are applied to cans in so-called hot glue labeling machines. To ensure a high quality standard, it is necessary to check that the labels have been correctly applied to the corresponding cans. For this purpose, a gloss sensor with laser light is installed next to the conveyor line. The sensor detects the different degree of gloss between the high-gloss tin and the matte label. This enables reliable presence check.



Product Overview

Product		Working range	Property	Output
	GM04PB2	5...40 mm	Potentiometer, M12 × 1; 4-pin	PNP, NO
	GM04PD2	5...40 mm	Potentiometer, M12 × 1; 4-pin	PNP, NC

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