



## L21

Cylindrical design for safety applications up to type 2

**SAFETY SINGLE-BEAM SENSORS**

**SICK**  
Sensor Intelligence.



### Technical data overview

|                                      |  |
|--------------------------------------|--|
| <b>Safety level</b>                  | Type 2, PL c, SIL1, SILCL1                                     |
| <b>Scanning range</b>                | 5 m / 16 m / 60 m (depending on type)                          |
| <b>Construction size</b>             | M18 / M30, 107.7 mm 97.7 mm 85.3 mm 100 mm (depending on type) |
| <b>Supply voltage</b>                | 24 V DC (19.2 V DC ... 28.8 V DC)                              |
| <b>Enclosure rating</b>              | IP67 (EN 60529)  |
| <b>Ambient operating temperature</b> | -40 °C ... +55 °C  |

### Product description

The L21 single-beam photoelectric safety switch consists of a sender and receiver. The test input on the sender allows direct functional tests. Performance level PL c in acc. with EN ISO 13849-1 or Type 2 in acc. with IEC 61496 can be achieved in conjunction with a safety controller. Suitable safety controllers are, for example, Flexi Classic or Flexi Soft. Color LEDs provide local information about the operational status. The required range can be selected from various device versions. All versions are suitable for outdoor applications and enable even complex safeguarding tasks to be accomplished by using deflector mirrors.

### At a glance

- Type 2 (IEC 61496), SIL1 (IEC 61508), PL c (EN ISO 13849), only in conjunction suitable testing device, e.g., Flexi Classic or Flexi Soft
- Small M18 sensors with ranges up to 10 m
- Compact M30 sensors with ranges up to 60 m
- Enclosure rating IP 67
- Temperature range from -40 °C ... 55 °C
- Metal and plastic version
- Radial optics (90° deflector mirror)
- Straightforward diagnostics and service

### Your benefits

- Easy integration due to small, compact versions with maximum range
- Directly connect to a safety controller – reducing costs
- Flexible device integration makes it possible to set up individual access protections
- Well suited to withstand extreme ambient conditions such as heat, cold or moisture

### Fields of application

- Access or area protection in warehouse/conveyor systems
- Monitoring of doors and service openings on machines
- Optical safety edges for protecting automated guided vehicles

## Ordering information

Other models and accessories → [www.sick.com/L21](http://www.sick.com/L21)

| Scanning range | Model      | Housing material    | Sender      |          | Receiver    |          |
|----------------|------------|---------------------|-------------|----------|-------------|----------|
|                |            |                     | Type        | Part no. | Type        | Part no. |
| 5 m            | M18 radial | Nickel-plated brass | L21S-11MA1A | 6034876  | L21E-11MA1A | 6034877  |
| 16 m           | M18 axial  | Plastic PBT         | L21S-21KA1A | 6034872  | L21E-21KA1A | 6034873  |
|                |            |                     | L21S-21KA2A | 6034964  | L21E-21KA2A | 6034965  |
|                |            | Nickel-plated brass | L21S-21MA1A | 6034874  | L21E-21MA1A | 6034875  |
|                |            |                     | L21S-21MA2A | 6034962  | L21E-21MA2A | 6034963  |
| 60 m           | M30 axial  | Nickel-plated brass | L21S-33MA2A | 6034870  | L21E-33MA2A | 6034871  |

## 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)