# ReLy

The safety relay for high ease of use

**SICK**
Sensor Intelligence.

Advantages



## Easy handling, efficient operation

**You can always relay on the ReLy. Thanks to its clever functions, it provides more efficiency in a simple way. You benefit from fast production startup, reduced downtime and more compact machine designs.**



The thin, user-friendly housing ensures space- and cost-efficient installation and commissioning



Quick troubleshooting and restart of your application thanks to diagnostic LEDs as well as controllable lamps and reset push-buttons



More compact machine designs and faster processes as a result of shorter response times and reduced safety distances
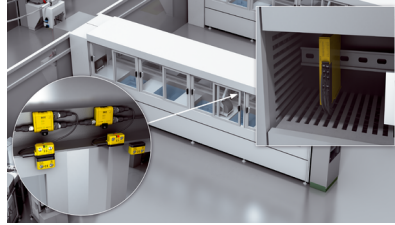
**With the ReLy, you get more out of your applications thanks to the high level of usability.**
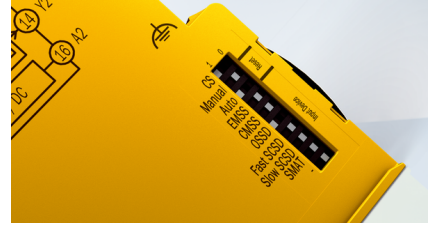
## Versatile application, simple selection

**From the simple evaluation of a safety light curtain to time-delayed switching: The ReLy has the right variant for any requirement and can thereby be used in nearly any of your applications. This means you can remain flexible in your operations and rely on productivity-enhancing safety concepts from SICK.**

Safety sensors of any kind can be monitored with a high level of safety in a wide variety of applications



The RLY3-LOOP1 in combination with the Flexi Loop ensures safe and cost-efficient series connection of safety sensors



The RLY3-MULT1 multifunctional relay can be configured using DIP switches and is also suitable for complementary safety sensors

**The ReLy offers you the right safety relay for any application.**

# ReLy

## Technical data overview

| | |
|---|---|
| **Safety level** | PL e, SIL 3 |
| **Applications** | Evaluation unit<br>Output expansion module for OSSDs<br>Evaluation unit for stop category 1 applications (depending on type) |
| **Compatible sensor types** | Safety sensors with potential-free outputs<br>Two-hand controls Type III C, in accordance with EN ISO 13851<br>Flexi Loop safe series connection<br>Safety sensors with OSSDs<br>Safety sensors with test input<br>Safety pressure mats (depending on type) |
| **Enabling current paths** | 2<br>3<br>4<br>2+1 (depending on type) |
| **Sensor monitoring** | Discrepancy monitoring<br>Cross-circuit detection<br>Sequence monitoring (depending on type) |
| **Typical response time** | 10 ms<br>12 ms<br>79 ms (depending on type) |
| **Configuration method** | Hard wired<br>DIP switch (depending on type) |
| **Housing width** | 18 mm<br>28 mm (depending on type) |

## Product description

High ease of use, more space in the control cabinet, quicker production starts, more compact machines with shorter safety distances and reduced downtime: With the clever ReLy safety relay, you get even more out of your application, and that with high safety at performance level e. So don't rely on just any safety relay – use the ReLy from SICK. Thanks to clearly defined areas of application, selecting the right variant is simple as can be.

## At a glance

- Clever, user-friendly housing functions
- Thin design with construction widths from 18 mm
- Fast response times of under 10 ms (depending on the type)
- Status LEDs and diagnostic interfaces
- Variants for universal application and for safe series connection with Flexi Loop available

## Your benefits

- Reduce commissioning work thanks to quick installation and wiring with a single front connector
- Quick module exchange thanks to the simple one-click mounting rail release
- Significant space savings in the control cabinet with a 20% thinner housing compared to the predecessor version
- Design machines more compactly and benefit from faster processes thanks to short response times and reduced safety distances
- Increase machine availability with comprehensive diagnostic options
- Long service life even in highly dynamic processes with many switching cycles

## Fields of application

- Monitoring of sensors with OSSD outputs, equivalent and complementary safety switches as well as two-hand control units
- Integration of the Flexi Loop safe series connection
- Stop category 1 applications with time-delayed switching of drive elements
- As an output extension of safety controllers

## Ordering information

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

- **Applications:** evaluation unit
- **Connection type:** Front connector with spring terminals
- **External device monitoring (EDM):** integrated
- **Housing width:** 18 mm

| Compatible sensor types | Restart interlock | Outputs | Type | Part no. |
|---|---|---|---|---|
| Flexi Loop safe series connection | ✓ | 3 enabling current paths (safe), 2 application diagnostic outputs (not safe), 1 test pulse output (not safe) | RLY3-LOOP100 | 1100696 |
| Safety sensors with OSSDs | ✓ | 2 enabling current paths (safe), 2 application diagnostic outputs (not safe), 1 test pulse output (not safe) | RLY3-OSSD200 | 1085344 |
| | | 3 enabling current paths (safe), 2 application diagnostic outputs (not safe), 1 test pulse output (not safe) | RLY3-OSSD300 | 1099969 |
| Safety sensors with OSSDs, Safety sensors with test input, safety sensors with potential-free outputs, Safety pressure mats | ✓ | 3 enabling current paths (safe), 2 application diagnostic outputs (not safe), 2 test pulse outputs (not safe) | RLY3-MULT100 | 1100692 |
| Safety sensors with potential-free outputs | ✓ | 2 enabling current paths (safe), 2 application diagnostic outputs (not safe), 3 test pulse outputs (not safe) | RLY3-EMSS100 | 1085345 |
| | | 3 enabling current paths (safe), 2 application diagnostic outputs (not safe), 3 test pulse outputs (not safe) | RLY3-EMSS300 | 1099973 |
| Two-hand controls Type III C, in accordance with EN ISO 13851 | – | 2 enabling current paths (safe), 1 application diagnostic output (not safe) | RLY3-HAND100 | 1085346 |

- **Applications:** output expansion module for OSSDs
- **Compatible sensor types:** safety sensors with OSSDs
- **Connection type:** Front connector with spring terminals
- **External device monitoring (EDM):** Via path

| Outputs | Housing width | Type | Part no. |
|---|---|---|---|
| 2 enabling current paths (safe), 1 feedback current path (for use as external device monitoring, not safe) | 18 mm | RLY3-OSSD100 | 1085343 |
| 4 enabling current paths (safe), 1 feedback current path (for use as external device monitoring, not safe), 1 signaling current path (not safe) | 28 mm | RLY3-OSSD400 | 1099971 |

- **Applications:** evaluation unit for stop category 1 applications
- **Compatible sensor types:** safety sensors with OSSDs, safety sensors with potential-free outputs
- **Connection type:** Front connector with spring terminals

| Restart interlock | External device monitoring (EDM) | Outputs | Housing width | Type | Part no. |
|---|---|---|---|---|---|
| ✓ | Integrated | 2 enabling current paths (safe), 1 re- | 18 mm | RLY3-TIME100 | 1100688 |

| Restart interlock | External device monitoring (EDM) | Outputs | Housing width | Type | Part no. |
|---|---|---|---|---|---|
| | | lease-delayed enabling current path, for stop category 1 applications (safe), 2 application diagnostic outputs (not safe), 3 test pulse outputs (not safe) | | | |

# 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**

SICK AG  |  Waldkirch  |  Germany  |  www.sick.com

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