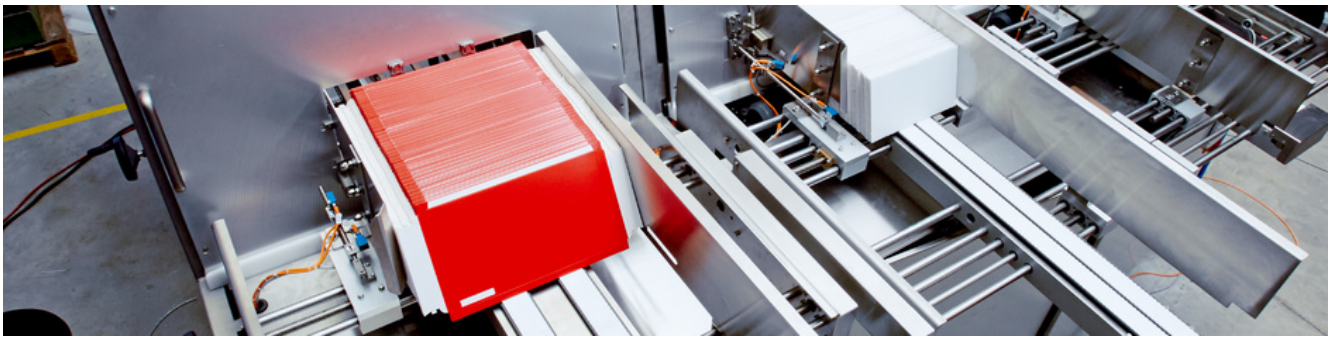
Product overview

Safeguard Detector

Natural protection by material

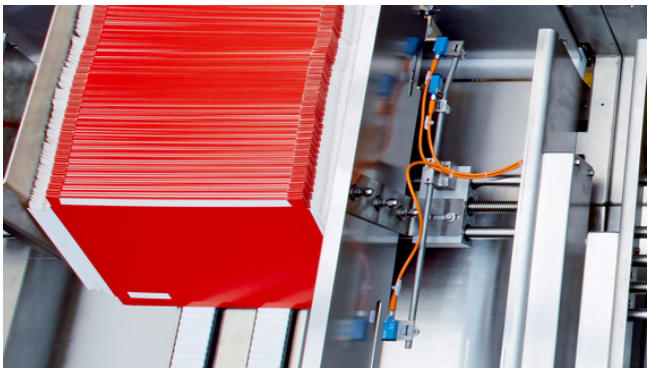
SICK
Sensor Intelligence.

Advantages

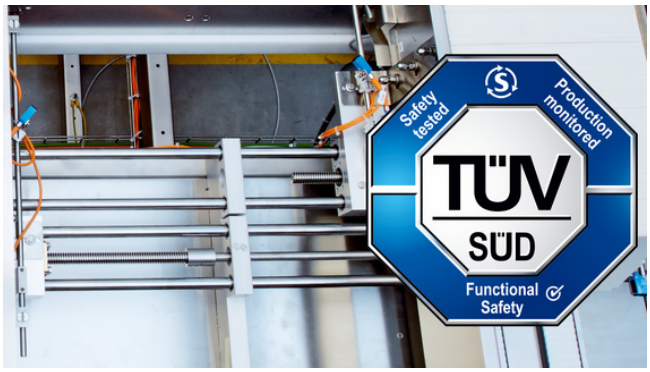


TÜV-certified safety system for safe material feed

The Safeguard Detector ensures high productivity while protecting machine operators: The TÜV-certified safety system enables simple format and material changes in feed magazines and therefore efficient production processes.



The Safeguard Detector makes it possible to eliminate mechanical tunnel systems. This means you can significantly reduce the space required by the machine.

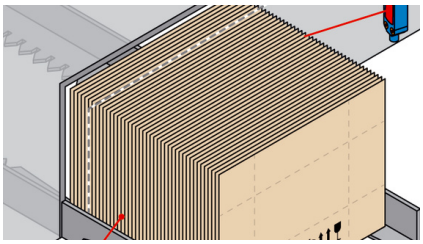


Thanks to the TÜV certification of the Safeguard Detector, you do not need any additional safety assessment. This means you can save time and money during commissioning and documentation.

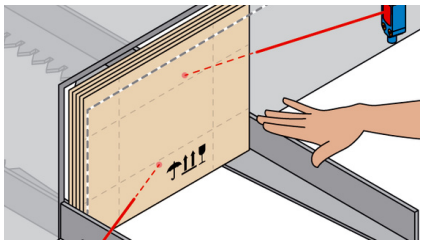
High productivity with unlimited safety

So that nothing stands in the way of your machine productivity

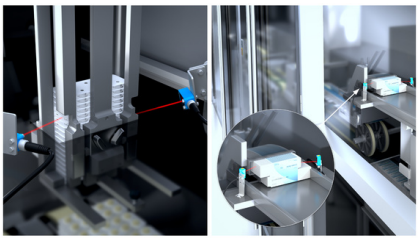
With rugged sensors and flexible machine controller within a safety system, the Safeguard Detector ensures the safety of people and fast setup of packaging materials and loading of the feed magazine. The system also detects whether only the desired material is fed to the machine.



Two MultiPulse photoelectric proximity sensors reliably detect whether the feed magazine of the packaging machine contains enough material.



If the material is almost empty, the sensors detect that material is missing. In this case, the hazardous area is no longer sufficiently protected. The machine is switched off in a safe manner until new material is filled.



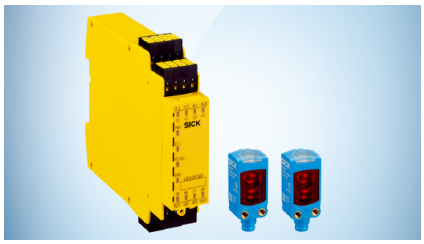
Safeguard Detector reliably detects different types of packaging, including boxes, plastic containers and non-transparent blister packs. The safety system is also suitable for packaging machines with limited installation space where the sensors need to be mounted close to the objects to be detected. This is the case, for example, when processing small packages.

High reliability for efficient processes

High flexibility for new and existing machines

Whether you are planning a new machine or want to retrofit an older one, the modular design of the Safeguard Detector means it can be adapted to the requirements of your protective device. Simply select the system variant that best fits your needs.

“Flexi Soft” system variant
This variants consists of the software, the MultiPulse photoelectric proximity sensors, and the Flexi Soft safety controller. The Flexi Soft impresses with easy configuration and diagnostics. Additional safety components can be integrated quickly. This allows for high process efficiency and flexibility.



“Box” system variant
If a safety controller has already been implemented in your machine, you can expand it with the “Box” variant with MultiPulse photoelectric proximity sensors and the UE410-SD evaluation module. This allows you to add preconfigured function blocks to the system, thus increasing safety.

“Software” system variant
If the Flexi Soft safety controller is already used in your machine, you can also use the system variant with software. This makes it possible to quickly retrofit older machines and benefit from reliable productivity.

Modular system to fit your needs

Technical data overview

Safety task	Natural protection due to the material
Safety level	PL d

Product description

Increase the safety and productivity of packaging machines with the modular Safeguard Detector safety system. The Safeguard Detector consists of two MultiPulse photoelectric proximity sensors, and the Flexi Soft safety controller or the UE410-SD evaluation module. The Safeguard Detector safely detects whether a movable physical guard is located at a previously defined position, e.g., the packaging material in the carton magazine of packaging machines. If there is sufficient packaging in the carton magazine, then it is not possible to reach into the hazardous area while the machine is running.

At a glance

- Certified up to PL d (EN ISO 13849), performance class D (IEC/TS 62998)
- High sensor availability in a miniature housing
- Reliable object detection, remission factor: 6% to 90%
- “Flexi Soft”, “Box”, “Software” system variants
- Background and foreground suppression protects against manipulation
- Detection distance: Up to 150 mm

Your benefits

- With the certified safety system for material feeding, you save time and money: An additional safety assessment is not necessary, and elaborate mechanical protection systems are not required
- Implement the system in tight spaces thanks to the very compact sensor housing
- You can count on the reliable detection of different materials such as cardboard or plastic
- You can also integrate the system into existing safety controllers and easily retrofit existing machines
- Take advantage of fast format changeovers and high machine availability

Fields of application

- Detection of movable physical guards
- Hazardous point protection when feeding plastic containers
- Hazardous point protection in primary and secondary packaging processes
- Hazardous point protection when loading and handling cardboard magazines on packaging machines

Ordering information

Other models and accessories ➜ www.sick.com/Safeguard_Detector

- **Application:** Packing machines
- **Safety task:** Natural protection due to the material

Product scope	Safeguard Detector variant	Detection zone	Items supplied	Type	Part no.
Safety controller	–	–	–	UE410-SD300	1089540
				UE410-SD400	1088689
Software license	Flexi Soft variant	–	–	SOW/SGD-W400402010	1129661
Sensors	–	28 mm ... 50 mm	2 × WTB4F Multi-Pulse sensor 50 mm	SYS/SGD-W4050000002W4F	1149838
		30 mm ... 100 mm	2 × WTB4F Multi-Pulse sensor 100 mm	SYS/SGD-W4100000002W4F	1129653
		30 mm ... 150 mm	2 × WTB4F Multi-Pulse sensor 150 mm	SYS/SGD-W4150000002W4F	1129657

Product scope	Safeguard Detector variant	Detection zone	Items supplied	Type	Part no.
System	Flexi Soft variant	28 mm ... 50 mm	1 × CPU0 main module, 1 × system plug for CPU0, 1 × XTIO expansion module (8 inputs, 4 outputs), 2 × WTB4F MultiPulse sensor 50 mm, Software license	SYS/SGD-W4054020101FX3	1149840
		30 mm ... 100 mm	1 × CPU0 main module, 1 × system plug for CPU0, 1 × XTIO expansion module (8 inputs, 4 outputs), 2 × WTB4F MultiPulse sensor 100 mm, Software license	SYS/SGD-W4104020101FX3	1129622
		30 mm ... 150 mm	1 × CPU0 main module, 1 × system plug for CPU0, 1 × XTIO expansion module (8 inputs, 4 outputs), 2 × WTB4F MultiPulse sensor 150 mm, Software license	SYS/SGD-W4154020101FX3	1129654
	Box variant	28 mm ... 50 mm	1 × UE410-SD safety controller, 2 × WTB4F MultiPulse sensor 50 mm, software, operating instructions, connection diagram and SISTEMA file	SYS/SGD-W4050010001BX3	1149841
				SYS/SGD-W4050010001BX4	1149839
		30 mm ... 100 mm	1 × UE410-SD safety controller, 2 × WTB4F MultiPulse sensor 100 mm, software, operating instructions, connection diagram and SISTEMA file	SYS/SGD-W4100010001BX3	1129652
				SYS/SGD-W4100010001BX4	1129625
		30 mm ... 150 mm	1 × UE410-SD safety controller, 2 × WTB4F MultiPulse sensor 150 mm, software, operating instructions, connection diagram and SISTEMA file	SYS/SGD-W4150010002BX3	1129656
				SYS/SGD-W4150010002BX4	1129655

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

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