



## MLP1

RFID safety switch with magnetic locking for process protection

**SICK**  
Sensor Intelligence.

## Advantages



### Smooth processes with safety

The MLP1 masters machines and plants without overrun movements with ease. Its strong electromagnet prevents interference in running processes, thus ensuring that the protective door remains closed and production runs smoothly. You also benefit from the high level of manipulation protection provided by the RFID safety switch: variants with unique coding only accept the previously taught-in actuator.



The high locking force of the electromagnet ensures that the protective door cannot be opened on accident.



The MLP1 offers an offset tolerance of  $\pm 5$  mm and, thanks to the combination of RFID technology and electromagnet, enables the door to be reliably locked even if the door is not quite closed correctly.



**Optimum process protection – increase the availability of your machines thanks to large offset tolerances**



## Flexible mounting, unobtrusive integration

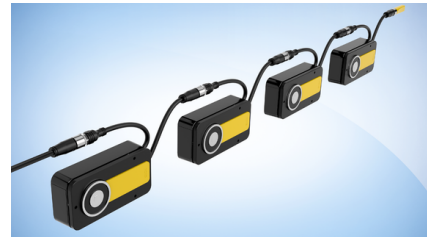
You can flexibly integrate the MLP1 into your machine – it is quickly mounted and hardly visible. Thanks to its IP67 enclosure rating and rugged metal housing, the MLP1 can withstand harsh ambient conditions, thus offering a long service life. It also features various connection options and performance level e.



Mount the MLP1 directly on the door frame or inside the machine as required.



Connect individually or in series – the choice is yours: MLP1 with one or two M12 plug connectors.



Simple and safe series connection reduces wiring work.



**For your safety – performance level (PL) e even in series connection**



### Technical data overview

<b>Type</b>	Type 4, RFID (EN ISO 14119)
<b>Actuator coding level</b>	Low coding level (EN ISO 14119) High coding level (EN ISO 14119)
<b>Type of output</b>	Self-monitoring semiconductor outputs (OSSDs)
<b>Locking principle</b>	Power to lock
<b>Door monitoring</b>	✓
<b>Locking force <math>F_{Zh}</math></b>	500 N (GS-ET-19)
<b>Connection type</b>	Cable with plug M12, 5-pin Cable with plug, M12, 5-pin and cable with socket, M12, 5-pin Cable with plug M12, 8-pin (depends on variant)
<b>LED</b>	✓

### Product description

The MLP1 safety switch featuring a magnetic locking function is the efficient solution for applications that require process protection in addition to the safety function. The RFID safety switch monitors its semiconductor outputs itself, thus offering a high level of safety for door monitoring. What's more, a strong electromagnet ensures that the protective door stays closed and the production process is not interrupted. The combination of these two low-wear technologies provides high door offset tolerance and increases the availability of the machine. The innovative mounting concept and flat actuators of the MLP1 make it easy to integrate into the machine design.

### At a glance

- Actuator with low or high coding level
- Magnetic locking force: 500 N, retaining force: 25 N
- PL e, category 4 (EN ISO 13849), SIL 3 (EN 61508) for door monitoring
- Offset tolerance:  $\pm 5$  mm
- Enclosure rating: IP67
- Standardized or integrated mounting
- Variants with two M12 plug connectors for simple cascading

### Your benefits

- Benefit from the high level of manipulation protection through the use of RFID technology when monitoring the actuator
- Take advantage of discreet integration into the machine design thanks to the innovative mounting concept
- Increase the availability of your machine thanks to the high door offset tolerance
- Save time and money thanks to very simple series connection and the low-wear and low-maintenance design
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### Fields of application

- Protection of people in applications which do not involve overrun movements
- Process protection for automated production systems
- Applications where precise guidance of the protective door is not permitted

## Ordering information

Other models and accessories → [www.sick.com/MLP1](http://www.sick.com/MLP1)

Coding	Connection type Detail	Safe series connection	Type	Part no.
Uniquely coded	Cable with plug, M12, 5-pin and cable with socket, M12, 5-pin	Direct (without diagnostics)	MLP1-SMUC0AC	1117390
	Cable with plug M12, 5-pin	None, only individual wiring (with diagnostics)	MLP1-SMUA0AC	1117627
	Cable with plug M12, 8-pin	With T-connector (without diagnostics), with Flexi Loop (with diagnostics)	MLP1-SMUFOAC	1117626
Universally coded	Cable with plug, M12, 5-pin and cable with socket, M12, 5-pin	Direct (without diagnostics)	MLP1-SMMCOAC	1077942
	Cable with plug M12, 5-pin	None, only individual wiring (with diagnostics)	MLP1-SMMA0AC	1077943
	Cable with plug M12, 8-pin	With T-connector (without diagnostics), with Flexi Loop (with diagnostics)	MLP1-SMMFOAC	1080321

## 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)