



## RE1

Small magnetic safety switch for non-contact door monitoring

**SICK**  
Sensor Intelligence.

## Advantages



### Reliable functionality for non-contact door monitoring

The RE1 magnetic safety switch is used to monitor doors and flaps up to IP67. It impresses with its long service life, a low-wear and -maintenance design and space-saving mounting. At the same time, the RE1 also offers reliable functionality even under unfavorable ambient conditions, such as heavy contamination.

### Low-maintenance with easy cleaning



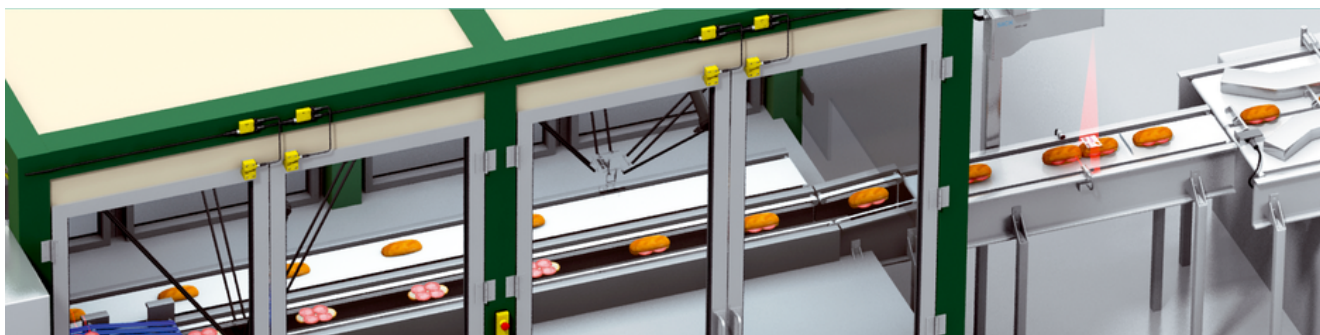
Low-wear operation enables a longer maintenance cycle and higher machine availability.



Without grooves and openings, the RE1 is very easy to clean and is perfectly suited for use on doors and flaps up to IP67 as well as in heavily contaminated areas.

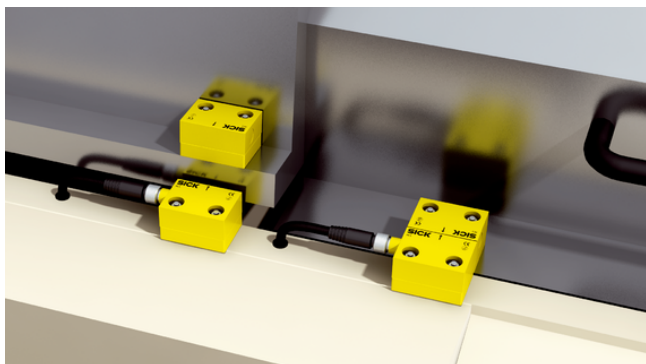


**High machine availability thanks to low-wear operation: The RE1 non-contact safety switch**

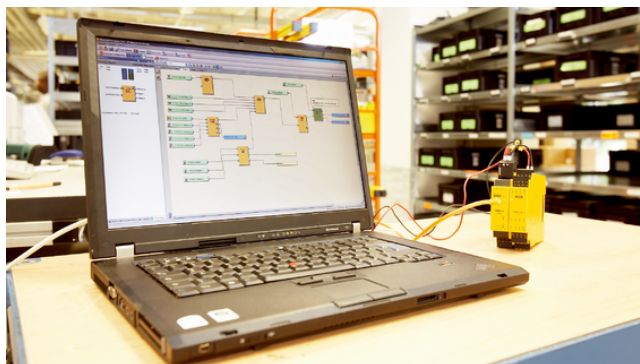


## Up to performance level e with improved protection against manipulation

Thanks to the high tolerance to door offset, the RE1 can be used for all sliding and swinging doors and enables the highest level of machine availability. Using special function blocks in the safety controller, the RE1 can achieve performance level e in accordance with EN ISO 13849 and also offers higher protection against manipulation.



Thanks to its magnetic operation, the RE1 offers more protection against manipulation than electro-mechanical safety switches and helps considerably lower the risk of accidents.



In combination with the appropriate safety function block in the controller, the RE1 can achieve performance level e.



**The RE1 magnetic safety switch combines improved protection against manipulation and the highest performance**



## Technical data overview

<b>Sensor principle</b>	Magnetic
<b>Actuator coding level</b>	Low coding level (EN ISO 14119)
<b>Type of output</b>	Reed contacts
<b>Number of N/C contacts</b>	1 / 0 (depending on type)
<b>Number of N/O contacts</b>	1 / 2 (depending on type)
<b>Connection type</b>	Cable Plug connector, M8, 4-pin Cable with M12 male connector, 4-pin Cable with M8 male connector, 4-pin (depending on type)

## Product description

RE1 magnetic safety switches are equipped with either complementary NC/NO contacts or equivalent N/O contacts which are addressed directly with coded magnetic actuators. Magnetic safety switches are used in areas where a high level of contamination occurs. They are simple to clean, thereby enabling high standards of hygiene. Their principle of operation enables greater tolerances, making them ideal for applications where precise guidance of the protective device is difficult.

## At a glance

- Response range up to 7 mm
- 2 or 3 contacts
- Up to performance level PL e (EN ISO 13849)
- Sensors with plug connector or connected cable
- Flexi Loop-compatible M12 plug connector (depending on variant)

## Your benefits

- Long service life due to durable and low-maintenance design
- Space-saving mounting due to compact housing design
- Just one safety switch in conjunction with a suitable safety module makes it possible to solve applications up to PL e and Cat. 4 (EN ISO 13849)
- High level of machine availability due to high tolerances for door misalignment
- The devices are easy to clean, making them suitable for contaminated areas or environments with strict hygiene standards
- Flexi Loop now enables a safe series connection with enhanced diagnostics capabilities and minimal wiring effort.

## Fields of application

- Monitoring of safety doors and removable guards
- Applications requiring a high standard of hygiene
- Applications where precise guidance of the safety door is not possible

## Ordering information

Other models and accessories → [www.sick.com/RE1](http://www.sick.com/RE1)

- **Systemteil:** Sensor with actuator

Number of N/O contacts	Number of N/C contacts	Connection type Detail	Length of cable	Safe series connection	Type	Part no.
1	1	Cable	3 m	None, only individual wiring (with diagnostics)	RE11-SA03	1059411
			5 m		RE15-SA03	1072460
		Plug connector, M8, 4-pin	-		RE11-SA05	1059501
					RE11-SAC	1059410
					RE15-SAC	1105317
2	0	Cable with M12 male connector, 4-pin	0.2 m	With Flexi Loop (with diagnostics)	RE13-SA64	1062540
			0.5 m	With Flexi Loop (with diagnostics)	RE13-SA64S06	1086615
		Cable with M8 male connector, 4-pin	0.2 m	None, only individual wiring (with diagnostics)	RE13-SA84	1062539
					Cable	3 m
			5 m	RE13-SA05	1062011	
		Plug connector, M8, 4-pin	-	With Flexi Loop (with diagnostics)	RE13-SAC	1059503

## 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](http://www.sick.com)