



flexLock

RFID-monitored safety locking device with 180° actuation radius

SAFETY LOCKING DEVICES

SICK
Sensor Intelligence.

Advantages



Flexible 180° approach

The flexLock safety locking device will impress you with its innovative rounded housing design and, thanks to the infinitely variable actuation radius of 180°, is suitable even for small door radii. The short minimum distance between multiple devices also allows fast machine integration.

Find out more



Whether it be a hinged door, sliding door or flap: The open locking head with 180° actuation radius makes it easy to adapt to the circumstances of your protective device.



Choose between two actuator variants: a flexible actuator with spring-loaded tongue when the door guidance is imprecise, or a rigid actuator that supports a side approach.



The alignment tolerance of +/- 3 mm allows fast mounting and reliable locking of your protective device, even with door misalignment.



Flexibility of the switch and actuator – makes your machine integration easier



Economical time savings

Less malfunctions, less downtimes, short maintenance cycles – even under challenging ambient conditions with high hygiene standards. With flexLock, you will experience a product that can withstand contamination, door sagging or frequent cleaning.



Protection class IP67 and IP69K as well as high chemical resistance: With no large grooves or openings, flexLock is fast and easy to clean.



The bright LEDs which are visible from three sides make it easy to determine the status and quickly diagnose issues.



No disturbances from external influences – a win for your machine availability.



Access reliably monitored

flexLock achieves a high level of safety for door and locking monitoring thanks to its performance level e rating. Benefit from the high coding level of the actuator with RFID technology and thereby save the time and expense of additional measures for manipulation protection.



With a low or high coding level of the RFID tag in the actuator to choose from, all the manipulation protection options according to EN ISO 14119 are available to you.



Not to overcome: The high locking force of up to 3150 N ensures the door remains safely and reliably locked until no more risk to humans or the production process exists.



The optional escape release protects persons in whole body applications. If a person is accidentally located in the hazardous area when the machine is running, they can unlock the locking device from the inside and stop the machine.



High coding level and high locking force – all for your safety

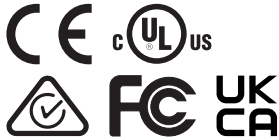


Optimal product flow without hazards

Not all machines can be stopped immediately in the case of a planned access. Overrun movements can create dangerous situations for workers. flexLock locks protective devices until dangerous states and the running production process have ended – for safe working and less material scrap.



Safety locking function – for optimal personnel and process protection



Technical data overview

Type	Type 4 (EN ISO 14119)
Actuator coding level	Low coding level (EN ISO 14119) High coding level (EN ISO 14119)
Type of output	Self-monitoring semiconductor outputs (OSSDs)
Locking principle	Power to release / power to lock (depending on type)
Locking force F_{Zh}	Flexible actuator 3,150 N (EN ISO 14119) Rigid actuator (frontal) 2,790 N (EN ISO 14119) Rigid actuator (lateral) 2,700 N (EN ISO 14119)
Escape release	– / ✓ (depending on type)
Connection type	Plug connector, M12, 8-pin
LED	✓

Product description

The flexLock safety locking device with RFID monitoring is characterized by an infinitely variable actuation radius of 180°. It thus offers a high level of flexibility for the safety locking function of doors and flaps – even with small door radii. The clearly visible LEDs show the device status continuously at all viewing angles. The open locking head and the rounded housing of the flexLock allow for easy cleaning. In addition, the high offset tolerance ensures easy mounting and high system availability, even when the door is lowered. Variants for personal or process protection are well suited for use in a wide range of applications up to PL e. The optional escape release allows the locking device to be unlocked from the hazardous area.

At a glance

- Innovative design: Open locking head with 180° actuation radius, rounded housing, bright LEDs (visible from three sides)
- PL e for door and locking monitoring with low or high coding
- IP67 and IP69K enclosure rating
- High locking force: Up to 3150 N
- Flexible actuator for high offset tolerance

Your benefits

- Makes machine integration easier thanks to the flexible entry point of the actuator into the locking head – even for applications with small door radii
- Provides high manipulation protection at a high coding level
- Saves you time and money when cleaning the housing, making it particularly well-suited for use in dirty environments
- Ensures a high level of safety thanks to PL e and high locking force
- Makes mounting easy and offers you a high machine availability thanks to offset tolerance
- Able to be used in hazardous areas that are not fully visible thanks to escape release

Fields of application

- Protection of persons by locking function in the event of the machine making dangerous overrun movements
- Locking of doors for process protection
- Applications in which high manipulation protection is required
- Applications with small door radii
- Applications that have high requirements on hygiene and cleaning

Ordering information

Other models and accessories → www.sick.com/flexLock

Locking principle	Switching behavior of the OSSDs	Coding	Auxiliary release	Escape release	Type	Part no.
Power to release	Locking monitoring	Universally coded	✓	–	FXL1-SPBMSA00	1101321
				✓	FXL1-SPEMSA00	1120828
		Uniquely coded	✓	–	FXL1-SPBUSA00	1101320
				✓	FXL1-SPEUSA00	1120827
Power to lock	Locking monitoring	Universally coded	–	–	FXL1-SPLMSA00	1101323
		Uniquely coded	–	–	FXL1-SPLUSA00	1101322
	Actuator monitoring	Universally coded	–	–	FXL1-SPLMAA00	1101325
		Uniquely coded	–	–	FXL1-SPLUAA00	1101324

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:

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