



Safeguard Detector

Natural protection by material

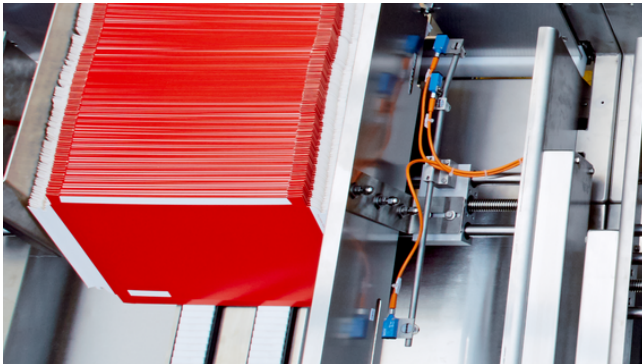
SICK
Sensor Intelligence.

Advantages

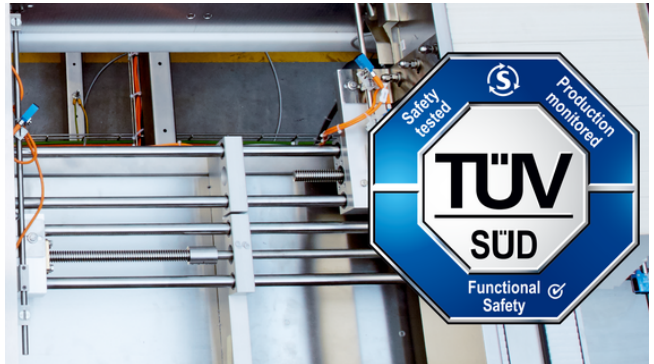


TÜV-certified safety system for safe material feed

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.

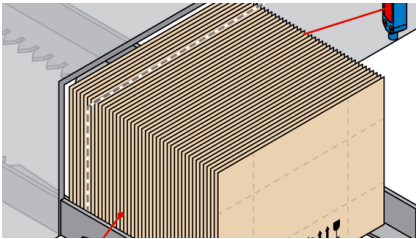


High productivity with unlimited safety

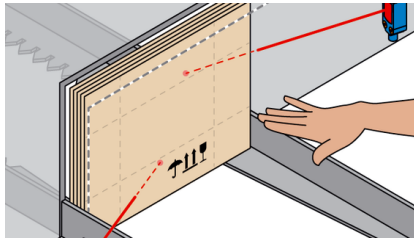


So that nothing stands in the way of your machine productivity

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.



The Safeguard Detector reliably detects various types of packaging, for instance cardboard boxes and plastic containers. This means you can use the system in many applications.



High reliability for efficient processes



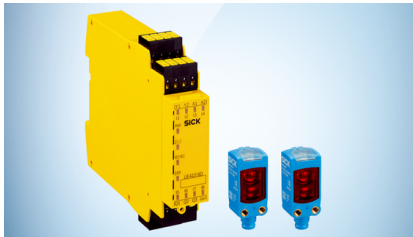
High flexibility for new and existing machines

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.



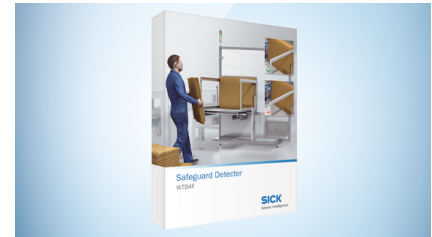
“Flexi Soft” system variant

This variant 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	Hazardous point protection
Application	Automated material flow Packing machines
Safety level	PL d, SIL 2



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
- Protection of machines for primary and secondary packaging
- Protection of infeed of plastic containers
- Protection of carton magazines for packaging machines

Ordering information

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

- **Application:** Automated material flow, Packing machines
- **Safeguard Detector variant:** box variant
- **Pulse frequency:** 10 Hz

Number of sensors	Connection type	Items supplied	Type	Part no.
2 pieces	Screw-type terminals, Connector M8, 3-pin	1 x UE410-SD300 safety evaluation module, 1 x SAPPO2D-06A0001 MultiPulse sensor pair	SAPPD2D-06AP007	1089570
		1 x UE410-SD300 safety evaluation module, 2 x MultiPulse WTB4F 30-100 photoelectric proximity sensor, software, operating instructions, connection diagram and SISTEMA file	SYS/SGD-W4100010001BX3	1129652
		1 x UE410-SD300 safety evaluation module, 2 x MultiPulse WTB4F 30-150 photoelectric proximity sensor, software, operating instructions, connection diagram and SISTEMA file	SYS/SGD-W4150010002BX3	1129656
	Spring terminals, Connector M8, 3-pin	1 x UE410-SD400 safety evaluation module, 1 x SAPPO2D-06A0001 MultiPulse sensor pair	SAPPD2D-06AP005	1089445
		1 x UE410-SD400 safety evaluation module, 2 x MultiPulse WTB4F 30-100 photoelectric proximity sensor, software, operating instructions, connection diagram and SISTEMA file	SYS/SGD-W4100010001BX4	1129625
		1 x UE410-SD400 safety evaluation module, 2 x MultiPulse WTB4F 30-150 photoelectric proximity sensor, software, operating instructions, connection diagram and SISTEMA file	SYS/SGD-W4150010002BX4	1129655
4 pieces	Screw-type terminals, Connector M8, 3-pin	1 x UE410-SD300 safety evaluation module, 2 x SAPPO2D-06A0001 MultiPulse sensor pair	SAPPD2D-06AP008	1089571
	Spring terminals, Connector M8, 3-pin	1 x UE410-SD400 safety evaluation module, 2 x SAPPO2D-06A0001 MultiPulse sensor pair	SAPPD2D-06AP006	1089446

- **Application:** Automated material flow, Packing machines
- **Safeguard Detector variant:** Flexi Soft variant

Number of sensors	Pulse frequency	Connection type	Items supplied	Type	Part no.
-	10 Hz	Connector M8, 3-pin	-	SOW/SGD-W400402010	1129661

Number of sensors	Pulse frequency	Connection type	Items supplied	Type	Part no.
2 pieces	2 Hz	Spring terminals, Connector M8, 3-pin	1 x main module FX3-CPU000000, 1 x system plug FX3-MPL000001, 1 x FX3-XTI084002 I/O module, 1 x SAP-P02D-06A0002 MultiPulse sensor pair	SAPP02D-06AP002	1066072
		Connector M8, 3-pin	1 x main module FX3-CPU000000, 1 x system plug FX3-MPL000001, 1 x FX3-XTI084002 I/O module, 2 x MultiPulse WTB4F 30-100 photoelectric proximity sensor, software, operating instructions, connection diagram and SISTEMA file	SYS/SGD-W4104020101FX3	1129622
	10 Hz	Spring terminals, Connector M8, 3-pin	1 x main module FX3-CPU000000, 1 x system plug FX3-MPL000001, 1 x FX3-XTI084002 I/O module, 1 x SAP-P02D-06A0001 MultiPulse sensor pair	SAPP02D-06AP001	1065548
		Connector M8, 3-pin	1 x main module FX3-CPU000000, 1 x system plug FX3-MPL000001, 1 x FX3-XTI084002 I/O module, 2 x MultiPulse WTB4F 30-150 photoelectric proximity sensor, software, operating instructions, connection diagram and SISTEMA file	SYS/SGD-W4154020101FX3	1129654

- **Application:** Automated material flow, Packing machines
- **System part:** safety evaluation module

Connection type	Items supplied	Type	Part no.
Screw-type terminals	1 x UE410-SD300 safety evaluation module	UE410-SD300	1089540
Spring terminals	1 x UE410-SD400 safety evaluation module	UE410-SD400	1088689

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