

# RE2

Compact magnetic safety switch for non-contact door monitoring



#### Advantages



### Reliable functionality for non-contact door monitoring

The RE2 magnetic safety switch is used to monitor doors and flaps up to IP67. It impresses with its long service life, a lowwear and -maintenance design and space-saving mounting. At the same time, the RE2 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 RE2 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 RE2 non-contact safety switch



# Up to performance level e with improved protection against manipulation

Thanks to the high tolerance to door offset, the RE2 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 RE2 can achieve performance level e in accordance with EN ISO 13849 and also offers higher protection against manipulation.



Thanks to its magnetic operation, the RE2 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 RE2 can achieve performance level e.



The RE2 magnetic safety switch combines improved protection against manipulation and the highest performance



#### Technical data overview

| Sensor principle      | Magnetic  |
|-----------------------|---|
| Actuator coding level | Low coding level (EN ISO 14119)   |
| Type of output        | Reed contacts   |
| N/C contacts          | 1 / 0 (depending on type)   |
| N/O contacts          | 1 / 2 (depending on type)   |
| Connection type       | Cable Cable with M8 male connector, 4-pin Plug connector, M8, 4-pin Cable with M12 male connector, 4-pin Cable with plug M12, 8-pin (depending on type) |

#### **Product description**

RE2 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 of up to 9 mm
- 2 or 3 contacts
- Up to performance level PL e / Cat. 4 (EN ISO 13849)
- Sensors with plug connector or connected cable
- LED status indicator (RE27)
- Flexi Loop-compatible M12 plug connector (depending on variant)

#### Your benefits

- · Long service life due to durable and low-maintenance 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
- Fast diagnostics via LED status indicator (RE27)
- 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/RE2

| Systemteil           | N/O contacts | N/C con-<br>tacts | Connection type Detail                          | Length<br>of cable | Safe se-<br>ries con-<br>nections                        | Status<br>display | Туре          | Part no. |
|----------------------|--------------|-------------------|---|--------------------|--|-------------------|---------------|----------|
| Sensor with actuator | 1            | 1                 | Cable with<br>M8 male<br>connec-<br>tor, 4-pin  | 0.2 m              | None, only<br>individual<br>wiring (with<br>diagnostics) | -                 | RE21-SA84     | 1083850  |
|                      |              |                   | Cable   | 3 m                |  | -                 | RE21-SA03     | 1059506  |
|                      |              |                   |   | 5 m                |  | -                 | RE21-SA05     | 1059507  |
|                      |              |                   | Plug con-<br>nector,<br>M8, 4-pin               | -                  |  | -                 | RE21-SAC      | 1059505  |
|                      | 2            | 0                 | Cable with<br>M12 male<br>connec-<br>tor, 4-pin | 0.2 m              | With Flexi<br>Loop (with<br>diagnostics)                 | -                 | RE23-SA64     | 1062542  |
|                      |              |                   | Cable with<br>M8 male<br>connec-<br>tor, 4-pin  | 0.2 m              | None, only<br>individual<br>wiring (with<br>diagnostics) | -                 | RE23-SA84     | 1062541  |
|                      |              |                   | Cable   | 3 m                |  | -                 | RE23-SA03     | 1061725  |
|                      |              |                   |   | 5 m                |  | ✓                 | RE27-SA05L    | 1059510  |
|                      |              |                   |   |                    |  | -                 | RE23-SA05     | 1061726  |
|                      |              |                   |   | 10 m               |  | ✓                 | RE27-SA10L    | 1059511  |
|                      |              |                   |   |                    |  | -                 | RE23-SA10     | 1093335  |
|                      |              |                   |   | 20 m               |  | ✓                 | RE27-SA20L    | 1059512  |
|                      |              |                   | Cable<br>with plug<br>M12, 8-pin                | 0.2 m              |  | ✓                 | RE27-SA68L    | 1059509  |
|                      |              |                   |   |                    | With Flexi<br>Loop (with<br>diagnostics)                 | ✓                 | RE27-SA68LS04 | 1065233  |
| sensor               | 2            | 0                 | Cable<br>with plug<br>M12, 8-pin                | 0.2 m              | With Flexi<br>Loop (with<br>diagnostics)                 | ✓                 | RE27-SB68LS04 | 1099625  |
| Sensor with actuator | 2            | 0                 | Plug con-<br>nector,<br>M8, 4-pin               | -                  | With Flexi<br>Loop (with<br>diagnostics)                 | -                 | RE23-SAC      | 1059508  |

# SICK AT A GLANCE

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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

