



PRODUCT OVERVIEW

STR1

Safety switches

SICK

Sensor Intelligence



NON-CONTACT SAFETY SWITCHES

STR1

Small RFID safety switch for door monitoring with manipulation protection

The STR1 RFID safety switch has monitored semiconductor outputs (OSSDs) and can be safely connected either individually or in series. It can be used for applications where a high level of manipulation protection is required. The STR1 is available with three codes. Universally coded sensors accept all actuators. An actuator must be taught into both the uniquely coded and permanently coded variants; this is the only actuator that the STR1 then accepts. The sensor has three active sensor surfaces. The actuator comes in four different sizes. This allows the STR1 to offer maximum mounting flexibility.

STR1 AT A GLANCE

BENEFITS

- High level of flexibility when mounting the sensor and actuator
- Reduced need for storage, as one sensor is suitable for a wide range of different applications
- High level of manipulation protection due to individually coded actuator
- High level of machine availability due to large door off-set tolerance and high level of shock and vibration resistance
- Economical solution due to series connection of up to 30 sensors
- Fast diagnosis via LED status indicator
- Long product service life due to low-wastage and low-maintenance configuration

FEATURES

- Response range of up to 14 mm
- Small housing with flexible mounting options
- Sensor activation possible from three sides
- Four different actuators available
- Universally coded, uniquely coded, and permanently coded sensors
- PL e (EN ISO 13849), SIL3 (IEC 61508)
- Safe series connection of up to 30 sensors possible

TECHNICAL DATA OVERVIEW

Sensor principle	RFID
Safety level	PL e, SIL 3
Actuator coding level	Low coding level (EN ISO 14119) High coding level (EN ISO 14119)
Type of output	Self-monitoring semiconductor outputs (OSSDs)
Number of safe outputs	2
Connection type	Cable, 5-wire Cable, 7-wire Cable with plug M12, 5-pin Cable with plug M12, 8-pin Cable with plug M8, 8-pin
Active sensor surface	Top, sides (left, right)

ADVANTAGES



The STR1 non-contact safety switch switches with extreme reliability

To keep system productivity as high as possible, safety switches should do one thing above all else: Switch reliably. No matter what is happening around them. That is why safety switches must be rugged so they can work reliably even in very challenging environments. It is also important that the sensor status can always be clearly identified.



Thanks to the IPX9K enclosure rating, a very high electromagnetic compatibility and the VISTAL® housing made of glass fiber-reinforced plastic, dirt, shocks, heat and cold are no problem for the STR1.



The status of the STR1 safety switch can be read off at any time thanks to the highly-visible LEDs – even in bright ambient light.



The STR1 safety switch supports the productivity of your machines with its reliability.



The compact STR1 RFID safety switch can be mounted and used flexibly.

With its high flexibility, the STR1 non-contact safety switch not only offers many mounting options, but also features maximum manipulation protection thanks to its RFID technology. Simply select a combination of the best actuator and the coding required for your application.



There are four different actuator designs:
mini, compact, flat, standard



The STR1 safety switch features active sensor surfaces at the front and on both sides



There are three coding options available for individualized manipulation protection: Universal, unique and permanently coded



The STR1 RFID safety switch offers a wide range of application options. You can use it as required by the risk assessment and machine design.

Select the right product variant and accessories directly online. There you will also find example applications as well as downloads such as CAD dimensional models, operating instructions and software.

www.sick.com/STR1



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SICK AT A GLANCE

SICK is a leading global technology company for intelligent sensors and integrated solutions in industrial automation. Our technologies set benchmarks, making your industrial processes more efficient, safer and more sustainable – both in logistics and manufacturing operations.

SICK combines sensor intelligence with industry expertise and certified consulting services. We provide the ideal foundation for scalable as well as tailor-made automation solutions and create added value along the entire value chain. Our close partnership with our customers is more than just a promise: Together, we optimize productivity, elevate quality, protect health and safety, and sustain the future. All with empathy and trust.

Since 1946, we have been developing innovative technologies with passion and a pioneering spirit. With a global network in around 40 countries, SICK has a global presence and is always close by. The company's headquarters are located in Waldkirch near Freiburg, Germany. Our customers benefit from our understanding of both local and global requirements, which enables us to deliver tailor-made solutions.

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