



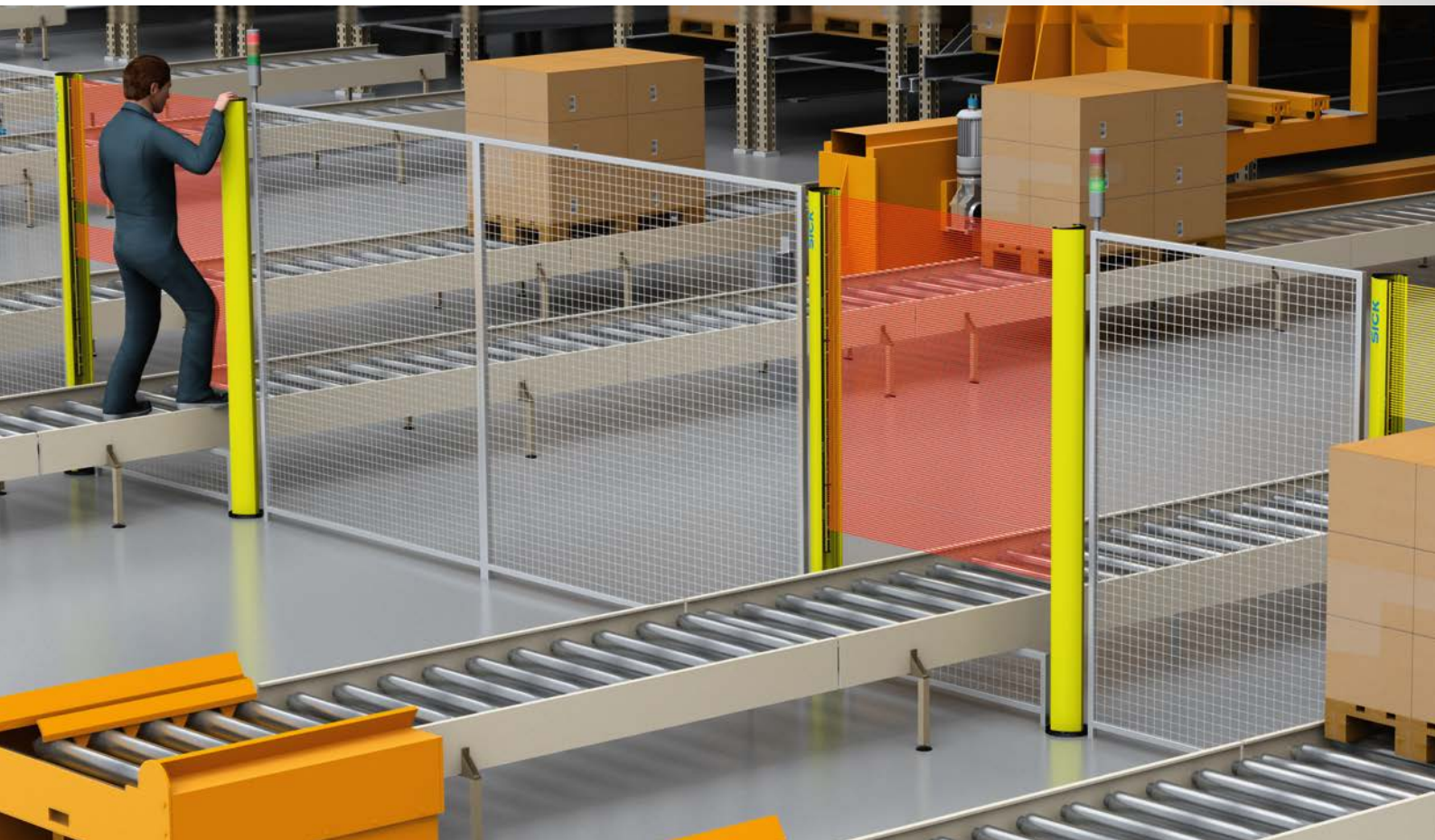
# Safe Entry Exit

NEW WAY OF MUTING

Safety systems

**SICK**  
Sensor Intelligence.

# THE MODERN ALTERNATIVE TO CLASSIC MUTING



In order to ensure high productivity when safeguarding machines and plants, a reliable and at the same time efficient human-material differentiation is essential.

Classic muting relies on signal-emitting muting sensors to detect when transport goods are approaching a protective field. However, such systems are not only associated for taking up a lot of space, but also for a high installation effort.

**The Safe Entry Exit system from SICK is the TÜV-certified alternative to classic muting in the intra-logistics, automotive, and packaging industry, as well as for automated guided vehicles (AGVs) and carts (AGCs). The system offers reliable differentiation between humans and materials without the need for additional signal sensors.**

## MUTING IS NOW EVEN MORE EFFICIENT

### + Guarantee safety



- Stay protected with the existing TÜV certification (EU-type examination) up to SILCL3 (EN 62061), PL e (EN ISO 13849)



### + Ensure high productivity



- Take advantage of the benefits of each type 4 electro-sensitive protective device (ESPE) and perform tasks e.g. measure the height at the same time
- Use an existing process signal instead of additional muting sensors to reduce machine downtimes



### + Save time, space and money



- Save time and money on integration and documentation thanks to the easy handling and use of pre-configured and certified software
- Stay flexible – since Safe Entry Exit can be integrated into almost every bus system, such as PROFINET or EtherCAT®
- Save space and take advantage of a compact system layout by eliminating the need for additional muting sensors and the option to use any type 4 ESPE



### + Future-proof investment



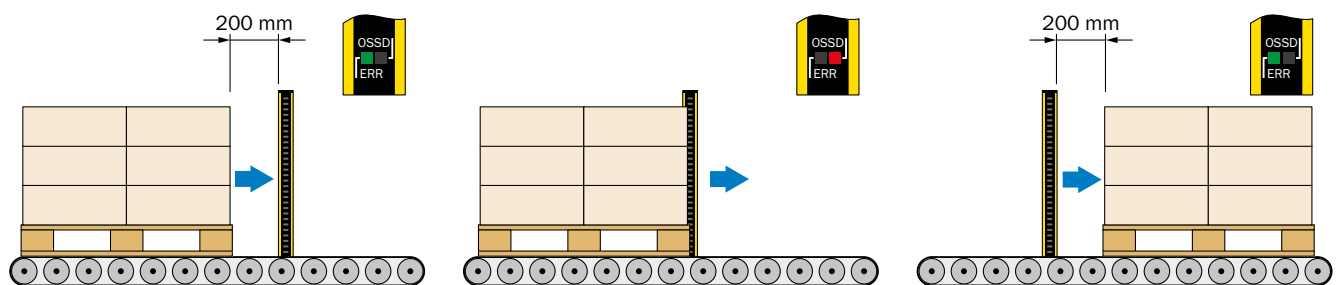
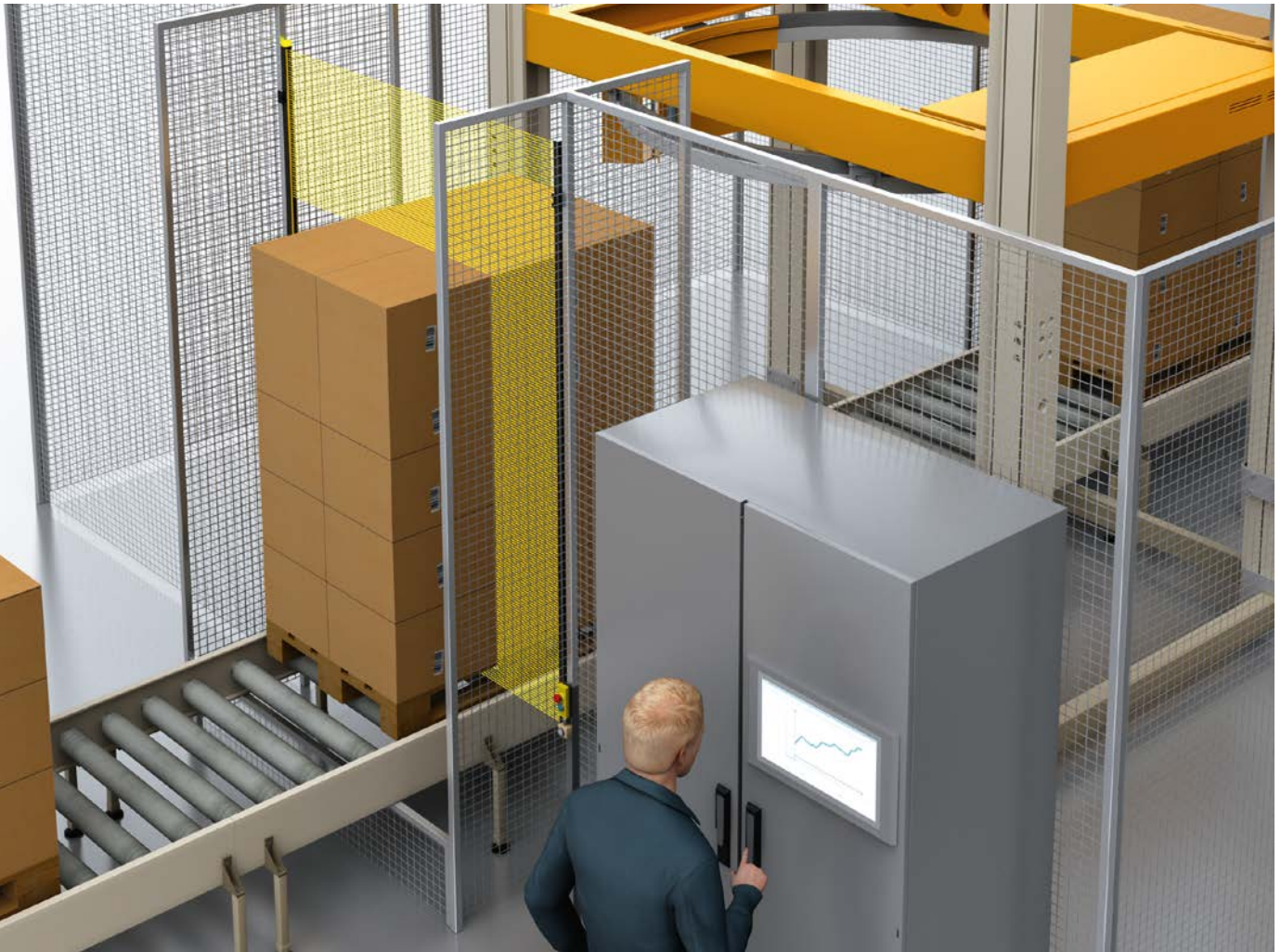
- Take a significant step towards Industry 4.0: Detailed diagnosis data is available for continuous process transparency and optimization of your application
- Take advantage of being independent of product innovations. Even in the future, every type 4 ESPE will still be suitable for the use in your plant



**4** INDUSTRY 4.0  
READY®

## YOU CAN SAVE ON MUTING ARMS

Safe Entry Exit uses existing process signals as a trigger, making additional muting sensors on any protruding brackets unnecessary. Always on the condition that the signal must not be easy to manipulate. As soon as the transport goods have passed the protective device, it is ready for use again to protect humans from hazards.



A manipulation-proof process signal, which is typically already available in every plant, is used as the first trigger signal according to the requirement of max. 200 mm in front of the protective device (distance may vary based on the risk assessment).

The safe switching signal of the protective device initiates the muting function as the second signal.

The muting function is terminated no more than 200 mm after leaving the protective field (may vary based on the risk assessment) and the safe-guarding of the machine is active again.



## FREE SELECTION OF ANY TYPE 4 ELECTRO-SENSITIVE PROTECTIVE DEVICES

Safe Entry Exit works reliably with a combination of any type 4 safety light curtain or multiple light beam safety device and a TÜV-certified software. Two variants are available for reliable differentiation between humans and materials, saving you any extra time and effort with handling documentation and validation.

### Function Block for Siemens S7 controls

The TÜV-certified function block, which can be used in conjunction with any type 4 electro-sensitive protective device, can be easily integrated into existing Siemens S7 controls.

- **Save time and money** – the TÜV-certified function block not only saves time but also makes the use of an additional safety controller redundant
- **Safe productivity** – thanks to simultaneous monitoring, diagnostics, and visualization options for the muting stations directly in your Siemens control



### Flexi Soft variant

This variant of the modern safety system from SICK is available in two versions. The first version consists of the tried-and-tested Flexi Soft safety controller and a pre-configured project file. If you already own the Flexi Soft safety controller, the second version is right for you: With this version, you get the pre-configured project file as a stand-alone software. Both versions can be combined with any type 4 electro-sensitive protective device.

- **Everything from a single source** – with decades of experience in the field of industrial safety technology and a global service network, SICK is offering a comprehensive solution with the Flexi Soft variant of Safe Entry Exit
- **Easy integration** – the combination of perfectly harmonized safety components makes it possible to integrate the safety system easily into existing plants and quickly put it into operation





miniTwin4  
Safety light curtains  
→ [www.sick.com/miniTwin4](http://www.sick.com/miniTwin4)



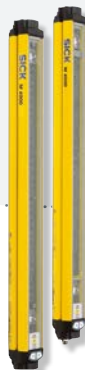
deTec4  
Safety light curtains  
→ [www.sick.com/deTec4](http://www.sick.com/deTec4)



deTem4  
Multiple light beam safety devices  
→ [www.sick.com/deTem4\\_Core](http://www.sick.com/deTem4_Core)



C4000 Advanced  
Safety light curtains  
→ [www.sick.com/C4000\\_Advanced](http://www.sick.com/C4000_Advanced)



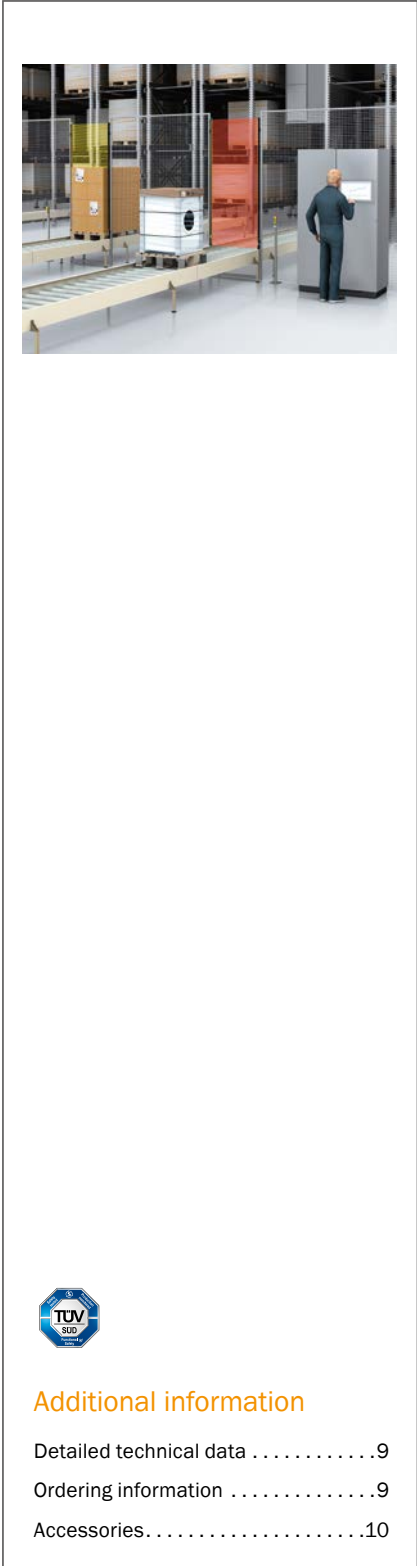
M4000  
Multiple light beam safety devices  
→ [www.sick.com/M4000\\_Standard](http://www.sick.com/M4000_Standard)



deTem4 A/P  
Multiple light beam safety devices  
→ [www.sick.com/deTem4\\_AP](http://www.sick.com/deTem4_AP)

Our comprehensive portfolio of type 4 electro-sensitive protective devices along with the appropriate services can be found on → [page 8](#)  
We will be happy to assist you with making your selection.

# NEW WAY OF MUTING



## Product description

The Safe Entry Exit safety system from SICK is the TÜV-certified alternative to classic muting: It reliably differentiates between humans and materials without additional muting sensor technology. Only a signal from the process controller is needed. As soon as the transport goods have passed the protective device, it is immediately ready again to protect humans from hazards. Depend-

ing on requirements, any type 4 electro-sensitive protective device (ESPE) can be combined with the software for the Flexi Soft safety controller from SICK or for Siemens S7 controllers. Thereby, the respective controller evaluates multiple material gates and provides the relevant diagnostic data for Industry 4.0 applications.

## At a glance

- Can be combined with any type 4 electro-sensitive protective device
- TÜV-certified alternative to classic muting up to SILCL3 and PL e
- Human/material differentiation without additional muting sensor
- Available as software for Siemens S7 or Flexi Soft
- Several material passage movements can be evaluated using a single controller
- Multiple material gates can be evaluated by one controller

## Your benefits

- A safety system that can be flexibly adapted to individual safety requirements and minimum distances
- Time and cost savings when documenting and validating your plant
- Increased productivity of your plant and space savings as no additional muting sensors are required
- Easy to integrate via the ready-to-use software
- Diagnostic data offers process transparency and optimization for your Industry 4.0 applications



## Additional information

Detailed technical data .....9  
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 Accessories.....10

→ [www.sick.com/Safe\\_Entry\\_Exit](http://www.sick.com/Safe_Entry_Exit)

For more information, simply enter the link or scan the QR code and get direct access to technical data, CAD design models, operating instructions, software, application examples, and much more.





## Detailed technical data

## Features

	Flexi Soft variant	Function block for Siemens S7
<b>Safety task</b>	Access protection with differentiation between persons and material	
<b>Supply voltage</b>	24 V DC (16.8 V DC ... 28.8 V DC) <sup>1)</sup>	–
<b>System requirements</b>	The system requires a Type 4 electro-sensitive protective device. The project file requires a Flexi Soft main module FX3-CPUx (version status: 4.0 or higher), Flexi Soft I/O module FX3-XTIO (version status: 3.0 or higher) and the Flexi Soft Designer (version status: 1.9.4 or higher).	The system requires a Type 4 electro-sensitive protective device. The function block requires a Siemens SIMATIC S7-15xxF and the TIA-Portal V14 SP1 or higher.

<sup>1)</sup> The external voltage supply must be capable of buffering brief mains voltage failures of 20 ms as specified in EN 60204-1. Suitable power supplies are available as accessories from SICK.

## Safety-related parameters

	Flexi Soft variant	Function block for Siemens S7
<b>Performance level</b>		
For process controller with MTTF <sub>d</sub> value of at least 10 a	PL d (ISO 13849-1)	
For process controller with MTTF <sub>d</sub> value of at least 100 a <sup>1)</sup>	PL e (ISO 13849-1)	
<b>Category</b>	Category 3 (ISO 13849-1)	
<b>Safety integrity level</b>		
For process controller with MTTF <sub>d</sub> value of at least 10 a	SILCL2 (EN 62061)	
For process controller with MTTF <sub>d</sub> value of at least 100 a <sup>1)</sup>	SILCL3 (EN 62061)	
<b>Safe state in the event of a fault</b>	The safety-related semiconductor outputs are in the OFF state.	

<sup>1)</sup> If PL e is required, the higher-level controller and signal source must also correspond to PL e and have a MTTF<sub>d</sub> value of at least 100 a.

## Ordering information

- Note:** With purchase, you accept the product description available under Downloads > Documentation in connection with the General Terms and Conditions for the Supply of Software Products (AVB Software SICK).

Variant	Items supplied	Type	Part no.
Flexi Soft variant	Software, operating instructions, connection diagram and SISTEMA file	SOW/SEE-FX00402010	1615186
	1 Flexi Soft main module FX3-CPU0 1 Flexi Soft I/O module FX3-XTIO 1 Flexi Soft system plug FX3-MPL0 Software, operating instructions, connection diagram and SISTEMA file	SYS/SEE-FX004020101FX3	1117266
Function block for Siemens S7	Software, operating instructions, connection diagram and SISTEMA file	SAPPD3E-05XS001	1613431

Accessories


Connection systems

Plug connectors and cables

- **Description:** For connecting the configuration connection to the USB interface on the PC


Figure	Connection type		Length of cable	Type	Part no.
	Male connector, M8, 4-pin, straight	Male connector, USB-A, straight	2 m	DSL-8U04G02M025KM1	6034574

Safety command devices





Figure	Description	Items supplied	Type	Part no.
	Emergency stop pushbutton	Including retaining clip and "RESET" cover	ES11-SC4D8	6051329

Safety controllers

Flexi Soft gateways

Figure	Communication interface	Type	Part no.
	CANopen	FX0-GCAN00000	1044076
	DeviceNet™	FX0-GDEV00000	1044077
	EtherNet/IP™	FX0-GENT00000	1044072
	EtherCAT®	FX0-GETC00000	1051432
	Modbus TCP	FX0-GMOD00000	1044073
	PROFINET	FX0-GPNT00000	1044074
	PROFIBUS DP	FX0-GPRO00000	1044075

Flexi Soft I/O modules

Figure	Description	Type	Part no.
	Flexi Soft input/output extension: 6 inputs 6 outputs 2 switchable inputs or outputs	FX0-STIO68002	1061778
	Flexi Soft input extension: 8 safety inputs 8 test pulse outputs	FX3-XTDI80002	1044124
	Flexi Soft input/output extension: 8 safety inputs 4 standard outputs 2 switchable outputs or test pulse outputs	FX3-XTDS84002	1061777
	Flexi Soft input/output extension: 8 safety inputs 4 safety outputs	FX3-XTIO84002	1044125



### deTec – At a glance

- NFC diagnosis and smartphone app
- Diagnostics and automation via IO-Link
- 2-signal muting
- Smart presence detection
- Dynamic protective field widths

### Your benefits

- Increased productivity and short downtimes thanks to extensive and innovative diagnostic options
- Safety and automation combined: IO-Link makes cost-effective system design possible
- Muting provides maximum productivity and safety in differentiating between people and material
- High availability: smart presence

- Configuration of all functions without software
- Reduced resolution: 1 or 2 beams
- IP65, IP67, and IP69K enclosure ratings plus variants for explosion-hazardous areas

detection prevents unwanted switch-offs

- Easy commissioning and configuration without the need for software, saving time and money
- IP65, IP67, and IP69K enclosure ratings available, plus variants for explosion-hazardous areas, ensuring maximum reliability in harsh environments

→ [www.sick.com/deTec](http://www.sick.com/deTec)

For more information, simply enter the link or scan the QR code and get direct access to technical data, CAD design models, operating instructions, software, application examples, and much more.



### deTem – At a glance

- Smart Sensor: diagnostic data via IO-Link or NFC and the SICK Safety Assistant app
- Compact housing, standardized connectivity, compatible accessories
- Integrated alignment aid with status

### Your benefits

- Increase productivity in access protection as well as entry and exit monitoring with muting thanks to the processing of sensor data
- Minimize installation work and profit from standardized implementation of the deTem into your machine design

LEDs directly on the device

- Configuration of all functions without software
- Variants for explosion-hazardous areas as well as enclosure rating IP69K

- Take advantage of the benefits of quick and easy device alignment
- Save time and money thanks to easy commissioning and configuration
- You can also count on the deTem in harsh environments

→ [www.sick.com/deTem](http://www.sick.com/deTem)

For more information, simply enter the link or scan the QR code and get direct access to technical data, CAD design models, operating instructions, software, application examples, and much more.





### M4000 Standard – At a glance

- Type 4 (IEC 61496), SIL3 (IEC 61508), PL e (EN ISO 13849)
- Robust housing with three mounting grooves
- Wide scanning range, up to 70 m
- External device monitoring (EDM), restart interlock and application diagnostic output
- Standardized M12 connectivity
- 7-segment display
- Configuration keys located directly on the device
- Optional integration features: laser alignment aid, LED or AS-i interface

### Your benefits

- The wide scanning range allows the device to be customized according to the application
- Robust design with a high level of resistance to environmental changes ensures high machine availability, even under special ambient conditions
- Customized protection field adaption with deflection mirror reduces installation costs
- Customer-friendly interfaces and status display simplify commissioning and maintenance
- Mounting grooves on three housing sides ensure more flexibility during mounting and simplify machine integration
- Fast start-up times due to easy alignment, using the optional laser alignment aid and performing configuration directly on the device
- Reduced downtime through 360° visible LED and diagnostics displays

→ [www.sick.com/M4000\\_Standard](http://www.sick.com/M4000_Standard)

For more information, simply enter the link or scan the QR code and get direct access to technical data, CAD design models, operating instructions, software, application examples, and much more.



### M4000 Standard A/P – At a glance

- Type 4 (IEC 61496), SIL3 (IEC 61508), PL e (EN ISO 13849)
- Sender/receiver in a single housing, scanning range up to 7.5 m
- External device monitoring (EDM), restart interlock and application diagnostic output
- Standardized M12 connectivity
- 7-segment display
- Configuration keys for setting directly on the device
- Beam coding for correct system allocation
- Optional integrated: LED, AS-i interface

### Your benefits

- Economical active/passive variants minimize the wiring and installation workload.
- Resilient and rugged design for high system throughput, even under special ambient conditions
- Mounting grooves on three housing sides ensure greater mounting flexibility and facilitate integration with the machine
- User-friendly interfaces and status indicators simplify commissioning and maintenance
- Fast startup times due to configuration directly on the device, without the need for a PC
- Reduced downtimes thanks to all-around-visible LEDs and diagnostics displays

→ [www.sick.com/M4000\\_Standard\\_A\\_P](http://www.sick.com/M4000_Standard_A_P)

For more information, simply enter the link or scan the QR code and get direct access to technical data, CAD design models, operating instructions, software, application examples, and much more.





### M4000 Advanced – At a glance

- Type 4 (IEC 61496), SIL3 (IEC 61508), PL e (EN ISO 13849)
- Robust housing with three mounting grooves
- Wide scanning range, up to 70 m
- External device monitoring (EDM), restart interlock, application diagnos-

tic output, SDL interface

- Muting in combination with the UE403 muting switching amplifier
- 7-segment display
- Configuration and diagnostics via PC
- Optional integration features: laser alignment aid, LED

### Your benefits

- The wide scanning range allows the device to be customized according to the application
- Robust design with a high level of resistance to environmental changes ensures high machine availability, even under special ambient conditions
- Mounting grooves on three housing sides ensure more mounting flexibility and simplify machine integration
- Customer-friendly interfaces and

status display simplify commissioning and maintenance

- For 2- and 4-sensor muting, the on-site connection of the muting signals significantly minimizes wiring costs and simplifies commissioning and maintenance
- Reduced downtime due to 360° visible LED, diagnostics displays and configuration memory in the UE403 muting switching amplifier

→ [www.sick.com/M4000\\_Advanced](http://www.sick.com/M4000_Advanced)

For more information, simply enter the link or scan the QR code and get direct access to technical data, CAD design models, operating instructions, software, application examples, and much more.



### M4000 Advanced A/P – At a glance

- Type 4 (IEC 61496), SIL3 (IEC 61508), PL e (EN ISO 13849)
- Sender/receiver in a single housing, scanning range up to 7.5 m
- External device monitoring (EDM), restart interlock, application diagnos-

tic output, SDL interface

- Muting in combination with the UE403 muting switching amplifier
- 7-segment display
- Configuration and diagnostics via PC
- Optional integrated: LED

### Your benefits

- The wide scanning range allows the device to be customized according to the application
- Robust design with a high level of resistance to environmental changes ensures high machine availability, even under special ambient conditions
- Mounting grooves on three housing sides ensure more mounting flexibility and simplify machine integration
- Customer-friendly interfaces and

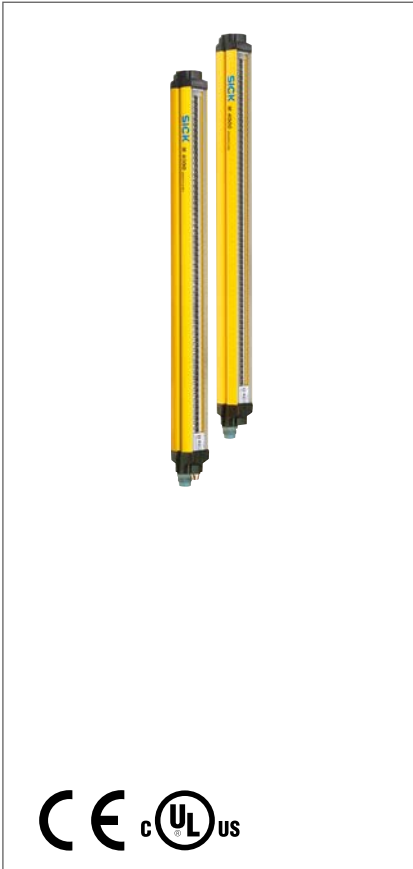
status display simplify commissioning and maintenance

- For 2- and 4-sensor muting, the on-site connection of the muting signals significantly minimizes wiring costs and simplifies commissioning and maintenance
- Reduced downtime due to 360° visible LED, diagnostics displays and configuration memory in the UE403 muting switching amplifier

→ [www.sick.com/M4000\\_Advanced\\_A\\_P](http://www.sick.com/M4000_Advanced_A_P)

For more information, simply enter the link or scan the QR code and get direct access to technical data, CAD design models, operating instructions, software, application examples, and much more.





### M4000 Advanced Curtain – At a glance

- Type 4 (IEC 61496), SIL3 (IEC 61508), PL e (EN ISO 13849)
- Rugged housing with three mounting grooves
- 7-segment display
- Resolution 14 mm or 30 mm, scanning range up to 19 m
- External device monitoring (EDM), restart interlock (RES), application diagnostic output (ADO), and SDL interface
- Beam coding for correct system allocation
- Muting: on-site connection and processing in combination with the UE403 muting switching amplifier
- Configuration and diagnostics via PC

#### Your benefits

- The high resolution (14 mm / 30 mm) reduces the safety distances for access protection, with and without muting
- The rugged housing and high power reserve enable reliable use, even in harsh ambient conditions
- Mounting grooves on three sides ensure greater mounting flexibility and facilitate integration with the machine
- Customer-friendly interfaces and status indicators facilitate commissioning and maintenance
- On-site connection of the muting signals to the UE403 muting switching amplifier minimizes cabling work and simplifies commissioning and maintenance
- Reduced downtime due to all-around-visible LED and diagnostics displays as well as the configuration memory in the UE403 muting switching amplifier

→ [www.sick.com/M4000\\_Advanced\\_Curtain](http://www.sick.com/M4000_Advanced_Curtain)

For more information, simply enter the link or scan the QR code and get direct access to technical data, CAD design models, operating instructions, software, application examples, and much more.



### C4000 Advanced – At a glance

- Type 4 (IEC 61496), SIL3 (IEC 61508), PL e (EN ISO 13849)
- Various options for blanking objects: fixed, floating, or teach-in
- 7-segment display
- PSDI mode with the UE402 switching amplifier
- External device monitoring (EDM) and restart interlock (RES)
- Beam coding for correct system allocation
- Configuration and diagnostics via PC
- Cascade up to three systems

#### Your benefits

- Blanking functions enable reliable and safe object detection and thus increase productivity
- Time-saving alignment and diagnostics by means of 7-segment display
- Beam coding protects the systems against mutual interference and thus offers a high level of availability
- The clone plug can duplicate configurations quickly and easily, thus saving time and money
- Increased flexibility and reduced wiring complexity via cascading of up to a maximum of three systems
- Convenient configuration and diagnostics ensure increased availability

→ [www.sick.com/C4000\\_Advanced](http://www.sick.com/C4000_Advanced)

For more information, simply enter the link or scan the QR code and get direct access to technical data, CAD design models, operating instructions, software, application examples, and much more.





### miniTwin – At a glance

- Twin sticks: sender and receiver in a compact housing
- Different protective field heights, graduated to 60 mm each
- Diagnostics through protective field visualization
- Commissioning and alignment by means of color LEDs, configuration without software
- Cascading possible
- Application-specific brackets

### Your benefits

- Benefit from optimum integration into your machine thanks to the miniature design
- Minimize your ordering, logistics, handling and maintenance work due to the small number of components, which are all standardized.
- Increase the productivity of your staff with optimal work ergonomics. With the miniTwin, work can be performed unhindered at machines, accelerating production processes.
- Take advantage of the benefits of quick diagnostics
- Save time and resources thanks to easy commissioning and configuration
- Eliminate blind zones
- Reduce mounting times

→ [www.sick.com/miniTwin](http://www.sick.com/miniTwin)

For more information, simply enter the link or scan the QR code and get direct access to technical data, CAD design models, operating instructions, software, application examples, and much more.



### C4000 Advanced ATEX II 3G/3D – At a glance

- Type 4 (IEC 61496), SIL3 (IEC 61508), PL e (EN ISO 13849)
- ATEX II 3G / 3D (2/22 zones)
- ATEX for gas: II 3G Ex nA op is IIC T4 Gc X
- ATEX for dust: II 3D Ex tc IIIC T135 °C Dc
- 7-segment display
- External device monitoring (EDM) and restart interlock
- Beam coding for accurate system allocation
- Configuration and diagnostics via PC

### Your benefits

- ATEX II 3G / 3D for use in 2/22 zones
- Large sensing range up to 21 m and sufficient power reserve for use in paint finishing lines, for example
- Time-saving alignment and diagnostics by means of 7-segment display
- Beam coding protects the systems against mutual interference and thus offers a high level of availability
- Quick and easy commissioning by means of pre-configuration of the systems or clone plug
- Convenient configuration and diagnostics ensure increased availability

→ [www.sick.com/C4000\\_Advanced\\_ATEX\\_II\\_3G\\_3D](http://www.sick.com/C4000_Advanced_ATEX_II_3G_3D)

For more information, simply enter the link or scan the QR code and get direct access to technical data, CAD design models, operating instructions, software, application examples, and much more.





### C4000 Advanced Ex – At a glance

- ATEX for gas: II 2 G Ex db IIB T6
- ATEX for dust: II 2 D Ex tb IIIC T56°C Db IP6X
- NFPA 70/NEC 500 Class I, Div. 1, Groups C and D
- NFPA 70/NEC 500 Class II, Div. 1,

- Groups E, F and G
- NFPA 70/NEC 500 Class III, Div. 1
- Available in protective field heights of 600 mm, 900 mm and 1,200 mm
- Resolution of 30 mm
- Scanning range of 16 m

### Your benefits

- Compatibility with numerous SICK safety light curtains makes high flexibility in the application solution possible
- Durable housing
- Simple installation and alignment with the special mounting system
- Quick commissioning of pre-mounting systems, comprises light curtain

- and housing
- Low downtimes thanks to resistance to water and dust as a result of enclosure rating IP 66
- Well visible LED status indicator for quick fault diagnosis
- Global availability and support for the entire safety solution

→ [www.sick.com/C4000\\_Advanced\\_Ex](http://www.sick.com/C4000_Advanced_Ex)

For more information, simply enter the link or scan the QR code and get direct access to technical data, CAD design models, operating instructions, software, application examples, and much more.



### TWINOX4 – At a glance

- Media resistance due to stainless-steel housing
- Easy-to-clean design with rounded edges and without undercuts
- Twin concept: Sender and receiver in

- a single housing
- Restart interlock, external device monitoring (EDM), beam coding
- Enclosure ratings IP65 and IP67

### Your benefits

- The small, elegant stainless-steel housing saves space, enables optimum integration into the machine design, and offers great flexibility
- Highest level of media resistance for maximum reliability
- Efficient cleaning ensures high process and production quality and a low risk of contamination

- Efficient ordering process and cost savings due to reduced storage needs and spare parts maintenance
- Adjustable brackets ensure the highest availability
- Quick on-site diagnostics with LED status indicators over the entire protective field height

→ [www.sick.com/TWINOX4](http://www.sick.com/TWINOX4)

For more information, simply enter the link or scan the QR code and get direct access to technical data, CAD design models, operating instructions, software, application examples, and much more.







### Machine safeguarding evaluation – At a glance

- Identification of electrical and mechanical hazards
- Risk assessment of identified hazards
- Evaluation of existing protective measures
- Recommendation of new or improvement of existing protective measures
- Consideration of valid provisions and regulations
- Service can be retrieved worldwide

### Your benefits

- Detailed knowledge of the safety status of the machines
- Concrete statements on the urgency of improvement measures
- High flexibility thanks to product-neutral perspective
- Economic, well-thought-out recommendations for reducing detected risks
- Reduced effort when drafting safety concepts
- Enables simple and standard-compliant implementation of the recommended protective measures for safety technology
- Foundation for fulfilling due diligence with documented inspection of the machine
- Guaranteed quality thanks to standardized processes and sustainable competence management

→ [www.sick.com/machine\\_safeguarding\\_evaluation](http://www.sick.com/machine_safeguarding_evaluation)



### Commissioning – At a glance

- Configuration and parameter setting of components or systems, optimized for each application
- Final functional testing of components or systems
- Documentation of the configuration and parameter setting in the acceptance report
- Briefing of operating personnel

### Your benefits

- High productivity: via application-optimized components and system settings
- Cost savings: quick transition to normal operation under professional supervision
- Planning reliability: via effective cooperation between SICK, the system integrator and the customer

→ [www.sick.com/commissioning](http://www.sick.com/commissioning)



### Periodic inspection – At a glance

- Evaluation of the optical protective devices to ensure they have been installed correctly and according to the specification
- Inspection of whether the protective device is operating according to current machine usage
- Identification of operational changes and manipulations
- Readjustment of the optical protective devices and removal of contamination
- Production of an inspection report and issuance of a test seal

### Your benefits

- Safety is determined and corresponding documentation is provided in the inspection report as proof that the legal obligation for testing has been fulfilled
- High testing quality through certification and periodic inspections in accordance with IEC 17020 is carried out by independent bodies and with on-going competency management
- Quick identification of the safety status and the period of validity by means of test seals as proof to regulators of current inspections
- Safety is ensured due to early detection of changes to application conditions and manipulations
- High machine reliability due to periodic checking and, if necessary, removal of contamination or readjustment
- Automatic reminder of required testing periods within the framework of the service contracts to ensure equipment is working properly

→ [www.sick.com/inspection](http://www.sick.com/inspection)



### Stop time measurement – At a glance

- Performance of stop time measurement
- Calculation of the required safety distance between the hazardous point and the non-physical guard according to EN ISO 13855
- Generation of a report with the measurement results

### Your benefits

- Guaranteed measurement quality using calibrated measuring instruments
- Generation of a report with measurement results for the machine documentation
- Hazardous risks caused by non-compliance with the required safety distances can be determined
- High testing quality through certification and periodic inspections in accordance with IEC 17020 is carried out by independent bodies and with on-going competency management

→ [www.sick.com/stop\\_time\\_measurement](http://www.sick.com/stop_time_measurement)

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# SERVICES FOR MACHINES AND PLANTS: SICK LifeTime Services

Our comprehensive and versatile LifeTime Services are the perfect addition to the comprehensive range of products from SICK. The services range from product-independent consulting to traditional product services.



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Safe and professional



**Product and system support**  
Reliable, fast, and on-site



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Safe and regularly inspected



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Easy, safe, and economical



**Training and education**  
Practical, focused, and professional

## SICK AT A GLANCE

SICK is a leading manufacturer of intelligent sensors and sensor solutions for industrial applications. With more than 10,400 employees and over 50 subsidiaries and equity investments as well as numerous agencies worldwide, SICK is always close to its customers. 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.

SICK has extensive experience in various industries and understands their processes and requirements. With intelligent sensors, SICK delivers exactly what the 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 SICK a reliable supplier and development partner.

Comprehensive services round out the offering: SICK LifeTime Services provide support throughout the machine life cycle and ensure safety and productivity.

**That is “Sensor Intelligence.”**

### **Worldwide presence:**

Australia, Austria, Belgium, Brazil, Canada, Chile, China, Czech Republic, Denmark, Finland, France, Germany, Great Britain, Hungary, Hong Kong, India, Israel, Italy, Japan, Malaysia, Mexico, Netherlands, New Zealand, Norway, Poland, Romania, Russia, Singapore, Slovakia, Slovenia, South Africa, South Korea, Spain, Sweden, Switzerland, Taiwan, Thailand, Turkey, United Arab Emirates, USA, Vietnam.

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