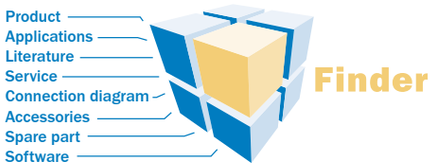
WWW.MYSICK.COM – SEARCH ONLINE AND ORDER

Search online quickly and safely – with the SICK "Finders"



Product Finder: We can help you to quickly target the product that best matches your application.
Applications Finder: Select the application description on the basis of the challenge posed, industrial sector, or product group.
Literature Finder: Go directly to the operating instructions, technical information, and other literature on all aspects of SICK products.

These and other finders at
➜ www.mysick.com

Efficiency – with the e-commerce tools from SICK

Find out prices and availability: Determine the price and possible delivery date of your desired product simply and quickly at any time.
Request or view a quote: You can have a quote generated online here. Every quote is confirmed to you via e-mail.
Order online: You can go through the ordering process in just a few steps.

WWW.SICKINSIGHT.COM – THE MAGAZINE FROM SICK

SICKinsight

The online magazine providing recent reports and videos on solutions for factory, logistics, and process automation.

Visit us at
➜ www.sickinsight.com

TOP PRODUCTS FROM SICK

CORE PRODUCT SELECTION FOR FACTORY, LOGISTICS AND PROCESS AUTOMATION

QUERO AUTOMATION

SICK
Sensor Intelligence.

B Photoelectric sensors
Page B-24

C Proximity sensors
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D Magnetic cylinder sensors
Page D-198

E Identification solutions
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F Detection and ranging solutions
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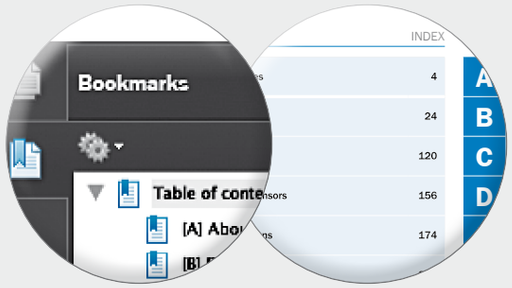
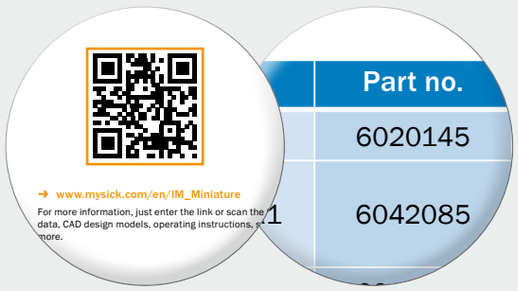
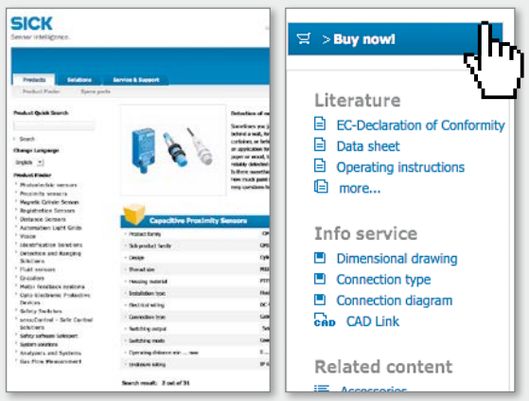


By page references

Links to www.mysick.com

By links, QR codes and part numbers





Photoelectric sensors
Detecting, verifying, positioning, counting – photoelectric sensors from SICK

Proximity sensors
Reliable, powerful, rugged. Proximity sensors from SICK.

Magnetic cylinder sensors
With millimeter precision – cylinder sensors from SICK

Identification solutions
All you can read – ensure your investment over the long term

Detection and ranging solutions
Compact, reliable detection and distance measurement at all times

Fluid sensors
Efficient instrumentation solutions for factory automation

Registration sensors
SICK registration sensors – enhancing performance through precision and speed

Distance sensors
Distance sensors from SICK – precision for measuring tasks

Foto: viastore, Stuttgart

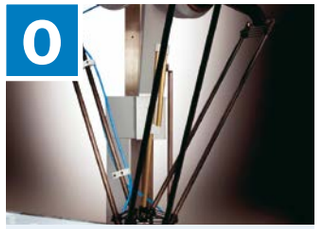
Automation light grids
SICK automation light grids – simple integration through high flexibility

Vision
A new dimension in vision

Opto-electronic protective devices
Optical protection – remove the barrier to greater productivity

Safety switches
Three product groups for tried and tested, intelligent safety solutions

sens:Control – safe control solutions
Safe control solutions for intelligent machine designs



Motor feedback systems
Measuring the speed and position with the greatest possible precision

Encoders
Perfect rotary and linear path measurement

Gas analyzers
Optimum solutions for analyzing gases in process- or emission-related applications

Dust measuring devices
Innovation solutions for measuring dust

Traffic sensors
Solutions for active traffic safety

Ultrasonic gas flow measuring devices
Ultrasonic technology by SICK: gas flow measurement at the highest level

SICK
Sensor Intelligence.

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A

WE DELIVER “SENSOR INTELLIGENCE.”

SICK sensor solutions for industrial automation are the result of exceptional dedication and experience. From development all the way to service: The people at SICK are committed to investing all their expertise in providing with the very best sensors and system solutions possible.

A company with a culture of success

Over 6,500 people are on staff, with products and services available to help SICK sensor technology users increase their productivity and reduce their costs. Founded in 1946 and headquartered in Waldkirch, Germany, SICK is a global sensor specialist with more than 50 subsidiaries and representations worldwide.
Our exemplary corporate culture fosters an optimum work-life balance, thus attracting the best employees from all over the world. SICK is one of the best employers – we have been among the winners of the prestigious German “Great Place to Work” award for many years in succession.

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Innovation for the leading edge

SICK sensor systems simplify and optimize processes and allow for sustainable production. SICK operates at many research and development centers all over the world. Co-designed with customers and universities, our innovative sensor products and solutions are made to give a decisive edge. With an impressive track record of innovation, we take the key parameters of modern production to new levels: reliable process control, safety of people and environmental protection.

A corporate culture for sustainable excellence

SICK is backed by a holistic, homogeneous corporate culture. We are an independent company. And our sensor technology is open to all system environments. The power of innovation has made SICK one of the technology and market leaders – sensor technology that is successful in the long term.

A

“SENSOR INTELLIGENCE.” FOR ALL REQUIREMENTS

SICK is a renowned expert in many industries, and is entirely familiar with the critical challenges they face. While speed, accuracy and availability take center stage in all industries, technical implementations vary greatly. SICK puts its vast experience to use to provide with precisely the solution you need.

For applications worldwide

Hundreds of thousands of installations and applications go to prove that SICK knows the different industries and their processes inside out. This tradition of uncompromising expertise is ongoing: As we move into the future, we will continue to design, implement and optimize customized solutions in our application centers in Europe, Asia and North America. You can count on SICK as a reliable supplier and development partner.

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For your specific industry

With a track record of proven expertise in a great variety of industries, SICK has taken quality and productivity to new heights. The automotive, pharmaceutical, electronics and solar industries are just a few examples of sectors that benefit from our know-how. In addition to increasing speed and improving traceability in warehouses and distribution centers, SICK solutions provide accident protection for automated guided vehicles. SICK system solutions for analysis and flow measurement of gases and liquids enable environmental protection and sustainability in, for example, energy production, cement production or waste incineration plants.

For performance across the board

SICK provides the right technology to respond to the tasks involved in industrial automation: measuring, detecting, monitoring and controlling, protecting, networking and integrating, identifying, positioning. Our development and industry experts continually create groundbreaking innovations to solve these tasks.

➜ www.sick.com/industries

A

SERVICES FOR MACHINES AND SYSTEMS: SICK LifeTime Services

SICK LifeTime Services is a comprehensive set of high-quality services provided to support the entire life cycle of products and applications from plant walk-through to upgrades. These services increase the safety of people, boost the productivity of machines and serve as the basis for our customers' sustainable business success. LifeTime Services range from product-independent consulting to traditional product services and are characterized by extensive industry expertise and more than 60 years of experience.

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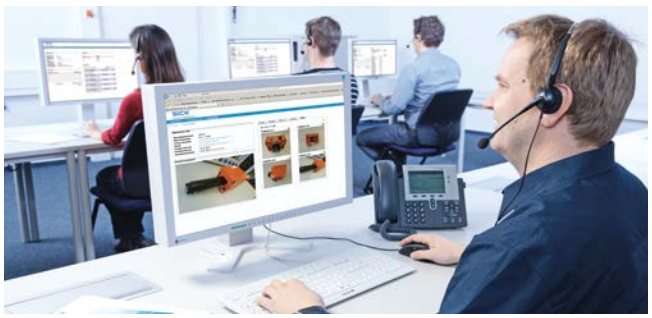
➜ www.sick.com/service



Consulting & Design

- Plant walk-through
- Risk assessment
- Safety concept
- Safety software and hard-ware design
- Validation of functional safety
- CE-conformance check

Product & System Support

- Installation
- Commissioning
- Start-up support
- Calibration
- Helpline support
- 24 h helpline
- SICK Remote Service
- Troubleshooting on site
- Repair
- Exchange units
- Extended warranty

Verification & Optimization

- Inspection
- Stop time measurement
- Machine safety inspection
- Electrical equipment check
- Accident investigation
- Initial verification
- Maintenance
- Performance check

Upgrade & Retrofits

- Upgrade

Training & Education

- Training
- Seminars
- WebTraining

A

CONSULTING & DESIGN

Planning, constructing and commissioning equipment and special machinery requires a large amount of time and resources. The current legal regulations and requirements add to the complexity of this process. Experts from SICK are available worldwide to help our customers with this process. In addition, SICK LifeTime Services provide consulting and design from the start – to ensure clients benefit from efficient and cost saving solutions. SICK not only helps with the selection, design and commissioning of appropriate products, but also provides machine-specific analyses and design concepts. SICK also offers engineering services such as programming and functionality checks related to regulations, standards or specifications.

An overview of the services

- Plant walk-through
- Risk assessment
- Safety concept
- Safety software and hardware design
- Validation of functional safety
- CE-conformance check

Your benefits:

- Compliant with all legal requirements and regulations
- Minimize project risk by involving experts from the start
- Save time and reduce costs using expert knowledge
- Highly trained and certified employees implement defined processes to ensure top quality
- Testing and documentation is conducted by independent third parties

Service for machine safety: "plant walk-through"

- Overview for determining current machine safety status
- Appraisal of the safety status of all systems in a manufacturing plant in relation to suitable accident protection and the development of an appropriate safety strategy
- Analysis of the current system compliance status based on general data, technical data, and safety data
- Prioritized recommendations for minimizing risks

Specially tailored to your requirements: customer-specific bespoke solutions

Even with a wide range of standard sensors, individual solutions customized to meet customers' precise needs are sometimes required to fulfill the specific requirements and application conditions in the automation industry. Dialog with our specialists for customer-specific developments begins here.

From small but crucial adaptations to standard components or extensive new developments – our experts find the optimum solution. This enables us to guarantee a structured project procedure right from the start.

1 Application analysis
2 Assessment of requirements
3 Drawing up a specification
4 Prototyping
5 Test installation
6 Production and supply

From the analysis through to delivery: In every phase of the development of a bespoke solution, you can rely on our support and expertise – worldwide.

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Service for machine safety: "risk assessment"

- List of safety requirements to ensure machine safety
- Analysis and evaluation of the hazards and risks resulting from the machine
- Responsibility for dangers and risk-reducing measures
- Prioritizing risk-reducing measures
- Preparation of safety requirements (Safety Requirement Specification = SRS) for the machine

The "risk assessment" service carries the VERIFIED SAFETY seal of quality.

Service for machine safety: "safety concept"

- Development of solutions to obtain the necessary risk reduction based on the risk assessment
- Recommendations on how health and safety protection requirements should be met as stipulated in the Machinery Directive
- Description of operation of a higher-level concept, including safety areas
- Layout, including location of the safety-related equipment
- Dimensioning of mechanical protection
- Specification of safety parameters: category, PL, SIL, stop category, etc.
- Basis for selecting safety-relevant parts of the machine controller
- Provision of engineering results in a concept document

The "safety concept" service carries the VERIFIED SAFETY seal of quality.

VERIFIED SAFETY
by SICK

VERIFIED SAFETY – the seal of quality from SICK

Consulting and engineering services from SICK carry the VERIFIED SAFETY seal of quality. Documents bearing the VERIFIED SAFETY seal of quality guarantee results with proven quality and compliance with the prevailing regulations.

VERIFICATION & OPTIMIZATION

System operators are responsible for conducting their operations safely and productively. Complying with legal requirements and ensuring the safety of people and the environment are essential. With verification and optimization from SICK LifeTime Services, SICK ensures that the safety and reliability of equipment is guaranteed. Our customers benefit from the expertise of our specialists, who have a wealth of experience and knowledge. As a result, errors and downtime are significantly reduced to ensure operations run smoothly.

An overview of the services

- Accident investigation
- Electrical equipment check
- Inspections
- Machine safety inspection
- Stop time measurement
- Maintenance
- Initial Verification
- Performance check

Your benefits

- High level of process reliability due to expert inspections
- Documented safety via checklists, service reports and test seal
- Compliance with legal requirements and regulations
- Protection of personnel and the environment by detecting incorrect applications and preventing harmful incidents
- Regular inspections and maintenance checks ensure proper functioning
- Increased system performance by optimizing equipment settings

Service for machine safety: "accident investigation"

The professional, independent root cause analysis of accidents and near misses ensures that an incident or accident at a machine is fully examined. Aside from this, it forms the basis for introducing corresponding countermeasures, so, if possible, the incident or accident is not repeated.

Service for machine safety: "stop time measurement"

The stop time measurement determines the correct safety distance in accordance with the relevant standards.

It comprises, in detail:

- From the average of ten measurements of dangerous movement of a machine, the current stopping/run-down time is calculated
- Calculation of the correct safety distance from the hazardous point to the protective device

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Service for machine safety: "initial inspection"

The safety inspection is used to determine the occupational safety of protective devices from SICK for protection against mechanical dangers in the production plant.

Key focus areas:

- Mode of operation of the protective device during machine use
- Selection of protective devices according to the dangers which emerge
- Selection of protective devices according to the required type in accordance with IEC 61496
- Integration of the protective device up to the signal transfer in accordance with the required safety level

Maintenance

Regular and correct maintenance ensure a long service life and reduce wear on components. A maintenance contract with SICK provides customers with a consistently high level of reliability of their plants, systems and sensors. Individual services in a maintenance contract can be added according to the customer's requirements. During the consultation, experts from SICK rely on their experience to establish the maintenance intervals together with the customer. Practical maintenance is defined in advance and at a fixed price so that maintenance costs remain within budget.

At a glance:

- Creation of maintenance schedules, individually tailored to customer requirements
- Comprehensive maintenance documentation
- Service technicians available worldwide
- Regularly trained maintenance personnel from SICK
- Review and documentation in line with QAL3 in EN 14181
- Annual Surveillance Test (AST) according to EN 14181
- Genuine spare parts from the manufacturer

A

PRODUCT & SYSTEM SUPPORT

Every minute that a system is not in production costs money. With product and system support from SICK LifeTime Services, your machinery and system will always be ready for operation. SICK provides product selection, commissioning and troubleshooting support. Experienced service technicians are available around the world – by phone, remotely or directly on-site. Repairs and short-term provision of exchange units ensure that errors can be quickly corrected without having to locally store replacement units. Customized service offerings from SICK LifeTime Services ensure the highest level of reliability.

An overview of the services

- Installation
- Commissioning
- Start-up support
- Calibration
- Helpline support
- 24 h helpline
- SICK Remote Service
- Troubleshooting on-site
- Repair
- Exchange units
- Extended warranty

Your benefits

- Short response times: obtain direct help and quick support
- Worldwide network of service technicians provide local support around the clock
- Minimal downtime: fast, targeted troubleshooting via remote access
- Reduced storage costs: exchange units are available quickly
- Focused on success: experts support product selection, commissioning and equipment start-up

Commissioning

Specialist expertise and experience are required during commissioning to fully take advantage of the potential performance of a system. The experienced and skilled technicians from SICK provide plant commissioning in compliance with all formal and legal requirements, ensuring optimal performance. In a documented final inspection process, which includes training, the plant is handed over to the customer.By having their plant commissioned, customers benefit from the high level of planning reliability and quick installation by qualified technicians from SICK.

SICK Remote Service

Providing expert assistance and quick service to customers is not only a priority during commissioning, but also during operation. Fast, system-specific support provided by specialists is therefore more important than ever. Complex systems and growing pressure on costs require optimizing maintenance costs and providing proactive service. The SICK Remote Service meets these requirements. Safe Internet connections to enable expert support with just a click – with no travel and setup time needed. The customer gets the benefits of SICK Remote Service at a variety of levels, taking advantage of targeted expert support to speed up the installation phase, and optimizing the operational phase by saving time and travel expenses. And it's flexible: The modular SICK Remote Service contract model provides customers with support matching their needs at all times.

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UPGRADE & RETROFITS

System failures can result in high costs due to lost production. Upgrade and retrofit measures from SICK LifeTime Services ensure that the latest technology from SICK is readily available and can be easily and quickly integrated into existing applications. In addition, operators benefit from a longer service life of their system with less maintenance and increased efficiency. Based on SICK's planning and product conversion experience, clients will receive dependable, high-quality service that meets all applicable regulations. Upgrade measures from SICK LifeTime Services provide a cost-effective alternative to purchasing a new system.

Your benefits

- Increased efficiency by using the latest technologies
- Preventive upgrades reduce costly and unplanned downtime
- Extended service life of the system provides a more economical solution over the long term
- Function-compatible solution replacement: standardized upgrade kits
- Fast and safe product exchange with professional SICK technicians

Upgrade

When modifying systems to increase their performance or when replacing components after years of use, retrofit measures from SICK can extend the service life of the system and provide a cost-effective alternative to buying new devices. The experienced technicians from SICK simply and quickly integrate upgrade kits that are specifically tailored to the application with minimal system downtime. Using SICK experts to modify existing systems ensures high performance and increases the efficiency of existing systems.

- Selection of the right upgrade kit
- Coordination of the replacement service in consultation with the customer
- Mechanical and electrical integration, including configuration
- Functional testing and documentation of the modifications implemented
- Briefing of operating personnel

A

TRAINING & EDUCATION

Humans have a decisive impact on the safety and productivity of equipment and systems. Training and education from SICK LifeTime Services expand the expertise of employees. With our wide range of seminars and training courses, expert trainers offer valuable, targeted information about a variety of tasks. An important element of our training and education is providing practical tips for optimizing applications. In the form of user trainings, seminars and WebTrainings, employees will learn about efficient and legally-compliant planning to ensure safe operation.

An overview of the services

- Trainings
- Seminars
- WebTrainings

Your benefits

- Optimal use of products: gain in-depth product knowledge through hands-on training
- Minimize downtime: correct errors quickly using trained staff
- Simple transfer of practice: comprehensive training with user examples
- Up-to-date knowledge and information: communication of current legal regulations to ensure compliance
- Efficient knowledge transfer: individual training on-site, at SICK or via the Internet

"Certified expert – functional safety in accordance with EN ISO 13849 (TÜV®)" seminar

From planning and construction, up to safe operation: a practical seminar for anyone who has to assess, ensure, and guarantee safety around machines. After successfully taking the exam, the participant receives the "Certified expert – functional safety in accordance with EN-ISO 13849" from TÜV NORD CERT GmbH, Bosch Rexroth and SICK. This seminar for developers, design engineers, production engineers, and those responsible for safety in machine building teaches safety from the beginning.

Objectives of the seminar:

- To convey requirements of the Machinery Directive in accordance with the law
- Competence in functional safety assessment
- Practical application of current standards on implementing the functional safety of machines

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"Risk assessment and conformance check" seminar

This seminar shows you how to perform and document hazard analyses and risk assessments in practice. It provides practical experience in CE marking and risk assessment, and gives assurance when issuing declarations of conformity. The target groups are design engineers, developers, production engineers, and product managers from machine, plant and control engineering, as well as electrical construction, and technical documentation services.

Objectives of the seminar:

- Introduction to the legal requirements for risk assessment, meaning and research of standards
- Step-by-step formulation of practical measures for a case study
- To provide the skills to implement the procedure learned for CE marking and risk assessment into the company

"Machinery Directive – principles of machine-related safety" seminar

How to implement the requirements of the Machinery Directive adequately and correctly? This seminar for managers, design engineers, and those responsible for safety communicates knowledge of legislation and the requirements for machine safety. Safety regulations and safety technology are part of the content as well as standards and regulations on maintaining required safety for your machines and their users.

Objectives of the seminar:

- Communication of legal requirements to machine manufacturers
- Safe application of directives and standards with regard to:
  - General procedure
  - Types of protective devices and their application
  - Consideration of functional safety

A

MODULAR SERVICE CONTRACTS – FLEXIBLE FOR EVERY REQUIREMENT

An important part of LifeTime Services from SICK is the modular service concept, which allows every business to draw up its own individual service contract from different service modules.

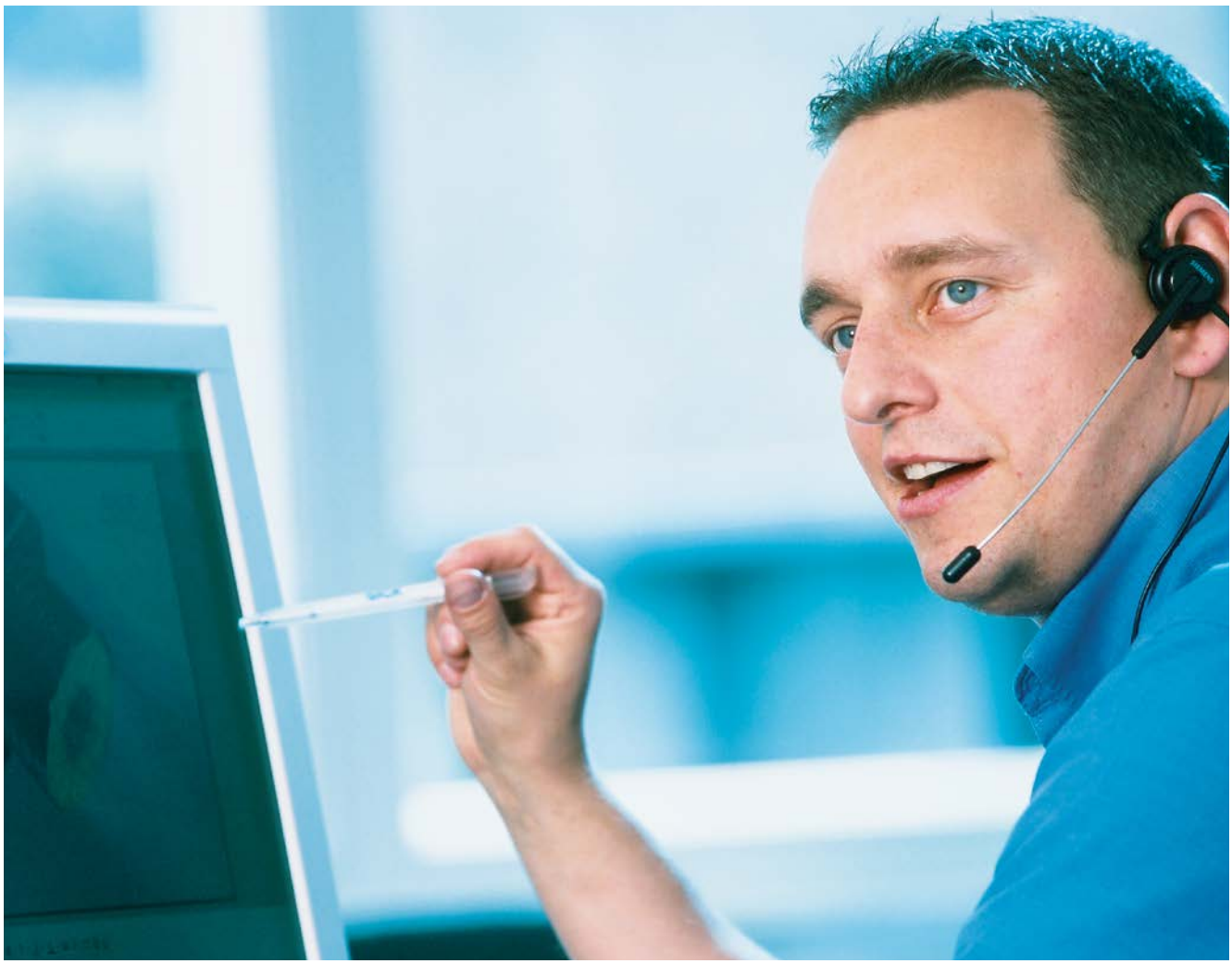
For performance, availability and safety

We advise you and you decide which service you'd like to use. With modular service contracts, we accommodate all your requirements. Combine your own individual service contract with different, standardized modules and only pay for what you need. Regardless of the service contract you have chosen, SICK always ensures optimum performance and maximum availability of machines and systems, as well as human safety.

Assured productivity – every time

SICK is available to you around the clock and worldwide as an experienced and competent partner throughout the entire life cycle of a machine or system.* As the operator, you are therefore able to concentrate on increasing productivity, efficiency, and income.

*Not all services are available in all countries, due to local restrictions on rights of use and service availability.



Service module remote support: With just one call, a SICK-service technician will make sure that your machines and systems are running without problems. In the same way, the whole system can be regularly inspected or its software can be updated.

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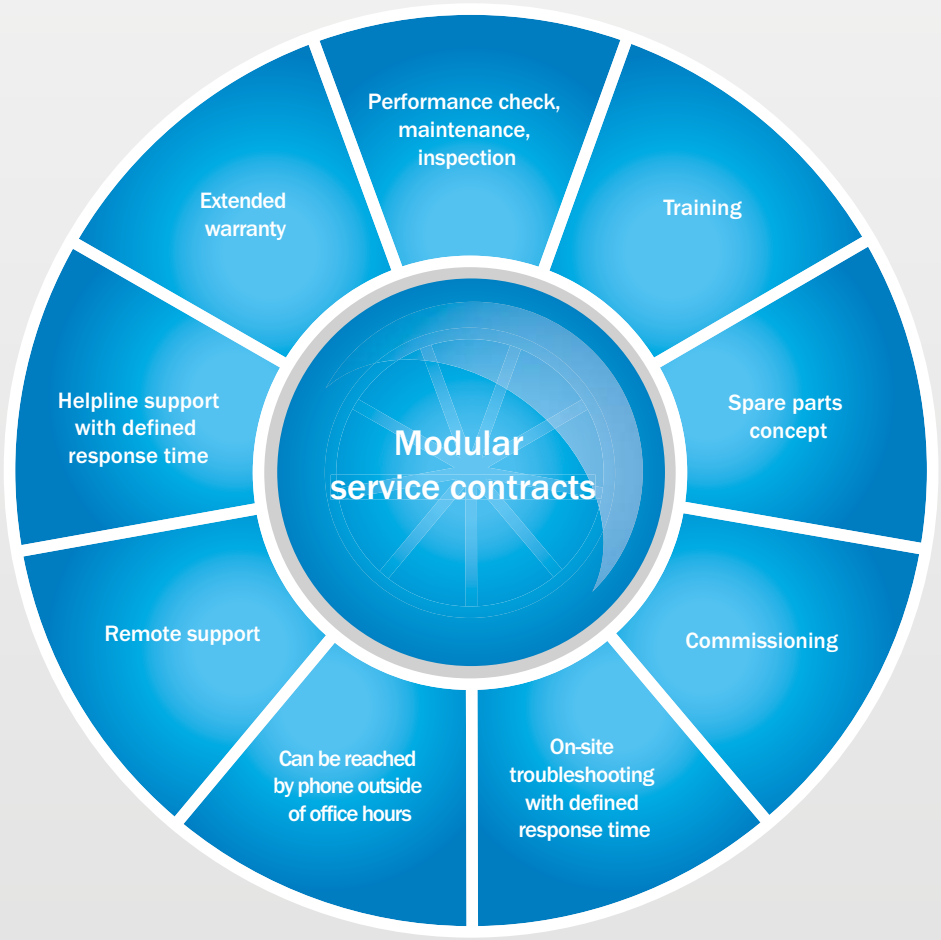
At a glance

- Individual preparation of the service package
- Quick reaction to critical situations
- Regular inspection of machines and systems
- Continuous software updates
- More than 550 service representatives worldwide
- You can contact us round the clock, seven days a week
- Training for machine operators and operating personnel

The advantages

- Regular inspection and continuous improvement of the machine or system
- Maximum system availability and reliability during its entire life cycle
- Cost reductions due to shorter downtime
- Qualified support team providing error analysis and trouble-shooting services
- Target-oriented training



As part of a modular service contract, you can combine and pay for the service modules you really need.

A

VERSATILE PRODUCT RANGE FOR INDUSTRIAL AUTOMATION

From the simple acquisition task to the key sensor technology in a complex production process: With every product from its broad portfolio, SICK offers a sensor solution that best combines cost effectiveness and safety.

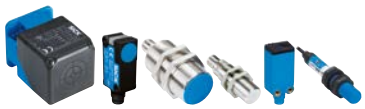
→ www.sick.com/products

Photoelectric sensors

- MultiTask photoelectric sensors
- Miniature photoelectric sensors
- Small photoelectric sensors
- Compact photoelectric sensors
- Cylindrical photoelectric sensors
- Fiber-optic sensors and fibers

Proximity sensors

- Inductive proximity sensors
- Capacitive proximity sensors
- Magnetic proximity sensors



Magnetic cylinder sensors

- Analog positioning sensors
- Sensors for T-slot cylinders
- Sensors for C-slot cylinders
- Sensor adapters for other cylinder types

Registration sensors

- Contrast sensors
- Markless sensors
- Color sensors
- Luminescence sensors
- Fork sensors
- Array sensors
- Register sensors

Automation light grids

- Measuring automation light grids
- Switching automation light grids

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Opto-electronic protective devices

- Safety laser scanners
- Safety light curtains
- Safety camera systems
- Multiple light beam safety devices
- Single-beam photoelectric safety switches
- Mirror columns and device columns

Safety switches

- Electro-mechanical safety switches
- Non-contact safety switches
- Safety command devices

sens:Control – safe control solutions

- Safety controllers
- Safe sensor cascade
- Safety relays

Gas analyzers

- Gas transmitters
- In-situ gas analyzers
- Extractive gas analyzers

Dust measuring devices

- Scattered light dust measuring devices
- Transmittance dust measuring devices
- Gravimetric dust measuring devices

Analyzer solutions

- CEMS solutions
- Process solutions

A

Traffic sensors

- Tunnel sensors
- Overheight detectors
- Visual range measuring devices

Ultrasonic gas flow measuring devices

- Volume flow measuring devices
- Mass flow measuring devices
- Flow velocity measuring devices
- Gas flow meters
- Flow computers

Motor feedback systems

- Motor feedback system rotary HIPERFACE®
- Motor feedback system rotary HIPERFACE DSL®
- Motor feedback system rotary incremental
- Motor feedback system rotary incremental with commutation
- Motor feedback system linear HIPERFACE®

Encoders

- Absolute encoders
- Incremental encoders
- Linear encoders
- Wire draw encoders
- Safety encoders

Identification solutions

- Bar code scanners
- Image-based code readers
- Hand-held scanners
- RFID

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Subject to change without notice

Vision

- Vision sensors
- Smart cameras
- High-end cameras

Distance sensors

- Short range distance sensors (displacement)
- Mid range distance sensors
- Long range distance sensors
- Linear measurement sensors
- Ultrasonic sensors
- Double sheet detection
- Optical data transmission
- Position finders

Detection and ranging solutions

- 2D laser scanners
- 3D laser scanners

Fluid sensors

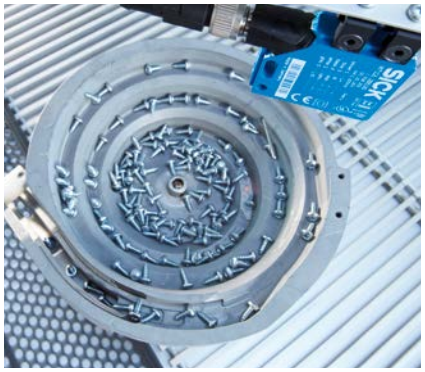
- Level sensors
- Pressure sensors
- Flow sensors
- Temperature sensors

System solutions

- Customized analyzer systems
- Collision awareness systems
- Flexible automation systems
- Object detection systems
- Profiling systems
- Quality control systems
- Security systems
- Track and trace systems

B

PHOTOELECTRIC SENSORS



Detecting, verifying, positioning, counting – photoelectric sensors from SICK

SICK's vast range of photoelectric sensors offers precise optics and advanced technology, creating market-leading solutions with sensor intelligence. By using the latest SIRIC® and LED technologies, these sensors offer the highest level of operational reliability regardless of any interference factors. Additional sensor information can be used to simplify modern production processes. This extensive range of photoelectric sensors is used in many automation applications around the world.

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SELECTION GUIDE PHOTOELECTRIC SENSORS

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Product			Housing properties								Sensor properties										Optics properties								
			Material					Design														Type of light/ light sender				Light spot geometry			
			Stainless steel	Metal	Plastic	VISTAL®	Enclosure rating IP 69K	Rectangular design	Cylindric, axial	Cylindric, radial	Photoelectric proximity sensor	Photoelectric retro-reflective sensor	Through-beam photoelectric sensor	Reflex Array	MultiLine Sensor	MultiPac	IO-Link	AutoAdapt	Switching frequency: ≥ 2kHz	AC/DC	LED: infrared light	LED: red light	Red laser light	PinPoint LED	Line-shaped light spot	Light array	Focused optics		
MultiTask photoelectric sensors																													
		DeltaPac			■			■			■						■							■					
		MultiLine Sensor			■			■			■				■									■	■				
		MultiPac			■			■			■					■								■					
		Reflex Array			■			■				■		■				■						■		■			
		TranspaTect				■		■			■							■						■					
		R/IR			■			■			■										■			■					
Miniature photoelectric sensors																													
		G6			■			■			■	■	■											■					
	W2	W2 Flat			■			■			■		■									■					■		
	W2	W2S-2			■			■			■	■	■				■							■	■		■		
	W2	W2SG-2			■			■				■					■	■						■					
	W4	W4-3			■			■			■	■	■								■			■	■				
	W4	W4-3 Glass			■			■				■						■						■					
	W4	W4S-3			■			■			■	■	■				■							■					
	W4	W4S-3 Glass			■			■				■					■	■						■					
	W4	W4SL-3			■			■			■	■	■				■						■						
	W4 Inox	W4S-3 Inox	■				■	■			■	■	■											■					
	W4 Inox	W4S-3 Inox Glass	■				■	■				■						■											
	W4 Inox	W4S-3 Inox Hygiene Glass	■				■	■				■						■						■					
	W8	W8			■			■			■	■							■			■							
	W8	W8 Laser			■			■			■								■				■						
		W8 Inox	■				■	■			■	■	■																
		W100 Laser			■			■			■	■	■						■				■						
Small photoelectric sensors																													
		G10			■			■			■	■	■							■	■			■					
	W9-3	W9-3				■	■	■			■	■	■								■			■			■		
	W9-3	W9-3 Glass				■	■	■				■						■						■					
	W9-3	W9L-3				■	■	■			■	■	■										■						
	W9-3	W9LG-3				■	■	■				■						■					■						

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Technology			Special applications											Max. sensing range			Page
SIRIC®	V-optics	Delta-S technology	ZoneControl	Hygienic and washdown zone	Detecting transparent objects	Detecting perforated objects	Detecting small objects	Detecting uneven, shiny objects	Detecting objects wrapped in film	Detecting objects with position tolerances	Detecting high-speed objects	Zero gap detection	Explosion areas	Photoelectric proximity sensor: 500 mm … 18,000 mm	Photoelectric retro-reflective sensor: 5 m … 30 m	Through-beam photoelectric sensor: 20 m … 60 m	
■		■										■		30 … 40	–	–	→ B-30
■						■		■	■					5 … 120	–	–	→ B-33
■								■	■					30 … 150	–	–	→ B-35
■					■	■		■		■				–	0 … 4.5	–	→ B-37
					■			■	■					150 … 700	–	–	→ B-39
■			■											60 … 900	–	–	→ B-41
					■									5 … 300	0 … 6	0 … 15	→ B-43
														1 … 115	–	0 … 0.5	→ B-46
■	■					■	■	■	■	■				1 … 150	0 … 1.2	0 … 2.5	→ B-48
■					■									–	0 … 1.2	–	→ B-51
■	■					■	■	■	■	■				3 … 150	0.01 … 4.5	0 … 4	→ B-53
■					■										0.01 … 4.5	–	→ B-57
■														4 … 180	0 … 5	0 … 5	→ B-59
■					■									–	0.01 … 5		→ B-63
■							■							25 … 300	0 … 12	0 … 60	→ B-65
■				■										4 … 500	0 … 5	0 … 5	→ B-67
■				■	■									–	0 … 5	–	→ B-71
■				■	■									–	0 … 5	–	→ B-73
											■			5 … 300	0 … 4	–	→ B-75
							■				■			5 … 300	–	–	→ B-77
				■										0 … 950	0.01 … 6.5	0 … 45	→ B-79
							■				■			0 … 450	0.08 … 12	0 … 35	→ B-82
					■				■					20 … 2,000	0.08 … 15	0 … 40	→ B-84
■							■							20 … 800	0 … 5	0 … 10	→ B-88
■					■									–	0 … 5	–	→ B-92
■							■							25 … 400	0 … 12	0 … 60	→ B-94
■					■		■							–	0 … 4.5	–	→ B-97

SELECTION GUIDE PHOTOELECTRIC SENSORS

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Product			Housing properties								Sensor properties										Optics properties						
			Material				Design															Type of light/ light sender				Light spot geometry		
			Stainless steel	Metal	Plastic	VISTAL®	Enclosure rating IP 69K	Rectangular design	Cylindric, axial	Cylindric, radial	Photoelectric proximity sensor	Photoelectric retro-reflective sensor	Through-beam photoelectric sensor	Reflex Array	MultiLine Sensor	MultiPac	IO-Link	AutoAdapt	Switching frequency: ≥ 2kHz	AC/DC	LED: infrared light	LED: red light	Red laser light	PinPoint LED	Line-shaped light spot	Light array	Focused optics
Small photoelectric sensors																											
		W11-2			■		■	■			■	■	■									■		■			
	W12	W12-2L Laser		■			■	■			■	■	■						■				■				
	W12	W12G		■			■	■				■					■	■			■			■			
	W12	W12-3		■			■	■			■	■	■				■				■			■	■		■
		W14-2			■			■			■	■	■								■	■		■	■		
		W18-3			■			■			■	■	■								■	■					
Compact photoelectric sensors																											
		W23-2			■			■			■	■									■			■			
		W24-2		■			■	■			■	■	■							■	■						
		W27-2 Laser			■			■			■												■				
		W27-3			■		■	■			■	■	■							■	■			■			
		W250-2			■			■			■	■	■							■		■					
		W280-2			■			■			■	■	■							■		■					
		W280L-2 Long Range			■			■			■												■				
Cylindrical photoelectric sensors																											
	GR18	GR18S		■	■				■	■	■	■	■											■			
	GR18	GR18SG		■	■				■	■		■												■			
		V18 Laser		■					■	■	■	■	■										■				
		V18V	■				■		■		■	■	■								■	■					
		V180-2		■	■				■	■	■	■	■									■					■
Fiber-optic sensors and fibers																											
		WLL170-2			■			■			■		■						■			■					
		WLL180T			■			■			■		■						■			■					
		LL3		■	■																					■	■

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Technology			Special applications											Max. sensing range			Page
SIRIC®	V-optics	Delta-S technology	ZoneControl	Hygienic and washdown zone	Detecting transparent objects	Detecting perforated objects	Detecting small objects	Detecting uneven, shiny objects	Detecting objects wrapped in film	Detecting objects with position tolerances	Detecting high-speed objects	Zero gap detection	Explosion areas	Photoelectric proximity sensor	Photoelectric retro-reflective sensor	Through-beam photo-electric sensor	
														500 mm … 18,000 mm	5 m … 30 m	20 m … 60 m	
■									■					20 … 1,100	0.15 … 10	0 … 20	→ B-99
■							■							20 … 200	0 … 18	0 … 80	→ B-102
■					■									–	0 … 4	–	→ B-104
■						■	■	■		■				20 … 800	0 … 7	0 … 20	→ B-107
■						■		■	■	■				20 … 1,500	0.15 … 17	0 … 15	→ B-111
■													■	10 … 1,000	0 … 7	0 … 20	→ B-114
■									■					50 … 2,300	0.01 … 12	–	→ B-117
■														100 … 2,500	0 … 22	0 … 60	→ B-120
■							■							100 … 800	–	–	→ B-124
■									■					30 … 2,000	0.1 … 19	0 … 35	→ B-126
														100 … 1,000	0.01 … 15	0 … 50	→ B-129
														10 … 2,000	0.01 … 15	0 … 60	→ B-132
							■							20 … 18,000	–	–	→ B-135
														3 … 550	0.03 … 7.2	0 … 15	→ B-137
					■									–	0.03 … 7.2	–	→ B-141
							■							0 … 400	0.1 … 35	0 … 60	→ B-143
				■	■		■							0 … 900	0.035 … 5	0 … 20	→ B-145
							■							0 … 1,100	0.05 … 7	0 … 28	→ B-148
														0 … 160	–	0 … 0.7	→ B-152
														0 … 1,400	–	0 … 20	→ B-154
				■	■	■	■	■		■	■			–	–	–	→ B-156

B

At a glance

- Delta-S technology®: four PinPoint emitters and two receivers combined with SIRIC® and distance measurement technology
- Direction-independent object contours with radius up to 20 mm
- For conveyor speeds up to 1.2 m/s or production capacities up to 55,000 packages per hour
- Pre-configured sensors and individual setting via IO-Link
- Compact housing (42 mm x 42 mm x 45 mm) with an IP 67 enclosure rating

Your benefits

- Selective process optimization: information about the number of packages in the process enables better production monitoring
- Better space utilization: no mechanical devices are required to isolate packages, reducing the width of packaging systems and saving space
- Better time management: packages run in push-push mode, which prevents collisions and toppling, and reduces machine downtime
- Stable production for reduced energy consumption
- Fast and intuitive commissioning due to pre-configuration
- Configuration via the IO-Link enables users to customize features based on the applications
- Space-saving mounting due to compact housing

➜ www.mysick.com/en/DeltaPac

For more information, just 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.

Ordering information

Other models and accessories ➜ www.mysick.com/en/DeltaPac

WTD20E, rounded, rounded out and prism shaped packaging

- **Object speed max.:** 1.2 m/s
- **Productivity max.:** ≤ 54,000 Stk./h
- **Switch on delay Q_1 & Q_2:** ≤ 60 ms
- **Time delay off Q_1:** ≤ 60 ms
- **Pulse length (Q2):** ≤ 20 ms
- **Background suppression:** ≥ 80 mm
- **Object height min.:** 50 mm (The object heigh min. is relevant only for the installation of DeltaPac above the conveyor belt.)

Object width min.	Radius of the object contour	Key feature of the object	Sensing range	Output type	Current consumption	Connection	Model name	Part no.
≥ 20 mm	2 mm ... 5 mm	Rounded edges, rounded out body and prism shaped	30 mm ... 35 mm	PNP	≤ 160 mA	Connector M12, 4-pin	WTD20E-V2414	1064778
≥ 30 mm	5 mm ... 20 mm		30 mm ... 40 mm	NPN	≤ 70 mA	Cable, 4-wire, 2 m, PVC	WTD20E-W1114	1064779

WTD20E, for folded boxes

- **Object speed max.:** 0.6 m/s
- **Productivity max.:** ≤ 40,000 Stk./h
- **Switch on delay Q_1 & Q_2:** ≤ 80 ms
- **Time delay off Q_1:** ≤ 80 ms
- **Pulse length (Q2):** ≤ 20 ms
- **Background suppression:** ≥ 60 mm
- **Object height min.:** 30 mm (The object heigh min. is relevant only for the installation of DeltaPac above the conveyor belt.)
- **Current consumption:** ≤ 70 mA

Object width min.	Radius of the object contour	Key feature of the object	Sensing range	Output type	Connection	Model name	Part no.
≥ 10 mm	1 mm ... 2 mm	Edge	30 +/- 2 mm	PNP	Connector M12, 4-pin	WTD20E-V2445	1065772
				NPN	Cable, 4-wire, 2 m, PVC	WTD20E-W1145	1065773

WTD20E, IO-Link for folded boxes

- **Object speed max.:** 0.6 m/s
- **Productivity max.:** ≤ 200,000 Stk./h
- **Switch on delay Q_1 & Q_2:** 0 ms ... 255 ms
- **Time delay off Q_1:** 0 ms ... 255 ms
- **Pulse length (Q2):** 0 ms ... 63 ms
- **Background suppression:** ≥ 60 mm
- **Object height min.:** 30 mm (The object heigh min. is relevant only for the installation of DeltaPac above the conveyor belt.)
- **Current consumption:** ≤ 70 mA

Object width min.	Radius of the object contour	Key feature of the object	Sensing range	Output type	Connection	Model name	Part no.
≥ 10 mm	1 mm ... 2 mm	Edge	30 +/- 2 mm	PNP	Connector M12, 4-pin	WTD20EC-V2449	1064783

WTD20E, IO-Link for rounded, rounded out and prism shaped packaging

- **Object speed max.:** 3 m/s
- **Productivity max.:** ≤ 200,000 Stk./h
- **Switch on delay Q_1 & Q_2:** 0 ms ... 255 ms
- **Time delay off Q_1:** 0 ms ... 255 ms
- **Pulse length (Q2):** 0 ms ... 63 ms
- **Background suppression:** ≥ 80 mm
- **Object height min.:** 50 mm (The object heigh min. is relevant only for the installation of DeltaPac above the conveyor belt.)
- **Current consumption:** ≤ 70 mA

Object width min.	Radius of the object contour	Key feature of the object	Sensing range	Output type	Connection	Model name	Part no.
≥ 20 mm	2 mm ... 20 mm	Rounded out body and prism shaped	30 mm ... 40 mm	PNP	Connector M12, 4-pin	WTD20EC-V2419	1064782

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Recommended accessories

	Brief description	Model name	Part no.
Universal bar clamp systems			
Illustration may differ	Plate N10 for universal clamp bracket, Stainless steel 1.4571 (sheet), Stainless steel 1.4408 (clamp), Universal clamp, mounting hardware	BEF-KHS-N11N	2071081
Plug connectors and cables			
Illustration may differ	Head A: Female connector, M12, 4-pin, straight Head B: cable Cable: PVC, unshielded, 2 m	DOL-1204-G02M	6009382
Illustration may differ	Head A: Female connector, M12, 4-pin, angled Head B: cable Cable: PVC, unshielded, 2 m	DOL-1204-W02M	6009383
	Head A: Female connector, M12, 4-pin, straight Head B: male connector, M12, 4-pin, straight Cable: PVC, unshielded, 2 m	DSL-1204-G02M	6022567
Test and monitoring tools			
	Demonstration target, 10 mm x 55 mm x 40 mm, ABS	Demonstration target	4077622

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At a glance

- Two logical and intelligently linked sensors with background suppression in one miniature housing offer the highest ruggedness for object detection
- Consistent, reliable detection of structures and perforated objects such as e-cards
- Consistent, reliable detection of reflective and irregular objects such as blister packs and soup sachets on conveyor belts
- Maximum sensing range 120 mm
- Simple adjustment via teach-in button

Your benefits

- The MultiLine sensor facilitates faster production sequences since the distances between objects can be reduced
- The sensor position no longer needs to be modified for format changes since the sensor is able to detect objects independently of their position. This saves time and money
- The reliable signal of the sensor from the arriving to the departing edge places less demands on the control software since it no longer needs to be debounced or evaluated
- # MultiLine sensor offers high process reliability because all objects are detected independently of their structure, geometry and surface properties
- And placing the sensor into operation is as easy as pressing a button. A fast and reliable commissioning without complicated operating algorithms is thus given

→ www.mysick.com/en/MultiLine_Sensor

For more information, just 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.

Ordering information

Other models and accessories → www.mysick.com/en/MultiLine_Sensor

- **Sensor principle:** Photoelectric proximity sensor
- **Detection principle:** multi-background suppression
- **Adjustment:** Single teach-in button

Sensing range max.	Light spot size (distance)	Output type	Switching mode	Connection	Model name	Part no.
5 mm ... 120 mm	3 mm x 25 mm (40 mm)	NPN	Light/dark-switching	Cable, 4-wire, 2 m	WTB4-3N1192	1059272
	5 mm x 22 mm (40 mm)	PNP	Light switching	Connector M8, 3-pin	WTB4-3P2192	1058268
			Light/dark-switching	Connector M8, 4-pin	WTB4-3P2292	1062850

Recommended accessories

	Brief description	Model name	Part no.
Universal bar clamp systems			
	Plate N05 for universal clamp bracket, Zinc plated steel (sheet), Diecast zinc (clamp), Universal clamp, mounting hardware	BEF-KHS-N05	2051611

B

	Brief description	Model name	Part no.
Plug connectors and cables			
	Head A: Female connector, M8, 3-pin, straight Head B: cable Cable: PVC, unshielded, 2 m	DOL-0803-G02M	6010785
	Head A: Female connector, M8, 3-pin, angled Head B: cable Cable: PVC, unshielded, 2 m	DOL-0803-W02M	6008489
	Head A: Female connector, M8, 4-pin, straight Head B: cable Cable: PVC, unshielded, 2 m	DOL-0804-G02M	6009870
	Head A: Female connector, M8, 4-pin, angled Head B: cable Cable: PVC, unshielded, 2 m	DOL-0804-W02M	6009871

At a glance

- Two redundant receiver arrays from SICK
- The newest SICK chip technology
- Intense, visible red HighPower LED
- Sensing distance up to 500 mm
- Fast and precise commissioning thanks to the highly visible light spot

Your benefits

- Redundant receiver arrays provide reliable detection of shiny, gloss, dark, or irregular shaped objects without signal interruptions
- Products can be detected using a higher angle of incidence. This removes the typical mounting restrictions associated with detecting these products.
- In applications involving plastic wrapped bottles, the MultiPac replaces current solutions which require expensive mechanical height adjustment
- Allows overhead detection of product that is transported on a single conveyor belt but seperated into multiple lanes

→ www.mysick.com/en/MultiPac

For more information, just 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.

Ordering information

Other models and accessories → www.mysick.com/en/MultiPac

WTB27-3 MultiPac

- **Connection:** Connector M12, 4-pin

Sensing range max. [1]	Output type	Model name	Part no.
30 mm ... 500 mm	PNP	WTB27-3P2483	1056384
	NPN	WTB27-3N2483	1056385

[1] Object with 90 % reflectance (referred to standard white, DIN 5033)

Recommended accessories

	Brief description	Model name	Part no.
Device protection (mechanical)			
	Protective housing for universal clamp, Zinc plated steel (protective housing), Diecast zinc (clamp), Universal clamp, mounting hardware	BEF-SG-W27	2039601
Mounting brackets and mounting plates			
	Mounting bracket with hinged arm, Steel, zinc coated, Mounting hardware included	BEF-WN-W27	2009122
Universal bar clamp systems			
	Plate A for universal clamp bracket, Steel, zinc coated, Universal clamp, mounting hardware	BEF-KHS-A01	2022458

B

	Brief description	Model name	Part no.
Plug connectors and cables			
Illustration may differ	Head A: Female connector, M12, 4-pin, straight Head B: cable Cable: PVC, unshielded, 2 m	DOL-1204-G02M	6009382
Illustration may differ	Head A: Female connector, M12, 4-pin, angled Head B: cable Cable: PVC, unshielded, 2 m	DOL-1204-W02M	6009383

At a glance

- Detects objects > 12 mm within a 50 mm light array, regardless of position
- Sensing range for detection from 0 m to max. 4.5 m
- Minimum distance of 0.5 m between sensor and reflector for all variants
- PinPoint technology for intense red light
- Automatic adjustment of the switching threshold when there is contamination

Your benefits

- Reduces the installation work required by up to 50% compared to light grids or multiple photoelectric sensors
- Detects objects > 12 mm within a 50 mm light array, regardless of position Three other variants are available for other objects.
- PinPoint technology and optical alignment procedure enables simple and quick commissioning
- Continuous Threshold Adjustment (CTA) ensures less downtime

→ www.mysick.com/en/Reflex_Array

For more information, just 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.

Ordering information

Other models and accessories → www.mysick.com/en/Reflex_Array

- **Output type:** PNP

Detection hight	Sensing range max.	Minimum object size	Connection	Model name	Part no.
24 mm	0 m ... 1.5 m [1]	≥ 5 mm	Cable with connector M12, 4-pin 270 mm PVC	WL27-3P3402S17	1051529
30 mm	0 m ... 4.5 m [2] 0 m ... 2 m [1]	≥ 8 mm	Cable with connector M12, 4-pin 270 mm PVC	WL27-3P3402S20	1060755
45 mm	0 m ... 3.5 m [2]	≥ 10 mm	Cable with connector M12, 4-pin 270 mm PVC	WL27-3P3402S19	1056382
50 mm	0 m ... 4.5 m [2] 0 m ... 2 m [1]	≥ 12 mm	Cable, 4-wire 2 m PVC	WL27-3P1102S16	1050825
			Connector M12, 4-pin	WL27-3P2402S18	1051577
			Cable with connector M12, 4-pin 270 mm PVC	WL27-3P3402S13	1046538
		≥ 16 mm		WL27-3P3402S15	1048230

[1] PL40A.

[2] PL80A.

Recommended accessories

	Brief description	Model name	Part no.
Device protection (mechanical)			
	Protective housing for universal clamp, Zinc plated steel (protective housing), Diecast zinc (clamp), Universal clamp, mounting hardware	BEF-SG-W27	2039601

B

	Brief description	Model name	Part no.
Mounting brackets and mounting plates			
	Mounting bracket with hinged arm, Steel, zinc coated, Mounting hardware included	BEF-WN-W27	2009122
Universal bar clamp systems			
	Plate N04 for universal clamp bracket, Zinc plated steel (sheet), Diecast zinc (clamp), Universal clamp, mounting hardware	BEF-KHS-N04	2051610
Plug connectors and cables			
Illustration may differ	Head A: Female connector, M12, 4-pin, straight Head B: cable Cable: PVC, unshielded, 2 m	DOL-1204-G02M	6009382
Illustration may differ	Head A: Female connector, M12, 4-pin, angled Head B: cable Cable: PVC, unshielded, 2 m	DOL-1204-W02M	6009383
Reflectors			
	Rectangular, screw connection, 47 mm x 47 mm, PMMA/ABS, Screw-on, 2 hole mounting	P250	5304812
	Rectangular, screw connection, 175 mm x 34 mm, PMMA/ABS, Screw-on, 2 hole mounting	PL180E01	1013289
	Rectangular, screw connection, 37 mm x 56 mm, PMMA/ABS, Screw-on, 2 hole mounting	PL40A	1012720
	Rectangular, screw connection, 80 mm x 80 mm, PMMA/ABS, Screw-on, 2 hole mounting	PL80A	1003865

8011993/2014-07-24
Subject to change without notice

At a glance

- High-performance SICK technology
- No reflectors required
- Existing machine parts are used as reference target
- AutoAdapt for continuous threshold adaptation in contaminated conditions
- PinPoint LED with bright and precise light spot
- Easy-to-use teach-in button
- Status LEDs visible from all sides
- Rugged metal housing (PTFE coating available on request)

Your benefits

- Reliable detection of transparent and semitransparent objects without a reflector
- Reliable detection of objects regardless of color or surface qualities
- Freedom of machine design: no mounting system for the installation of a reflector required
- Quick commissioning: there is no need to mount a reflector or precisely adjust the sensor
- High operational safety: if the background becomes contaminated, object detection will continue uninterrupted
- Machine downtime is minimized: the integrated AutoAdapt function extends the time between cleanings
- Heightened productivity: mechanical and chemical ruggedness due to the metal housing

→ www.mysick.com/en/TranspaTect

For more information, just 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.

Ordering information

Other models and accessories → www.mysick.com/en/TranspaTect

WTF12-3, clear material detection

- **Switching mode:** Light/dark-switching
- **Adjustment:** Single teach-in button

Sensing range max. [1]	Sensing range [2]	Light spot size (distance)	Output type	Connection	Model name	Part no.
150 mm ... 700 mm	0 mm ... 400 mm [3] 0 mm ... 550 mm [4]	Ø 8 mm 300 mm	PNP	Connector M12, 4-pin	WTF12G-3P2432	1065719
			NPN	Connector M12, 4-pin	WTF12G-3N2432	1066279

[1] Adjustable background; referring to the background with 90 % remission (based on glass-bead blasted stainless steel, equivalent to standard white DIN 5033)

[2] Adjustable background.

[3] Detection range transparent objects.

[4] Detection range non-transparent objects.

Recommended accessories

	Brief description	Model name	Part no.
Device protection (mechanical)			
	Protective housing for universal clamp, Zinc plated steel (protective housing), Diecast zinc (clamp), Universal clamp, mounting hardware	BEF-SG-W12-3	2045175
Mounting brackets and mounting plates			
	Mounting bracket, large, Stainless steel, Mounting hardware included	BEF-WG-W12	2013942

B

	Brief description	Model name	Part no.
Terminal and alignment brackets			
	Clamping block for dovetail mounting, Steel, zinc coated, Mounting hardware included	BEF-KH-W12	2013285
Universal bar clamp systems			
	Plate N02 for universal clamp bracket, Zinc plated steel (sheet), Diecast zinc (clamp), Universal clamp, mounting hardware	BEF-KHS-N02	2051608
Plug connectors and cables			
Illustration may differ	Head A: Female connector, M12, 4-pin, straight Head B: cable Cable: PVC, unshielded, 2 m	DOL-1204-G02M	6009382
Illustration may differ	Head A: Female connector, M12, 4-pin, angled Head B: cable Cable: PVC, unshielded, 2 m	DOL-1204-W02M	6009383

At a glance

- Three mounting versions: betweeen the rollers (IR/R), side frame mount (ZLM) and over the conveyor (WLR)
- Three types of logic: single accumulation, single accumulation with sleep, block (slug) accumulation
- Up to 50 ZoneControl solutions can be cascaded in one string
- Fully animated simulation to ease selection and implementation
- Standard zone lengths of 1m (3ft) or 2m (6 ft)

Your benefits

- Largest Zero Pressure Accumulation portfolio on the market gives users a wide variety of choices for their application
- SICK ZoneControl solutions control the flow of packages a on conveyor without a PLC or other external control
- Quick setup since no programming, no laptop, and no PLC interfacing are required
- With 20 years of ZoneControl experience and personal support from SICK experts, all application and product issues are quickly addressed
- Quick expansion or modification of the conveyor due to the modular design

➜ **www.mysick.com/en/ZoneControl**

For more information, just 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.

Ordering information

Other models and accessories ➜ **www.mysick.com/en/ZoneControl**

R DC

Switching mode	Output type	Connection	Model name	Part no.
Light switching	PNP, NPN	Connector M12, 4-pin	RT-B1221	1063174
Dark-switching	PNP, NPN	Connector M12, 4-pin	RT-B2221	1063175
Light/dark-switching	PNP	Cable, 4-wire, 2 m	RT-P3117	1063179
		Connector M12, 4-pin	RT-P3221	1063129
	NPN	Cable, 4-wire, 2 m	RT-N3117	1063180
		Connector M12, 4-pin	RT-N3221	1063162

R AC/DC

- **Output type:** FET switch
- **Connection:** Cable, 4-wire, 2 m

Switching mode	Model name	Part no.
Light switching	RT-M1117	1063194
Dark-switching	RT-M2117	1063197

B

IR DC Air to Drive (NC)

- **Actuator:** pneumatic, valve on board
- **Output type:** PNP
- **Connection:** Connector M12, 4-pin

Type of output	Connection type solenoid valve	Connection type for daisy chain	Model name	Part no.
Valve, imperial	Control line 1/4 " diameter, compressed air 2x 3/8 " diameter	Cable with receptacle, M12, 4-pin 1.2 m	IRT-P211A10	1063117
		Cable with receptacle, M12, 4-pin 2 m	IRT-P212A10	1063123
Valve, metric	Compressed air 2 x 8 mm diameter, output line 4 mm diameter	Cable with receptacle, M12, 4-pin 2 m	IRT-P212E40	1063108

IR DC Air to Brake (NO)

- **Actuator:** pneumatic, valve on board
- **Output type:** PNP
- **Connection:** Connector M12, 4-pin

Type of output	Connection type solenoid valve	Connection type for daisy chain	Model name	Part no.
Valve, imperial	Output line 2 x 1/4 " diameter, compressed air 2x 3/8 " diameter	Cable with receptacle, M12, 4-pin 1.2 m	IRT-P211A11	1063118
	Control line 1/4 " diameter, compressed air 2x 3/8 " diameter	Cable with receptacle, M12, 4-pin 2 m	IRT-P212A11	1063124
Valve, metric	Compressed air 2 x 8 mm diameter, output line 4 mm diameter	Cable with receptacle, M12, 4-pin 1.2 m	IRT-P211E41	1063107
		Cable with receptacle, M12, 4-pin 2 m	IRT-P212E41	1063109

IR DC HIGH to Drive

- **Output type:** PNP
- **Connection:** Connector M12, 4-pin

Type of output	Actuator	Connection type solenoid valve	Connection type for daisy chain	Model name	Part no.
Without magnetic valve	Pneumatic, valve supplied separately	Cable with 9.4 mm DIN valve connector	Cable with receptacle, M12, 4-pin 1.2 m	IRT-P211C63	1063127
			Cable with receptacle, M12, 4-pin 2 m	IRT-P212C63	1063116
For Motor Driven Rollers (MDR)	Electrical	–	Cable with receptacle, M12, 4-pin 1.2 m	IRT-P231C83	1063101
			Cable with receptacle, M12, 4-pin 2 m	IRT-P232C83	1063100

Recommended accessories

	Brief description	Model name	Part no.
Mounting brackets and mounting plates			
	Mounting bracket, Steel, zinc coated, Mounting hardware included	BEF-WK-WTR	2051786
Adapters and distributors			
	Signal interrogation, female connector M12, 4-pin to 2 x male connector M12, 4-pin	DSL-1204-T0M3	6011682

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Subject to change without notice

At a glance

- PinPoint LED for a bright, precise light spot
- Durable metal threaded inserts
- SICK ASIC technology - the result of decades of experience in photoelectric sensors
- Large, user-friendly potentiometer
- Large, bright indicator LEDs
- IP 67 enclosure rating

Your benefits

- Easy alignment and precise object detection due to a highly visible PinPoint LED
- Quick and easy mounting and high durability due to threaded metal inserts
- SICK ASIC technology provides high performance and excellent reliability
- Easy to adjust due to large, user-friendly potentiometers
- Easy to monitor due to large, bright indicator LEDs
- Easy installation with SICK accessories

→ www.mysick.com/en/G6

For more information, just 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.

Ordering information

Other models and accessories → www.mysick.com/en/G6

GTE6

- **Sensor principle:** Photoelectric proximity sensor
- **Detection principle:** energetic
- **Light spot size (distance):** Ø 7 mm (90 mm)
- **Type of light:** visible red light
- **Switching mode:** Light/dark-switching
- **Adjustment:** Mechanical spindle, 5 turns

Sensing range max. [1]	Output type	Items supplied	Connection	Model name	Part no.
≤ 300 mm	PNP	Stainless steel mounting bracket (1.4301/304) BEF-W100-A	Cable, 3-wire, 2 m, PVC	GTE6-P1212	1051783
			Connector M8, 4-pin	GTE6-P4212	1051781
			Cable with connector M12, 4-pin, 300 mm, PVC	GTE6-P7212	1053628
	NPN		Cable, 3-wire, 2 m, PVC	GTE6-N1212	1051784
		–	Connector M8, 4-pin	GTE6-N4212	1051782

[1] Object with 90 % reflectance (referred to standard white, DIN 5033)

B

GTB6

- **Sensor principle:** Photoelectric proximity sensor
- **Detection principle:** Background suppression
- **Light spot size (distance):** Ø 6 mm (100 mm)
- **Type of light:** visible red light
- **Switching mode:** Light/dark-switching
- **Adjustment:** Mechanical spindle, 5 turns

Sensing range max. [1]	Output type	Items supplied	Connection	Model name	Part no.
5 mm ... 250 mm	PNP	Stainless steel mounting bracket (1.4301/304) BEF-W100-A	Cable, 3-wire, 2 m, PVC	GTB6-P1212	1052444
			Connector M8, 4-pin	GTB6-P4212	1052442
		–	Cable with connector M8, 3-pin, 300 mm	GTB6-P5211	1059333
			Cable with connector M8, 4-pin, 300 mm	GTB6-P6211	1059320
			Cable with connector M12, 4-pin, 300 mm	GTB6-P7211	1057705
	NPN	Stainless steel mounting bracket (1.4301/304) BEF-W100-A	Cable, 3-wire, 2 m, PVC	GTB6-N1212	1052445
			Connector M8, 4-pin	GTB6-N4212	1052443
			Cable with connector M8, 4-pin, 300 mm	GTB6-N6212	1058769

[1] Object with 90 % reflectance (referred to standard white, DIN 5033)

GL6

- **Sensor principle:** Photoelectric retro-reflective sensor
- **Detection principle:** Standard optics
- **Light spot size (distance):** Ø 8 mm (350 mm)
- **Type of light:** visible red light

Sensing range max. [1]	Output type	Switching mode	Adjustment	Items supplied	Connection	Model name	Part no.
≤ 6 m	PNP	Light switching	–	–	Connector M8, 4-pin	GL6-P4511	1052634
					Connector M12, 4-pin, 300 mm, PVC	GL6-P7511	1056039
		Light/dark-switching	Potentiometer, 270 °	–	Connector M8, 4-pin	GL6-P4211	1059241
			–	Stainless steel mounting bracket (1.4301/304) BEF-W100-A, Reflector P250	Cable, 3-wire, 2 m, PVC	GL6-P1112	1051779
					Connector M8, 4-pin	GL6-P4112	1051777
					Connector M12, 4-pin, 300 mm, PVC	GL6-P7112	1053590
	NPN	Light/dark-switching	Potentiometer, 270 °	–	Cable, 3-wire, 2 m, PVC	GL6-N1211	1059923
			–	Stainless steel mounting bracket (1.4301/304) BEF-W100-A, Reflector P250	Cable, 3-wire, 2 m, PVC	GL6-N1112	1051780
					Connector M8, 4-pin	GL6-N4112	1051778

[1] PL80A.

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Subject to change without notice

GL6G, clear material detection

- **Sensor principle:** Photoelectric retro-reflective sensor
- **Detection principle:** Standard optics
- **Light spot size (distance):** Ø 8 mm (350 mm)
- **Type of light:** visible red light
- **Switching mode:** Light/dark-switching
- **Adjustment:** potentiometer, 270 °

Sensing range max. [1]	Output type	Connection	Model name	Part no.
≤ 6 m	PNP	Connector M8, 4-pin	GL6G-P4211	1059632
	NPN	Cable, 3-wire, 2 m, PVC	GL6G-N1211	1059925

[1] PL80A.

GSE6

- **Sensor principle:** Through-beam photoelectric sensor
- **Light spot size (distance):** Ø 375 mm (12 m)
- **Type of light:** visible red light
- **Switching mode:** Light/dark-switching
- **Items supplied:** Stainless steel mounting bracket (1.4301/304) BEF-W100-A

Sensing range max.	Output type	Connection	Model name	Part no.
0 m ... 15 m	PNP	Cable, 3-wire, 2 m, PVC	GSE6-P1112	1052452
		Connector M8, 4-pin	GSE6-P4112	1052450
		Cable with connector M8, 4-pin, 300 mm, PVC	GSE6-P6112	1054850
		Cable with connector M12, 4-pin, 300 mm, PVC	GSE6-P7112	1054831
	NPN	Cable, 3-wire, 2 m, PVC	GSE6-N1112	1052453
		Connector M8, 4-pin	GSE6-N4112	1052451
		Cable with connector M8, 4-pin, 300 mm, PVC	GSE6-N6112	1054852
		Cable with connector M12, 4-pin, 300 mm, PVC	GSE6-N7112	1054835

Recommended accessories

	Brief description	Model name	Part no.
Device protection (mechanical)			
	Safety bracket for floor mounting, Stainless steel 1.4571, Mounting hardware included	BEF-SW-W4S	2051497
Mounting brackets and mounting plates			
	Mounting bracket for wall mounting, Stainless steel, Mounting hardware included	BEF-W100-A	5311520
	Mounting bracket for floor mounting, Steel, zinc coated, Mounting hardware included	BEF-W100-B	5311521
Universal bar clamp systems			
	Plate N08 for universal clamp bracket, Zinc plated steel (sheet), Diecast zinc (clamp), Universal clamp, mounting hardware	BEF-KHS-N08	2051607

B

At a glance

- One of the smallest photoelectric sensors in the world
- No external amplifier required
- Variant designed to detect transparent and glossy objects
- Rugged housing with metal-reinforced fixing holes

Your benefits

- High-performance solutions for very tight spaces provide increased application flexibility
- Fast response times with a high level of accuracy and precise switching points
- The high enclosure rating and the rugged housing offer a long service life that withstands harsh environmental conditions
- Quick and easy installation since sensors can be mounted directly on machine parts

➜ www.mysick.com/en/W2_Flat

For more information, just 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.

Ordering information

Other models and accessories ➜ www.mysick.com/en/W2_Flat

WT2 Flat

- **Sensor principle:** Photoelectric proximity sensor
- **Detection principle:** energetic

Sensing range max. [1]	Output type	Switching mode	Connection	Model name	Part no.
1 mm ... 9 mm	PNP	Light switching	Cable, 3-wire, 2 m, PVC	WT2F-P170	6030588
			Cable with connector M8, 3-pin, 200 mm, PVC	WT2F-P270	6030589
			Cable with connector M8, 4-pin, 200 mm, PVC	WT2F-P470	6030590
	NPN	Light switching	Cable, 3-wire, 2 m, PVC	WT2F-N170	6030587
2 mm ... 18 mm	PNP	Light switching	Cable, 3-wire, 2 m, PVC	WT2F-P140	6030584
			Cable with connector M8, 3-pin, 200 mm, PVC	WT2F-P240	6030585
			Cable with connector M8, 4-pin, 200 mm, PVC	WT2F-P440	6030586
	NPN	Light switching	Cable, 3-wire, 2 m, PVC	WT2F-N140	6030583
2 mm ... 34 mm	PNP	Light switching	Cable, 3-wire, 2 m, PVC	WT2F-P150	6030580
			Cable with connector M8, 3-pin, 200 mm, PVC	WT2F-P250	6030581
			Cable with connector M8, 4-pin, 200 mm, PVC	WT2F-P450	6030582
	NPN	Light switching	Cable, 3-wire, 2 m, PVC	WT2F-N150	6030576

[1] Object with 90 % reflectance (referred to standard white, DIN 5033)

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Sensing range max. [1]	Output type	Switching mode	Connection	Model name	Part no.
4 mm ... 115 mm	PNP	Light switching	Cable, 3-wire, 2 m, PVC	WT2F-P180	6030573
			Cable with connector M8, 3-pin, 200 mm, PVC	WT2F-P280	6030574
			Cable with connector M8, 4-pin, 200 mm, PVC	WT2F-P480	6030575
	NPN	Light switching	Cable, 3-wire, 2 m, PVC	WT2F-N180	6030572

[1] Object with 90 % reflectance (referred to standard white, DIN 5033)

WS/WE2 Flat

- **Sensor principle:** Through-beam photoelectric sensor

Sensing range max.	Output type	Switching mode	Connection	Model name	Part no.
0 m ... 0.5 m	PNP	Light switching	Cable, 3-wire, 2 m, PVC	WS/WE2F-P110	6049355
			Cable with connector M8, 3-pin, 200 mm, PVC	WS/WE2F-P210	6030566
		Dark-switching	Cable, 3-wire, 2 m, PVC	WS/WE2F-F110	6030569
			Cable with connector M8, 3-pin, 200 mm, PVC	WS/WE2F-F210	6030570
	NPN	Light switching	Cable, 3-wire, 2 m, PVC	WS/WE2F-N110	6030540
		Dark-switching	Cable, 3-wire, 2 m, PVC	WS/WE2F-E110	6030554

Recommended accessories

	Brief description	Model name	Part no.
Plug connectors and cables			
	Head A: Female connector, M8, 3-pin, straight Head B: cable Cable: PVC, unshielded, 2 m	DOL-0803-G02M	6010785
	Head A: Female connector, M8, 3-pin, angled Head B: cable Cable: PVC, unshielded, 2 m	DOL-0803-W02M	6008489
	Head A: Female connector, M8, 4-pin, straight Head B: cable Cable: PVC, unshielded, 2 m	DOL-0804-G02M	6009870
	Head A: Female connector, M8, 4-pin, angled Head B: cable Cable: PVC, unshielded, 2 m	DOL-0804-W02M	6009871

B

At a glance

- Sensor with background suppression and without any significant black/white shift
- PinPoint 2.0 LED with extended sensing distances and high operating reserves
- A variety of application options thanks to clearly-defined laser-like or line-shaped light spots
- Detection of highly-transparent and reflective objects using sensors with V-optics
- Photoelectric retro-reflective sensor with autocollimation and a clearly visible light spot

Your benefits

- Machine design flexibility: the ultra-compact sensors offer above-average sensing distances and provide space-saving installation
- Remote setup: sensors installed in confined spaces can be set and monitored remotely via IO-Link.
- High operational reliability: ultrablack objects are detected with a degree of reflection of 1%
- Maximum reliability during object detection
- Quick and easy commissioning: the photoelectric retro-reflective sensor with autocollimation provides a clearly visible light spot for high process reliability
- Universal application options: wide range of models enclosed in a rugged housing

CE

IO-Link

➜ www.mysick.com/en/W2S-2

For more information, just 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.

Ordering information

Other models and accessories ➜ www.mysick.com/en/W2S-2

WTB2S-2, fix

- **Detection principle:** Background suppression

Sensing range max. [1]	Light spot size (distance)	Output type	Switching mode	Connection	Model name	Part no.
1 mm ... 18 mm	Ø 2 mm (8 mm)	PNP	Light switching	Cable with connector M8, 3-pin, 200 mm	WTB2S-2P3110	1064395
			Dark-switching	Cable with connector M8, 3-pin, 200 mm	WTB2S-2F3110	1064396
			Light/dark-switching	Cable with connector M8, 4-pin, 200 mm	WTB2S-2P3210	1063314
		NPN	Light switching	Cable, 3-wire, 2 m	WTB2S-2N1310	1064249
			Dark-switching	Cable, 3-wire, 2 m	WTB2S-2E1310	1064397
1 mm ... 36 mm	Ø 3 mm (15 mm)	PNP	Light switching	Cable with connector M8, 3-pin, 200 mm	WTB2S-2P3130	1064575
			Dark-switching	Cable with connector M8, 3-pin, 200 mm	WTB2S-2F3130	1064576
		NPN	Light switching	Cable, 3-wire, 2 m	WTB2S-2N1330	1064578
			Dark-switching	Cable, 3-wire, 2 m	WTB2S-2E1330	1064580
			Light/dark-switching	Cable, 4-wire, 2 m	WTB2S-2N1130	1063321
1 mm ... 66 mm	Ø 4.5 mm (40 mm)	PNP	Light switching	Cable with connector M8, 3-pin, 200 mm	WTB2S-2P3160	1064607
			Dark-switching	Cable with connector M8, 3-pin, 200 mm	WTB2S-2F3160	1064608
		NPN	Light switching	Cable, 3-wire, 2 m	WTB2S-2N1360	1064609

[1] Object with 90 % reflectance (referred to standard white, DIN 5033)

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WTB2S-2, adjustable

- **Detection principle:** Background suppression

Sensing range max. [1]	Light spot size (distance)	Output type	Switching mode	Adjustment	Connection	Model name	Part no.
4 mm ... 110 mm	Ø 4.4 mm (60 mm)	PNP	Light switching	Cable	Cable with connector M8, 4-pin, 200 mm	WTB2S-2P3245	1064615
		NPN	Light switching	Cable	Cable, 4-wire, 2 m	WTB2S-2N1145	1063552
1 mm ... 150 mm	Ø 3.5 mm (50 mm)	PNP	Light/dark-switching	Potentiometer, 3 turns	Cable with connector M8, 4-pin, 200 mm	WTB2S-2P3251	1066111
		NPN	Light/dark-switching	Potentiometer, 3 turns	Cable, 4-wire, 2 m	WTB2S-2N1151	1066113

[1] Object with 90 % reflectance (referred to standard white, DIN 5033)

WTB2S-2, adjustable, line-shaped light spot

- **Detection principle:** Background suppression
- **Light spot size (distance):** 2.2 mm x 9 mm (45 mm)
- **Switching mode:** Light switching
- **Adjustment:** cable

Sensing range max. [1]	Output type	Connection	Model name	Part no.
4 mm ... 90 mm	PNP	Cable with connector M8, 4-pin, 200 mm	WTB2S-2P3275	1064620
	NPN	Cable, 4-wire, 2 m	WTB2S-2N1175	1064621

[1] Object with 90 % reflectance (referred to standard white, DIN 5033)

WL2S-2

- **Detection principle:** autocollimation
- **Light spot size (distance):** Ø 12 mm (250 mm)

Sensing range max. [1]	Output type	Switching mode	Connection	Model name	Part no.
0 m ... 1.2 m	PNP	Light switching	Cable with connector M8, 3-pin, 200 mm	WL2S-2P3130	1064592
		Dark-switching	Cable with connector M8, 3-pin, 200 mm	WL2S-2F3130	1064593
		Light/dark-switching	Cable with connector M8, 4-pin, 200 mm	WL2S-2P3230	1063572
	NPN	Light switching	Cable, 3-wire, 2 m	WL2S-2N1330	1064595
		Dark-switching	Cable, 3-wire, 2 m	WL2S-2E1330	1064596
		Light/dark-switching	Cable, 4-wire, 2 m	WL2S-2N1130	1063571

[1] P250F.

WSE2S-2

- **Light spot size (distance):** Ø 65 mm (1,500 mm)

Sensing range max.	Output type	Switching mode	Connection	Model name	Part no.
0 m ... 2.5 m	PNP	Light switching	Cable with connector M8, 3-pin, 200 mm	WSE2S-2P3130	1063521
		Dark-switching	Cable with connector M8, 3-pin, 200 mm	WSE2S-2F3130	1063523
	NPN	Light switching	Cable, 3-wire, 2 m	WSE2S-2N1330	1064584
		Dark-switching	Cable, 3-wire, 2 m	WSE2S-2E1330	1064586

B

Recommended accessories

	Brief description	Model name	Part no.
Plug connectors and cables			
	Head A: Female connector, M8, 3-pin, straight Head B: cable Cable: PVC, unshielded, 2 m	DOL-0803-G02M	6010785
	Head A: Female connector, M8, 4-pin, straight Head B: cable Cable: PVC, unshielded, 2 m	DOL-0804-G02M	6009870
Reflectors			
	Rectangular, screw connection, 47 mm x 47 mm, PMMA/ABS, Screw-on, 2 hole mounting	P250	5304812
	Rectangular, screw connection, 38 mm x 15 mm, PMMA/ABS, Screw-on, 2 hole mounting	PL20A	1012719
	Rectangular, screw connection, 56 mm x 28 mm, PMMA/ABS, Screw-on, 2 hole mounting	PL30A	1002314
	Rectangular, screw connection, 37 mm x 56 mm, PMMA/ABS, Screw-on, 2 hole mounting	PL40A	1012720
	Rectangular, screw connection, 80 mm x 80 mm, PMMA/ABS, Screw-on, 2 hole mounting	PL80A	1003865

IO-Link

At a glance

- Extremely high sensor size to sensing distance ratio
- High switching point accuracy
- Teach-in functions enable reliable set-tings
- Automatic switching threshold adaption
- Single-lens autocollimation for visibility through apertures and drill holes
- Flexible sensor settings, monitoring, advanced diagnostics, and display thanks to IO-Link

Your benefits

- Machine design flexibility: the ultra-compact sensors offer above-average sensing distances and provide space-saving installation
- Remote setup: sensors installed in confined spaces can be set and monitored remotely via IO-Link.
- High operational reliability and system throughput: all familiar, highly-transparent objects are reliably detected
- Precise switching characteristics and a high detection quality guarantee an universal object detecting
- Universal use: conventional mounting and housing design
- The precise light spot of the PinPoint 2.0 LED enables the use of very small reflectors and reflector surfaces

→ www.mysick.com/en/W2SG-2

For more information, just 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.

Ordering information

Other models and accessories → www.mysick.com/en/W2SG-2

WL2SG-2, clear material detection

- **Detection principle:** autocollimation
- **Light spot size (distance):** Ø 12 mm (250 mm)
- **Adjustment:** cable

Sensing range max. [1]	Output type	Switching mode	Connection	Model name	Part no.
0 m ... 1.2 m	PNP	Light switching	Cable with connector M8, 4-pin, 200 mm	WL2SG-2P3235	1065929
		Dark-switching	Cable with connector M8, 4-pin, 200 mm	WL2SG-2F3235	1063647
	NPN	Light switching	Cable, 4-wire, 2 m	WL2SG-2N1135	1065934
		Dark-switching	Cable, 4-wire, 2 m	WL2SG-2E1135	1065930

[1] P250F.

B

Recommended accessories

	Brief description	Model name	Part no.
Plug connectors and cables			
	Head A: Female connector, M8, 4-pin, straight Head B: cable Cable: PVC, unshielded, 2 m	DOL-0804-G02M	6009870
Reflectors			
	Fine triple, screw connection, suitable for laser sensors, 47 mm x 47 mm, PMMA/ABS, Screw-on, 2 hole mounting	P250F	5308843
	Fine triple, screw connection, suitable for laser sensors, 18 mm x 18 mm, PMMA/ABS, Screw-on, 2 hole mounting	PL10F	5311210
	Fine triple, chemically resistant, screw connection, 18 mm x 18 mm, Plastic, Screw-on, 2 hole mounting	PL10F CHEM	5321636
	Fine triple, screw connection, suitable for laser sensors, 38 mm x 16 mm, PMMA/ABS, Screw-on, 2 hole mounting	PL20F	5308844
	Fine triple, chemically resistant, screw connection, suitable for laser sensors, 16 mm x 38 mm, Plastic, Screw-on, 2 hole mounting	PL20F-CHEM	5326089
	Fine triple, screw connection, suitable for laser sensors, 56 mm x 28 mm, PMMA/ABS, Screw-on, 2 hole mounting	PL30F	5326523
	Fine triple, screw connection, suitable for laser sensors, 76 mm x 45 mm, PMMA/ABS, Screw-on, 2 hole mounting	PL81-1F	5325060

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Subject to change without notice

At a glance

- Best-in-class background suppression, reliable detection of critical objects and a high immunity to ambient light
- Quick and easy setup using a precise 5-turn potentiometer, control wire or teach function
- Best background suppression in its class
- PinPoint LED for brightest light spot in its class
- Flexible sensor settings, monitoring, advanced diagnostics, and visualization thanks to IO-Link

Your benefits

- Low-cost integration due to optimal machine integration in areas with limited space
- Application versatility due to reliable detection of shiny or jet-black objects
- Rugged mounting system with M3 threaded metal inserts reduces maintenance costs due to a long service life
- High immunity to ambient light reduces downtime caused by false trips
- Clearly visible light spot simplifies alignment
- IO-Link provides easy data access from the PLC
- Quick and easy configuration
- Quick and easy integration using function blocks

➜ www.mysick.com/en/W4-3

For more information, just 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.

Ordering information

Other models and accessories ➜ www.mysick.com/en/W4-3

WTB4-3

- **Sensor principle:** Photoelectric proximity sensor
- **Detection principle:** Background suppression
- **Light spot size (distance):** Ø 7 mm (50 mm)

Type of light	Sensing range max. [1]	Output type	Switching mode	Adjustment	Connection	Model name	Part no.
Visible red light	4 mm ... 150 mm	PNP	Light switching	Potentiometer, 5 turns	Cable with connector M8, 3-pin, 100 mm, PVC	WTB4-3P3161	1028097
				Single teach-in button	Connector M8, 3-pin	WTB4-3P2162	1028084
					Cable with connector M8, 3-pin, 100 mm, PVC	WTB4-3P3162	1028082
				Cable, Single teach-in button [2]	Connector M8, 4-pin	WTB4-3P2264	1028086
					Cable with connector M12, 4-pin, 150 mm, PVC	WTB4-3P3464	1044013
			Dark-switching	Potentiometer, 5 turns	Cable, 3-wire, 2 m, PVC	WTB4-3F1361	1028105
			Light/dark-switching	Potentiometer, 5 turns	Connector M8, 4-pin	WTB4-3P2261	1028100
					Cable with connector M8, 4-pin, 100 mm, PVC	WTB4-3P3261	1028098
		NPN	Light switching	Potentiometer, 5 turns	Cable, 3-wire, 2 m, PVC	WTB4-3N1361	1028101
			Light/dark-switching	Potentiometer, 5 turns	Cable, 4-wire, 2 m, PVC	WTB4-3N1161	1028102

[1] Object with 90 % reflectance (referred to standard white, DIN 5033)

[2] External teach-in: pulse > 2 s with voltage Uv with PNP and M with NPN.

B

WTB4-3, line-shaped light spot

- **Sensor principle:** Photoelectric proximity sensor
- **Detection principle:** Background suppression
- **Light spot size (distance):** 5 mm x 28 mm (50 mm)
- **Adjustment:** potentiometer, 5 turns

Type of light	Sensing range max. [1]	Output type	Switching mode	Connection	Model name	Part no.
Visible red light	4 mm ... 150 mm	PNP	Light switching	Cable with connector M8, 3-pin, 100 mm, PVC	WTB4-3P3171	1028122
			Light/dark-switching	Connector M8, 4-pin	WTB4-3P2271	1042190
		NPN	Light switching	Cable, 3-wire, 2 m, PVC	WTB4-3N1371	1028125

[1] Object with 90 % reflectance (referred to standard white, DIN 5033)

WTV4-3, V-optics

- **Sensor principle:** Photoelectric proximity sensor
- **Detection principle:** Background suppression
- **Light spot size (distance):** Ø 10 mm (40 mm)

Type of light	Sensing range max. [1]	Output type	Switching mode	Adjustment	Connection	Model name	Part no.
Visible red light	4 mm ... 50 mm	PNP	Light/dark-switching	Potentiometer, 5 turns	Connector M8, 4-pin	WTV4-3P2241	1028114
					Cable with connector M12, 4-pin, 150 mm, PVC	WTV4-3P3441	1029582
Infrared light	4 mm ... 50 mm	PNP	Light switching	Potentiometer, 5 turns	Cable, 3-wire, 2 m, PVC	WTV4-3P1321	1029888
				Single teach-in button	Cable with connector M8, 4-pin, 100 mm, PVC	WTV4-3P3122	1046411
		NPN	Light switching	Potentiometer, 5 turns	Cable, 3-wire, 2 m, PVC	WTV4-3N1321	1029885

[1] Object with 90 % reflectance (referred to standard white, DIN 5033)

WTV4-3, V-optics, line-shaped light spot

- **Sensor principle:** Photoelectric proximity sensor
- **Detection principle:** Background suppression
- **Light spot size (distance):** 3 mm x 20 mm (40 mm)
- **Switching mode:** Light switching
- **Adjustment:** potentiometer, 5 turns

Type of light	Sensing range max. [1]	Output type	Connection	Model name	Part no.
Visible red light	3 mm ... 50 mm	PNP	Connector M8, 4-pin	WTV4-3P2271	1046644
		NPN	Cable, 4-wire, 2 m, PVC	WTV4-3N1171	1046898

[1] Object with 90 % reflectance (referred to standard white, DIN 5033)

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Subject to change without notice

WL4-3

- **Sensor principle:** Photoelectric retro-reflective sensor
- **Detection principle:** Standard optics
- **Light spot size (distance):** Ø 75 mm (1.5 m)

Type of light	Sensing range max. [1]	Output type	Switching mode	Connection	Model name	Part no.
Visible red light	0.01 m ... 4.5 m	PNP	Light switching	Cable with connector M12, 4-pin, 150 mm, PVC	WL4-3P3430	1044347
			Dark-switching	Connector M8, 3-pin	WL4-3F2130	1028155
			Light/dark-switching	Connector M8, 4-pin	WL4-3P2230	1028147
		NPN	Light switching	Cable, 3-wire, 2 m, PVC	WL4-3N1330	1028148
			Dark-switching	Cable, 3-wire, 2 m, PVC	WL4-3E1330	1028156

[1] PL80A.

WSE4-3

- **Sensor principle:** Through-beam photoelectric sensor
- **Light spot size (distance):** Ø 210 mm (2 m)

Type of light	Sensing range max.	Output type	Switching mode	Adjustment	Connection	Model name	Part no.
Visible red light	0 m ... 4 m	PNP	Light switching	–	Connector M8, 3-pin	WSE4-3P2130	1028163
				Potentiometer, 5 turns	Cable with connector M8, 3-pin, 100 mm, PVC	WSE4-3P3131	1029898
			Dark-switching	–		WSE4-3F3130	1028170
			Light/dark-switching	–	Connector M8, 4-pin	WSE4-3P2230	1028160
		NPN	Dark-switching	–	Cable, 3-wire, 2 m, PVC	WSE4-3E1330	1028172

B

Recommended accessories

	Brief description	Model name	Part no.
Device protection (mechanical)			
	Safety bracket for floor mounting, Stainless steel 1.4571, Mounting hardware included	BEF-SW-W4S	2051497
Universal bar clamp systems			
	Plate N08 for universal clamp bracket, Zinc plated steel (sheet), Diecast zinc (clamp), Universal clamp, mounting hardware	BEF-KHS-N08	2051607
Reflectors			
	Fine triple, screw connection, suitable for laser sensors, 47 mm x 47 mm, PMMA/ABS, Screw-on, 2 hole mounting	P250F	5308843
	Fine triple, screw connection, suitable for laser sensors, 18 mm x 18 mm, PMMA/ABS, Screw-on, 2 hole mounting	PL10F	5311210
	Fine triple, screw connection, suitable for laser sensors, 38 mm x 16 mm, PMMA/ABS, Screw-on, 2 hole mounting	PL20F	5308844
	Round, self-adhesive, PMMA/ABS, self-adhesive	PL22-2	1003621
	Rectangular, screw connection, 37 mm x 56 mm, PMMA/ABS, Screw-on, 2 hole mounting	PL40A	1012720
	Self-adhesive, customizable length by roll, 5 cm x 22.8 m, self-adhesive [1]	REF-PLUS-50-K	4051185

[1] Customizable length by roll. Width 5 cm, length max. 22.8 m.

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Subject to change without notice

At a glance

- Fast and reliable setup via teach-in pushbutton
- Continuous threshold adjustment technology to detect objects in changing conditions such as temperature, contamination and reflector wear
- Versions without polarizing filters to better detect depolarizing objects such as PET bottles, CD sleeves and shrink-wrapped, glossy objects

Your benefits

- Reliable and quick setting via the push of a button
- Flat housing design eliminates alignment or mounting brackets, which saves time and money
- Low-cost machine integration due to small dimensions that enable mounting in areas with space restrictions
- Quick and easy setup due to highly visible intensive light spot
- The PinPoint LED's well-defined, intense light spot simplifies alignment
- Nearly all transparent objects can be reliably detected

→ www.mysick.com/en/W4-3_Glass

For more information, just 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.

Ordering information

Other models and accessories → www.mysick.com/en/W4-3_Glass

WLG4-3 without polarisation filter

Sensing range max. [1]	Output type	Switching mode	Adjustment	Connection	Model name	Part no.
0.01 m ... 1.6 m	PNP	Light switching	Single teach-in button	Connector M8, 3-pin	WLG4-3P2182	1044179
	NPN	Dark-switching	Single teach-in button	Cable, 3-wire, 2 m, PVC	WLG4-3E1382	1028138

[1] PL80A.

B

WLG4-3 with polarisation filter

- **Polarisation filter: ✔**

Sensing range max. [1]	Output type	Switching mode	Adjustment	Connection	Model name	Part no.
0.01 m ... 4.5 m	PNP	Light switching	Single teach-in button	Cable, 3-wire, 2 m, PVC	WLG4-3P1332	1042844
				Connector M8, 3-pin	WLG4-3P2132	1029567
		Dark-switching	Single teach-in button	Connector M8, 3-pin	WLG4-3F2132	1028127
			Cable, single teach-in button	Connector M8, 4-pin	WLG4-3F2234	1028130
				Cable with connector M8, 4-pin, 100 mm, PVC	WLG4-3F3234	1028129
			Single teach-in button	Cable with connector M8, 3-pin, 100 mm, PVC	WLG4-3F3132	1028128
			Cable, single teach-in button	Cable with connector M12, 4-pin, 150 mm, PVC	WLG4-3F3434	1043683
	NPN	Dark-switching	Single teach-in button	Cable, 3-wire, 2 m, PVC	WLG4-3E1332	1028131
			Cable, single teach-in button	Cable, 4-wire, 2 m, PVC	WLG4-3E1134	1028133
			Single teach-in button	Connector M8, 3-pin	WLG4-3E2132	1028132

[1] PL80A.

Recommended accessories

	Brief description	Model name	Part no.
Plug connectors and cables			
	Head A: Female connector, M8, 3-pin, straight Head B: cable Cable: PVC, unshielded, 2 m	DOL-0803-G02M	6010785
Reflectors			
	Fine triple, screw connection, suitable for laser sensors, 47 mm x 47 mm, PMMA/ABS, Screw-on, 2 hole mounting	P250F	5308843
	Fine triple, screw connection, suitable for laser sensors, 18 mm x 18 mm, PMMA/ABS, Screw-on, 2 hole mounting	PL10F	5311210
	Fine triple, chemically resistant, screw connection, 18 mm x 18 mm, Plastic, Screw-on, 2 hole mounting	PL10F CHEM	5321636
	Fine triple, screw connection, suitable for laser sensors, 38 mm x 16 mm, PMMA/ABS, Screw-on, 2 hole mounting	PL20F	5308844
	Fine triple, chemically resistant, screw connection, suitable for laser sensors, 16 mm x 38 mm, Plastic, Screw-on, 2 hole mounting	PL20F-CHEM	5326089
	Fine triple, screw connection, suitable for laser sensors, 56 mm x 28 mm, PMMA/ABS, Screw-on, 2 hole mounting	PL30F	5326523
	Fine triple, screw connection, suitable for laser sensors, 76 mm x 45 mm, PMMA/ABS, Screw-on, 2 hole mounting	PL81-1F	5325060

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Subject to change without notice

At a glance

- Best background suppression sensor in its class
- Universal use of PinPoint LED technology in all models
- BGS proximity sensor with laser-like light spot for precise detection tasks
- Reliable setting via 5-turn potentiometer, teach-in pushbutton, teach-in via cable or IO-Link
- Flexible sensor settings, monitoring, advanced diagnostics, and visualization thanks to IO-Link

Your benefits

- Application versatility due to reliable detection of shiny, transparent or jet-black objects
- Very quick and easy alignment due to the highly visible, intense PinPoint LED light spot
- Rugged mounting system with M3 threaded metal inserts reduces maintenance costs due to a long service life
- Background suppression sensors with a laser-like light spot reduce costs and installation of additional protective measures by replacing laser sensors
- IO-Link provides easy data access from the PLC
- Quick and easy configuration
- Quick and easy integration using function blocks

→ www.mysick.com/en/W4S-3

For more information, just 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.

Ordering information

Other models and accessories → www.mysick.com/en/W4S-3

WTB4S-3

- **Sensor principle:** Photoelectric proximity sensor
- **Detection principle:** Background suppression

Sensing range max. [1]	Output type	Switching mode	Adjustment	Connection	Model name	Part no.
4 mm ... 120 mm	PNP	Dark-switching	Potentiometer, 5 turns	Connector M8, 3-pin	WTB4S-3F2131	1042060
	NPN	Light switching	Cable [2]	Cable, 4-wire, 2 m, PVC	WTB4S-3N1135	1047127
			Potentiometer, 5 turns	Cable, 3-wire, 2 m, PVC	WTB4S-3N1331	1042062
		Dark-switching	Potentiometer, 5 turns	Cable, 3-wire, 2 m, PVC	WTB4S-3E1331	1042064
4 mm ... 150 mm	PNP	Light switching	Single teach-in button	Connector M8, 3-pin	WTB4S-3P2162	1042037
4 mm ... 180 mm	PNP	Light/dark-switching	Potentiometer, 5 turns	Connector M8, 4-pin	WTB4S-3P2261	1042041
	NPN	Dark-switching	Potentiometer, 5 turns	Cable, 3-wire, 2 m, PVC	WTB4S-3E1361	1042047

[1] Object with 90 % reflectance (referred to standard white, DIN 5033)

[2] External teach-in: pulse > 2 s with voltage Uv with PNP and M with NPN.

B

WTB4S-3 IO-Link

- **Sensor principle:** Photoelectric proximity sensor
- **Detection principle:** Background suppression
- **Output type:** PNP
- **Switching mode:** Light switching
- **Adjustment:** cable, Single teach-in button
- **Connection:** Connector M8, 4-pin

Sensing range max. [1]	IO-Link	Advanced functions	Model name	Part no.
4 mm ... 180 mm	✔, Standard functions	–	WTB4SC-3P2262	1042033
	✔, Standard functions, advanced functions	Time measurement / timer, decentralized debouncing	WTB4SC-3P2262A70	1067756
		High speed counter, decentralized debouncing	WTB4SC-3P2262A71	1067757
		Time stamp, decentralized debouncing	WTB4SC-3P2262A91	1067758

[1] Object with 90 % reflectance (referred to standard white, DIN 5033)

WL4S-3

- **Sensor principle:** Photoelectric retro-reflective sensor
- **Detection principle:** autocollimation

Sensing range max. [1]	Adjustment	Output type	Switching mode	Connection	Model name	Part no.
0 m ... 4 m	–	PNP	Light switching	Connector M8, 3-pin	WL4S-3P2130	1042069
				Cable with connector M8, 3-pin, 100 mm, PVC	WL4S-3P3130	1042070
			Dark-switching	Cable, 3-wire, 2 m, PVC	WL4S-3F1330	1042068
			Light/dark-switching	Connector M8, 4-pin	WL4S-3P2230	1042066
		NPN	Light switching	Cable, 3-wire, 2 m, PVC	WL4S-3N1330	1042073
0 m ... 5 m	Single teach-in button	PNP	Light switching	Cable with connector M8, 3-pin, 100 mm, PVC	WL4S-3P3132	1044802
			Dark-switching	Cable, 3-wire, 2 m, PVC	WL4S-3F1332	1042076
				Cable with connector M8, 3-pin, 100 mm, PVC	WL4S-3F3132	1042075
		NPN	Light switching	Cable, 3-wire, 2 m, PVC	WL4S-3N1332	1042082
			Dark-switching	Cable, 3-wire, 2 m, PVC	WL4S-3E1332	1042081

[1] PL80A.

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Subject to change without notice

WL4S-3 IO-Link

- **Sensor principle:** Photoelectric retro-reflective sensor
- **Detection principle:** autocollimation
- **Output type:** PNP
- **Switching mode:** Light/dark-switching
- **Adjustment:** Single teach-in button
- **Connection:** Connector M8, 4-pin

Sensing range max. [1]	IO-Link	Advanced functions	Model name	Part no.
0 m ... 5 m	✔, Standard functions	–	WL4SC-3P2232	1065315
	✔, Standard functions, advanced functions	Time measurement / timer, decentralized debouncing	WL4SC-3P2232A70	1067760
		High speed counter, decentralized debouncing	WL4SC-3P2232A71	1067761
		Time stamp, decentralized debouncing	WL4SC-3P2232A91	1067762

[1] PL80A.

WSE4S-3

- **Sensor principle:** Through-beam photoelectric sensor

Sensing range max.	Output type	Switching mode	Connection	Model name	Part no.
0 m ... 5 m	PNP	Light switching	Connector M8, 3-pin	WSE4S-3P2130	1052892
		Dark-switching	Cable with connector M12, 4-pin, 150 mm, PVC	WSE4S-3F3430	1052884
	NPN	Light switching	Cable, 3-wire, 2 m, PVC	WSE4S-3N1330	1052872
		Dark-switching	Cable, 3-wire, 2 m, PVC	WSE4S-3E1330	1052867

WSE4S-3 IO-Link

- **Sensor principle:** Through-beam photoelectric sensor
- **Output type:** PNP
- **Switching mode:** Light/dark-switching
- **Connection:** Connector M8, 4-pin

Sensing range max.	IO-Link	Advanced functions	Model name	Part no.
0 m ... 5 m	✔, Standard functions	–	WSE4SC-3P2230	1067767
	✔, Standard functions, advanced functions	Time measurement / timer, decentralized debouncing	WSE4SC-3P2230A70	1067768
		High speed counter, decentralized debouncing	WSE4SC-3P2230A71	1067769
		Time stamp, decentralized debouncing	WSE4SC-3P2230A91	1067770

B

Recommended accessories

	Brief description	Model name	Part no.
Plug connectors and cables			
	Head A: Female connector, M8, 3-pin, straight Head B: cable Cable: PVC, unshielded, 2 m	DOL-0803-G02M	6010785
Reflectors			
	Rectangular, screw connection, 47 mm x 47 mm, PMMA/ABS, Screw-on, 2 hole mounting	P250	5304812
	Rectangular, screw connection, 38 mm x 15 mm, PMMA/ABS, Screw-on, 2 hole mounting	PL20A	1012719
	Rectangular, screw connection, 56 mm x 28 mm, PMMA/ABS, Screw-on, 2 hole mounting	PL30A	1002314
	Rectangular, screw connection, 37 mm x 56 mm, PMMA/ABS, Screw-on, 2 hole mounting	PL40A	1012720
	Rectangular, screw connection, 80 mm x 80 mm, PMMA/ABS, Screw-on, 2 hole mounting	PL80A	1003865

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Subject to change without notice

At a glance

- Continuous threshold adaption of the switching threshold compensates for environmental changes
- Single-lens autocollimation optics
- Simple setting either via teach-in push-button, cable or IO-Link
- PinPoint LED technology with a small, highly visible, well-defined light spot enables high reserve levels when using small reflectors
- Flexible sensor settings, monitoring, advanced diagnostics, and visualization thanks to IO-Link

Your benefits

- Optimal detection of any kind of transparent object
- Quick and easy operation via the push of a button – automatic setting of the correct switching threshold
- Less downtime due to a Continuous Threshold Adaption which compensates for changing environmental conditions, including temperature, dust and drift effects
- The well-defined, highly visible intense light spot provides quick and reliable alignment
- IO-Link provides easy data access from the PLC
- Quick and easy configuration
- Quick and easy integration using function blocks
- Easy device replacement and identification

→ www.mysick.com/en/W4S-3_Glass

For more information, just 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.

Ordering information

Other models and accessories → www.mysick.com/en/W4S-3_Glass

WLG4S-3

- **Detection principle:** autocollimation
- **Polarisation filter:** ✔

Sensing range max. [1]	Output type	Switching mode	Adjustment	Connection	Model name	Part no.
0.01 m ... 5 m	PNP	Light switching	Cable, Single teach-in button	Connector M8, 4-pin	WLG4S-3P2234	1052999
		Dark-switching	Cable, Single teach-in button	Connector M8, 4-pin	WLG4S-3F2234	1042084
	NPN	Light switching	Single teach-in button	Cable, 3-wire, 2 m, PVC	WLG4S-3N1332	1046111
		Dark-switching	Cable, Single teach-in button	Cable, 4-wire, 2 m, PVC	WLG4S-3E1134	1042085

[1] PL80A.

WLG4S-3 Alarm output

- **Detection principle:** autocollimation
- **Output type:** PNP

Sensing range max. [1]	Switching mode	Polarisation filter	Adjustment	Connection	Model name	Part no.
0.01 m ... 5 m	Dark-switching	✔	Single teach-in button	Connector M8, 4-pin	WLG4S-3V2232	1042087

[1] PL80A.

B

WLG4S-3 IO-Link

- **Detection principle:** autocollimation
- **Output type:** PNP
- **Switching mode:** Light/dark-switching
- **Polarisation filter:** ✔

Sensing range max. [1]	IO-Link	Advanced functions	Adjustment	Connection	Model name	Part no.
0.01 m ... 5 m	Standard functions	–	Single teach-in button	Connector M8, 4-pin	WLG4SC-3P2232	1057177
	Standard functions, advanced functions	Time measurement / timer, decentralized debouncing	Single teach-in button	Connector M8, 4-pin	WLG4SC-3P2232A70	1067763
		High speed counter, decentralized debouncing	Single teach-in button	Connector M8, 4-pin	WLG4SC-3P2232A71	1067765
		Time stamp, decentralized debouncing	Single teach-in button	Connector M8, 4-pin	WLG4SC-3P2232A91	1067766

[1] PL80A.

Recommended accessories

	Brief description	Model name	Part no.
Plug connectors and cables			
	Head A: Female connector, M8, 4-pin, straight Head B: cable Cable: PVC, unshielded, 2 m	DOL-0804-G02M	6009870
Reflectors			
	Fine triple, screw connection, suitable for laser sensors, 47 mm x 47 mm, PMMA/ABS, Screw-on, 2 hole mounting	P250F	5308843
	Fine triple, screw connection, suitable for laser sensors, 18 mm x 18 mm, PMMA/ABS, Screw-on, 2 hole mounting	PL10F	5311210
	Fine triple, chemically resistant, screw connection, 18 mm x 18 mm, Plastic, Screw-on, 2 hole mounting	PL10F CHEM	5321636
	Fine triple, screw connection, suitable for laser sensors, 38 mm x 16 mm, PMMA/ABS, Screw-on, 2 hole mounting	PL20F	5308844
	Fine triple, chemically resistant, screw connection, suitable for laser sensors, 16 mm x 38 mm, Plastic, Screw-on, 2 hole mounting	PL20F-CHEM	5326089
	Fine triple, screw connection, suitable for laser sensors, 76 mm x 45 mm, PMMA/ABS, Screw-on, 2 hole mounting	PL81-1F	5325060

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Subject to change without notice

At a glance

- Precise laser light spot, laser class 1
- Teach-in pushbutton can be switched between detection of transparent and non-transparent objects
- Sensing ranges between 25 mm and 60 m
- Latest SICK proprietary ASIC and laser technologies with second emitter LED to provide outstanding background suppression and ambient light immunity
- Choice of adjustment via teach-in button, potentiometer, cable, or IO-Link

Your benefits

- Precise laser light spot for highly accurate switching behavior
- High optical ambient light immunity reduces incorrect switching and thus machine downtime, even when modern energy-saving lamps are used
- The highest degree of machine design flexibility BGS (background suppression) eliminates the effect of undesired background reflections. In addition, autocollimation allows detection through small drilled holes
- One device for detecting both transparent objects and the smallest non-transparent objects, thus reducing the variety of sensors and saving on storage costs
- IO-Link facilitates initial system performance diagnostics and uses additional sensor functions (optional) to reduce complex control programming

→ www.mysick.com/en/W4SL-3

For more information, just 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.

Ordering information

Other models and accessories → www.mysick.com/en/W4SL-3

WTB4SL-3

- **Sensor principle:** Photoelectric proximity sensor

Sensing range max. [1]	Output type	Switching mode [2]	Adjustment	Connection	Model name	Part no.
25 mm ... 300 mm	PNP	Light/dark-switching	Potentiometer, 5 turns	Connector M8, 4-pin	WTB4SL-3P2261	1058237
	NPN	Light/dark-switching	Potentiometer, 5 turns	Cable, 4-wire, 2 m, PVC	WTB4SL-3N1161	1058242

[1] Object with 90 % reflectance (referred to standard white, DIN 5033)

[2] Q = light-switching.

WL4SL-3

- **Sensor principle:** Photoelectric retro-reflective sensor

Sensing range max. [1]	Output type	Switching mode	Adjustment	Connection	Model name	Part no.
0 m ... 12 m	PNP	Dark-switching [2]	Cable, Single teach-in button [3]	Connector M8, 4-pin	WL4SL-3F2234	1061562
		Light/dark-switching [4]	Single teach-in button	Connector M8, 4-pin	WL4SL-3P2232	1061561
	NPN	Dark-switching [2]	Cable, Single teach-in button [3]	Cable, 4-wire, 2 m, PVC	WL4SL-3E1134	1061566
		Light/dark-switching [4]	Single teach-in button	Cable, 4-wire, 2 m, PVC	WL4SL-3N1132	1061565

[1] PL80A.

[2] Q = dark-switching.

[3] Adjustment via cable (ET): white cable or PIN2 according to the desired sensitivity > 2 ... < 8 s or put > 8 s on L+ (PNP) or on M (NPN)

[4] Q = light-switching.

B

WSE4SL-3

- **Sensor principle:** Through-beam photoelectric sensor

Sensing range max.	Output type	Switching mode [1]	Adjustment	Connection	Model name	Part no.
0 m ... 60 m	PNP	Light/dark-switching	Single teach-in button	Connector M8, 4-pin	WSE4SL-3P2237	1058249
	NPN	Light/dark-switching	Single teach-in button	Cable, 4-wire, 2 m, PVC	WSE4SL-3N1137	1058250

[1] Q = light-switching.

Recommended accessories

	Brief description	Model name	Part no.
Plug connectors and cables			
	Head A: Female connector, M8, 4-pin, straight Head B: cable Cable: PVC, unshielded, 2 m	DOL-0804-G02M	6009870
Reflectors			
	Fine triple, screw connection, suitable for laser sensors, 47 mm x 47 mm, PMMA/ABS, Screw-on, 2 hole mounting	P250F	5308843
	Fine triple, screw connection, suitable for laser sensors, 18 mm x 18 mm, PMMA/ABS, Screw-on, 2 hole mounting	PL10F	5311210
	Fine triple, chemically resistant, screw connection, 18 mm x 18 mm, Plastic, Screw-on, 2 hole mounting	PL10F CHEM	5321636
	Fine triple, screw connection, suitable for laser sensors, 38 mm x 16 mm, PMMA/ABS, Screw-on, 2 hole mounting	PL20F	5308844
	Fine triple, chemically resistant, screw connection, suitable for laser sensors, 16 mm x 38 mm, Plastic, Screw-on, 2 hole mounting	PL20F-CHEM	5326089
	Fine triple, screw connection, suitable for laser sensors, 56 mm x 28 mm, PMMA/ABS, Screw-on, 2 hole mounting	PL30F	5326523
	Fine triple, screw connection, suitable for laser sensors, 76 mm x 45 mm, PMMA/ABS, Screw-on, 2 hole mounting	PL81-1F	5325060

8011993/2014-07-24
Subject to change without notice

At a glance

- WashDown rated for fluid tightness (IP 66, IP 67, IP 68 and IP 69K) and Ecolab certified
- Tough stainless steel housing (316L/1.4404)
- Resistant to a variety of common cleaning and disinfection agents
- Highly visible laser-like light spot due to PinPoint LED
- Teach-in via stainless steel pushbutton with a metal membrane
- Flexible sensor settings, monitoring, advanced diagnostics, and visualization thanks to IO-Link

Your benefits

- Long service life in harsh conditions ensures less downtime and fewer replacement costs
- Quick and easy alignment due to highly visible PinPoint emitter LED
- Easy adjustment via a stainless steel metal membrane teach-in pushbutton
- IO-Link provides easy data access from the PLC
- Quick and easy configuration
- Quick and easy integration using function blocks
- Easy device replacement and identification

➜ www.mysick.com/en/W4S-3_Inox

For more information, just 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.

Ordering information

Other models and accessories ➜ www.mysick.com/en/W4S-3_Inox

WTB4S-3V

- **Sensor principle:** Photoelectric proximity sensor
- **Detection principle:** Background suppression

Sensing range max. [1]	Light spot size (distance)	Output type	Switching mode	Adjustment	Connection	Model name	Part no.
4 mm ... 120 mm	Ø 2.5 mm (50 mm)	PNP	Light switching	Single teach-in button	Connector M12, 4-pin	WTB4S-3P2432V	1054672
			Light/dark-switching	Single teach-in button	Connector M8, 4-pin	WTB4S-3P2232V	1046396
					Cable with connector M8, 4-pin, 150 mm, PVC	WTB4S-3P3232V	1046398
					Cable with connector M12, 4-pin, 150 mm, PVC	WTB4S-3P3432V	1046399

[1] Object with 90 % reflectance (referred to standard white, DIN 5033)

[2] External teach-in: pulse > 2 s with voltage Uv with PNP and M with NPN.

B

Sensing range max. [1]	Light spot size (distance)	Output type	Switching mode	Adjustment	Connection	Model name	Part no.
4 mm ... 500 mm	Ø 6.5 mm (150 mm)	PNP	Light switching	Single teach-in button	Connector M8, 3-pin	WTB4S-3P2162V	1046384
				Cable, Single teach-in button [2]	Cable with connector M12, 4-pin, 150 mm, PVC	WTB4S-3P3464V	1048015
			Dark-switching	Single teach-in button	Connector M8, 3-pin	WTB4S-3F2162V	1046389
					Cable with connector M8, 3-pin, 150 mm, PVC	WTB4S-3F3162V	1046390
			Light/dark-switching	Single teach-in button	Cable, 4-wire, 2 m, PVC	WTB4S-3P1162V	1046388
					Connector M8, 4-pin	WTB4S-3P2262V	1046383
					Cable with connector M8, 4-pin, 150 mm, PVC	WTB4S-3P3262V	1046385
					Connector M12, 4-pin	WTB4S-3P2462V	1054675
		NPN	Light switching	Cable [2]	Connector M8, 4-pin	WTB4S-3N2265V	1047620
				Single teach-in button	Cable, 3-wire, 2 m, PVC	WTB4S-3N1362V	1046393
					Connector M8, 3-pin	WTB4S-3N2162V	1046392
			Light/dark-switching	Single teach-in button	Cable, 4-wire, 2 m, PVC	WTB4S-3N1162V	1046391
					Connector M12, 4-pin	WTB4S-3N2462V	1054703

[1] Object with 90 % reflectance (referred to standard white, DIN 5033)

[2] External teach-in: pulse > 2 s with voltage Uv with PNP and M with NPN.

WTF4S-3V, clear material detection

- **Sensor principle:** Photoelectric proximity sensor
- **Detection principle:** Foreground suppression
- **Light spot size (distance):** Ø 6.5 mm (150 mm)

Sensing range max. [1]	Output type	Switching mode	Adjustment	Connection	Model name	Part no.
20 mm ... 200 mm	PNP	Light/dark-switching	Single teach-in button	Connector M8, 4-pin	WTF4S-3P2262V	1046410

[1] Object with 90 % reflectance (referred to standard white, DIN 5033)

8011993/2014-07-24

Subject to change without notice

WL4S-3V

- **Sensor principle:** Photoelectric retro-reflective sensor
- **Detection principle:** autocollimation
- **Light spot size (distance):** Ø 45 mm (1.5 m)

Sensing range max. [1]	Output type	Switching mode	Adjustment	Connection	Model name	Part no.
0 m ... 4 m	PNP	Light/dark-switching	–	Connector M8, 4-pin	WL4S-3P2230V	1045095
				Connector M12, 4-pin, 150 mm, PVC	WL4S-3P2430V	1054707
				Cable with connector M12, 4-pin, 150 mm, PVC	WL4S-3P3430V	1046415
	NPN	Dark-switching	–	Cable, 3-wire, 2 m, PVC	WL4S-3E1330V	1046420
		Light/dark-switching	–	Cable, 4-wire, 2 m, PVC	WL4S-3N1130V	1046418
0 m ... 5 m	PNP	Light/dark-switching	Single teach-in button	Connector M12, 4-pin, PVC	WL4S-3P2432V	1054715
				Cable with connector M12, 4-pin, 150 mm, PVC	WL4S-3P3432V	1046426
	NPN	Light/dark-switching	Single teach-in button	Connector M12, 4-pin, PVC	WL4S-3N2432V	1054722

[1] PL80A.

WL4S-3V, Alarm output

- **Sensor principle:** Photoelectric retro-reflective sensor
- **Detection principle:** autocollimation
- **Light spot size (distance):** Ø 45 mm (1.5 m)

Sensing range max. [1]	Output type	Switching mode	Adjustment	Connection	Model name	Part no.
0 m ... 5 m	PNP	Dark-switching	Single teach-in button	Connector M8, 4-pin	WL4S-3V2232V	1046422

[1] PL80A.

WSE4S-3V

- **Sensor principle:** Through-beam photoelectric sensor
- **Light spot size (distance):** Ø 50 mm (2 m)

Sensing range max.	Output type	Switching mode	Connection	Model name	Part no.
0 m ... 5 m	PNP	Light switching	Connector M8, 3-pin	WSE4S-3P2130V	1046439
		Dark-switching	Connector M8, 3-pin	WSE4S-3F2130V	1045099
			Cable with connector M12, 4-pin, 150 mm, PVC	WSE4S-3F3430V	1048028
		Light/dark-switching	Connector M12, 4-pin	WSE4S-3P2430V	1054784
	NPN	Light switching	Connector M8, 3-pin	WSE4S-3N2130V	1047629

B

Recommended accessories

	Brief description	Model name	Part no.
Mounting brackets and mounting plates			
	Mounting bracket for wall mounting, Stainless steel 1.4571, Mounting hardware included	BEF-W4-A	2051628
Other mounting accessories			
	Diameter 18 mm x 100 mm for W4S-3 Inox hygiene. Hygienic integration without holes and brackets. Cable run inside tube	BEF-MR18G-NA	4065853
Universal bar clamp systems			
	Plate N08N for universal clamp bracket, Stainless steel 1.4571 (sheet), Stainless steel 1.4408 (clamp), Universal clamp, mounting hardware	BEF-KHS-N08N	2051616
	Mounting bar, straight, 300 mm, Stainless steel (1.4571)	BEF-MS12G-NB	4058915
	Bar clamp for bar diameter of 12 mm (fixing the mounting rod), Aluminum, 2 screws M6 x 30, 2 spring discs	BEF-RMC-D12	5321878
Reflectors			
	Chemically resistant, screw connection, 47 mm x 47 mm, Plastic, Screw-on, 2 hole mounting	P250 CHEM	5321097
	Fine triple, chemically resistant, screw connection, 18 mm x 18 mm, Plastic, Screw-on, 2 hole mounting	PL10F CHEM	5321636
	Chemically resistant, screw connection, 38 mm x 15 mm, Plastic, Screw-on, 2 hole mounting	PL20 CHEM	5321089
	Stainless steel reflector, hygienic design, chemically resistant, Enclosure rating IP 69K, D12-adapter shaft, 25 mm x 25 mm, Stainless steel V4A (1.4404, 316L), D12-adapter shaft	PLH25-D12	2063404
	Stainless steel reflector, hygienic design, chemically resistant, Enclosure rating IP 69K, M12-adapter thread, 25 mm x 25 mm, Stainless steel V4A (1.4404, 316L), M12-adapter thread	PLH25-M12	2063403
	Stainless steel reflector, wash-down design, chemically resistant, Enclosure rating IP 69K, screw connection, 14 mm x 14 mm, Stainless steel V4A (1.4404, 316L), Screw-on, 2 hole mounting	PLV14-A	2063405

8011993/2014-07-24
Subject to change without notice

At a glance

- IP 66, IP 67, IP 68 and IP 69K enclosure rating and Ecolab certified
- Tough stainless steel housing (316L/1.4404)
- Resistant to a variety of common cleaning and disinfection agents
- Modern electrical connection available – M12 connector with pin casting
- PinPoint LED technology provides a highly visible laser-like light spot
- Teach-in via stainless steel pushbutton with a metal membrane
- Continuous threshold adjustment technology reliably detects objects in changing conditions

Your benefits

- Long service life in harsh conditions ensures less downtime and fewer replacement costs
- Reliable detection of all materials, including transparent objects in the pharmaceutical, packaging, and food and beverage industries
- Easy adjustment via a stainless steel metal membrane teach-in pushbutton
- Quick and easy alignment due to highly visible PinPoint emitter LED
- Remote monitoring and quick diagnostics via IO-Link (optional)

➜ www.mysick.com/en/W4S-3_Inox_Glass

For more information, just 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.

Ordering information

Other models and accessories ➜ www.mysick.com/en/W4S-3_Inox_Glass

WLG4S-3V

Sensing range max. [1]	Output type	Switching mode	Adjustment	Connection	Model name	Part no.
0 m ... 5 m	PNP	Dark-switching	Cable [2]	Connector M8, 4-pin	WLG4S-3F2235V	1045098
			Cable, Single teach-in button [2]	Connector M8, 4-pin	WLG4S-3F2234V	1047653
				Connector M12, 4-pin, PVC	WLG4S-3F2434V	1054727
				Cable with connector M12, 4-pin, 150 mm, PVC	WLG4S-3F3434V	1048024
		Light/dark-switching	Single teach-in button	Connector M8, 4-pin	WLG4S-3P2232V	1046446
				Cable, 4-wire, 2 m, PVC	WLG4S-3P1132V	1055044
				Connector M12, 4-pin, PVC	WLG4S-3P2432V	1054725
				Cable with connector M8, 4-pin, 150 mm, PVC	WLG4S-3P3232V	1046448
				Cable with connector M12, 4-pin, 150 mm, PVC	WLG4S-3P3432V	1046449
0 m ... 5 m	NPN	Dark-switching	Cable [2]	Cable, 4-wire, 2 m, PVC	WLG4S-3E1135V	1046438
			Cable, Single teach-in button [2]	Cable, 4-wire, 2 m, PVC	WLG4S-3E1134V	1048027
		Light/dark-switching	Single teach-in button	Cable, 4-wire, 2 m, PVC	WLG4S-3N1132V	1046450
				Connector M12, 4-pin, PVC	WLG4S-3N2432V	1054728

[1] PL80A.

[2] External teach-in: pulse > 2 s with voltage Uv with PNP and M with NPN.

B

WLG4S-3V Alarm output

Sensing range max. [1]	Output type	Switching mode	Adjustment	Connection	Model name	Part no.
0 m ... 5 m	PNP	Dark-switching	Single teach-in button	Connector M8, 4-pin	WLG4S-3V2232V	1046447

[1] PL80A.

Recommended accessories

	Brief description	Model name	Part no.
Plug connectors and cables			
	Head A: Female connector, M8, 4-pin, straight Head B: cable Cable: PP, unshielded, 2 m	DOL-0804-G02MN	6033670
Reflectors			
	Fine triple, screw connection, suitable for laser sensors, 47 mm x 47 mm, PMMA/ABS, Screw-on, 2 hole mounting	P250F	5308843
	Fine triple, screw connection, suitable for laser sensors, 18 mm x 18 mm, PMMA/ABS, Screw-on, 2 hole mounting	PL10F	5311210
	Fine triple, chemically resistant, screw connection, 18 mm x 18 mm, Plastic, Screw-on, 2 hole mounting	PL10F CHEM	5321636
	Fine triple, screw connection, suitable for laser sensors, 38 mm x 16 mm, PMMA/ABS, Screw-on, 2 hole mounting	PL20F	5308844
	Fine triple, chemically resistant, screw connection, suitable for laser sensors, 16 mm x 38 mm, Plastic, Screw-on, 2 hole mounting	PL20F-CHEM	5326089
	Fine triple, screw connection, suitable for laser sensors, 56 mm x 28 mm, PMMA/ABS, Screw-on, 2 hole mounting	PL30F	5326523
	Fine triple, screw connection, suitable for laser sensors, 76 mm x 45 mm, PMMA/ABS, Screw-on, 2 hole mounting	PL81-1F	5325060

8011993/2014-07-24
Subject to change without notice

At a glance

- Hygienic designed stainless steel housing and accessories (316L/1.4404)
- Hygienic mounting using M12-adapter thread or D12-adapter shaft
- IP 66, IP 67, IP 68 and IP 69K enclosure rating and Ecolab certified
- Resistant to a variety of common cleaning and disinfection agents
- PinPoint LED technology provides a highly visible laser-like light spot
- Teach-in stainless steel metal membrane or external teach-in

Your benefits

- Smooth hygienic housing and accessories with no grooves or crevices eliminates the potential for bacteria to grow, providing a more hygienic solution.
- Long service life in harsh conditions ensures less downtime and fewer replacement costs
- Reliable detection of all transparent objects in the pharmaceutical and food and beverage industries
- Quick and easy adjustment via a stainless steel metal membrane teach-in pushbutton
- Quick and easy alignment due to highly visible PinPoint emitter LED
- Remote monitoring and fast diagnostics via IO-Link (optional)

→ www.mysick.com/en/W4S-3_Inox_Hygiene_Glass

For more information, just 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.

Ordering information

Other models and accessories → www.mysick.com/en/W4S-3_Inox_Hygiene_Glass

WLG4S-3H

- **Sensor principle:** Photoelectric retro-reflective sensor
- **Detection principle:** autocollimation
- **Mechanical connection:** M12 adapter thread

Sensing range max. [1]	Output type	Switching mode	Adjustment	Connection	Model name	Part no.
0 m ... 5 m	PNP	Dark-switching	Cable, Single teach-in button [2]	Cable with connector M8, 4-pin, 150 mm, PVC	WLG4S-3F3234H	1048121
		Light/dark-switching	Single teach-in button		WLG4S-3P3232H	1048120
	NPN	Dark-switching	Cable [2]	Cable, 4-wire, 2 m, PVC	WLG4S-3E1135H	1048126
			Cable, Single teach-in button [2]	Cable, 4-wire, 2 m, PVC	WLG4S-3E1134H	1048124
		Light/dark-switching	Single teach-in button	Cable, 4-wire, 2 m, PVC	WLG4S-3N1132H	1048123

[1] PL80A.

[2] External teach-in: pulse > 2 s with voltage Uv with PNP and M with NPN.

B

WLG4S-3H Alarm output

- **Sensor principle:** Photoelectric retro-reflective sensor
- **Detection principle:** autocollimation
- **Output type:** PNP

Sensing range max. [1]	Switching mode	Adjustment	Mechanical connection	Connection	Model name	Part no.
0 m ... 5 m	Dark-switching	Single teach-in button	M12 adapter thread	Cable with connector M8, 4-pin, 150 mm, PVC	WLG4S-3V3232H	1048122

[1] PL80A.

WLG4S-3H D12 adapter shaft

- **Sensor principle:** Photoelectric retro-reflective sensor
- **Detection principle:** autocollimation
- **Output type:** PNP

Sensing range max. [1]	Switching mode	Adjustment	Mechanical connection	Connection	Model name	Part no.
0 m ... 5 m	Light/dark-switching	Single teach-in button	D12 adapter shaft	Connector M8, 4-pin	WLG4S-3P5232H	1057053

[1] PL80A.

Recommended accessories

	Brief description	Model name	Part no.
Plug connectors and cables			
	Head A: Female connector, M8, 4-pin, straight Head B: cable Cable: PP, unshielded, 2 m	DOL-0804-G02MN	6033670
Reflectors			
	Fine triple, screw connection, suitable for laser sensors, 47 mm x 47 mm, PMMA/ABS, Screw-on, 2 hole mounting	P250F	5308843
	Fine triple, screw connection, suitable for laser sensors, 18 mm x 18 mm, PMMA/ABS, Screw-on, 2 hole mounting	PL10F	5311210
	Fine triple, chemically resistant, screw connection, 18 mm x 18 mm, Plastic, Screw-on, 2 hole mounting	PL10F CHEM	5321636
	Fine triple, screw connection, suitable for laser sensors, 38 mm x 16 mm, PMMA/ABS, Screw-on, 2 hole mounting	PL20F	5308844
	Fine triple, chemically resistant, screw connection, suitable for laser sensors, 16 mm x 38 mm, Plastic, Screw-on, 2 hole mounting	PL20F-CHEM	5326089
	Antifog, for prevention of moisture fogging on the reflection area, screw connection, 56 mm x 37 mm, PMMA/ABS, Screw-on, 2 hole mounting	PL40A Antifog	5322011
	Stainless steel reflector, hygienic design, chemically resistant, Enclosure rating IP 69K, D12-adapter shaft, 25 mm x 25 mm, Stainless steel V4A (1.4404, 316L), D12-adapter shaft	PLH25-D12	2063404
	Stainless steel reflector, hygienic design, chemically resistant, Enclosure rating IP 69K, M12-adapter thread, 25 mm x 25 mm, Stainless steel V4A (1.4404, 316L), M12-adapter thread	PLH25-M12	2063403
	Stainless steel reflector, wash-down design, chemically resistant, Enclosure rating IP 69K, screw connection, 14 mm x 14 mm, Stainless steel V4A (1.4404, 316L), Screw-on, 2 hole mounting	PLV14-A	2063405

8011993/2014-07-24
Subject to change without notice

At a glance

- Miniature housing with M3 threaded mounting holes
- Switching frequency up to 2 kHz
- Stainless steel mounting bracket (1.4301/304) BEF-W100-A included with delivery

Your benefits

- Highly flexible design and operational capabilities due to precise background suppression
- Quick and easy mounting due to the universally compatible M3 threaded mounting holes
- A fast switching frequency optimizes production processes
- All necessary accessories are included with delivery, decreasing installation and procurement costs
- Application versatility due to sensitivity adjustments, light/dark switching and a variety of connection options

→ www.mysick.com/en/W8

For more information, just 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.

Ordering information

Other models and accessories → www.mysick.com/en/W8

WTB8

- **Sensor principle:** Photoelectric proximity sensor
- **Detection principle:** Background suppression
- **Switching mode:** Light/dark-switching
- **Adjustment:** potentiometer, 4 turns

Sensing range max. [1]	Output type	Connection	Model name	Part no.
5 mm ... 100 mm	PNP	Cable, 3-wire, 2 m, PVC	WTB8-P1111	6033211
		Connector M8, 3-pin	WTB8-P2111	6033213
		Connector M8, 4-pin	WTB8-P2211	6033215
	NPN	Cable, 3-wire, 2 m, PVC	WTB8-N1111	6033210
		Connector M8, 3-pin	WTB8-N2111	6033212
		Connector M8, 4-pin	WTB8-N2211	6033214
30 mm ... 300 mm	PNP	Cable, 3-wire, 2 m, PVC	WTB8-P1131	6033205
		Connector M8, 3-pin	WTB8-P2131	6033207
		Connector M8, 4-pin	WTB8-P2231	6033209
	NPN	Cable, 3-wire, 2 m, PVC	WTB8-N1131	6033204
		Connector M8, 3-pin	WTB8-N2131	6033206
		Connector M8, 4-pin	WTB8-N2231	6033208

[1] Object with 90 % reflectance (referred to standard white, DIN 5033)

B

WL8

- **Sensor principle:** Photoelectric retro-reflective sensor
- **Detection principle:** autocollimation
- **Switching mode:** Light/dark-switching
- **Adjustment:** potentiometer, 270 °

Sensing range max. [1]	Output type	Connection	Model name	Part no.
0 m ... 4 m	PNP	Cable, 3-wire, 2 m, PVC	WL8-P1131	6033177
		Connector M8, 3-pin	WL8-P2131	6033180
		Connector M8, 4-pin	WL8-P2231	6033182
	NPN	Cable, 3-wire, 2 m, PVC	WL8-N1131	6033176
		Connector M8, 3-pin	WL8-N2131	6033179
		Connector M8, 4-pin	WL8-N2231	6033181

[1] PL80A.

WSE8

- **Sensor principle:** Through-beam photoelectric sensor
- **Switching mode:** Light/dark-switching
- **Adjustment:** potentiometer, 270 °

Sensing range max.	Output type	Connection	Model name	Part no.
0 m ... 10 m	PNP	Cable, 3-wire, 2 m, PVC	WSE8-P1131	6035581
		Connector M8, 3-pin	WSE8-P2131	6035582
		Connector M8, 4-pin	WSE8-P2231	6035583
	NPN	Cable, 3-wire, 2 m, PVC	WSE8-N1131	6035578
		Connector M8, 3-pin	WSE8-N2131	6035579
		Connector M8, 4-pin	WSE8-N2231	6035580

Recommended accessories

	Brief description	Model name	Part no.
Mounting brackets and mounting plates			
	Mounting bracket for wall mounting, Stainless steel, Mounting hardware included	BEF-W100-A	5311520
	Mounting bracket for floor mounting, Steel, zinc coated, Mounting hardware included	BEF-W100-B	5311521
Universal bar clamp systems			
	Mounting bar, straight, 200 mm, Steel, zinc coated, without mounting hardware	BEF-MS12G-A	4056054
	Mounting bar, straight, 300 mm, Stainless steel (1.4571)	BEF-MS12G-NB	4058915
	Bar clamp for bar diameter of 12 mm (fixing the mounting rod), Aluminum, 2 screws M6 x 30, 2 spring discs	BEF-RMC-D12	5321878
Reflectors			
	Rectangular, screw connection, 47 mm x 47 mm, PMMA/ABS, Screw-on, 2 hole mounting	P250	5304812

8011993/2014-07-24
Subject to change without notice

At a glance

- Laser class 1
- Background suppression
- Standard miniature housing with M3 threaded mounting holes
- Switching frequency up to 2 kHz
- Light/dark switching via rotary switch
- Mounting bracket BEF-W100-A is included with delivery

Your benefits

- Highly flexible design and operational capabilities due to precise background suppression
- Reliable detection of small objects, regardless of color or surface qualities
- Rapid switching frequency reliably detects objects travelling at high speeds which allows to optimize the production processes
- Highly visible laser light spot simplifies alignment
- All necessary accessories are included with delivery, reducing installation and procurement costs

→ www.mysick.com/en/W8_Laser

For more information, just 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.

Ordering information

Other models and accessories → www.mysick.com/en/W8_Laser

WTB8L

- **Sensor principle:** Photoelectric proximity sensor
- **Detection principle:** Background suppression
- **Switching mode:** Light/dark-switching
- **Adjustment:** potentiometer, 4 turns

Sensing range max. [1]	Output type	Connection	Model name	Part no.
5 mm ... 100 mm	PNP	Cable, 4-wire 2 m PVC	WTB8L-P1111	6033223
		Connector M8, 3-pin	WTB8L-P2111	6033225
		Connector M8, 4-pin	WTB8L-P2211	6033227
	NPN	Cable, 4-wire 2 m PVC	WTB8L-N1111	6033222
		Connector M8, 3-pin	WTB8L-N2111	6033224
		Connector M8, 4-pin	WTB8L-N2211	6033226
30 mm ... 300 mm	PNP	Cable, 4-wire 2 m PVC	WTB8L-P1131	6033217
		Connector M8, 3-pin	WTB8L-P2131	6033219
		Connector M8, 4-pin	WTB8L-P2231	6033221
	NPN	Cable, 4-wire 2 m PVC	WTB8L-N1131	6033216
		Connector M8, 3-pin	WTB8L-N2131	6033218
		Connector M8, 4-pin	WTB8L-N2231	6033220

[1] Object with 90 % reflectance (referred to standard white, DIN 5033)

B

Recommended accessories

	Brief description	Model name	Part no.
Device protection (mechanical)			
	Safety bracket for floor mounting, Stainless steel 1.4571, Mounting hardware included	BEF-SW-W4S	2051497
Mounting brackets and mounting plates			
	Mounting bracket for wall mounting, Stainless steel, Mounting hardware included	BEF-W100-A	5311520
	Mounting bracket for floor mounting, Steel, zinc coated, Mounting hardware included	BEF-W100-B	5311521
Universal bar clamp systems			
	Plate N08 for universal clamp bracket, Zinc plated steel (sheet), Diecast zinc (clamp), Universal clamp, mounting hardware	BEF-KHS-N08	2051607
Plug connectors and cables			
	Head A: Female connector, M8, 3-pin, straight Head B: cable Cable: PVC, unshielded, 2 m	DOL-0803-G02M	6010785
	Head A: Female connector, M8, 4-pin, straight Head B: cable Cable: PVC, unshielded, 2 m	DOL-0804-G02M	6009870

8011993/2014-07-24
Subject to change without notice

At a glance

- Rugged IP 69K stainless steel housing 1.4404/316L
- Front screen made of high-performance PPSU plastic that is resistant to heat and chemicals
- Potentiometer made of mechanically stable high-performance PEEK (polyether ketone) plastic
- Constructed with FDA-approved materials
- Well-defined, highly visible light spot
- M3 threaded mounting holes and stainless steel mounting bracket (1.4301/304) included with delivery

Your benefits

- High reliability due to an IP 69K stainless steel housing, which withstands aggressive cleaning agents or cooling lubricants
- Quick and easy mounting due to universally compatible M3 threaded mounting holes
- Compact housing saves space (equal to W8 plastic version)
- Highly visible light spot provides easy alignment
- All necessary accessories are included, which simplifies installation

→ www.mysick.com/en/W8_Inox

For more information, just 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.

Ordering information

Other models and accessories → www.mysick.com/en/W8_Inox

WTB8 Inox

- **Sensor principle:** Photoelectric proximity sensor
- **Detection principle:** Background suppression
- **Switching mode:** Light/dark-switching
- **Adjustment:** potentiometer, 4 turns

Sensing range max. [1]	Output type	Connection	Model name	Part no.
5 mm ... 150 mm	PNP	Cable, 3-wire 2 m PVC	WTB8-P1111V	6041457
		Connector M8, 4-pin	WTB8-P2211V	6041459
		Cable with connector M12, 4-pin 300 mm PVC	WTB8-P3311V	6041460
	NPN	Cable, 3-wire 2 m PVC	WTB8-N1111V	6041453
		Connector M8, 4-pin	WTB8-N2211V	6041455
		Cable with connector M12, 4-pin 300 mm PVC	WTB8-N3311V	6041456
10 mm ... 500 mm	PNP	Cable, 3-wire 2 m PVC	WTB8-P1131V	6041465
		Connector M8, 4-pin	WTB8-P2231V	6041467
		Cable with connector M12, 4-pin 300 mm PVC	WTB8-P3331V	6041468
	NPN	Cable, 3-wire 2 m PVC	WTB8-N1131V	6041461
		Connector M8, 4-pin	WTB8-N2231V	6041463
		Cable with connector M12, 4-pin 300 mm PVC	WTB8-N3331V	6041464

[1] Object with 90 % reflectance (referred to standard white, DIN 5033)

B

WTE8 Inox

- **Sensor principle:** Photoelectric proximity sensor
- **Detection principle:** energetic
- **Switching mode:** Light/dark-switching
- **Adjustment:** potentiometer, 270 °

Sensing range max. [1]	Output type	Connection	Model name	Part no.
0 mm ... 950 mm	PNP	Cable, 3-wire 2 m PVC	WTE8-P1131V	6041473
		Connector M8, 4-pin	WTE8-P2231V	6041475
		Cable with connector M12, 4-pin 300 mm PVC	WTE8-P3331V	6041476
	NPN	Cable, 3-wire 2 m PVC	WTE8-N1131V	6041469
		Connector M8, 4-pin	WTE8-N2231V	6041471
		Cable with connector M12, 4-pin 300 mm PVC	WTE8-N3331V	6041472

[1] Object with 90 % reflectance (referred to standard white, DIN 5033)

WL8 Inox

- **Sensor principle:** Photoelectric retro-reflective sensor
- **Detection principle:** Standard optics
- **Switching mode:** Light/dark-switching
- **Adjustment:** potentiometer, 270 °

Sensing range max. [1]	Output type	Connection	Model name	Part no.
0.01 m ... 6.5 m	PNP	Cable, 3-wire 2 m PVC	WL8-P1131V	6041481
		Connector M8, 4-pin	WL8-P2231V	6041483
		Cable with connector M12, 4-pin 300 mm PVC	WL8-P3331V	6041484
	NPN	Cable, 3-wire 2 m PVC	WL8-N1131V	6041477

[1] PL80A.

WSE8 Inox

- **Sensor principle:** Through-beam photoelectric sensor
- **Switching mode:** Light/dark-switching
- **Adjustment:** potentiometer, 270 °

Sensing range max.	Output type	Connection	Model name	Part no.
0 m ... 45 m	PNP	Cable, 3-wire 2 m PVC	WSE8-P1131V	6041489
		Connector M8, 4-pin	WSE8-P2231V	6041491
		Cable with connector M12, 4-pin 300 mm PVC	WSE8-P3331V	6041492
	NPN	Cable, 3-wire 2 m PVC	WSE8-N1131V	6041485
		Connector M8, 4-pin	WSE8-N2231V	6041487
		Cable with connector M12, 4-pin 300 mm PVC	WSE8-N3331V	6041488

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Subject to change without notice

Recommended accessories

	Brief description	Model name	Part no.
Universal bar clamp systems			
	Plate N08N for universal clamp bracket, Stainless steel 1.4571 (sheet), Stainless steel 1.4408 (clamp), Universal clamp, mounting hardware	BEF-KHS-N08N	2051616
	Mounting bar, straight, 200 mm, Stainless steel (1.4571)	BEF-MS12G-NA	4058914
	Bar clamp for bar diameter of 12 mm (fixing the mounting rod), Aluminum, 2 screws M6 x 30, 2 spring discs	BEF-RMC-D12	5321878
Reflectors			
	Chemically resistant, screw connection, 47 mm x 47 mm, Plastic, Screw-on, 2 hole mounting	P250 CHEM	5321097
	Fine triple, screw connection, suitable for laser sensors, 18 mm x 18 mm, PMMA/ABS, Screw-on, 2 hole mounting	PL10F	5311210
	Chemically resistant, screw connection, 38 mm x 15 mm, Plastic, Screw-on, 2 hole mounting	PL20 CHEM	5321089
	Stainless steel reflector, hygienic design, chemically resistant, Enclosure rating IP 69K, D12-adapter shaft, 25 mm x 25 mm, Stainless steel V4A (1.4404, 316L), D12-adapter shaft	PLH25-D12	2063404
	Stainless steel reflector, hygienic design, chemically resistant, Enclosure rating IP 69K, M12-adapter thread, 25 mm x 25 mm, Stainless steel V4A (1.4404, 316L), M12-adapter thread	PLH25-M12	2063403
	Stainless steel reflector, wash-down design, chemically resistant, Enclosure rating IP 69K, screw connection, 14 mm x 14 mm, Stainless steel V4A (1.4404, 316L), Screw-on, 2 hole mounting	PLV14-A	2063405

B

At a glance

- Standard miniature housing with M3 threaded mounting holes
- Long sensing range
- Light/dark switching and sensitivity adjustment via rotary switch possible
- Various versions are available, including through-beam, retro-reflective and energetic
- Wide variety of accessories available
- Laser emitter LED, class 1

Your benefits

- Reliable detection of small objects
- Less contamination due to high optical operating reserve
- M3 threaded mounting holes provide easy installation
- Compact housing easily fits in applications with limited space

➜ www.mysick.com/en/W100_Laser

For more information, just 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.

Ordering information

Other models and accessories ➜ www.mysick.com/en/W100_Laser

WT100L

- **Sensor principle:** Photoelectric proximity sensor
- **Detection principle:** energetic
- **Switching mode:** Light/dark-switching
- **Items supplied:** Stainless steel mounting bracket (1.4301/304) BEF-W100-A
- **Connection:** Connector M8, 3-pin

Sensing range max. [1]	Light spot size (distance)	Adjustment	Output type	Model name	Part no.
0 mm ... 450 mm	Ø 2 mm (400 mm)	Potentiometer, 270 °	PNP	WT100L-F2141	6030703
			NPN	WT100L-E2141	6030706

[1] Object with 90 % reflectance (referred to standard white, DIN 5033)

WL100L

- **Sensor principle:** Photoelectric retro-reflective sensor
- **Detection principle:** Standard optics
- **Switching mode:** Light/dark-switching
- **Items supplied:** Stainless steel mounting bracket (1.4301/304) BEF-W100-A, Reflector P250F
- **Connection:** Connector M8, 3-pin

Sensing range max. [1]	Light spot size (distance)	Adjustment	Output type	Model name	Part no.
0.08 m ... 12 m	Ø 12 mm (10 m)	Potentiometer, 270 °	PNP	WL100L-F2131	6030709
			NPN	WL100L-E2131	6030712

[1] P250F.

8011993/2014-07-24
Subject to change without notice

WS/WE100L

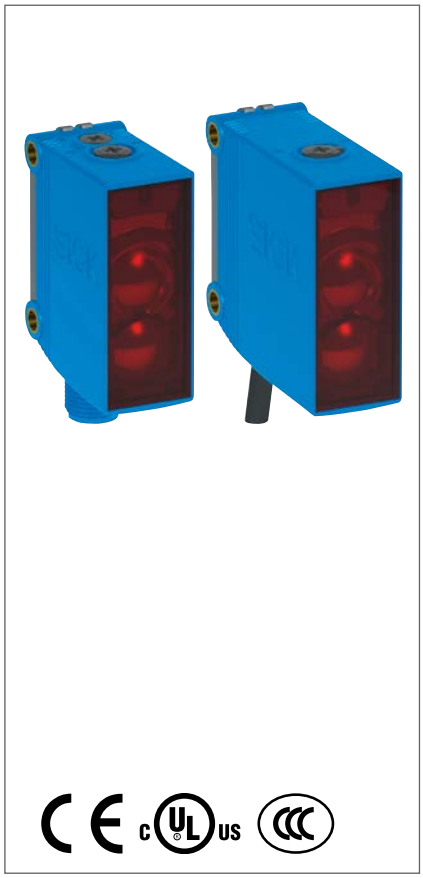
- **Sensor principle:** Through-beam photoelectric sensor
- **Switching mode:** Light/dark-switching
- **Items supplied:** 2 Stainless steel mounting brackets (1.4301/304) BEF-W100-A
- **Connection:** Connector M8, 3-pin

Sensing range max.	Light spot size (distance)	Adjustment	Output type	Model name	Part no.
0 m ... 35 m	Ø 30 mm (30 m)	Potentiometer, 270 °	PNP	WS/WE100L-F2131	6030715
			NPN	WS/WE100L-E2131	6030718

Recommended accessories

	Brief description	Model name	Part no.
Plug connectors and cables			
	Head A: Female connector, M8, 3-pin, straight Head B: cable Cable: PVC, unshielded, 2 m	DOL-0803-G02M	6010785

B



At a glance

- Maximum optical window surface combined with a small sensor housing
- Sensing range up to 1,200 mm with background suppression performance
- PinPoint LED with bright and precise light spot
- Sensor variants in all major detection principles and with DC or AC/DC power supply
- Transistor output or relay output
- Latest SICK ASIC chip technology
- Rugged sensor housing with metal sleeved mounting holes

Your benefits

- G10 focuses on the essentials the user really needs – without compromising quality, reliability or performance
- One sensor family serves all standard industrial and domestic applications
- Reliable object detection and long scanning ranges thanks to large optics and SICK ASIC technology
- Easy and fast sensor alignment due to small and highly visible PinPoint light spot
- Insensitive to dust and dirt on front lens or reflector
- Clever accessories reduce installation effort and safe time

→ www.mysick.com/en/G10

For more information, just 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.

Ordering information

Other models and accessories → www.mysick.com/en/G10

GTB10

- **Sensor principle:** Photoelectric proximity sensor
- **Detection principle:** Background suppression
- **Adjustment:** potentiometer, 5 turns

Voltage type	Sensing range max. [1]	Light spot size (distance)	Type of light	Output type	Switching mode	Connection	Model name	Part no.
DC	20 mm ... 950 mm	Ø 8 mm (700 mm)	Visible red light	PNP	Light/dark-switching	Cable, 3-wire, 2 m, PVC	GTB10-P1211	1065854
						Connector M12, 4-pin	GTB10-P4211	1064694
AC/DC	20 mm ... 950 mm	Ø 8 mm (700 mm)	Visible red light	Relay	–	Cable, 5-wire, 2 m, PVC	GTB10-R3811	1064686
	20 mm ... 1,200 mm	Ø 22 mm (700 mm)	Infrared light	Relay	–	Cable, 5-wire, 2 m, PVC	GTB10-R3821	1065863

[1] Object with 90 % reflectance (referred to standard white, DIN 5033)

8011993/2014-07-24
Subject to change without notice

GTE10

- **Sensor principle:** Photoelectric proximity sensor
- **Detection principle:** energetic
- **Adjustment:** potentiometer, 270 °

Voltage type	Sensing range max. [1]	Light spot size (distance)	Type of light	Output type	Switching mode	Connection	Model name	Part no.
DC	20 mm ... 1,300 mm	Ø 28 mm (1,400 mm)	Visible red light	PNP	Light/dark-switching	Cable, 3-wire, 2 m, PVC	GTE10-P1211	1065865
						Connector M12, 4-pin	GTE10-P4211	1064697
				NPN	Light/dark-switching	Cable, 3-wire, 2 m, PVC	GTE10-N1211	1065868
						Connector M12, 4-pin	GTE10-N4211	1065871
AC/DC	20 mm ... 1,300 mm	Ø 28 mm (1,400 mm)	Visible red light	Relay	–	Cable, 5-wire, 2 m, PVC	GTE10-R3811	1064688
	20 mm ... 2,000 mm	Ø 57 mm (1,500 mm)	Infrared light	Relay	–	Cable, 5-wire, 2 m, PVC	GTE10-R3821	1065874

[1] Object with 90 % reflectance (referred to standard white, DIN 5033)

GL10

- **Sensor principle:** Photoelectric retro-reflective sensor
- **Detection principle:** Standard optics
- **Light spot size (distance):** Ø 58 mm (5 m)
- **Type of light:** visible red light

Voltage type	Sensing range max.	Output type	Switching mode	Adjustment	Connection	Model name	Part no.
DC	0.08 m ... 15 m [1] 0.08 m ... 12 m [2]	PNP	Light/dark-switching	No/fix	Cable, 3-wire, 2 m, PVC	GL10-P1111	1065876
				Potentiometer, 270 °	Cable, 3-wire, 2 m, PVC	GL10-P1211	1065885
				No/fix	Connector M12, 4-pin	GL10-P4111	1065878
				Potentiometer, 270 °	Connector M12, 4-pin	GL10-P4211	1065890
		NPN	Light/dark-switching	No/fix	Cable, 3-wire, 2 m, PVC	GL10-N1111	1065880
				Potentiometer, 270 °	Cable, 3-wire, 2 m, PVC	GL10-N1211	1065888
				No/fix	Connector M12, 4-pin	GL10-N4111	1065883
				Potentiometer, 270 °	Connector M12, 4-pin	GL10-N4211	1064700
AC/DC	0.08 m ... 15 m [1] 0.08 m ... 12 m [2]	Relay	–	No/fix	Cable, 5-wire, 2 m, PVC	GL10-R3711	1065896
				Potentiometer, 270 °	Cable, 5-wire, 2 m, PVC	GL10-R3811	1064689

[1] PL80A.

[2] P250.

B

GL10G, clear material detection

- **Sensor principle:** Photoelectric retro-reflective sensor
- **Detection principle:** Standard optics
- **Voltage type:** DC
- **Light spot size (distance):** Ø 58 mm (5 m)
- **Type of light:** visible red light
- **Switching mode:** Light/dark-switching
- **Adjustment:** potentiometer, 270 °

Sensing range max.	Output type	Connection	Model name	Part no.
0.15 m ... 12 m [1] 0.15 m ... 10 m [2]	PNP	Connector M12, 4-pin	GL10G-P4251	1064704
	NPN	Cable, 3-wire, 2 m, PVC	GL10G-N1251	1064705

[1] PL80A.
[2] P250.

GSE10

- **Sensor principle:** Through-beam photoelectric sensor

Voltage type	Sensing range max.	Light spot size (distance)	Type of light	Output type	Switching mode	Adjust-ment	Connec-tion	Model name	Part no.
DC	0 m ... 40 m	Ø 180 mm (15 m)	Visible red light	PNP	Light/dark-switching	No/fix	Connector M12, 4-pin	GSE10-P4111	1065899
						Potentiom-eter, 270 °	Connector M12, 4-pin	GSE10-P4211	1064706
				NPN	Light/dark-switching	No/fix	Cable, 3-wire, 2 m, PVC	GSE10-N1111	1065901
						Potentiom-eter, 270 °	Cable, 3-wire, 2 m, PVC	GSE10-N1211	1065904
		Ø 433 mm (15 m)	Infrared light	PNP	Light/dark-switching	Potentiom-eter, 270 °	Connector M12, 4-pin	GSE10-P4221	1065906
				NPN	Light/dark-switching	Potentiom-eter, 270 °	Cable, 3-wire, 2 m, PVC	GSE10-N1221	1065908
AC/DC	0 m ... 40 m	Ø 180 mm (15 m)	Visible red light	Relay	–	No/fix	Cable, 5-wire, 2 m, PVC	GSE10-R3711	1065910
						Potentiom-eter, 270 °	Cable, 5-wire, 2 m, PVC	GSE10-R3811	1064691
		Ø 433 mm (15 m)	Infrared light	Relay	–	No/fix	Cable, 5-wire, 2 m, PVC	GSE10-R3721	1065913

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Subject to change without notice

Recommended accessories

	Brief description	Model name	Part no.
Device protection (mechanical)			
	Weather protection hood for G10, Steel, zinc coated, Mounting hardware included	BEF-G10WSG	2071960
	Weather protection hood for reflectors PL80A, P250, PL40A, Steel, zinc coated, Mounting hardware included	BEF-PL80AWSG	2071961
Mounting brackets and mounting plates			
	Mounting bracket for wall and floor mounting for G10 DC, Steel, zinc coated, Mounting hardware included	BEF-G10DC01	2071258
	Mounting bracket for wall and floor mounting for G10 AC/DC, Steel, zinc coated, Mounting hardware included	BEF-G10UC01	2071259
Universal bar clamp systems			
	Q-Lock, bar clamp system for G10 and reflector P250, Die-cast zinc, Steel, zinc coated	BEF-KHSQ12R01	2071260
	Q-Lock, bar clamp system for G10 and reflector P250, Die-cast zinc, Steel, zinc coated, incl. slot-in sheet clamp	BEF-KHSQ12ZR01	2071262
Plug connectors and cables			
Illustration may differ	Head A: Female connector, M12, 4-pin, straight Head B: cable Cable: PVC, unshielded, 2 m	DOL-1204-G02M	6009382
Illustration may differ	Head A: Female connector, M12, 4-pin, angled Head B: cable Cable: PVC, unshielded, 2 m	DOL-1204-W02M	6009383
Reflectors			
	Rectangular, screw connection, 47 mm x 47 mm, PMMA/ABS, Screw-on, 2 hole mounting	P250	5304812
	Self-adhesive	REF-IRF-56	5314244

B

At a glance

- High-performance sensor in ultra-rugged VISTAL™ housing
- PinPoint LED for highly visible and precise light spot
- Two emitter LEDs for best-in-class background suppression
- Variable mounting with M3 or M4 hole pattern
- Wide range of connection options

Your benefits

- Robustness with the VISTAL™ housing
- Best in class performance
- Wide variance in connection, mounting and optic

→ www.mysick.com/en/W9-3

For more information, just 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.

Ordering information

Other models and accessories → www.mysick.com/en/W9-3

WTB9-3

- **Detection principle:** Background suppression
- **Mounting hole:** M3
- **Adjustment:** potentiometer, 5 turns
- **Switching mode:** Light/dark-switching (Q = light-switching.)

Type of light	Sensing range max. [1]	Light spot size (distance)	Output type	Connection	Model name	Part no.
Visible red light	20 mm ... 350 mm	Ø 4.5 mm (75 mm)	PNP	Connector M8, 4-pin	WTB9-3P2261	1049047
				Connector M12, 4-pin	WTB9-3P2461	1049049
				Cable, 4-wire, 2 m, PVC	WTB9-3P1161	1049043
				Cable with connector M12, 4-pin, 120 mm, PVC	WTB9-3P3461	1049051
			NPN	Connector M12, 4-pin	WTB9-3N2461	1049053
				Cable, 4-wire, 2 m, PVC	WTB9-3N1161	1049052

[1] Object with 90 % reflectance (referred to standard white, DIN 5033)

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Type of light	Sensing range max. [1]	Light spot size (distance)	Output type	Connection	Model name	Part no.
Infrared light	20 mm ... 500 mm	Ø 20 mm (250 mm)	PNP	Connector M8, 4-pin	WTB9-3P2211	1049045
				Connector M12, 4-pin	WTB9-3P2411	1049048
	20 mm ... 800 mm	Ø 40 mm (400 mm)	PNP	Connector M8, 4-pin	WTB9-3P2211S14	1052171
				Connector M12, 4-pin	WTB9-3P2411S14	1052172

[1] Object with 90 % reflectance (referred to standard white, DIN 5033)

WL9-3

- **Detection principle:** autocollimation
- **Mounting hole:** M3
- **Light spot size (distance):** Ø 45 mm (1.5 m)
- **Switching mode:** Light/dark-switching (Q = light-switching.)

Type of light	Sensing range max. [1]	Adjustment	Output type	Connection	Model name	Part no.
Visible red light	0 m ... 4 m	–	PNP	Connector M8, 4-pin	WL9-3P2230	1049059
				Connector M12, 4-pin	WL9-3P2430	1049062
			NPN	Connector M8, 4-pin	WL9-3N2230	1049071
				Connector M12, 4-pin	WL9-3N2430	1049073
	0 m ... 5 m	Single teach-in button	PNP	Connector M8, 4-pin	WL9-3P2232	1049060
				Connector M12, 4-pin	WL9-3P2432	1049063
				Cable, 4-wire, 2 m, PVC	WL9-3P1132	1049056
				Cable with connector M12, 4-pin, 120 mm, PVC	WL9-3P3432	1049067
			NPN	Connector M12, 4-pin	WL9-3N2432	1049074
				Cable, 4-wire, 2 m, PVC	WL9-3N1132	1049070

[1] PL80A.

WSE9-3

- **Mounting hole:** M3
- **Light spot size (distance):** Ø 25 mm (1 m)
- **Adjustment:** No adjustment
- **Switching mode:** Light/dark-switching (Q = light-switching.)

Type of light	Sensing range max.	Output type	Connection	Model name	Part no.
Visible red light	0 m ... 10 m	PNP	Connector M8, 4-pin	WSE9-3P2230	1049076
			Connector M12, 4-pin	WSE9-3P2430	1049077
		NPN	Connector M12, 4-pin	WSE9-3N2430	1049080

B

WTB9M4-3

- **Detection principle:** Background suppression
- **Mounting hole:** M4
- **Adjustment:** potentiometer, 5 turns
- **Switching mode:** Light/dark-switching (Q = light-switching.)

Type of light	Sensing range max. [1]	Light spot size (distance)	Output type	Connection	Model name	Part no.
Visible red light	20 mm ... 350 mm	Ø 4.5 mm (75 mm)	PNP	Connector M8, 4-pin	WTB9M4-3P2261	1051889
				Connector M12, 4-pin	WTB9M4-3P2461	1051891
			NPN	Connector M8, 4-pin	WTB9M4-3N2261	1051885
Infrared light	20 mm ... 500 mm	Ø 20 mm (250 mm)	PNP	Connector M8, 4-pin	WTB9M4-3P2211	1051888
				Connector M12, 4-pin	WTB9M4-3P2411	1051890

[1] Object with 90 % reflectance (referred to standard white, DIN 5033)

WL9M4-3

- **Detection principle:** autocollimation
- **Mounting hole:** M4
- **Light spot size (distance):** Ø 45 mm (1.5 m)
- **Adjustment:** Single teach-in button
- **Switching mode:** Light/dark-switching (Q = light-switching.)

Type of light	Sensing range max. [1]	Output type	Connection	Model name	Part no.
Visible red light	0 m ... 5 m	PNP	Connector M8, 4-pin	WL9M4-3P2232	1051895
			Connector M12, 4-pin	WL9M4-3P2432	1051896
		NPN	Connector M8, 4-pin	WL9M4-3N2232	1051893

[1] PL80A.

WSE9M4-3

- **Mounting hole:** M4
- **Light spot size (distance):** Ø 25 mm (1 m)
- **Adjustment:** No adjustment
- **Switching mode:** Light/dark-switching (Q = light-switching.)
- **Connection:** Connector M8, 4-pin

Type of light	Sensing range max.	Output type	Model name	Part no.
Visible red light	0 m ... 10 m	PNP	WSE9M4-3P2230	1051912
		NPN	WSE9M4-3N2230	1052938

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Subject to change without notice

Recommended accessories

	Brief description	Model name	Part no.
Mounting brackets and mounting plates			
	Fastening plate with threaded sleeve M3, PMMA, Brass (Br)	BEF-GPM3-W9	4066039
	Mounting bracket, Steel, zinc coated, Mounting hardware included	BEF-WN-W9-2	2022855
Universal bar clamp systems			
	Plate N08 for universal clamp bracket, Zinc plated steel (sheet), Diecast zinc (clamp), Universal clamp, mounting hardware	BEF-KHS-N08	2051607
Plug connectors and cables			
	Head A: Female connector, M8, 4-pin, straight Head B: cable Cable: PVC, unshielded, 2 m	DOL-0804-G02M	6009870
Illustration may differ	Head A: Female connector, M12, 4-pin, straight Head B: cable Cable: PVC, unshielded, 2 m	DOL-1204-G02M	6009382
Masks			
	Mask card, vertical/horizontal slots, slot width: 0.5 mm / 1.0 mm / 1.5 mm / 2.0 mm	BL-9-2	4033253
Reflectors			
	Rectangular, screw connection, 47 mm x 47 mm, PMMA/ABS, Screw-on, 2 hole mounting	P250	5304812
	Rectangular, screw connection, 38 mm x 15 mm, PMMA/ABS, Screw-on, 2 hole mounting	PL20A	1012719
	Rectangular, screw connection, 56 mm x 28 mm, PMMA/ABS, Screw-on, 2 hole mounting	PL30A	1002314
	Rectangular, screw connection, 37 mm x 56 mm, PMMA/ABS, Screw-on, 2 hole mounting	PL40A	1012720
	Rectangular, screw connection, 80 mm x 80 mm, PMMA/ABS, Screw-on, 2 hole mounting	PL80A	1003865
	Self-adhesive	REF-IRF-56	5314244
	Self-adhesive, roll, 25 mm x 22.8 m, self-adhesive	REF-PLUS-R25	5319929
	Self-adhesive, roll, 50 mm x 22.8 m, self-adhesive	REF-PLUS-R50	5319981

B

At a glance

- High-performance sensor in ultra-rugged VISTAL™ housing
- Best-in-class optical performance for transparent object detection
- Continuous threshold adaption
- PinPoint LED for highly visible and precise light spot
- Variable mounting with M3 or M4 hole pattern
- Wide range of connection options

Your benefits

- Tough VISTAL™ housing provides reliable installation and operation
- Best-in-class optical performance
- Wide variety of connection, mounting and optical possibilities to solve many different applications

➜ www.mysick.com/en/W9-3_Glass

For more information, just 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.

Ordering information

Other models and accessories ➜ www.mysick.com/en/W9-3_Glass

WL9G-3

- **Mounting hole:** M3
- **Detection principle:** autocollimation
- **Adjustment:** Single teach-in button
- **Switching mode:** Light/dark-switching (Q = light-switching.)

Sensing range max. [1]	Output type	Connection	Model name	Part no.
0 m ... 5 m	PNP	Connector M8, 4-pin	WL9G-3P2232	1049082
		Connector M12, 4-pin	WL9G-3P2432	1049083
		Cable, 4-wire, 2 m, PVC	WL9G-3P1132	1049081
		Cable with connector M12, 4-pin, 120 mm, PVC	WL9G-3P3432	1049084
	NPN	Cable, 4-wire, 2 m, PVC	WL9G-3N1132	1049085

[1] PL80A.

8011993/2014-07-24

Subject to change without notice

WL9M4G-3

- **Mounting hole:** M4
- **Detection principle:** autocollimation
- **Adjustment:** Single teach-in button
- **Switching mode:** Light/dark-switching (Q = light-switching.)

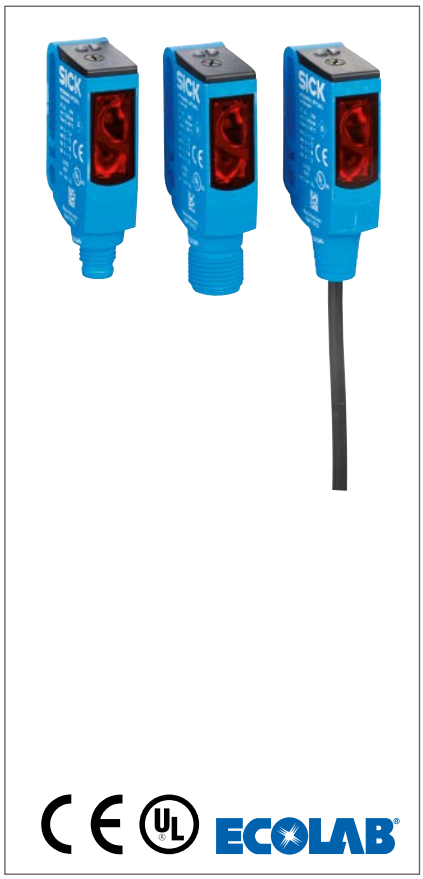
Sensing range max. [1]	Output type	Connection	Model name	Part no.
0 m ... 5 m	PNP	Connector M8, 4-pin	WL9M4G-3P2232	1051899
		Connector M12, 4-pin	WL9M4G-3P2432	1051900
		Cable, 4-wire, 2 m, PVC	WL9M4G-3P1132	1051898
		Cable with connector M12, 4-pin, 120 mm, PVC	WL9M4G-3P3432	1051910
	NPN	Cable, 4-wire, 2 m, PVC	WL9M4G-3N1132	1051897

[1] PL80A.

Recommended accessories

	Brief description	Model name	Part no.
Mounting brackets and mounting plates			
	Fastening plate with threaded sleeve M3, PMMA, Brass (Br)	BEF-GPM3-W9	4066039
	Mounting bracket, Steel, zinc coated, Mounting hardware included	BEF-WN-W9-2	2022855
Plug connectors and cables			
	Head A: Female connector, M8, 4-pin, straight Head B: cable Cable: PVC, unshielded, 2 m	DOL-0804-G02M	6009870
 Illustration may differ	Head A: Female connector, M12, 4-pin, straight Head B: cable Cable: PVC, unshielded, 2 m	DOL-1204-G02M	6009382
Reflectors			
	Fine triple, screw connection, suitable for laser sensors, 47 mm x 47 mm, PMMA/ABS, Screw-on, 2 hole mounting	P250F	5308843
	Fine triple, chemically resistant, screw connection, 18 mm x 18 mm, Plastic, Screw-on, 2 hole mounting	PL10F CHEM	5321636
	Fine triple, screw connection, suitable for laser sensors, 56 mm x 28 mm, PMMA/ABS, Screw-on, 2 hole mounting	PL30F	5326523
	Fine triple, screw connection, suitable for laser sensors, 76 mm x 45 mm, PMMA/ABS, Screw-on, 2 hole mounting	PL81-1F	5325060
	Stainless steel reflector, wash-down design, chemically resistant, Enclosure rating IP 69K, screw connection, 14 mm x 14 mm, Stainless steel V4A (1.4404, 316L), Screw-on, 2 hole mounting	PLV14-A	2063405
	Suitable for laser sensors, self-adhesive, cut, see alignment note, 56.3 mm x 56.3 mm, self-adhesive	REF-AC1000-56	4063030

B



At a glance

- Tough VISTAL™ housing
- Precise laser light spot
- Photoelectric proximity sensor in laser classes 1 and 2
- Photoelectric retro-reflective sensor with autocollimation optics and polarizing filter; models available for clear material detection
- Through-beam photoelectric sensors with sensing ranges of up to 60 m
- SIRIC technology
- Connections: M8 and M12 plugs, cable as well as cable with plug
- M3 and M4 hole pattern

Your benefits

- Precise detection of small objects and object features
- Detection of objects even through small openings
- Less machine downtime due to stable VISTAL™ housing as well as the suppression of optical interference
- The longest detection and sensing ranges in its class
- Best-in-class background suppression for photoelectric proximity sensors
- No blind spots, detection of shiny objects using photoelectric retro-reflective sensors
- A wide variety of connection and mounting options
- Highly visible light spot simplifies alignment

➜ www.mysick.com/en/W9L-3

For more information, just 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.

Ordering information

Other models and accessories ➜ www.mysick.com/en/W9L-3

WTB9L-3

- **Mounting hole:** M3
- **Switching mode:** Light/dark-switching (Q = light-switching.)
- **Adjustment:** potentiometer, 5 turns

Laser class	Sensing range max. [1]	Light spot size (distance)	Output type	Connection	Model name	Part no.
1	25 mm ... 300 mm	Ø 1 mm (170 mm)	PNP	Cable, 4-wire, 2 m, PVC	WTB9L-3P1161	1058232
				Connector M8, 4-pin	WTB9L-3P2261	1058230
				Connector M12, 4-pin	WTB9L-3P2461	1058231
			NPN	Connector M8, 4-pin	WTB9L-3N2261	1062523
				Connector M12, 4-pin	WTB9L-3N2461	1062524
				Cable with connector M12, 4-pin, 120 mm, PVC	WTB9L-3N3461	1062525
2	25 mm ... 400 mm	Ø 0.9 mm (230 mm)	PNP	Connector M8, 4-pin	WTB9L-3P2291	1058150
				Connector M12, 4-pin	WTB9L-3P2491	1058151
			NPN	Cable, 4-wire, 2 m	WTB9L-3N1191	1068515
				Connector M8, 4-pin	WTB9L-3N2291	1058146
				Connector M12, 4-pin	WTB9L-3N2491	1058149

[1] Object with 90 % reflectance (referred to standard white, DIN 5033)

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Subject to change without notice

WTB9M4L-3

- **Mounting hole:** M4
- **Output type:** PNP
- **Switching mode:** Light/dark-switching (Q = light-switching.)
- **Adjustment:** potentiometer, 5 turns

Laser class	Sensing range max. [1]	Light spot size (distance)	Connection	Model name	Part no.
1	25 mm ... 300 mm	Ø 1 mm (170 mm)	Cable, 4-wire, 2 m, PVC	WTB9M4L-3P1161	1058188
			Connector M12, 4-pin	WTB9M4L-3P2461	1058187
2	25 mm ... 400 mm	Ø 0.9 mm (230 mm)	Cable, 4-wire, 2 m, PVC	WTB9M4L-3P1191	1058226
			Connector M12, 4-pin	WTB9M4L-3P2491	1058225

[1] Object with 90 % reflectance (referred to standard white, DIN 5033)

WL9L-3

- **Light spot size (distance):** Ø 1 mm (500 mm)
- **Mounting hole:** M3
- **Switching mode:** Light/dark-switching (Q = light-switching.)
- **Adjustment:** Single teach-in button

Laser class	Sensing range max. [1]	Output type	Connection	Model name	Part no.
1	0 m ... 12 m	PNP	Cable, 4-wire, 2 m, PVC	WL9L-3P1132	1058233
			Connector M8, 4-pin	WL9L-3P2232	1058174
			Connector M12, 4-pin	WL9L-3P2432	1058175
			Cable with connector M12, 4-pin, 120 mm, PVC	WL9L-3P3432	1058176
		NPN	Connector M8, 4-pin	WL9L-3N2232	1058172
			Connector M12, 4-pin	WL9L-3N2432	1058173

[1] PL80A.

WL9M4L-3

- **Light spot size (distance):** Ø 1 mm (500 mm)
- **Mounting hole:** M4
- **Switching mode:** Light/dark-switching (Q = light-switching.)
- **Adjustment:** Single teach-in button

Laser class	Sensing range max. [1]	Output type	Connection	Model name	Part no.
1	0 m ... 12 m	PNP	Cable, 4-wire, 2 m, PVC	WL9M4L-3P1132	1058229
			Connector M8, 4-pin	WL9M4L-3P2232	1058227
			Connector M12, 4-pin	WL9M4L-3P2432	1058228

[1] PL80A.

B

WSE9L-3

- **Light spot size (distance):** Ø 1 mm (500 mm)
- **Mounting hole:** M3
- **Switching mode:** Light/dark-switching (Q = light-switching.)
- **Adjustment:** Single teach-in button

Laser class	Sensing range max.	Output type	Connection	Model name	Part no.
1	0 m ... 60 m	PNP	Cable, 4-wire, 2 m, PVC	WSE9L-3P1137	1058915
			Connector M8, 4-pin	WSE9L-3P2237	1058182
			Connector M12, 4-pin	WSE9L-3P2437	1058181
		NPN	Connector M8, 4-pin	WSE9L-3N2237	1058179
			Connector M12, 4-pin	WSE9L-3N2437	1058180

Recommended accessories

	Brief description	Model name	Part no.
Mounting brackets and mounting plates			
	Fastening plate with threaded sleeve M3, PMMA, Brass (Br)	BEF-GPM3-W9	4066039
	Mounting bracket, Steel, zinc coated, Mounting hardware included	BEF-WN-W9-2	2022855
Universal bar clamp systems			
	Plate N08 for universal clamp bracket, Zinc plated steel (sheet), Diecast zinc (clamp), Universal clamp, mounting hardware	BEF-KHS-N08	2051607
Plug connectors and cables			
	Head A: Female connector, M8, 4-pin, straight Head B: cable Cable: PVC, unshielded, 2 m	DOL-0804-G02M	6009870
 Illustration may differ	Head A: Female connector, M12, 4-pin, straight Head B: cable Cable: PVC, unshielded, 2 m	DOL-1204-G02M	6009382
Reflectors			
	Fine triple, screw connection, suitable for laser sensors, 47 mm x 47 mm, PMMA/ABS, Screw-on, 2 hole mounting	P250F	5308843
	Reflector with microprismatic reflex tape REF-AC1000, suitable for laser sensors, see alignment note, 23 mm x 23 mm, PMMA/ABS, Screw-on, 2 hole mounting	P41F	5315128
	Fine triple, screw connection, suitable for laser sensors, 56 mm x 28 mm, PMMA/ABS, Screw-on, 2 hole mounting	PL30F	5326523
	Fine triple, screw connection, suitable for laser sensors, 76 mm x 45 mm, PMMA/ABS, Screw-on, 2 hole mounting	PL81-1F	5325060
	Suitable for laser sensors, self-adhesive, cut, see alignment note, 56.3 mm x 56.3 mm, self-adhesive	REF-AC1000-56	4063030

8011993/2014-07-24
Subject to change without notice

At a glance

- Tough VISTAL™ housing
- Precise laser light spot, laser class 1
- Continuous switching threshold adjustment (CTA)
- Autocollimation optics and polarizing filter
- Teach-in
- SIRIC technology
- Connections: M8 and M12 plugs, cable as well as cable with plug
- M3 and M4 hole pattern

Your benefits

- Precise detection of small objects and object features
- Detection of objects even through small openings
- Best-in-class for detecting transparent objects
- Less machine downtime thanks to the stable VISTAL™ housing
- No blind spots, also detects shiny objects
- Wide range of connection options
- Multiple mounting options
- Highly visible light spot simplifies alignment

➜ www.mysick.com/en/W9LG-3

For more information, just 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.

Ordering information

Other models and accessories ➜ www.mysick.com/en/W9LG-3

WL9LG-3

- **Light spot size (distance):** Ø 1 mm (500 mm)
- **Mounting hole:** M3
- **Switching mode:** Light/dark-switching (Q = light-switching.)
- **Adjustment:** Single teach-in button

Laser class	Sensing range max. [1]	Output type	Connection	Model name	Part no.
1	0 m ... 4.5 m	PNP	Cable, 4-wire, 2 m, PVC	WL9LG-3P1132	1058236
			Connector M8, 4-pin	WL9LG-3P2232	1058234
			Connector M12, 4-pin	WL9LG-3P2432	1058235

[1] REF-AC1000.

B

Recommended accessories

	Brief description	Model name	Part no.
Mounting brackets and mounting plates			
	Fastening plate with threaded sleeve M3, PMMA, Brass (Br)	BEF-GPM3-W9	4066039
	Mounting bracket, Steel, zinc coated, Mounting hardware included	BEF-WN-W9-2	2022855
Universal bar clamp systems			
	Plate N08 for universal clamp bracket, Zinc plated steel (sheet), Diecast zinc (clamp), Universal clamp, mounting hardware	BEF-KHS-N08	2051607
Plug connectors and cables			
	Head A: Female connector, M8, 4-pin, straight Head B: cable Cable: PVC, unshielded, 2 m	DOL-0804-G02M	6009870
 Illustration may differ	Head A: Female connector, M12, 4-pin, straight Head B: cable Cable: PVC, unshielded, 2 m	DOL-1204-G02M	6009382
Reflectors			
	Fine triple, screw connection, suitable for laser sensors, 47 mm x 47 mm, PMMA/ABS, Screw-on, 2 hole mounting	P250F	5308843
	Reflector with microprismatic reflex tape REF-AC1000, suitable for laser sensors, see alignment note, 23 mm x 23 mm, PMMA/ABS, Screw-on, 2 hole mounting	P41F	5315128
	Fine triple, screw connection, suitable for laser sensors, 56 mm x 28 mm, PMMA/ABS, Screw-on, 2 hole mounting	PL30F	5326523
	Fine triple, screw connection, suitable for laser sensors, 76 mm x 45 mm, PMMA/ABS, Screw-on, 2 hole mounting	PL81-1F	5325060
	Suitable for laser sensors, self-adhesive, cut, see alignment note, 56.3 mm x 56.3 mm, self-adhesive	REF-AC1000-56	4063030

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Subject to change without notice

At a glance

- Uniform housing, mounting and connection systems
- Rugged sensors for industrial use
- PinPoint LED technology provides highly visible light spot
- Space-saving plastic housing in chemically, thermally or mechanically resistant designs
- Dovetail mounting – mounting holes and oblong holes
- Highly visible 360° status LEDs

Your benefits

- Reliable object detection due to superior ASIC technology with a high immunity to ambient light
- PinPoint technology provides a bright, small and precise light spot that enables quick and easy sensor alignment
- Precise switching characteristics ensure high performance even in changing application conditions
- Highly visible 360° status LEDs provide quick and easy setup
- Compact and rugged housing design easily fits in tight spaces
- Uniform housing, mounting and connection systems simplify installation
- Versatile mounting options, including dovetail, side mounting and standard mounting holes enable quick installation

→ www.mysick.com/en/W11-2

For more information, just 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.

Ordering information

Other models and accessories → www.mysick.com/en/W11-2

WTB11-2

- **Sensor principle:** Photoelectric proximity sensor
- **Detection principle:** Background suppression
- **Light spot size (distance):** Ø 6 mm (200 mm)

Light source	Sensing range max. [1]	Switching mode	Adjustment	Output type	Connection	Model name	Part no.
LED	20 mm ... 350 mm	Light/dark-switching	Potentiometer, 5 turns	PNP	Connector M12, 4-pin	WTB11-2P2431	1041376
				NPN	Connector M12, 4-pin	WTB11-2N2431	1041378
PinPoint LED	30 mm ... 1,100 mm	Light/dark-switching	Potentiometer, 5 turns	PNP	Connector M12, 4-pin	WTB11-2P2461	1044442
				NPN	Connector M12, 4-pin	WTB11-2N2461	1051818

[1] Object with 90 % reflectance (referred to standard white, DIN 5033)

WTF11-2

- **Sensor principle:** Photoelectric proximity sensor
- **Detection principle:** Foreground suppression
- **Light source:** LED
- **Light spot size (distance):** Ø 6 mm (200 mm)

Sensing range max. [1]	Switching mode	Adjustment	Output type	Connection	Model name	Part no.
35 mm ... 350 mm	Light/dark-switching	Potentiometer, 5 turns	PNP	Connector M12, 4-pin	WTF11-2P2431	1041380

[1] Object with 90 % reflectance (referred to standard white, DIN 5033)

B

WTE11-2

- **Sensor principle:** Photoelectric proximity sensor
- **Detection principle:** energetic
- **Light source:** LED
- **Light spot size (distance):** Ø 90 mm (600 mm)

Sensing range max. [1]	Switching mode	Adjustment	Output type	Connection	Model name	Part no.
40 mm ... 1,000 mm	Light/dark-switching	Single teach-in button	PNP	Connector M12, 4-pin	WTE11-2P2432	1041381
			NPN	Connector M12, 4-pin	WTE11-2N2432	1041383

[1] Object with 90 % reflectance (referred to standard white, DIN 5033)

WL11-2

- **Sensor principle:** Photoelectric retro-reflective sensor
- **Detection principle:** Standard optics
- **Light source:** LED
- **Light spot size (distance):** Ø 50 mm (3 m)

Sensing range max. [1]	Switching mode	Output type	Adjustment	Connection	Model name	Part no.
0.15 m ... 10 m	Light/dark-switching	PNP	–	Connector M12, 4-pin	WL11-2P2430	1041385
			Single teach-in button	Connector M12, 4-pin	WL11-2P2432	1048542
		NPN	–	Connector M12, 4-pin	WL11-2N2430	1041387

[1] PL80A.

WSE11-2

- **Sensor principle:** Through-beam photoelectric sensor
- **Light source:** LED
- **Light spot size (distance):** Ø 220 mm (15 m)

Sensing range max.	Switching mode	Output type	Connection	Model name	Part no.
0 m ... 20 m	Light/dark-switching	PNP	Connector M12, 4-pin	WSE11-2P2430	1041394
		NPN	Connector M12, 4-pin	WSE11-2N2430	1041396

Recommended accessories

	Brief description	Model name	Part no.
Mounting brackets and mounting plates			
	Mounting bracket, large, Stainless steel, Mounting hardware included	BEF-WG-W12	2013942
Terminal and alignment brackets			
	Clamping block for dovetail mounting, Steel, zinc coated, Mounting hardware included	BEF-KH-W12	2013285
Universal bar clamp systems			
	Plate N02 for universal clamp bracket, Zinc plated steel (sheet), Diecast zinc (clamp), Universal clamp, mounting hardware	BEF-KHS-N02	2051608

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	Brief description	Model name	Part no.
Plug connectors and cables			
Illustration may differ	Head A: Female connector, M12, 4-pin, straight Head B: cable Cable: PVC, unshielded, 2 m	DOL-1204-G02M	6009382
Illustration may differ	Head A: Female connector, M12, 5-pin, straight Head B: cable Cable: PVC, unshielded, 2 m	DOL-1205-G02M	6008899
Reflectors			
	Rectangular, screw connection, 38 mm x 15 mm, PMMA/ABS, Screw-on, 2 hole mounting	PL20A	1012719
	Rectangular, screw connection, 56 mm x 28 mm, PMMA/ABS, Screw-on, 2 hole mounting	PL30A	1002314
	Rectangular, screw connection, 37 mm x 56 mm, PMMA/ABS, Screw-on, 2 hole mounting	PL40A	1012720
	Rectangular, screw connection, 80 mm x 80 mm, PMMA/ABS, Screw-on, 2 hole mounting	PL80A	1003865
	Self-adhesive	REF-IRF-56	5314244

B

At a glance

- Best-in-class retro-reflective laser performance in a metal housing
- Teflon® coating available
- Precise autocollimation optics
- Adjustable focus on retro-reflective sensors
- High switching frequency of 2.5 kHz
- Connection via cable or rotatable connector
- Mounting options with through holes, blind holes, oblong holes and dovetail
- Laser protection class 1 or 2

Your benefits

- Reliable object detection of small objects due to superior ASIC (application-specific integrated circuit) technology combined with innovative laser technology
- Red light laser technology provides quick and easy alignment of sensor
- Rugged metal housing (available with Teflon® coating) withstands harsh environments
- Laser protection class 1 or 2 for eye safety
- Resistance to optical interference reduces false readings and downtime
- Rotatable connector provides easy installation

➜ www.mysick.com/en/W12-2_Laser

For more information, just 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.

Ordering information

Other models and accessories ➜ www.mysick.com/en/W12-2_Laser

WT12L-2

- **Detection principle:** Background suppression
- **Focus:** 100 mm
- **Light spot size (distance):** Ø 0.2 mm (100 mm)
- **Adjustment:** potentiometer
- **Output type:** PNP, NPN
- **Switching mode:** Light switching, dark-switching
- **Connection:** Connector M12, 5-pin

Laser class	Sensing range max. [1]	Model name	Part no.
I	30 mm ... 200 mm	WT12L-2B551	1047958
II	30 mm ... 200 mm	WT12L-2B550	1017904

[1] Objects to be sensed with 18 % reflectivity (based on DIN 5033 white standard)

WL12L-2

- **Laser class:** II
- **Detection principle:** autocollimation
- **Light spot size (distance):** Ø 0.8 mm (300 mm)

Sensing range max. [1]	Adjustment	Output type	Switching mode	Connection	Model name	Part no.
0 m ... 18 m	Potentiometer	PNP, NPN	Light switching Dark-switching	Connector M12, 5-pin	WL12L-2B530	1018252

[1] PL80A.

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Subject to change without notice

WS/WE12L-2

- **Connection:** Connector M12, 4-pin

Laser class	Sensing range max.	Light spot size (distance)	Adjustment	Output type	Model name	Part no.
I	0 m ... 80 m	Ø 150 mm (60 m)	–	PNP	WS/WE12L-2P431	1047960
II	0 m ... 10 m	Ø 1 mm (1 m)	Potentiometer	PNP	WS/WE12L-2P410	1018256
				NPN	WS/WE12L-2N410	1018257
	0 m ... 80 m	Ø 150 mm (60 m)	–	PNP	WS/WE12L-2P430	1018254
				NPN	WS/WE12L-2N430	1018255

Recommended accessories

	Brief description	Model name	Part no.
Mounting brackets and mounting plates			
	Mounting bracket, large, Stainless steel, Mounting hardware included	BEF-WG-W12	2013942
Terminal and alignment brackets			
	Clamping block for dovetail mounting, Steel, zinc coated, Mounting hardware included	BEF-KH-W12	2013285
Universal bar clamp systems			
	Plate N02 for universal clamp bracket, Zinc plated steel (sheet), Diecast zinc (clamp), Universal clamp, mounting hardware	BEF-KHS-N02	2051608
Plug connectors and cables			
Illustration may differ	Head A: Female connector, M12, 4-pin, straight Head B: cable Cable: PVC, unshielded, 2 m	DOL-1204-G02M	6009382
Illustration may differ	Head A: Female connector, M12, 5-pin, straight Head B: cable Cable: PVC, unshielded, 2 m	DOL-1205-G02M	6008899
Reflectors			
	Fine triple, screw connection, suitable for laser sensors, 47 mm x 47 mm, PMMA/ABS, Screw-on, 2 hole mounting	P250F	5308843
	Fine triple, screw connection, suitable for laser sensors, 18 mm x 18 mm, PMMA/ABS, Screw-on, 2 hole mounting	PL10F	5311210
	Fine triple, screw connection, suitable for laser sensors, 38 mm x 16 mm, PMMA/ABS, Screw-on, 2 hole mounting	PL20F	5308844
	Fine triple, screw connection, suitable for laser sensors, 56 mm x 28 mm, PMMA/ABS, Screw-on, 2 hole mounting	PL30F	5326523
	Suitable for laser sensors, self-adhesive, cut, see alignment note, 56.3 mm x 56.3 mm, self-adhesive	REF-AC1000-56	4063030

B

At a glance

- Rugged die-cast zinc housing with optional Teflon® coating
- Reliable detection of transparent objects
- Precise autocollimation optics
- Robust sensors for industrial use
- Precise PinPoint LED
- Dovetail mounting – mounting holes and oblong holes
- Highly visible status LEDs
- Flexible sensor settings, monitoring, advanced diagnostics, and visualization thanks to IO-Link

Your benefits

- Reliable detection of transparent objects - from PET bottles to transparent film - due to superior ASIC (application-specific integrated circuit) technology
- High immunity to ambient conditions reduces false readings
- Red PinPoint LED provides quick and easy alignment of sensor
- Precise switching characteristics, fast response times and high performance ensure superior reliability and productivity in nearly every application type
- Withstands mechanical, thermal, chemical and electromagnetic factors, providing increased industrial reliability
- Flexible mounting and installation due to rotatable connector and versatile mounting options
- IO-Link provides easy data access from the PLC
- Quick and easy configuration

➜ www.mysick.com/en/W12G

For more information, just 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.

Ordering information

Other models and accessories ➜ www.mysick.com/en/W12G

WL12G

- **Housing material:** Metal
- **Connection:** Connector M12, 5-pin

Type of light	Sensing range max. [1]	Light spot size (distance)	Continuous threshold adaption	Output type	Switching mode	Adjustment	Model name	Part no.
Visible red light	0 m ... 4 m	Ø 25 mm (1.5 m)	–	PNP, NPN	Light switching Dark-switching	Potentiometer, 11 turns	WL12G-3B2531	1041456
			✔	PNP	Light/dark-switching	Single teach-in button [2] [3]	WL12G-3P2572	1053535
				NPN	Light/dark-switching	Single teach-in button [2] [3]	WL12G-3N2572	1053530
Infrared light	0 m ... 4 m	Ø 100 mm (3 m)	✔	PNP	Light/dark-switching	Single teach-in button [2] [3]	WL12G-3P2582	1053536

[1] PL80A.

[2] Mode I, 10 % attenuation.

[3] Mode II, 18 % attenuation.

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Subject to change without notice

WL12G, IO-Link

- **Light spot size (distance):** Ø 25 mm (1.5 m)
- **Housing material:** Metal
- **Continuous threshold adaption:** ✔
- **Output type:** PNP
- **Switching mode:** Light/dark-switching
- **Adjustment:** Single teach-in button (Mode I, 10 % attenuation.) (Mode II, 18 % attenuation.)
- **Connection:** Connector M12, 4-pin

Type of light	Sensing range max. [1]	IO-Link	Advanced functions	Model name	Part no.
Visible red light	0 m ... 4 m	Standard functions	–	WL12GC-3P2472	1054087
		Standard functions, advanced functions	Time measurement / timer, decentralized debouncing	WL12GC-3P2472A70	1067778
			High speed counter, decentralized debouncing	WL12GC-3P2472A71	1067779
			Time stamp, decentralized debouncing	WL12GC-3P2472A91	1061063

[1] PL80A.

Recommended accessories

	Brief description	Model name	Part no.
Mounting brackets and mounting plates			
	Mounting bracket, large, Stainless steel, Mounting hardware included	BEF-WG-W12	2013942
Terminal and alignment brackets			
	Clamping block for dovetail mounting, Steel, zinc coated, Mounting hardware included	BEF-KH-W12	2013285
Universal bar clamp systems			
	Plate N02 for universal clamp bracket, Zinc plated steel (sheet), Diecast zinc (clamp), Universal clamp, mounting hardware	BEF-KHS-N02	2051608
Plug connectors and cables			
Illustration may differ	Head A: Female connector, M12, 4-pin, straight Head B: cable Cable: PVC, unshielded, 2 m	DOL-1204-G02M	6009382
Illustration may differ	Head A: Female connector, M12, 5-pin, straight Head B: cable Cable: PVC, unshielded, 2 m	DOL-1205-G02M	6008899

B

	Brief description	Model name	Part no.
Reflectors			
	Fine triple, screw connection, suitable for laser sensors, 47 mm x 47 mm, PMMA/ABS, Screw-on, 2 hole mounting	P250F	5308843
	Fine triple, screw connection, suitable for laser sensors, 18 mm x 18 mm, PMMA/ABS, Screw-on, 2 hole mounting	PL10F	5311210
	Fine triple, chemically resistant, screw connection, 18 mm x 18 mm, Plastic, Screw-on, 2 hole mounting	PL10F CHEM	5321636
	Stainless steel reflector, wash-down design, chemically resistant, Enclosure rating IP 69K, screw connection, 14 mm x 14 mm, Stainless steel V4A (1.4404, 316L), Screw-on, 2 hole mounting	PLV14-A	2063405
	Suitable for laser sensors, self-adhesive, cut, see alignment note, 56.3 mm x 56.3 mm, self-adhesive	REF-AC1000-56	4063030

8011993/2014-07-24
Subject to change without notice

At a glance

- Best-in-class optical performance due to superior OES technology
- Autocollimation with retro-reflective sensors
- Background and foreground suppression with second emitter LED on proximity sensors
- Highly visible, precise light spot and high-energy IR transmitters
- Rugged die-cast zinc housing, optional with Teflon® coating
- Mounting options with through holes, base blind holes, oblong through holes and dovetail
- Flexible sensor settings, monitoring, advanced diagnostics, and visualization thanks to IO-Link

Your benefits

- Reliable detection due to superior ASIC (application-specific integrated circuit) technology and immunity to optical interference factors from the industrial environment
- PinPoint LED technology provides a bright, small and precise light spot that enables quick and easy sensor alignment
- Precise switching characteristics ensure reliable object detection, reducing downtime caused by re-adjusting sensors during recipe changes
- Wide range of products enclosed in a rugged metal housing enables application flexibility in a broad range of industrial environments
- Flexible mounting options reduce installation time
- IO-Link provides easy data access from the PLC
- Quick and easy configuration
- Quick and easy integration using function blocks

→ www.mysick.com/en/W12-3

For more information, just 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.

Ordering information

Other models and accessories → www.mysick.com/en/W12-3

WTF12-3

- **Sensor principle:** Photoelectric proximity sensor
- **Detection principle:** Foreground suppression
- **Switching mode:** Light/dark-switching

Sensing range max. [1]	Light spot size (distance)	Output type	Adjustment	Connection	Model name	Part no.
30 mm ... 175 mm	Ø 2 mm (60 mm)	PNP	Potentiometer, 5 turns	Connector M12, 4-pin	WTF12-3P2431	1041404
			Double teach-in button	Connector M12, 4-pin	WTF12-3P2433	1041405
		NPN	Potentiometer, 5 turns	Connector M12, 4-pin	WTF12-3N2431	1041408
			Double teach-in button	Connector M12, 4-pin	WTF12-3N2433	1041409
30 mm ... 500 mm	Ø 7 mm (300 mm)	PNP	Potentiometer, 5 turns	Connector M12, 4-pin	WTF12-3P2441	1041400
			Single teach-in button	Connector M12, 4-pin	WTF12-3P2443	1041401
		NPN	Potentiometer, 5 turns	Connector M12, 4-pin	WTF12-3N2441	1041403

[1] Object with 90 % reflectance (referred to standard white, DIN 5033)

B

WTB12-3

- **Sensor principle:** Photoelectric proximity sensor
- **Detection principle:** Background suppression
- **Light spot size (distance):** Ø 6 mm (200 mm)
- **Output type:** PNP
- **Switching mode:** Light/dark-switching

Sensing range max. [1]	Adjustment	Connection	Model name	Part no.
20 mm ... 350 mm	Potentiometer, 5 turns	Connector M12, 4-pin	WTB12-3P2431	1041411
	Double teach-in button	Connector M12, 4-pin	WTB12-3P2433	1041412

[1] Object with 90 % reflectance (referred to standard white, DIN 5033)

WTB12-3, IO-Link

- **Sensor principle:** Photoelectric proximity sensor
- **Detection principle:** Background suppression
- **Output type:** PNP
- **Switching mode:** Light/dark-switching
- **Adjustment:** Single teach-in button

Sensing range max. [1]	Light spot size (distance)	IO-Link	Advanced functions	Connection	Model name	Part no.
20 mm ... 350 mm	Ø 6 mm (200 mm)	Standard functions	–	Connector M12, 4-pin	WTB12C-3P2432	1067771
		Standard functions, advanced functions	Time measurement / timer, decentralized debouncing	Connector M12, 4-pin	WTB12C-3P2432A70	1067772
			High speed counter, decentralized debouncing	Connector M12, 4-pin	WTB12C-3P2432A71	1067773
	15 mm x 15 mm (200 mm)	Standard functions, advanced functions	Time stamp, decentralized debouncing	Connector M12, 4-pin	WTB12C-3P2432A91	1060222

[1] Object with 90 % reflectance (referred to standard white, DIN 5033)

WL12-3

- **Sensor principle:** Photoelectric retro-reflective sensor
- **Detection principle:** autocollimation
- **Polarisation filter:** ✔
- **Light spot size (distance):** Ø 100 mm (3 m)
- **Switching mode:** Light/dark-switching
- **Adjustment:** potentiometer, 5 turns

Sensing range max. [1]	Output type	Connection	Model name	Part no.
0 m ... 7 m	PNP	Connector M12, 4-pin	WL12-3P2431	1041436
	NPN	Connector M12, 4-pin	WL12-3N2431	1041440

[1] PL80A.

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Subject to change without notice

WL12-3, IO-Link

- **Sensor principle:** Photoelectric retro-reflective sensor
- **Detection principle:** autocollimation
- **Polarisation filter:** ✔
- **Light spot size (distance):** Ø 100 mm (3 m)
- **Output type:** PNP
- **Switching mode:** Light/dark-switching
- **Adjustment:** Single teach-in button

Sensing range max. [1]	IO-Link	Advanced functions	Connection	Model name	Part no.
0 m ... 7 m	Standard functions	–	Connector M12, 4-pin	WL12C-3P2432	1067774
	Standard functions, advanced functions	Time measurement / timer, decentralized debouncing	Connector M12, 4-pin	WL12C-3P2432A70	1067775
		High speed counter, decentralized debouncing	Connector M12, 4-pin	WL12C-3P2432A71	1067776
		Time stamp, decentralized debouncing	Connector M12, 4-pin	WL12C-3P2432A91	1067777

[1] PL80A.

WSE12-3

- **Sensor principle:** Through-beam photoelectric sensor
- **Light spot size (distance):** Ø 220 mm (15 m)
- **Switching mode:** Light/dark-switching
- **Adjustment:** potentiometer, 5 turns

Sensing range max.	Output type	Connection	Model name	Part no.
0 m ... 20 m	PNP	Connector M12, 4-pin	WSE12-3P2431	1041459
	NPN	Connector M12, 4-pin	WSE12-3N2431	1041462

WSE12-3, IO-Link

- **Sensor principle:** Through-beam photoelectric sensor
- **Light spot size (distance):** Ø 220 mm (15 m)
- **Output type:** PNP
- **Switching mode:** Light/dark-switching

Sensing range max.	IO-Link	Advanced functions	Connection	Model name	Part no.
0 m ... 20 m	Standard functions	–	Connector M12, 4-pin	WSE12C-3P2430	1067780
	Standard functions, advanced functions	Time measurement / timer, decentralized debouncing	Connector M12, 4-pin	WSE12C-3P2430A70	1067781
		High speed counter, decentralized debouncing	Connector M12, 4-pin	WSE12C-3P2430A71	1067782
		Time stamp, decentralized debouncing	Connector M12, 4-pin	WSE12C-3P2430A91	1067783

B

Recommended accessories

	Brief description	Model name	Part no.
Device protection (mechanical)			
	Protective housing for universal clamp, Zinc plated steel (protective housing), Diecast zinc (clamp), Universal clamp, mounting hardware	BEF-SG-W12-3	2045175
Terminal and alignment brackets			
	Clamping block for dovetail mounting, Steel, zinc coated, Mounting hardware included	BEF-KH-W12	2013285
Universal bar clamp systems			
	Plate N02 for universal clamp bracket, Zinc plated steel (sheet), Diecast zinc (clamp), Universal clamp, mounting hardware	BEF-KHS-N02	2051608
Plug connectors and cables			
Illustration may differ	Head A: Female connector, M12, 4-pin, straight Head B: cable Cable: PVC, unshielded, 2 m	DOL-1204-G02M	6009382
Reflectors			
	Rectangular, screw connection, 47 mm x 47 mm, PMMA/ABS, Screw-on, 2 hole mounting	P250	5304812
	Rectangular, screw connection, 38 mm x 15 mm, PMMA/ABS, Screw-on, 2 hole mounting	PL20A	1012719
	Rectangular, screw connection, 56 mm x 28 mm, PMMA/ABS, Screw-on, 2 hole mounting	PL30A	1002314
	Rectangular, screw connection, 37 mm x 56 mm, PMMA/ABS, Screw-on, 2 hole mounting	PL40A	1012720
	Rectangular, screw connection, 80 mm x 80 mm, PMMA/ABS, Screw-on, 2 hole mounting	PL80A	1003865
	Self-adhesive	REF-IRF-56	5314244

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Subject to change without notice

At a glance

- Outstanding background suppression with OES3 technology
- Highly visible and precise light spot due to PinPoint LED in selected products
- Slim, durable plastic housing
- Complete sensor family with proximity, retro-reflective and through-beam variants

Your benefits

- Reliable object detection at a cost-effective price
- PinPoint LED technology provides a highly visible red light that enables quick and easy setup
- Broad product range gives users a variety of choices to fit their application
- Rugged plastic housing in a slim design simplifies installation
- Quick and easy installation using SICK accessories saves time

➜ www.mysick.com/en/W14-2

For more information, just 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.

Ordering information

Other models and accessories ➜ www.mysick.com/en/W14-2

WT14-2

- **Sensor principle:** Photoelectric proximity sensor
- **Output type:** PNP
- **Switching mode:** Light/dark-switching

Detection principle	Type of light	Sensing range max. [1]	Light spot size (distance)	Adjustment	Connection	Model name	Part no.
Background suppression	Visible red light	20 mm ... 250 mm	Ø 10 mm (250 mm)	Potentiometer, 4 turns	Cable, 4-wire 2 m PVC	WT14-2P132	1026055
					Connector M12, 4-pin	WT14-2P432	1026056
		20 mm ... 1,300 mm	Ø 7 mm (300 mm)	Potentiometer, 4 turns	Connector M12, 4-pin	WT14-2P432S08	1045104
	Infrared light	20 mm ... 500 mm	Ø 14 mm (300 mm)	Potentiometer, 4 turns	Cable, 4-wire 2 m PVC	WT14-2P122	1026051
					Connector M12, 4-pin	WT14-2P422	1026052
Energetic	Infrared light	50 mm ... 1,500 mm	Ø 56 mm (1,000 mm)	Single teach-in button	Cable, 4-wire 2 m PVC	WT14-2P111	1026058
					Connector M12, 4-pin	WT14-2P411	1026059

[1] Object with 90 % reflectance (referred to standard white, DIN 5033)

B

WT14-2, line-shaped light spot

- **Sensor principle:** Photoelectric proximity sensor
- **Detection principle:** Background suppression
- **Type of light:** Infrared light

Sensing range max. [1]	Adjustment	Output type	Switching mode	Connection	Model name	Part no.
20 mm ... 500 mm	Potentiometer, 4 turns	PNP	Light/dark-switching	Connector M12, 4-pin	WT14-2P422S03	1041679

[1] Object with 90 % reflectance (referred to standard white, DIN 5033)

WL14-2

- **Sensor principle:** Photoelectric retro-reflective sensor
- **Detection principle:** Standard optics
- **Type of light:** visible red light
- **Output type:** PNP
- **Switching mode:** Light/dark-switching
- **Polarisation filter:** ✔

Sensing range max. [1]	Light spot size (distance)	Adjustment	Connection	Model name	Part no.
0.15 m ... 6 m	Ø 140 mm (4 m)	–	Cable, 4-wire 2 m PVC	WL14-2P130	1026050
			Connector M12, 4-pin	WL14-2P430	1026049
0.15 m ... 17 m	Ø 30 mm (2 m)	Single teach-in button	Connector M12, 4-pin	WL14-2P431	1050271
		–	Connector M12, 4-pin	WL14-2P430S07	1045089

[1] PL80A.

WS/WE14-2

- **Sensor principle:** Through-beam photoelectric sensor
- **Type of light:** visible red light
- **Light spot size (distance):** Ø 300 mm (10 m)
- **Output type:** PNP
- **Switching mode:** Light/dark-switching

Sensing range max.	Connection	Model name	Part no.
0 m ... 15 m	Cable, 4-wire 2 m PVC	WS/WE14-2P130	1026430
	Connector M12, 4-pin	WS/WE14-2P430	1026431

Recommended accessories

	Brief description	Model name	Part no.
Device protection (mechanical)			
	Protective housing for universal clamp, Zinc plated steel (protective housing), Diecast zinc (clamp), Universal clamp (new), mounting hardware	BEF-SG-W14	2058124
Mounting brackets and mounting plates			
	Mounting bracket, Steel, zinc coated, Mounting hardware included	BEF-WN-W14	2019084
Universal bar clamp systems			
	Plate N03 for universal clamp bracket, Zinc plated steel (sheet), Diecast zinc (clamp), Universal clamp, mounting hardware	BEF-KHS-N03	2051609

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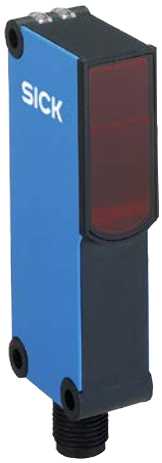
	Brief description	Model name	Part no.
Plug connectors and cables			
Illustration may differ	Head A: Female connector, M12, 4-pin, straight Head B: cable Cable: PVC, unshielded, 2 m	DOL-1204-G02M	6009382
Reflectors			
	Rectangular, screw connection, 47 mm x 47 mm, PMMA/ABS, Screw-on, 2 hole mounting	P250	5304812
	Rectangular, screw connection, 38 mm x 15 mm, PMMA/ABS, Screw-on, 2 hole mounting	PL20A	1012719
	Rectangular, screw connection, 37 mm x 56 mm, PMMA/ABS, Screw-on, 2 hole mounting	PL40A	1012720
	Rectangular, screw connection, 80 mm x 80 mm, PMMA/ABS, Screw-on, 2 hole mounting	PL80A	1003865
	Self-adhesive	REF-IRF-56	5314244

B



At a glance

- Best-in-class optical performance due to superior OES technology
- Autocollimation optics
- Background suppression with second sender LED
- Slim, durable plastic housing
- Operation via double teach-in pushbutton or potentiometer
- Wide variety of options for operation, connection, and optics
- Flexible sensor settings, monitoring, advanced diagnostics, and visualization thanks to IO-Link

Your benefits

- Reliable object detection due to best-in-class background suppression and resistance to ambient light
- A wide range of product variants provides increased user flexibility
- Less downtime in industrial environments
- IO-Link provides easy data access from the PLC
- Quick and easy configuration
- Quick and easy integration using function blocks
- Easy device replacement and identification

→ www.mysick.com/en/W18-3

For more information, just 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.

Ordering information

Other models and accessories → www.mysick.com/en/W18-3

WT18-3

- **Sensor principle:** Photoelectric proximity sensor
- **Detection principle:** Background suppression
- **Output type:** PNP
- **Switching mode:** Light/dark-switching

Type of light	Sensing range max. [1]	Light spot size (distance)	Adjustment	Connection	Model name	Part no.
Visible red light	10 mm ... 600 mm	Ø 15 mm (300 mm)	Potentiometer, 4 turns	Connector M12, 4-pin	WT18-3P430	1025896
			Double teach-in button	Connector M12, 4-pin	WT18-3P431	1026032
Infrared light	10 mm ... 700 mm	Ø 20 mm (400 mm)	Potentiometer, 4 turns	Connector M12, 4-pin	WT18-3P410	1025889
				Cable, 4-wire 2 m PVC	WT18-3P110	1025887
			Double teach-in button	Connector M12, 4-pin	WT18-3P411	1026031
	10 mm ... 1,000 mm	Ø 30 mm (600 mm)	Potentiometer, 4 turns	Connector M12, 4-pin	WT18-3P420	1025905

[1] Object with 90 % reflectance (referred to standard white, DIN 5033)

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Subject to change without notice

WL18-3

- **Sensor principle:** Photoelectric retro-reflective sensor
- **Detection principle:** autocollimation
- **Light spot size (distance):** Ø 40 mm (2 m)
- **Output type:** PNP
- **Switching mode:** Light/dark-switching
- **Polarisation filter:** ✔
- **Adjustment:** potentiometer, 1 turn

Type of light	Sensing range max. [1]	Connection	Test input	Model name	Part no.
Visible red light	0 m ... 7 m	Connector M12, 4-pin	–	WL18-3P430	1025911
		Cable, 4-wire 2 m PVC	–	WL18-3P130	1025909
		Cable, 5-wire 2 m PVC	✔	WL18-3P730	1026029

[1] PL80A.

WL18-3, clear material detection

- **Sensor principle:** Photoelectric retro-reflective sensor
- **Detection principle:** autocollimation
- **Light spot size (distance):** Ø 40 mm (2 m)
- **Output type:** PNP
- **Polarisation filter:** ✔

Type of light	Sensing range max. [1]	Switching mode	Adjustment	Connection	Model name	Part no.
Visible red light	0 m ... 2 m	Light/dark-switching	Potentiometer, 1 turn	Cable with connector M12, 4-pin, 100 mm, PUR	WL18-3P030S07	1042484

[1] PL80A.

WS/WE18-3

- **Sensor principle:** Through-beam photoelectric sensor
- **Output type:** PNP
- **Switching mode:** Light/dark-switching
- **Adjustment:** potentiometer, 1 turn
- **Connection:** Connector M12, 4-pin

Type of light	Sensing range max.	Light spot size (distance)	Model name	Part no.
Visible red light	0 m ... 20 m	Ø 450 mm (15 m)	WS/WE18-3P430	1025923
Infrared light	0 m ... 20 m	Ø 950 mm (15 m)	WS/WE18-3P410	1025927

B

Recommended accessories

	Brief description	Model name	Part no.
Device protection (mechanical)			
	Protective housing for universal clamp, Zinc plated steel (protective housing), Diecast zinc (clamp), Universal clamp (new), mounting hardware	BEF-SG-W14	2058124
	Protective housing for universal clamp, Zinc plated steel (protective housing), Diecast zinc (clamp), Universal clamp, mounting hardware	BEF-SG-W27	2039601
Mounting brackets and mounting plates			
	Mounting bracket with hinged arm, Steel, zinc coated, Mounting hardware included	BEF-WN-W18	2009317
Plug connectors and cables			
Illustration may differ	Head A: Female connector, M12, 4-pin, straight Head B: cable Cable: PVC, unshielded, 2 m	DOL-1204-G02M	6009382
Reflectors			
	Rectangular, screw connection, 47 mm x 47 mm, PMMA/ABS, Screw-on, 2 hole mounting	P250	5304812
	Rectangular, screw connection, 38 mm x 15 mm, PMMA/ABS, Screw-on, 2 hole mounting	PL20A	1012719
	Rectangular, screw connection, 56 mm x 28 mm, PMMA/ABS, Screw-on, 2 hole mounting	PL30A	1002314
	Rectangular, screw connection, 37 mm x 56 mm, PMMA/ABS, Screw-on, 2 hole mounting	PL40A	1012720
	Rectangular, screw connection, 80 mm x 80 mm, PMMA/ABS, Screw-on, 2 hole mounting	PL80A	1003865
	Self-adhesive	REF-IRF-56	5314244

8011993/2014-07-24
Subject to change without notice

At a glance

- Energetic photoelectric sensor with easy teach-in
- Photoelectric proximity sensors with background suppression
- Intense red emitting LED with consistent light spot on PinPoint models
- Retro-reflective versions provided with and without adjustment
- Teach-in pushbutton on energetic proximity versions for quick, repeatable commissioning
- Cable or M12 connection

Your benefits

- Teach-in pushbutton option for quick commissioning
- Easy alignment with PinPoint LED and laser technology
- 360° LEDs provide device status indication from multiple angles

→ www.mysick.com/en/W23-2

For more information, just 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.

Ordering information

Other models and accessories → www.mysick.com/en/W23-2

WT23-2, DC

- **Sensor principle:** Photoelectric proximity sensor
- **Detection principle:** Background suppression
- **Type of light:** Infrared light
- **Light source:** LED
- **Light spot size (distance):** Ø 50 mm (800 mm)

Sensing range max. [1]	Output type	Switching mode	Adjustment	Connection	Model name	Part no.
50 mm ... 1,000 mm	PNP	Light/dark-switching	Potentiometer	Connector M12, 4-pin	WT23-2P2421	1027778

[1] Object with 90 % reflectance (referred to standard white, DIN 5033)

WTE23-2, DC

- **Sensor principle:** Photoelectric proximity sensor
- **Detection principle:** energetic
- **Type of light:** Infrared light
- **Light source:** LED
- **Light spot size (distance):** Ø 160 mm (2,000 mm)

Sensing range max. [1]	Output type	Switching mode	Adjustment	Connection	Model name	Part no.
50 mm ... 2,300 mm	PNP	Light/dark-switching	Single teach-in button	Connector M12, 4-pin	WTE23-2P2412	1027781

[1] Object with 90 % reflectance (referred to standard white, DIN 5033)

B

WTB23-2, DC

- **Sensor principle:** Photoelectric proximity sensor
- **Detection principle:** Background suppression
- **Type of light:** visible red light
- **Light source:** PinPoint LED
- **Light spot size (distance):** Ø 12 mm (800 mm)

Sensing range max. [1]	Output type	Switching mode	Adjustment	Connection	Model name	Part no.
30 mm ... 1,100 mm	PNP	Light/dark-switching	Potentiometer	Connector M12, 4-pin	WTB23-2P2461	1044164

[1] Object with 90 % reflectance (referred to standard white, DIN 5033)

WL23-2, DC

- **Sensor principle:** Photoelectric retro-reflective sensor
- **Detection principle:** Standard optics
- **Type of light:** visible red light
- **Output type:** PNP
- **Switching mode:** Light/dark-switching

Light source	Sensing range max. [1]	Light spot size (distance)	Adjustment	Connection	Model name	Part no.
LED	0.1 m ... 10 m	Ø 45 mm (2.7 m)	–	Cable, 4-wire, 2 m, PVC	WL23-2P1130	1027784
				Connector M12, 4-pin	WL23-2P2430P02	1028056
				Cable with connector M12, 4-pin, 270 mm, PVC	WL23-2P3430	1027786
PinPoint LED	0.1 m ... 15 m	Ø 160 mm (16 m)	Single teach-in button	Connector M12, 4-pin	WL23-2P2432S02	1043566
	0.1 m ... 12 m	Ø 45 mm (2.7 m)	–	Connector M12, 4-pin	WL23-2P2460	1044165

[1] PL80A.

WL23-2, DC, Detecting objects wrapped in film

- **Sensor principle:** Photoelectric retro-reflective sensor
- **Detection principle:** Standard optics
- **Type of light:** visible red light
- **Light source:** LED

Sensing range max. [1]	Light spot size (distance)	Output type	Switching mode	Connection	Model name	Part no.
0.1 m ... 4 m	Ø 45 mm (2.7 m)	PNP	Light/dark-switching	Connector M12, 4-pin	WL23-2P2430S01	1041159

[1] PL80A.

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Subject to change without notice

Recommended accessories

	Brief description	Model name	Part no.
Device protection (mechanical)			
	Protective housing for universal clamp, Zinc plated steel (protective housing), Diecast zinc (clamp), Universal clamp, mounting hardware	BEF-SG-W27	2039601
	Weather hood for universal clamp bracket, Steel, zinc coated, Mounting hardware included	OBW-KHS-M01	2023240
Universal bar clamp systems			
	Plate N04 for universal clamp bracket, Zinc plated steel (sheet), Diecast zinc (clamp), Universal clamp, mounting hardware	BEF-KHS-N04	2051610
Plug connectors and cables			
Illustration may differ	Head A: Female connector, M12, 4-pin, straight Head B: cable Cable: PVC, unshielded, 2 m	DOL-1204-G02M	6009382
Illustration may differ	Head A: Female connector, M12, 4-pin, angled Head B: cable Cable: PVC, unshielded, 2 m	DOL-1204-W02M	6009383
Reflectors			
	Rectangular, screw connection, 38 mm x 15 mm, PMMA/ABS, Screw-on, 2 hole mounting	PL20A	1012719
	Rectangular, screw connection, 56 mm x 28 mm, PMMA/ABS, Screw-on, 2 hole mounting	PL30A	1002314
	Rectangular, screw connection, 37 mm x 56 mm, PMMA/ABS, Screw-on, 2 hole mounting	PL40A	1012720
	Rectangular, screw connection, 80 mm x 80 mm, PMMA/ABS, Screw-on, 2 hole mounting	PL80A	1003865
	Self-adhesive	REF-IRF-56	5314244

B

At a glance

- IP 69K-tested die-cast zinc housing
- Terminal chamber protected by the housing
- Immune to ambient light and crosstalk
- Selectable PNP/NPN, light/dark output
- Variants with DC voltage and universal AC/DC voltage with UL approval
- Optional test input, time delays, alarm output and front screen heating also available in high-power version.
- M12 or terminal chamber connection: both 90° rotatable

Your benefits

- Rugged metal housing that has passed IP 69K testing offers reliability and a long service life
- Immune to ambient light and crosstalk, which improves detection security
- Long-range retro-reflective and through-beam versions have a very high operating reserve, which ensures reliable operation even when if sensor is contaminated
- Ensuring reliable operation in environments with temperatures fluctuation due to standard or high-power front lens heating (prevention and reduction of condensation water on the front lens)
- Variants with DC voltage and universal AC/DC voltage provide installation flexibility

➜ www.mysick.com/en/W24-2

For more information, just 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.

Ordering information

Other models and accessories ➜ www.mysick.com/en/W24-2

WT24-2, DC

- **Sensor principle:** Photoelectric proximity sensor
- **Detection principle:** Background suppression
- **Output type:** NPN, PNP
- **Switching mode:** Light/dark-switching
- **Adjustment:** potentiometer

Type of light	Sensing range max. [1]	Light spot size (distance)	Connection	Alarm output	Front screen heating	Time functions	Model name	Part no.
Infrared light	100 mm ... 2,500 mm	Ø 80 mm (2,500 mm)	Connector M12, 4-pin	–	–	–	WT24-2B410	1016933
					✔ [2]	✔	WT24-2B420	1017885
			Connector M12, 5-pin	✔	–	–	WT24-2V510	1017855
			Terminal connection with M16 gland	–	–	–	WT24-2B210	1016931
					✔	✔	WT24-2B220	1017882
Visible red light	100 mm ... 1,200 mm	Ø 40 mm (1,200 mm)	Connector M12, 4-pin	–	–	–	WT24-2B440	1016934
			Terminal connection with M16 gland	–	–	–	WT24-2B240	1017813
					✔	✔	WT24-2B250	1017883

[1] Object with 90 % reflectance (referred to standard white, DIN 5033)

[2] Static, low heat output, use in +5° C ... +15° C.

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Subject to change without notice

WT24-2, AC/DC

- **Sensor principle:** Photoelectric proximity sensor
- **Detection principle:** Background suppression
- **Output type:** relay
- **Switching mode:** Light/dark-switching (Provide suitable spark suppression for inductive or capacitive loads.)
- **Adjustment:** potentiometer
- **Connection:** terminal connection with M16 gland

Type of light	Sensing range max. [1]	Light spot size (distance)	Front screen heating	Time functions	Model name	Part no.
Infrared light	100 mm ... 2,500 mm	Ø 80 mm (2,500 mm)	–	–	WT24-2R210	1016932
			✔ [2]	✔	WT24-2R220	1016854
Visible red light	100 mm ... 1,200 mm	Ø 40 mm (1,200 mm)	–	–	WT24-2R240	1017854

[1] Object with 90 % reflectance (referred to standard white, DIN 5033)

[2] Static, low heat output, use in +5° C ... +15° C.

WL24-2, DC

- **Sensor principle:** Photoelectric retro-reflective sensor
- **Detection principle:** Standard optics
- **Type of light:** visible red light
- **Light spot size (distance):** Ø 250 mm (15 m)
- **Output type:** NPN, PNP
- **Switching mode:** Light/dark-switching
- **Adjustment:** potentiometer

Sensing range max. [1]	Connection	Alarm output	Front screen heating	Time functions	Model name	Part no.
0 m ... 22 m	Connector M12, 4-pin	–	–	–	WL24-2B430	1017860
			✔ [2]	✔	WL24-2B440	1017879
	Connector M12, 5-pin	✔	–	–	WL24-2V530	1017881

[1] PL80A.

[2] Static, low heat output, use in +5° C ... +15° C.

WL24-2, AC/DC

- **Sensor principle:** Photoelectric retro-reflective sensor
- **Detection principle:** Standard optics
- **Type of light:** visible red light
- **Light spot size (distance):** Ø 250 mm (15 m)
- **Output type:** relay
- **Switching mode:** Light/dark-switching (Provide suitable spark suppression for inductive or capacitive loads.)
- **Adjustment:** potentiometer
- **Connection:** terminal connection with M16 gland

Sensing range max. [1]	Front screen heating	Time functions	Model name	Part no.
0 m ... 22 m	–	–	WL24-2R230	1017857
	✔ [2]	✔	WL24-2R240	1017858

[1] PL80A.

[2] Static, low heat output, use in +5° C ... +15° C.

B

WS/WE24-2, DC

- **Sensor principle:** Through-beam photoelectric sensor
- **Type of light:** visible red light
- **Light spot size (distance):** Ø 700 mm (50 m)
- **Output type:** NPN, PNP
- **Switching mode:** Light/dark-switching
- **Adjustment:** potentiometer
- **Connection:** Connector M12, 4-pin
- **Time functions:** ✔

Sensing range max.	Front screen heating	Model name	Part no.
0 m ... 60 m	–	WS/WE24-2B430	1017853
	✔ [1]	WS/WE24-2B440	1017875

[1] Static, low heat output, use in +5° C ... +15° C.

WS/WE24-2, AC/DC

- **Sensor principle:** Through-beam photoelectric sensor
- **Type of light:** visible red light
- **Light spot size (distance):** Ø 700 mm (50 m)
- **Output type:** relay
- **Switching mode:** Light/dark-switching (Provide suitable spark suppression for inductive or capacitive loads.)
- **Adjustment:** potentiometer
- **Connection:** terminal connection with M16 gland

Sensing range max.	Front screen heating	Time functions	Model name	Part no.
0 m ... 60 m	–	–	WS/WE24-2R230	1017863
	✔ [1]	✔	WS/WE24-2R240	1017864

[1] Static, low heat output, use in +5° C ... +15° C.

Recommended accessories

	Brief description	Model name	Part no.
Device protection (mechanical)			
	Dust protection tube, air-purged, Aluminum (anodised), Mounting hardware included	OBS-W24	2015069
	Weather hood for universal clamp bracket, Steel, zinc coated, Mounting hardware included	OBW-KHS-M01	2023240
	Weather hood, Aluminum (anodised), Mounting hardware included	OBW-W24	2015070
Mounting brackets and mounting plates			
	Mounting bracket, small, Stainless steel, without mounting hardware	BEF-WK-W24	4027532
	Mounting bracket, Stainless steel (1.4301), Mounting hardware included	BEF-WN-W24	2015248
Universal bar clamp systems			
	Plate N04 for universal clamp bracket, Zinc plated steel (sheet), Diecast zinc (clamp), Universal clamp, mounting hardware	BEF-KHS-N04	2051610

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	Brief description	Model name	Part no.
Plug connectors and cables			
Illustration may differ	Head A: Female connector, M12, 4-pin, straight Head B: cable Cable: PVC, unshielded, 2 m	DOL-1204-G02M	6009382
Illustration may differ	Head A: Female connector, M12, 5-pin, straight Head B: cable Cable: PVC, unshielded, 2 m	DOL-1205-G02M	6008899
Reflectors			
	Rectangular, screw connection, 37 mm x 56 mm, PMMA/ABS, Screw-on, 2 hole mounting	PL40A	1012720
	Rectangular, screw connection, 80 mm x 80 mm, PMMA/ABS, Screw-on, 2 hole mounting	PL80A	1003865

B

At a glance

- 2 mm diameter light spot at a distance of 400 mm
- Precise adjustable background suppression
- Visible red laser LED
- Sensing range adjustment via potentiometer
- UL approval

Your benefits

- Precise detection of very small parts up to a distance of 400 mm due to 2 mm light spot
- Highly visible red laser provides quick and easy alignment
- Durable design provides high resistance to vibration

➜ www.mysick.com/en/W27-2_Laser

For more information, just 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.

Ordering information

Other models and accessories ➜ www.mysick.com/en/W27-2_Laser

WT27-2 Laser

- **Sensor principle:** Photoelectric proximity sensor
- **Light spot size (distance):** Ø 2 mm (400 mm)
- **Connection:** Connector M12, 4-pin

Sensing range max. [1]	Laser class	Output type	Model name	Part no.
100 mm ... 800 mm	1	PNP	WT27K-2F430	1059239
	2	PNP	WT27L-2F430	1016019
		NPN	WT27L-2N430	1026165

[1] Object with 90 % reflectance (referred to standard white, DIN 5033)

Recommended accessories

	Brief description	Model name	Part no.
Mounting brackets and mounting plates			
	Mounting bracket with hinged arm, Steel, zinc coated, Mounting hardware included	BEF-WN-MULTI	2064469
	Mounting bracket, Steel, zinc coated, Mounting hardware included	BEF-WN-W23	2019085
	Mounting bracket with hinged arm, Steel, zinc coated, Mounting hardware included	BEF-WN-W27	2009122

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	Brief description	Model name	Part no.
Universal bar clamp systems			
	Plate N04 for universal clamp bracket, Zinc plated steel (sheet), Diecast zinc (clamp), Universal clamp, mounting hardware	BEF-KHS-N04	2051610
Plug connectors and cables			
Illustration may differ	Head A: Female connector, M12, 4-pin, straight Head B: cable Cable: PVC, unshielded, 2 m	DOL-1204-G02M	6009382
Illustration may differ	Head A: Female connector, M12, 4-pin, angled Head B: cable Cable: PVC, unshielded, 2 m	DOL-1204-W02M	6009383

B

At a glance

- Intense visible red emitter LED with consistent light spot for PinPoint versions
- Long sensing ranges with IR LED achieve up to 2500 mm
- Precise background suppression for detection of multi-colored objects
- Universal DC or DC/AC supply voltage
- Operating temperature: –40 °C – +60 °C
- Flexible sensor settings, monitoring, advanced diagnostics, and visualization thanks to IO-Link

Your benefits

- Quick and easy commissioning due to a highly visible red PinPoint LED
- PinPoint technology can replace laser photoelectric proximity sensors in some applications. No laser safety regulations and a longer operating life due to PinPoint technology
- Resistant to ambient light, optical reflections, and crosstalk from other photoelectric devices
- Less contamination due to high operating reserves, reducing downtime
- Resistant to vibrations, reducing downtime
- Operation in harsh environments with temperatures as low as –40 °C
- IO-Link provides easy data access from the PLC
- Quick and easy configuration

➜ www.mysick.com/en/W27-3

For more information, just 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.

Ordering information

Other models and accessories ➜ www.mysick.com/en/W27-3

WTB27-3, DC

- **Sensor principle:** Photoelectric proximity sensor
- **Detection principle:** Background suppression
- **Switching mode:** Light/dark-switching

Type of light	Sensing range max. [1]	Light spot size (distance)	Output type	Adjustment	Connection	Time functions	Model name	Part no.
Visible red light	30 mm ... 1,100 mm	Ø 15 mm (500 mm)	PNP	Double teach-in button	Connector M12, 4-pin	–	WTB27-3P2443	1027745
	30 mm ... 2,000 mm	Ø 12 mm (800 mm)	PNP	Potentiometer	Connector M12, 4-pin	–	WTB27-3P2461	1044163
					Cable with connector M12, 4-pin	–	WTB27-3P3461	1048546
Infrared light	30 mm ... 1,600 mm	Ø 25 mm (800 mm)	PNP	Potentiometer	Connector M12, 4-pin	–	WTB27-3P2411	1025994
					Cable with connector M12, 4-pin, 270 mm, PVC	–	WTB27-3P3411	1044438
					Connector M12, 4-pin	✔	WTB27-3F2411	1027753
			NPN	Double teach-in button	Connector M12, 4-pin	–	WTB27-3N2413	1027761
				Potentiometer	Connector M12, 4-pin	✔	WTB27-3E2411	1027755
	30 mm ... 2,500 mm	Ø 25 mm (800 mm)	PNP	Potentiometer	Connector M12, 4-pin	–	WTB27-3P2411S18	1044508

[1] Object with 90 % reflectance (referred to standard white, DIN 5033)

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Subject to change without notice

WTB27-3, AC/DC

- **Sensor principle:** Photoelectric proximity sensor
- **Detection principle:** Background suppression
- **Output type:** relay
- **Adjustment:** potentiometer
- **Connection:** connector Q6, 6-pin, AC/UC-coding

Type of light	Switching mode [2]	Sensing range max. [1]	Light spot size (distance)	Time functions	Model name	Part no.
Visible red light	Light/dark-switching	30 mm ... 1,100 mm	Ø 15 mm (500 mm)	✔	WTB27-3R2641	1027750
Infrared light	Light/dark-switching	30 mm ... 1,600 mm	Ø 25 mm (800 mm)	✔	WTB27-3R2611	1027763

[1] Object with 90 % reflectance (referred to standard white, DIN 5033)

[2] Provide suitable spark suppression for inductive or capacitive loads. Relay contacts are separated from the power supply by a basic isolation of 3 mm. Depending on the application, additional isolation might have to be applied in the user's circuit.

WL27-3, DC

- **Sensor principle:** Photoelectric retro-reflective sensor
- **Detection principle:** Standard optics
- **Type of light:** visible red light
- **Switching mode:** Light/dark-switching

Sensing range max. [1]	Light spot size (distance)	Output type	Adjustment	Connection	Time functions	Model name	Part no.
0.1 m ... 19 m	Ø 60 mm (6 m)	PNP	–	Cable with connector M12, 4-pin, 270 mm, PVC	–	WL27-3P3460	1047955
			Potentiometer	Connector M12, 4-pin	–	WL27-3P2461	1044166
0.1 m ... 15 m	Ø 220 mm (10 m)	PNP	Potentiometer	Connector Q6, 6-pin, DC-coding	✔	WL27-3F2631	1027772
		NPN	Potentiometer	Connector Q6, 6-pin, DC-coding	✔	WL27-3E2631	1027773

[1] PL80A.

WL27-3, AC/DC

- **Sensor principle:** Photoelectric retro-reflective sensor
- **Detection principle:** Standard optics
- **Type of light:** visible red light
- **Light spot size (distance):** Ø 220 mm (10 m)
- **Output type:** relay

Sensing range max. [1]	Switching mode [2]	Adjustment	Connection	Time functions	Model name	Part no.
0.1 m ... 15 m	Light/dark-switching	Potentiometer	Connector Q6, 6-pin, AC/UC-coding	✔	WL27-3R2631	1027776

[1] PL80A.

[2] Provide suitable spark suppression for inductive or capacitive loads. Relay contacts are separated from the power supply by a basic isolation of 3 mm. Depending on the application, additional isolation might have to be applied in the user's circuit.

B

WSE27-3, DC

- **Sensor principle:** Through-beam photoelectric sensor
- **Type of light:** visible red light
- **Light spot size (distance):** Ø 600 mm (25 m)
- **Switching mode:** Light/dark-switching

Sensing range max.	Output type	Adjustment	Connection	Time functions	Model name	Part no.
0 m ... 35 m	PNP	–	Connector M12, 4-pin	–	WSE27-3P2430	1027790
		Potentiometer	Connector Q6, 6-pin, DC-coding	✔	WSE27-3F2631	1027792
	NPN	–	Connector M12, 4-pin	–	WSE27-3N2430	1028072

Recommended accessories

	Brief description	Model name	Part no.
Device protection (mechanical)			
	Protective housing for universal clamp, Zinc plated steel (protective housing), Diecast zinc (clamp), Universal clamp, mounting hardware	BEF-SG-W27	2039601
	Weather hood for universal clamp bracket, Steel, zinc coated, Mounting hardware included	OBW-KHS-M01	2023240
Mounting brackets and mounting plates			
	Mounting bracket with hinged arm, Steel, zinc coated, Mounting hardware included	BEF-WN-W27	2009122
Universal bar clamp systems			
	Plate N04 for universal clamp bracket, Zinc plated steel (sheet), Diecast zinc (clamp), Universal clamp, mounting hardware	BEF-KHS-N04	2051610
Plug connectors and cables			
Illustration may differ	Head A: Female connector, M12, 4-pin, straight Head B: cable Cable: PVC, unshielded, 2 m	DOL-1204-G02M	6009382
Reflectors			
	Rectangular, screw connection, 38 mm x 15 mm, PMMA/ABS, Screw-on, 2 hole mounting	PL20A	1012719
	Rectangular, screw connection, 37 mm x 56 mm, PMMA/ABS, Screw-on, 2 hole mounting	PL40A	1012720
	Rectangular, screw connection, 80 mm x 80 mm, PMMA/ABS, Screw-on, 2 hole mounting	PL80A	1003865
	Self-adhesive	REF-IRF-56	5314244

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Subject to change without notice

At a glance

- Highly visible red light spot thanks to the Bright Light LED
- Potentiometer for adjusting sening range
- Operating mode (light/dark) selectable via control wire
- Cable or rotatable M12 connector
- Versions for 10 – 30 V DC or 24 – 240 V DC/ 24 – 240 V AC voltage supply in compact design
- Stainless steel mounting bracket BEF-W250 included in delivery

Your benefits

- Mounting bracket is included to ease installation
- Visible red Bright Light LED for simpler alignment of the sensors
- Cable or rotatable M12 connector provide installation flexibility
- Operating mode (light/dark) is selectable via a control cable to reduce the number of device variants
- Variants with DC voltage and universal AC/DC voltage in the same housing provide increased flexibility

→ www.mysick.com/en/W250-2

For more information, just 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.

Ordering information

Other models and accessories → www.mysick.com/en/W250-2

WTB250-2, DC

- **Sensor principle:** Photoelectric proximity sensor

Sensing range max. [1]	Light spot size (distance)	Output type	Switching mode	Connection	Model name	Part no.
100 mm ... 300 mm	Ø 30 mm (300 mm)	PNP	Light/dark-switching	Connector M12, 4-pin	WTB250-2P2431	6044675
		NPN	Light/dark-switching	Connector M12, 4-pin	WTB250-2N2431	6044673
150 mm ... 500 mm	Ø 30 mm (500 mm)	PNP	Light/dark-switching	Connector M12, 4-pin	WTB250-2P2441	6044682
		NPN	Light/dark-switching	Connector M12, 4-pin	WTB250-2N2441	6044679
200 mm ... 1,000 mm	Ø 35 mm (1,000 mm)	PNP	Light/dark-switching	Connector M12, 4-pin	WTB250-2P2451	6044692
		NPN	Light/dark-switching	Connector M12, 4-pin	WTB250-2N2451	6044689

[1] Object with 90 % reflectance (referred to standard white, DIN 5033)

B

WTB250-2, AC/DC

- **Sensor principle:** Photoelectric proximity sensor

Sensing range max. [1]	Light spot size (distance)	Output type	Switching mode [2]	Connection	Model name	Part no.
100 mm ... 300 mm	Ø 30 mm (300 mm)	Relay	Light switching	Cable, 5-wire, 2 m, PVC	WTB250-2R1531	6044676
150 mm ... 500 mm	Ø 30 mm (500 mm)	Relay	Light switching	Cable, 5-wire, 2 m, PVC	WTB250-2R1541	6044683
200 mm ... 1,000 mm	Ø 35 mm (1,000 mm)	Relay	Light switching	Cable, 5-wire, 2 m, PVC	WTB250-2R1551	6044693

[1] Object with 90 % reflectance (referred to standard white, DIN 5033)

[2] Provide suitable spark suppression for inductive or capacitive loads.

WL250-2, DC

- **Sensor principle:** Photoelectric retro-reflective sensor
- **Light spot size (distance):** Ø 260 mm (8 m)

Sensing range max.	Output type	Switching mode	Connection	Model name	Part no.
0.01 m ... 15 m [1] 0.01 m ... 12 m [2]	PNP	Light/dark-switching	Cable, 4-wire, 2 m, PVC	WL250-2P1131	6044697
	NPN	Light/dark-switching	Cable, 4-wire, 2 m, PVC	WL250-2N1131	6044695
	PNP	Light/dark-switching	Connector M12, 4-pin	WL250-2P2431	6044699
	NPN	Light/dark-switching	Connector M12, 4-pin	WL250-2N2431	6044696

[1] PL80A.

[2] P250.

WL250-2, AC/DC

- **Sensor principle:** Photoelectric retro-reflective sensor

Sensing range max.	Light spot size (distance)	Output type	Switching mode [3]	Connection	Model name	Part no.
0.01 m ... 15 m [1] 0.01 m ... 12 m [2]	Ø 260 mm (8 m)	Relay	Light switching	Cable, 5-wire, 2 m, PVC	WL250-2R1531	6044700

[1] PL80A.

[2] P250.

[3] Provide suitable spark suppression for inductive or capacitive loads.

WSE250-2, DC

- **Sensor principle:** Through-beam photoelectric sensor
- **Light spot size (distance):** Ø 0.6 m (20 m)

Sensing range max.	Output type	Switching mode	Connection	Model name	Part no.
0 m ... 50 m	PNP	Light/dark-switching	Connector M12, 4-pin	WSE250-2P2431	6044705
	NPN	Light/dark-switching	Connector M12, 4-pin	WSE250-2N2431	6044711

WSE250-2, AC/DC

- **Sensor principle:** Through-beam photoelectric sensor

Sensing range max.	Light spot size (distance)	Output type	Switching mode [1]	Connection	Model name	Part no.
0 m ... 50 m	Ø 0.6 m (20 m)	Relay	Light switching	Cable, 5-wire, 2 m, PVC	WSE250-2R1531	6044707

[1] Provide suitable spark suppression for inductive or capacitive loads.

Recommended accessories

	Brief description	Model name	Part no.
Mounting brackets and mounting plates			
	Mounting bracket, Steel, zinc coated, Mounting hardware included	BEF-W250	5305850
Universal bar clamp systems			
	Plate N02 for universal clamp bracket, Zinc plated steel (sheet), Diecast zinc (clamp), Universal clamp, mounting hardware	BEF-KHS-N02	2051608
Plug connectors and cables			
Illustration may differ	Head A: Female connector, M12, 4-pin, straight Head B: cable Cable: PVC, unshielded, 2 m	DOL-1204-G02M	6009382
Reflectors			
	Rectangular, screw connection, 47 mm x 47 mm, PMMA/ABS, Screw-on, 2 hole mounting	P250	5304812
	Rectangular, screw connection, 38 mm x 15 mm, PMMA/ABS, Screw-on, 2 hole mounting	PL20A	1012719
	Rectangular, screw connection, 56 mm x 28 mm, PMMA/ABS, Screw-on, 2 hole mounting	PL30A	1002314
	Rectangular, screw connection, 37 mm x 56 mm, PMMA/ABS, Screw-on, 2 hole mounting	PL40A	1012720
	Rectangular, screw connection, 80 mm x 80 mm, PMMA/ABS, Screw-on, 2 hole mounting	PL80A	1003865
	Self-adhesive	REF-IRF-56	5314244

B

At a glance

- Highly visible red light spot thanks to the BrightLight LED
- Potentiometer for adjusting sensing range
- Light/dark switching (DC devices only)
- Rotatable connector, cable connection or terminal chamber
- Versions for 10 – 30 V DC or 24 – 240 V DC/AC voltage supply
- AC/DC (-2Hxxxx) devices are compliant with EN61000-6-3 (electromagnetic interference for “residential, commercial and light-industrial environments”)
- Stainless steel mounting bracket and P250 reflector (for WL280 only) are included in delivery

Your benefits

- Simple and fast commissioning with the highly visible light spot of the BrightLight LED
- Simple operation via potentiometer
- Light/dark switching provides application flexibility
- All necessary mounting and operating accessories are included in delivery, enabling quick and easy setup: since mounting bracket (stainless steel 1.4301) is included in delivery scope
- DC devices and AC/DC devices available in the same housing, allowing electrical flexibility
- Less contamination due to high operating reserves, reducing downtime

➜ www.mysick.com/en/W280-2

For more information, just 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.

Ordering information

Other models and accessories ➜ www.mysick.com/en/W280-2

WTE280-2, DC

- **Sensor principle:** Photoelectric proximity sensor
- **Light spot size (distance):** Ø 45 mm (1,500 mm)
- **Switching mode:** Light/dark-switching
- **Connection:** Connector M12, 4-pin

Sensing range max. [1]	Output type	Model name	Part no.
10 mm ... 2,000 mm	PNP	WTE280-2P2431	6044728
	NPN	WTE280-2N2431	6044729

[1] Object with 90 % reflectance (referred to standard white, DIN 5033)

WTE280-2, AC

- **Sensor principle:** Photoelectric proximity sensor
- **Light spot size (distance):** Ø 45 mm (1,500 mm)
- **Output type:** relay
- **Switching mode:** Light switching (Provide suitable spark suppression for inductive or capacitive loads.)

Sensing range max. [1]	Connection	Overvoltage category	Model name	Part no.
10 mm ... 2,000 mm	Cable, 5-wire, 2 m	2	WTE280-2H1531	6044731
		3	WTE280-2R1531	6044759
	Cable gland	2	WTE280-2H4331	6044730
		3	WTE280-2R4331	6044758

[1] Object with 90 % reflectance (referred to standard white, DIN 5033)

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Subject to change without notice

WL280-2, DC

- **Sensor principle:** Photoelectric retro-reflective sensor
- **Light spot size (distance):** Ø 260 mm (8 m)
- **Switching mode:** Light/dark-switching
- **Connection:** Connector M12, 4-pin

Sensing range max.	Output type	Model name	Part no.
0.01 m ... 15 m [1] 0.01 m ... 12 m [2]	PNP	WL280-2P2431	6044736
	NPN	WL280-2N2431	6044737

[1] PL80A.

[2] P250.

WL280-2, AC

- **Sensor principle:** Photoelectric retro-reflective sensor
- **Light spot size (distance):** Ø 260 mm (8 m)
- **Output type:** relay
- **Switching mode:** Light switching (Provide suitable spark suppression for inductive or capacitive loads.)

Sensing range max. [1]	Connection	Overvoltage category	Model name	Part no.
0.01 m ... 15 m	Cable, 5-wire, 2 m	2	WL280-2H1531	6044739
		3	WL280-2R1531	6044761
	Cable gland	2	WL280-2H4331	6044738
		3	WL280-2R4331	6044760

[1] PL80A.

WSE280-2, DC

- **Sensor principle:** Through-beam photoelectric sensor
- **Light spot size (distance):** Ø 0.6 m (20 m)
- **Switching mode:** Light/dark-switching
- **Connection:** Connector M12, 4-pin

Sensing range max.	Output type	Model name	Part no.
0 m ... 60 m	PNP	WSE280-2P2431	6044745
	NPN	WSE280-2N2431	6044746

WSE280-2, AC

- **Sensor principle:** Through-beam photoelectric sensor
- **Light spot size (distance):** Ø 0.6 m (20 m)
- **Output type:** relay
- **Switching mode:** Light switching (Provide suitable spark suppression for inductive or capacitive loads.)

Sensing range max.	Connection	Overvoltage category	Model name	Part no.
0 m ... 60 m	Cable, 5-wire, 2 m	2	WSE280-2H1531	6044748
		3	WSE280-2R1531	6044763
	Cable gland	2	WSE280-2H4331	6044747
		3	WSE280-2R4331	6044762

Recommended accessories

	Brief description	Model name	Part no.
Mounting brackets and mounting plates			
	Mounting bracket, Stainless steel V2A (1.4301), Mounting hardware included	BEF-W280	5313885
Universal bar clamp systems			
	Plate N02 for universal clamp bracket, Zinc plated steel (sheet), Diecast zinc (clamp), Universal clamp, mounting hardware	BEF-KHS-N02	2051608
Plug connectors and cables			
Illustration may differ	Head A: Female connector, M12, 4-pin, straight Head B: cable Cable: PVC, unshielded, 2 m	DOL-1204-G02M	6009382
Reflectors			
	Rectangular, screw connection, 47 mm x 47 mm, PMMA/ABS, Screw-on, 2 hole mounting	P250	5304812
	Rectangular, screw connection, 38 mm x 15 mm, PMMA/ABS, Screw-on, 2 hole mounting	PL20A	1012719
	Rectangular, screw connection, 56 mm x 28 mm, PMMA/ABS, Screw-on, 2 hole mounting	PL30A	1002314
	Rectangular, screw connection, 37 mm x 56 mm, PMMA/ABS, Screw-on, 2 hole mounting	PL40A	1012720
	Rectangular, screw connection, 80 mm x 80 mm, PMMA/ABS, Screw-on, 2 hole mounting	PL80A	1003865
	Self-adhesive	REF-IRF-56	5314244

At a glance

- WTT280L-2: sensing distance up to 4 m
- WLT280L-2: sensing distance up to 18 m
- Complete background suppression: very small black/white shift, insensitive against reflections from the background (e.g. shiny metal, window, safety vest)
- Visible red class 1 laser light
- Version 1: with 1 x switching output and light/dark switch, version 2: with 2 x switching outputs and light/dark switch
- Disable laser by wire
- Reliable detection also in very fast production processes thanks to the switching frequency of 1000 Hz

Your benefits

- Reliable target detection with difficult target colors, angles and color transitions (black/white shift)
- One sensor with two outputs and two status LEDs improves application flexibility and reduces the number of sensors needed
- Quick and easy comissioning with sensing distance adjustment potentiometers and status LED – one for each output
- Quick and easy alignment with a red class 1 laser light
- Rotatable connector and light/dark switch for mounting and installation flexibility

➜ www.mysick.com/en/W280L-2_Long_Range

For more information, just 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.

Ordering information

Other models and accessories ➜ www.mysick.com/en/W280L-2_Long_Range

WTT280L-2 Long Range

- **Sensor principle:** Photoelectric proximity sensor
- **Voltage type:** DC
- **Light spot size (distance):** Ø 12 mm (3 m)
- **Switching mode:** Light/dark-switching

Sensing range max.	Output type	Connection	Model name	Part no.
200 mm ... 4,000 mm [1] 200 mm ... 3,000 mm [2]	PNP	Cable, 5-wire, 2 m, PVC	WTT280L-2P1531	6048065
		Connector M12, 5-pin	WTT280L-2P2531	6048061
	NPN	Cable, 5-wire, 2 m, PVC	WTT280L-2N1531	6048067
		Connector M12, 5-pin	WTT280L-2N2531	6048063
	2 x PNP	Cable, 5-wire, 2 m, PVC	WTT280L-2P1536	6048066
		Connector M12, 5-pin	WTT280L-2P2536	6048062
	2 x NPN	Cable, 5-wire, 2 m, PVC	WTT280L-2N1536	6048068
		Connector M12, 5-pin	WTT280L-2N2536	6048064

[1] Object with 90 % reflectance (referred to standard white, DIN 5033)

[2] Objects to be sensed with 6 % reflectivity (based on black)

B

WLT280L-2 Long Range

- **Sensor principle:** Photoelectric proximity sensor
- **Voltage type:** DC
- **Light spot size (distance):** Ø 50 mm (18 m)
- **Switching mode:** Light/dark-switching
- **Connection:** Connector M12, 5-pin

Sensing range max. [1]	Output type	Model name	Part no.
200 mm ... 18,000 mm	2 x PNP	WLT280L-2P2536	6048069
	2 x NPN	WLT280L-2N2536	6048070

[1] Reflector P250, PL80A.

Recommended accessories

	Brief description	Model name	Part no.
Mounting brackets and mounting plates			
	Mounting bracket, Stainless steel V2A (1.4301), Mounting hardware included	BEF-W280	5313885
Universal bar clamp systems			
	Plate N04 for universal clamp bracket, Zinc plated steel (sheet), Diecast zinc (clamp), Universal clamp, mounting hardware	BEF-KHS-N04	2051610
Plug connectors and cables			
Illustration may differ	Head A: Female connector, M12, 5-pin, straight Head B: cable Cable: PVC, unshielded, 2 m	DOL-1205-G02M	6008899
Reflectors			
	Fine triple, screw connection, suitable for laser sensors, 47 mm x 47 mm, PMMA/ABS, Screw-on, 2 hole mounting	P250F	5308843
	Fine triple, screw connection, suitable for laser sensors, 18 mm x 18 mm, PMMA/ABS, Screw-on, 2 hole mounting	PL10F	5311210
	Fine triple, screw connection, suitable for laser sensors, 38 mm x 16 mm, PMMA/ABS, Screw-on, 2 hole mounting	PL20F	5308844
	Fine triple, screw connection, suitable for laser sensors, 56 mm x 28 mm, PMMA/ABS, Screw-on, 2 hole mounting	PL30F	5326523
	Fine triple, screw connection, suitable for laser sensors, 76 mm x 45 mm, PMMA/ABS, Screw-on, 2 hole mounting	PL81-1F	5325060
	Suitable for laser sensors, self-adhesive, cut, see alignment note, 56.3 mm x 56.3 mm, self-adhesive	REF-AC1000-56	4063030

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Subject to change without notice

At a glance

- Low-cost cylindrical M18 sensor with extra short housing
- Five different housing styles
- Variety of plastic and metal housing styles, with straight or right angle optics
- Bright and highly visible PinPoint-LED
- Potentiometer for adjustment of switching threshold (depending on type)
- Special flush type, one-piece metal housing
- Highly visible signal indicator LED
- IP 67 rating

Your benefits

- Space-saving solution due to short housing
- Flexible mounting options due to versatile housing styles
- Easy installation and precise detection due to PinPoint LED
- Reduced maintenance costs due to high tightening torque of single piece flush metal housing
- Rugged and reliable with proven SICK technology
- Highly visible signal indicator LED saves maintenance and commissioning time

➜ www.mysick.com/en/GR18S

For more information, just 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.

Ordering information

Other models and accessories ➜ www.mysick.com/en/GR18S

GRTE18S, Metal

- **Sensor principle:** Photoelectric proximity sensor
- **Detection principle:** energetic
- **Adjustment:** potentiometer, 270 °
- **Connection:** Connector M12, 3-pin

Housing design	Sensing range max. [1]	Light spot size (distance)	Switching mode	Output type	Model name	Part no.
Axial	3 mm ... 115 mm	Ø 8 mm (100 mm)	Light switching	PNP	GRTE18S-P2312	1058204
				NPN	GRTE18S-N2312	1059408
	5 mm ... 550 mm	Ø 9 mm (400 mm)	Light switching	PNP	GRTE18S-P2342	1058200
				NPN	GRTE18S-N2342	1059482
Axial, fully flush	3 mm ... 115 mm	Ø 8 mm (100 mm)	Light switching	PNP	GRTE18S-P231Z	1059436
			Dark-switching	NPN	GRTE18S-E231Z	1059409
	5 mm ... 550 mm	Ø 9 mm (400 mm)	Dark-switching	PNP	GRTE18S-F234Z	1059486
				NPN	GRTE18S-E234Z	1059483
Radial, fully flush	3 mm ... 115 mm	Ø 8 mm (100 mm)	Light switching	PNP	GRTE18S-P231X	1059440
	5 mm ... 550 mm	Ø 9 mm (400 mm)	Light switching	PNP	GRTE18S-P234X	1059489

[1] Object with 90 % reflectance (referred to standard white, DIN 5033)

B

GRTE18S, Plastic

- **Sensor principle:** Photoelectric proximity sensor
- **Detection principle:** energetic
- **Adjustment:** potentiometer, 270 °
- **Connection:** Connector M12, 3-pin

Housing design	Sensing range max. [1]	Light spot size (distance)	Switching mode	Output type	Model name	Part no.
Axial	3 mm ... 115 mm	Ø 8 mm (100 mm)	Light switching	PNP	GRTE18S-P2317	1058196
				NPN	GRTE18S-N2317	1059378
	5 mm ... 550 mm	Ø 9 mm (400 mm)	Light switching	PNP	GRTE18S-P2347	1058193
				NPN	GRTE18S-N2347	1059441
Radial	3 mm ... 115 mm	Ø 8 mm (100 mm)	Dark-switching	PNP	GRTE18S-F2319	1059406
	5 mm ... 550 mm	Ø 9 mm (400 mm)	Dark-switching	PNP	GRTE18S-F2349	1059480

[1] Object with 90 % reflectance (referred to standard white, DIN 5033)

GRL18S, Metal

- **Sensor principle:** Photoelectric retro-reflective sensor
- **Detection principle:** Standard optics
- **Light spot size (distance):** Ø 175 mm (7 m)

Housing design	Sensing range max. [1]	Switching mode	Output type	Connection	Model name	Part no.
Axial	0.03 m ... 7.2 m	Light switching	PNP	Connector M12, 3-pin	GRL18S-P2331	1058199
			NPN	Cable, 3-wire, 2 m, PVC	GRL18S-N1331	1059538
		Dark-switching	NPN	Cable, 3-wire, 2 m, PVC	GRL18S-E1331	1059537
Axial, fully flush	0.03 m ... 7.2 m	Light switching	PNP	Connector M12, 3-pin	GRL18S-P233Y	1058207
Radial, fully flush	0.03 m ... 7.2 m	Light switching	PNP	Connector M12, 3-pin	GRL18S-P233W	1058210

[1] PL80A.

GRL18S, Plastic

- **Sensor principle:** Photoelectric retro-reflective sensor
- **Detection principle:** Standard optics
- **Light spot size (distance):** Ø 175 mm (7 m)

Housing design	Sensing range max. [1]	Switching mode	Output type	Connection	Model name	Part no.
Axial	0.03 m ... 7.2 m	Light switching	PNP	Connector M12, 3-pin	GRL18S-P2336	1058192
			NPN	Cable, 3-wire, 2 m, PVC	GRL18S-N1336	1059531
		Dark-switching	PNP	Connector M12, 3-pin	GRL18S-F2336	1059533
			NPN	Cable, 3-wire, 2 m, PVC	GRL18S-E1336	1059530
Radial	0.03 m ... 7.2 m	Light switching	PNP	Connector M12, 3-pin	GRL18S-P2338	1058212
		Dark-switching	PNP	Connector M12, 3-pin	GRL18S-F2338	1058211

[1] PL80A.

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Subject to change without notice

GRSE18S, Metal

- **Sensor principle:** Through-beam photoelectric sensor
- **Light spot size (distance):** Ø 250 mm (10 m)

Housing design	Sensing range max.	Switching mode	Output type	Connection	Model name	Part no.
Axial	0 m ... 15 m	Light switching	PNP	Connector M12, 3-pin	GRSE18S-P2331	1059550
		Dark-switching	NPN	Cable, 3-wire, 2 m, PVC	GRSE18S-E1331	1059548
Radial, fully flush	0 m ... 15 m	Light switching	PNP	Connector M12, 3-pin	GRSE18S-P233W	1059552
		Dark-switching	PNP	Connector M12, 3-pin	GRSE18S-F233W	1059551

GRSE18S, Plastic

- **Sensor principle:** Through-beam photoelectric sensor
- **Housing design:** axial
- **Light spot size (distance):** Ø 250 mm (10 m)

Sensing range max.	Switching mode	Output type	Connection	Model name	Part no.
0 m ... 15 m	Light switching	PNP	Connector M12, 3-pin	GRSE18S-P2336	1058215
	Dark-switching	NPN	Cable, 3-wire, 2 m, PVC	GRSE18S-E1336	1059543

Recommended accessories

	Brief description	Model name	Part no.
Universal bar clamp systems			
	Plate N06 for universal clamp bracket, Zinc plated steel (sheet), Diecast zinc (clamp), Universal clamp, mounting hardware	BEF-KHS-N06	2051612
Plug connectors and cables			
Illustration may differ	Head A: Female connector, M12, 4-pin, straight Head B: cable Cable: PVC, unshielded, 2 m	DOL-1204-G02M	6009382
Illustration may differ	Head A: Female connector, M12, 4-pin, angled Head B: cable Cable: PVC, unshielded, 2 m	DOL-1204-W02M	6009383

B

	Brief description	Model name	Part no.
Reflectors			
	Round, screw connection, PMMA/ABS, Center hole mounting, screw-on	C110A	5304549
	Rectangular, screw connection, 47 mm x 47 mm, PMMA/ABS, Screw-on, 2 hole mounting	P250	5304812
	Rectangular, screw connection, 38 mm x 15 mm, PMMA/ABS, Screw-on, 2 hole mounting	PL20A	1012719
	Rectangular, screw connection, 56 mm x 28 mm, PMMA/ABS, Screw-on, 2 hole mounting	PL30A	1002314
	Rectangular, screw connection, 37 mm x 56 mm, PMMA/ABS, Screw-on, 2 hole mounting	PL40A	1012720
	Rectangular, screw connection, 80 mm x 80 mm, PMMA/ABS, Screw-on, 2 hole mounting	PL80A	1003865
	Self-adhesive	REF-IRF-56	5314244

8011993/2014-07-24
Subject to change without notice

At a glance

- Low-cost cylindrical M18 sensor with extra short housing
- Potentiometer for adjustment of switching threshold
- Five different housing styles
- Variety of plastic and metal housing styles, with straight or right angle optics
- Bright and highly visible PinPoint-LED
- Special flush type, one-piece metal housing
- Highly visible signal indicator LED
- IP 67 rating

Your benefits

- Space-saving solution due to short housing
- Flexible mounting options due to versatile housing styles
- Potentiometer for adjustment of switching threshold allows detection of transparent objects.
- Easy installation and precise detection due to PinPoint LED
- Reduced maintenance costs due to high tightening torque of single piece flush metal housing
- Rugged and reliable with proven SICK technology
- Highly visible signal indicator LED saves maintenance and commissioning time

→ www.mysick.com/en/GR18SG

For more information, just 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.

Ordering information

Other models and accessories → www.mysick.com/en/GR18SG

GRL18SG, Metal, clear material detection

- **Sensor principle:** Photoelectric retro-reflective sensor
- **Detection principle:** Standard optics
- **Light spot size (distance):** Ø 175 mm (7 m)
- **Switching mode:** Dark-switching
- **Output type:** PNP
- **Adjustment:** potentiometer, 270 °
- **Connection:** Connector M12, 3-pin

Housing design	Sensing range max. [1]	Model name	Part no.
Axial	0.03 m ... 7.2 m	GRL18SG-F2332	1059555
Axial, fully flush	0.03 m ... 7.2 m	GRL18SG-F233Z	1059556
Radial, fully flush	0.03 m ... 7.2 m	GRL18SG-F233X	1059557

[1] PL80A.

B

GRL18SG, Plastic, clear material detection

- **Sensor principle:** Photoelectric retro-reflective sensor
- **Detection principle:** Standard optics
- **Light spot size (distance):** Ø 175 mm (7 m)
- **Switching mode:** Dark-switching
- **Output type:** PNP
- **Adjustment:** potentiometer, 270 °
- **Connection:** Connector M12, 3-pin

Housing design	Sensing range max. [1]	Model name	Part no.
Axial	0.03 m ... 7.2 m	GRL18SG-F2337	1059553
Radial	0.03 m ... 7.2 m	GRL18SG-F2339	1059554

[1] PL80A.

Recommended accessories

	Brief description	Model name	Part no.
Universal bar clamp systems			
	Plate N06 for universal clamp bracket, Zinc plated steel (sheet), Diecast zinc (clamp), Universal clamp, mounting hardware	BEF-KHS-N06	2051612
Plug connectors and cables			
Illustration may differ	Head A: Female connector, M12, 4-pin, straight Head B: cable Cable: PVC, unshielded, 2 m	DOL-1204-G02M	6009382
Illustration may differ	Head A: Female connector, M12, 4-pin, angled Head B: cable Cable: PVC, unshielded, 2 m	DOL-1204-W02M	6009383
Reflectors			
	Fine triple, screw connection, suitable for laser sensors, 47 mm x 47 mm, PMMA/ABS, Screw-on, 2 hole mounting	P250F	5308843
	Fine triple, chemically resistant, screw connection, 18 mm x 18 mm, Plastic, Screw-on, 2 hole mounting	PL10F CHEM	5321636
	Fine triple, chemically resistant, screw connection, suitable for laser sensors, 16 mm x 38 mm, Plastic, Screw-on, 2 hole mounting	PL20F-CHEM	5326089
	Fine triple, screw connection, suitable for laser sensors, 56 mm x 28 mm, PMMA/ABS, Screw-on, 2 hole mounting	PL30F	5326523
	Fine triple, screw connection, suitable for laser sensors, 76 mm x 45 mm, PMMA/ABS, Screw-on, 2 hole mounting	PL81-1F	5325060
	Suitable for laser sensors, self-adhesive, cut, see alignment note, 56.3 mm x 56.3 mm, self-adhesive	REF-AC1000-56	4063030

8011993/2014-07-24
Subject to change without notice

At a glance

- Laser emitter LED enclosed in a cylindrical M18 housing
- Laser class 1
- Fast response time
- Straight or right-angle housing
- Durable metal housing
- IP 67
- Small visible light spot to detect small objects

Your benefits

- Lowest-cost laser sensor in M18 cylindrical housing saves installation costs
- Time-saving installation and alignment with highly visible light spot
- Laser class 1 does not require increased safety measures or markings, reducing installation costs
- Fast response time ensures reliable object detection at high speeds and increases machine throughput

➜ **www.mysick.com/en/V18_Laser**

For more information, just 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.

Ordering information

Other models and accessories ➜ **www.mysick.com/en/V18_Laser**

VTE18L

- **Sensor principle:** Photoelectric proximity sensor
- **Detection principle:** energetic
- **Switching mode:** Light/dark-switching
- **Adjustment:** cable, Single teach-in button
- **Connection:** Connector M12, 4-pin

Housing design	Sensing range max. [1]	Light spot size (distance)	Output type	Model name	Part no.
Axial	0 mm ... 400 mm	Ø 8 mm (300 mm)	PNP	VTE18L-4P324	6027418
			NPN	VTE18L-4N324	6027420
Radial	2 mm ... 250 mm	Ø 5 mm (200 mm)	PNP	VTE18L-4P344	6027422
			NPN	VTE18L-4N344	6027424

[1] Object with 90 % reflectance (referred to standard white, DIN 5033)

B

VL18L

- **Sensor principle:** Photoelectric retro-reflective sensor
- **Detection principle:** Standard optics
- **Light spot size (distance):** Ø 9 mm (35 m)
- **Switching mode:** Light/dark-switching
- **Adjustment:** cable, Single teach-in button
- **Connection:** Connector M12, 4-pin

Housing design	Sensing range max. [1]	Output type	Model name	Part no.
Axial	0.1 m ... 35 m	PNP	VL18L-4P324	6027430
		NPN	VL18L-4N324	6027432
Radial	0.1 m ... 35 m	PNP	VL18L-4P344	6027434
		NPN	VL18L-4N344	6027436

[1] P250F.

VSE18L

- **Sensor principle:** Through-beam photoelectric sensor
- **Light spot size (distance):** Ø 40 mm (50 m)
- **Switching mode:** Light/dark-switching
- **Adjustment:** potentiometer, 270 °
- **Connection:** Connector M12, 4-pin

Housing design	Sensing range max.	Output type	Model name	Part no.
Axial	0 m ... 60 m	PNP	VSE18L-4P324	6027931
		NPN	VSE18L-4N324	6027933
Radial	0 m ... 60 m	PNP	VSE18L-4P344	6027935
		NPN	VSE18L-4N344	6027937

8011993/2014-07-24
Subject to change without notice

At a glance

- IP 69K-rated cylindrical photoelectric sensors in M18 stainless steel housing
- Resistant to all common cleaning agents and certified by independent institutes
- Extended temperature range: +85° C (long-term), +100°C / 15 min. (short-term)
- Touch (smart) teach-in adjustment
- All sensor materials, including the housing, LED and lens are resistant to chemicals
- IP 69K and IP 68 according to DIN 40050
- Laser-etched part numbers
- Ecolab & JohnsonDiversey certified for chemical resistance

Your benefits

- Simple, time-saving design ensures easy mounting, alignment and replacement
- IP 69K-rated stainless steel housing has a long service life that withstands wash down environments, reducing maintenance time and costs
- Unique touch-teach feature and lock/unlock functionality allow users to control who can change the sensor setting, which reduces the chances of disturbing a proven process and saves commissioning and maintenance time
- Laser-etched part numbers ensures the part numbers will not be washed off, saving maintenance time

➜ **www.mysick.com/en/V18V**

For more information, just 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.

Ordering information

Other models and accessories ➜ **www.mysick.com/en/V18V**

VTF18V

- **Sensor principle:** Photoelectric proximity sensor
- **Detection principle:** energetic
- **Switching mode:** Light/dark-switching
- **Adjustment:** Single teach-in button
- **Connection:** Connector M12, 4-pin PPS (Griamid)

Sensing range max. [1]	Light spot size (distance)	Output type	Model name	Part no.
0 mm ... 110 mm	Ø 15 mm (100 mm)	PNP	VTF18-4P1240V	6035487
		NPN	VTF18-4N1240V	6035488

[1] Object with 90 % reflectance (referred to standard white, DIN 5033)

VTE18V

- **Sensor principle:** Photoelectric proximity sensor
- **Detection principle:** energetic
- **Switching mode:** Light/dark-switching
- **Adjustment:** Single teach-in button
- **Connection:** Connector M12, 4-pin PPS (Griamid)

Sensing range max. [1]	Light spot size (distance)	Output type	Model name	Part no.
0 mm ... 450 mm	Ø 60 mm (400 mm)	PNP	VTE18-4P4240V	6035489
		NPN	VTE18-4N4240V	6035490
0 mm ... 900 mm	Ø 100 mm (800 mm)	PNP	VTE18-4P8240V	6035491
		NPN	VTE18-4N8240V	6035492

[1] Object with 90 % reflectance (referred to standard white, DIN 5033)

B

VTB18V

- **Sensor principle:** Photoelectric proximity sensor
- **Detection principle:** Background suppression
- **Switching mode:** Light/dark-switching
- **Adjustment:** Single teach-in button
- **Connection:** Connector M12, 4-pin PPS (Griamid)

Sensing range max. [1]	Light spot size (distance)	Output type	Model name	Part no.
0 mm ... 140 mm	Ø 15 mm (130 mm)	PNP	VTB18-4P1240V	6035493
		NPN	VTB18-4N1240V	6035494
0 mm ... 100 mm	Ø 3 mm (100 mm)	PNP	VTB18-4P1240VS01	6037754
		NPN	VTB18-4N1240VS01	6037755

[1] Object with 90 % reflectance (referred to standard white, DIN 5033)

VL18V, clear material detection

- **Sensor principle:** Photoelectric retro-reflective sensor
- **Detection principle:** Standard optics
- **Switching mode:** Light/dark-switching
- **Connection:** Connector M12, 4-pin PPS (Griamid)

Sensing range max. [1]	Light spot size (distance)	Output type	Model name	Part no.
0.035 m ... 4.5 m	Ø 60 mm (1 m)	PNP	VL18-4P2240V	6035497
		NPN	VL18-4N2240V	6035498

[1] PL80A.

VL18V

- **Sensor principle:** Photoelectric retro-reflective sensor
- **Detection principle:** Standard optics
- **Switching mode:** Light/dark-switching
- **Connection:** Connector M12, 4-pin PPS (Griamid)

Sensing range max. [1]	Light spot size (distance)	Output type	Model name	Part no.
0.1 m ... 5 m	Ø 200 mm (4.5 m)	PNP	VL18-4P3140V	6035495
		NPN	VL18-4N3140V	6035496

[1] PL80A.

VS/VE18V

- **Sensor principle:** Through-beam photoelectric sensor
- **Switching mode:** Light/dark-switching
- **Connection:** Connector M12, 4-pin PPS (Griamid)

Sensing range max.	Light spot size (distance)	Output type	Model name	Part no.
0 m ... 20 m	Ø 600 mm (15 m)	PNP	VS/VE18-4P3140V	6035499
		NPN	VS/VE18-4N3140V	6035500

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Recommended accessories

	Brief description	Model name	Part no.
Universal bar clamp systems			
	Plate N06N for universal clamp bracket, M18, Stainless steel 1.4571 (sheet), Stainless steel 1.4408 (clamp), Universal clamp, mounting hardware	BEF-KHS-N06N	2051622
Plug connectors and cables			
	Head A: Female connector, M12, 4-pin, straight Head B: cable Cable: PVC, unshielded, 2 m	DOL-1204-G02MN	6028128
	Head A: Female connector, M12, 4-pin, angled Head B: cable Cable: PVC, unshielded, 2 m	DOL-1204-W02MN	6028129
Reflectors			
	Chemically resistant, screw connection, 47 mm x 47 mm, Plastic, Screw-on, 2 hole mounting	P250 CHEM	5321097
	Fine triple, chemically resistant, screw connection, 18 mm x 18 mm, Plastic, Screw-on, 2 hole mounting	PL10F CHEM	5321636
	Fine triple, chemically resistant, screw connection, suitable for laser sensors, 16 mm x 38 mm, Plastic, Screw-on, 2 hole mounting	PL20F-CHEM	5326089
	Antifog, for prevention of moisture fogging on the reflection area, screw connection, 56 mm x 37 mm, PMMA/ABS, Screw-on, 2 hole mounting	PL40A Antifog	5322011
	Stainless steel reflector, wash-down design, chemically resistant, Enclosure rating IP 69K, screw connection, 14 mm x 14 mm, Stainless steel V4A (1.4404, 316L), Screw-on, 2 hole mounting	PLV14-A	2063405
	Self-adhesive	REF-IRF-56	5314244

B

At a glance

- Low-cost M18 housing sensor on the market
- Long sensing distances: 100 mm, 400 mm, 800 mm (proximity sensor), 300 mm (proximity sensor with BGS), 6 m (retro-reflective sensor) and 20 m (through-beam sensor)
- Bright power and signal LEDs with 360° visibility
- Wide product portfolio solves a broad range of applications
- High switching frequencies up to 1000 Hz
- Available in a metal housing for applications in harsh environments
- Optical axis selectively axial or radial (90°)

Your benefits

- Low-cost M18 cylindrical sensor on the market reduces installation costs
- Bright red sender LED simplifies alignment and saves installation time
- Bright power and signal LEDs with 360° visibility offer quick and simple troubleshooting, reducing maintenance time and costs
- The flat and smooth lens reduces the collection of dust and dirt, ensuring safe operation with less maintenance and fewer costs

➜ www.mysick.com/en/V180-2

For more information, just 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.

Ordering information

Other models and accessories ➜ www.mysick.com/en/V180-2

VTE180-2, Metal

- **Sensor principle:** Photoelectric proximity sensor
- **Detection principle:** Background blanking
- **Light spot size (distance):** Ø 20 mm (400 mm)
- **Adjustment:** potentiometer, 270 °
- **Connection:** Connector M12, 4-pin

Sensing range max. [1]	Optical axis	Output type	Switching mode	Model name	Part no.
1 mm ... 500 mm	Axial	PNP	Light/dark-switching [2]	VTE180-2P42442	6041807
		NPN	Light/dark-switching [3]	VTE180-2N42442	6041805
1 mm ... 450 mm	Radial	PNP	Light/dark-switching [2]	VTE180-2P42444	6043815
		NPN	Light/dark-switching [3]	VTE180-2N42444	6043813

[1] Object with 90 % reflectance (referred to standard white, DIN 5033)

[2] Control wire open: dark-switching D.ON.

[3] Control wire open: light-switching L.ON.

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Subject to change without notice

VTE180-2, Plastic

- **Sensor principle:** Photoelectric proximity sensor
- **Detection principle:** Background blanking
- **Light spot size (distance):** Ø 20 mm (400 mm)
- **Adjustment:** potentiometer, 270 °
- **Connection:** Connector M12, 4-pin

Sensing range max. [1]	Optical axis	Output type	Switching mode	Model name	Part no.
1 mm ... 500 mm	Axial	PNP	Light/dark-switching [2]	VTE180-2P42447	6037484
		NPN	Light/dark-switching [3]	VTE180-2N42447	6037482
1 mm ... 450 mm	Radial	PNP	Light/dark-switching [2]	VTE180-2P42449	6043819
		NPN	Light/dark-switching [3]	VTE180-2N42449	6043817

[1] Object with 90 % reflectance (referred to standard white, DIN 5033)
[2] Control wire open: dark-switching D.ON.
[3] Control wire open: light-switching L.ON.

VTF180-2, Metal

- **Sensor principle:** Photoelectric proximity sensor
- **Detection principle:** Background blanking
- **Light spot size (distance):** Ø 8 mm (100 mm)
- **Adjustment:** potentiometer, 270 °
- **Connection:** Connector M12, 4-pin

Sensing range max. [1]	Optical axis	Output type	Switching mode	Model name	Part no.
1 mm ... 130 mm	Radial	PNP	Light/dark-switching [2]	VTF180-2P42414	6043806
		NPN	Light/dark-switching [3]	VTF180-2N42414	6043804
1 mm ... 140 mm	Axial	PNP	Light/dark-switching [2]	VTF180-2P42412	6041803
		NPN	Light/dark-switching [3]	VTF180-2N42412	6041801

[1] Object with 90 % reflectance (referred to standard white, DIN 5033)
[2] Control wire open: dark-switching D.ON.
[3] Control wire open: light-switching L.ON.

VTF180-2, Plastic

- **Sensor principle:** Photoelectric proximity sensor
- **Detection principle:** Background blanking
- **Light spot size (distance):** Ø 8 mm (100 mm)
- **Adjustment:** potentiometer, 270 °
- **Connection:** Connector M12, 4-pin

Sensing range max. [1]	Optical axis	Output type	Switching mode	Model name	Part no.
1 mm ... 130 mm	Radial	PNP	Light/dark-switching [2]	VTF180-2P42419	6043811
		NPN	Light/dark-switching [3]	VTF180-2N42419	6043808
1 mm ... 140 mm	Axial	PNP	Light/dark-switching [2]	VTF180-2P42417	6037480
		NPN	Light/dark-switching [3]	VTF180-2N42417	6037478

[1] Object with 90 % reflectance (referred to standard white, DIN 5033)
[2] Control wire open: dark-switching D.ON.
[3] Control wire open: light-switching L.ON.

B

VL180-2, Metal

- **Sensor principle:** Photoelectric retro-reflective sensor
- **Detection principle:** Standard optics
- **Adjustment:** potentiometer, 270 °
- **Connection:** Connector M12, 4-pin

Sensing range max. [1]	Light spot size (distance)	Optical axis	Output type	Switching mode	Model name	Part no.
0.05 m ... 5.5 m	Ø 270 mm (4 m)	Radial	PNP	Light/dark-switching [2]	VL180-2P42433	6043834
			NPN	Light/dark-switching [3]	VL180-2N42433	6043830
0.05 m ... 7 m	Ø 400 mm (6 m)	Axial	PNP	Light/dark-switching [2]	VL180-2P42431	6041819
			NPN	Light/dark-switching [3]	VL180-2N42431	6041817

[1] PL80A.
[2] Control wire open: dark-switching D.ON.
[3] Control wire open: light-switching L.ON.

VL180-2, Plastic

- **Sensor principle:** Photoelectric retro-reflective sensor
- **Detection principle:** Standard optics
- **Adjustment:** potentiometer, 270 °
- **Connection:** Connector M12, 4-pin

Sensing range max. [1]	Light spot size (distance)	Optical axis	Output type	Switching mode	Model name	Part no.
0.05 m ... 5.5 m	Ø 270 mm (4 m)	Radial	PNP	Light/dark-switching [2]	VL180-2P42438	6043838
			NPN	Light/dark-switching [3]	VL180-2N42438	6043836
0.05 m ... 7 m	Ø 400 mm (6 m)	Axial	PNP	Light/dark-switching [2]	VL180-2P42436	6037496
			NPN	Light/dark-switching [3]	VL180-2N42436	6037494

[1] PL80A.
[2] Control wire open: dark-switching D.ON.
[3] Control wire open: light-switching L.ON.

VSE180-2, Metal

- **Sensor principle:** Through-beam photoelectric sensor
- **Light spot size (distance):** Ø 1,100 mm (20 m)
- **Adjustment:** potentiometer, 270 ° (Receiver.)
- **Connection:** Connector M12, 4-pin

Sensing range max.	Optical axis	Output type	Switching mode	Model name	Part no.
0 m ... 25 m	Radial	PNP	Light/dark-switching [1]	VSE180-2P42434	6043850
		NPN	Light/dark-switching [2]	VSE180-2N42434	6043848
0 m ... 28 m	Axial	PNP	Light/dark-switching [1]	VSE180-2P42432	6041823
		NPN	Light/dark-switching [2]	VSE180-2N42432	6041821

[1] Control wire open: dark-switching D.ON.
[2] Control wire open: light-switching L.ON.

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VSE180-2, Plastic

- **Sensor principle:** Through-beam photoelectric sensor
- **Light spot size (distance):** Ø 1,100 mm (20 m)
- **Adjustment:** potentiometer, 270 ° (Receiver.)
- **Connection:** Connector M12, 4-pin

Sensing range max.	Optical axis	Output type	Switching mode	Model name	Part no.
0 m ... 25 m	Radial	PNP	Light/dark-switching [1]	VSE180-2P42439	6043854
		NPN	Light/dark-switching [2]	VSE180-2N42439	6043852
0 m ... 28 m	Axial	PNP	Light/dark-switching [1]	VSE180-2P42437	6037500
		NPN	Light/dark-switching [2]	VSE180-2N42437	6037498

[1] Control wire open: dark-switching D.ON.

[2] Control wire open: light-switching L.ON.

Recommended accessories

	Brief description	Model name	Part no.
Mounting brackets and mounting plates			
	Mounting plate for M18 sensors, Steel, zinc coated, without mounting hardware	BEF-WG-M18	5321870
	Mounting bracket, M18 thread, Steel, zinc coated, without mounting hardware	BEF-WN-M18	5308446
Universal bar clamp systems			
	Plate N06 for universal clamp bracket, Zinc plated steel (sheet), Diecast zinc (clamp), Universal clamp, mounting hardware	BEF-KHS-N06	2051612
Plug connectors and cables			
Illustration may differ	Head A: Female connector, M12, 4-pin, straight Head B: cable Cable: PVC, unshielded, 2 m	DOL-1204-G02M	6009382
Illustration may differ	Head A: Female connector, M12, 4-pin, angled Head B: cable Cable: PVC, unshielded, 2 m	DOL-1204-W02M	6009383
Reflectors			
	Rectangular, screw connection, 47 mm x 47 mm, PMMA/ABS, Screw-on, 2 hole mounting	P250	5304812
	Rectangular, screw connection, 37 mm x 56 mm, PMMA/ABS, Screw-on, 2 hole mounting	PL40A	1012720
	Rectangular, screw connection, 80 mm x 80 mm, PMMA/ABS, Screw-on, 2 hole mounting	PL80A	1003865
	Self-adhesive	REF-IRF-56	5314244

B

At a glance

- Rapid response time (50 µs)
- Switching threshold adjustment via potentiometer, or teach-in via button or cable
- Four different teach-in modes
- Simple installation
- Red or green LED emitter

Your benefits

- Reliable, rapid process detection
- Low installation costs due to short commissioning time
- Flexible teach-in modes allow the sensor to be customized according to the specific application
- Emitted light ideal for color or contrast detection
- Easy programming via simple potentiometer and switch adjustment

➜ www.mysick.com/en/WLL170-2

For more information, just 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.

Ordering information

Other models and accessories ➜ www.mysick.com/en/WLL170-2

WLL170-2

- **Type of light:** visible red light
- **Adjustment:** Potentiometer, 10-turn (Scale 270°.)

Response time	Sensing range max. [1]	Switching mode	Connection	Model name	Part no.
≤ 0.25 ms	0 mm ... 4,000 mm, through-beam system	PNP	Male connector, M8, 4-pin	WLL170-2P430	6029514
		NPN	Cable, 3-pole, 2 m	WLL170-2N132	6029515
≤ 50 µs	0 mm ... 1,600 mm, through-beam system	PNP	Male connector, M8, 4-pin	WLL170-2P460	6029530
		NPN	Cable, 3-pole, 2 m	WLL170-2N162	6029531

[1] LL3-TB02 and tip adapter LL3-TA01.

WLL170T-2

- **Type of light:** visible red light
- **Adjustment:** Teach-in button, cable

Response time	Sensing range max. [1]	Switching mode	Connection	Model name	Part no.
≤ 0.25 ms	0 mm ... 3,500 mm, through-beam system	PNP	Male connector, M8, 4-pin	WLL170T-2P430	6033950
		NPN	Cable, 4-pole, 2 m	WLL170T-2N132	6033951
≤ 50 µs	0 mm ... 1,500 mm, through-beam system	PNP	Male connector, M8, 4-pin	WLL170T-2P460	6033965
		NPN	Cable, 4-pole, 2 m	WLL170T-2N162	6033960

[1] LL3-TB02 and tip adapter LL3-TA01.

Recommended accessories

	Brief description	Model name	Part no.
Mounting brackets and mounting plates			
	Mounting bracket, Steel, zinc coated, without mounting hardware	BEF-WLL170	5306574
Other mounting accessories			
	Rail end piece for block mounting, Stainless steel, Mounting hardware included	BF-EB01-W190	5313011
Plug connectors and cables			
	Head A: Female connector, M8, 3-pin, straight Head B: cable Cable: PVC, unshielded, 2 m	DOL-0803-G02M	6010785
	Head A: Female connector, M8, 3-pin, angled Head B: cable Cable: PVC, unshielded, 2 m	DOL-0803-W02M	6008489
	Head A: Female connector, M8, 4-pin, straight Head B: cable Cable: PVC, unshielded, 2 m	DOL-0804-G02M	6009870
	Head A: Female connector, M8, 4-pin, angled Head B: cable Cable: PVC, unshielded, 2 m	DOL-0804-W02M	6009871

B

At a glance

- Selectable response time up to 16 µs
- Sensing range up to 20 m (Through-beam system); up to 1400 mm (proximity system)
- Bus-compatible with anti-interference
- 2 x 4-digit display
- Adjustable hysteresis
- Rotatable display screen
- High-resolution signal processing
- Programmable time delays

Your benefits

- Reliable, rapid process detection, even under the most difficult ambient conditions, such as dust, spray or mist
- Easy commissioning and product changeover due to external teach-in
- Cross-talk is eliminated when utilizing bus configuration option
- Quick, easy setup and adjustment due to an intuitive operating menu
- Flexible parameter adjustment due to high-resolution signal processing. Hysteresis and time delays can be adapted to suit the application, e.g., when detecting tiny or transparent objects
- Easy-to-read display, even under difficult installation conditions

➜ www.mysick.com/en/WLL180T

For more information, just 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.

Ordering information

Other models and accessories ➜ www.mysick.com/en/WLL180T

Stand-alone

- **Type of light:** visible red light
- **Adjustment:** Teach-in button, cable, +/– increment button, manual
- **Sensing range max.:** 0 m ... 20 m, through-beam system (Sensing range with 8 ms response time. Reduction with shorter response time (see tables LL3/WLL180T)) (LL3-TX01.)

Output type	Connection	Model name	Part no.
PNP	Cable, 4-pole, 2 m	WLL180T-P432	6039093
	Male connector, M8, 4-pin	WLL180T-P434	6039095
NPN	Cable, 4-pole, 2 m	WLL180T-N432	6039094
	Male connector, M8, 4-pin	WLL180T-N434	6039096

Base unit

- **Type of light:** visible red light
- **Adjustment:** Teach-in button, cable, +/– increment button, manual
- **Sensing range max.:** 0 m ... 20 m, through-beam system (Sensing range with 8 ms response time. Reduction with shorter response time (see tables LL3/WLL180T)) (LL3-TX01.)

Output type	Connection	Model name	Part no.
PNP	Cable, 4-pole, 2 m	WLL180T-M432	6039097
	Male connector, M8, 3-pin	WLL180T-M333	6042428
	Male connector, M8, 4-pin	WLL180T-M434	6039101
NPN	Cable, 4-pole, 2 m	WLL180T-L432	6039099
	Male connector, M8, 4-pin	WLL180T-L434	6039103

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Expansion unit

- **Type of light:** visible red light
- **Adjustment:** Teach-in button, cable, +/– increment button, manual
- **Sensing range max.:** 0 m ... 20 m, through-beam system (Sensing range with 8 ms response time. Reduction with shorter response time (see tables LL3/WLL180T)) (LL3-TX01.)

Output type	Connection	Model name	Part no.
PNP	Cable, 2-pole, 2 m	WLL180T-F232	6039098
	Male connector, M8, 3-pin	WLL180T-F333	6042429
	Male connector, M8, 4-pin	WLL180T-F434	6039102
NPN	Cable, 2-pole, 2 m	WLL180T-E232	6039100
	Male connector, M8, 4-pin	WLL180T-E434	6039104

Recommended accessories

	Brief description	Model name	Part no.
Mounting brackets and mounting plates			
	Mounting bracket, Steel, zinc coated, without mounting hardware	BEF-WLL170	5306574
Other mounting accessories			
	Rail end piece for block mounting, Stainless steel, Mounting hardware included	BF-EB01-W190	5313011

B

At a glance

- Very large selection of plastic and glass fiber-optic cables.
- Fiber-optic cables resistant to chemicals and high temperature
- Threaded and smooth sleeves, bands of light (array), 90° reflection versions available
- Focused optics
- Proximity and through-beam versions available
- Plastic, protective metal or Teflon sheathing available

Your benefits

- Very large selection of fiber-optic cables with plastic and glass fibers, giving users more application flexibility
- Resistant to damage caused by mechanical and chemical stress, as well as high temperatures
- Standard and customer-specific types
- Simple installation saves time
- For detection of objects, surfaces, leading edges, and fluid levels

➜ www.mysick.com/en/LL3

For more information, just 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.

Ordering information

Other models and accessories ➜ www.mysick.com/en/LL3

Proximity system

Category	Core material	Sleeve material	Model name	Part no.
Threaded sleeve	PMMA	Stainless steel [1]	LL3-DM01	5308071
			LL3-DM02	5308077
			LL3-DT01	5308076
			LL3-DB01	5308074
			LL3-DK67	5313025
		CuZn	LL3-DR01	5308078
Smooth sleeve	PMMA	Stainless steel [1]	LL3-DR04	5308081
Long end sleeve	PMMA	Stainless steel [1]	LL3-DK63Z	5313027
Flat type	PMMA	Stainless steel	LL3-DC47	5324268
		PC	LL3-DE03	5325986
		ABS	LL3-DC09	5326028
Area detection	PMMA	PC	LL3-DZ01	5326013
		Brass (Br)	LL3-DZ03	5326015
LCDs/transparent objects/semiconductors	PMMA	–	LL3-DC38	5322472
Heat-resistant	Glass	Stainless steel	LL3-DW01	5315234
	Si	Stainless steel [1]	LL3-DH01	5308091
Liquid level	PMMA	PTFE	LL3-DF02-S01	5321924
Tip adapters	–	–	LL3-DA01	5308127
			LL3-DA02	5308130

[1] Stainless steel.

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Through-beam system

Category	Core material	Sleeve material	Model name	Part no.
Threaded sleeve	PMMA	Stainless steel	LL3-TX01	5324173
		CuZn	LL3-TR01	5308052
			LL3-TK77	5313035
Smooth sleeve	PMMA	Stainless steel [1]	LL3-TK05	5313034
Long end sleeve	PMMA	Stainless steel [1]	LL3-TS08	5308061
Flat type	PMMA	PC	LL3-TE03	5325908
Area detection	PMMA	CuZn	LL3-TS14	5313039
		PA	LL3-TS40	5323971
		Brass (Br)	LL3-TZ09	5326598
Heat-resistant	Glass	End head: stainless steel, jacket: stainless steel, head: brass	LL3-TH08	5325978
		Stainless steel	LL3-TW01	5315233
LCDs/transparent objects/semiconductors	PMMA	–	LL3-TG04	5324499
Resistant to oil/chemicals	PMMA	PTFE	LL3-TY01	5308066
90° deflection	PMMA	PA	LL3-TV07	5322548
Tip adapters	–	–	LL3-TA01	5308128
			LL3-TA02	5308129

[1] Stainless steel.

Recommended accessories

	Brief description	Model name	Part no.
Other mounting accessories			
	Adapter sleeve for fibers LL3 Ø 1.0 mm, included with delivery of LL3	BF-WLL160-10	5305479
	Adapter sleeve for fibers LL3 Ø 1.3 mm, included with delivery of LL3	BF-WLL160-13	5306094
	Cutter for fibers, supplied with LL3	FC	5304141

C

PROXIMITY SENSORS

Reliable, powerful, rugged. Proximity sensors from SICK.

Proximity sensors provide non-contact detection of a wide variety of objects and media. SICK's sensors are perfectly suited to industrial applications and requirements. SICK's inductive, capacitive and magnetic proximity sensors offer a long service life, extreme ruggedness and the utmost precision. SICK intelligently and reliably solves industry-specific and individual automation tasks.

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C

Selection guide proximity sensors C-160

IM Miniature C-162
Space-saving miniature inductive sensors

IM Standard C-164
The industry standard for inductive sensors

IM Triplex C-167
Inductive sensors with triple sensing range

IM Inox C-170
Single-piece stainless steel sensors for the highest demands

IMF C-172
Inductive sensors for washdown environments

IMA C-174
Analog inductive sensors with triple sensing distance for continuous feedback

IQ Miniature C-176
Rectangular, small and space-saving

IQ Standard C-178
Industry-proven – the first choice for reliable detection

IQ Flat C-181
Low profile sensors when space is at a premium

IH Miniature C-183
Space-saving IH Miniature inductive sensors

IH Standard C-185
Smooth cylindrical housing design for time-saving installations

SAM C-187
The simple and intelligent way of speed monitoring

CM C-189
Sensors in cylindrical housing

CQ C-192
Reliable capacitive proximity sensors enclosed in a rectangular housing

MM C-194
Magnetic proximity sensors in common M8, M12, and M18 cylindrical housing

MQ C-197
Magnetic proximity sensors in a rectangular housing

C

SELECTION GUIDE PROXIMITY SENSORS

Product	Housing																			Sensor properties					
	Material					Design			Thread size						Diameter dimensions in mm											
	Stainless steel	Nickel-plated brass	Plastic	VISTAL™	Enclosure rating IP 69k	Rectangular	Cylindrical threaded	Cylindrical smooth	M4	M5	M8	M12	M18	M30	Sleeve diameter: ≤ 4	Sleeve diameter: 6.5 ... 34	5 x 5 x 25 ... 8 x 8 x 40	8 x 16 x 4 ... 80 x 60 x 105	40 x 40 x 66 ... 80 x 40 x 105	NAMUR output	Analog output	All-metal housing	Triple sensing range	High mechanical load capability	
Inductive proximity sensors																									
IM Miniature	■						■		■	■															
IM Standard		■					■				■	■	■	■											
IM Triplex		■					■				■	■	■	■									■		
IM Inox	■				■		■					■	■	■								■	■	■	
IMF	■				■		■					■	■											■	
IMA		■					■				■	■	■	■							■		■		
IQ Miniature			■	■		■											■							■	
IQ Standard			■	■		■												■	■					■	
IQ Flat		■	■			■												■							
IH Miniature	■							■							■										
IH Standard	■		■					■								■									
Inductive MultiTask sensors																									
SAM		■					■						■	■											
Capacitive proximity sensors																									
CM			■				■						■	■											
CQ			■			■												■							
Magnetic proximity sensors																									
MM		■					■				■	■	■							■					
MQ		■				■												■							

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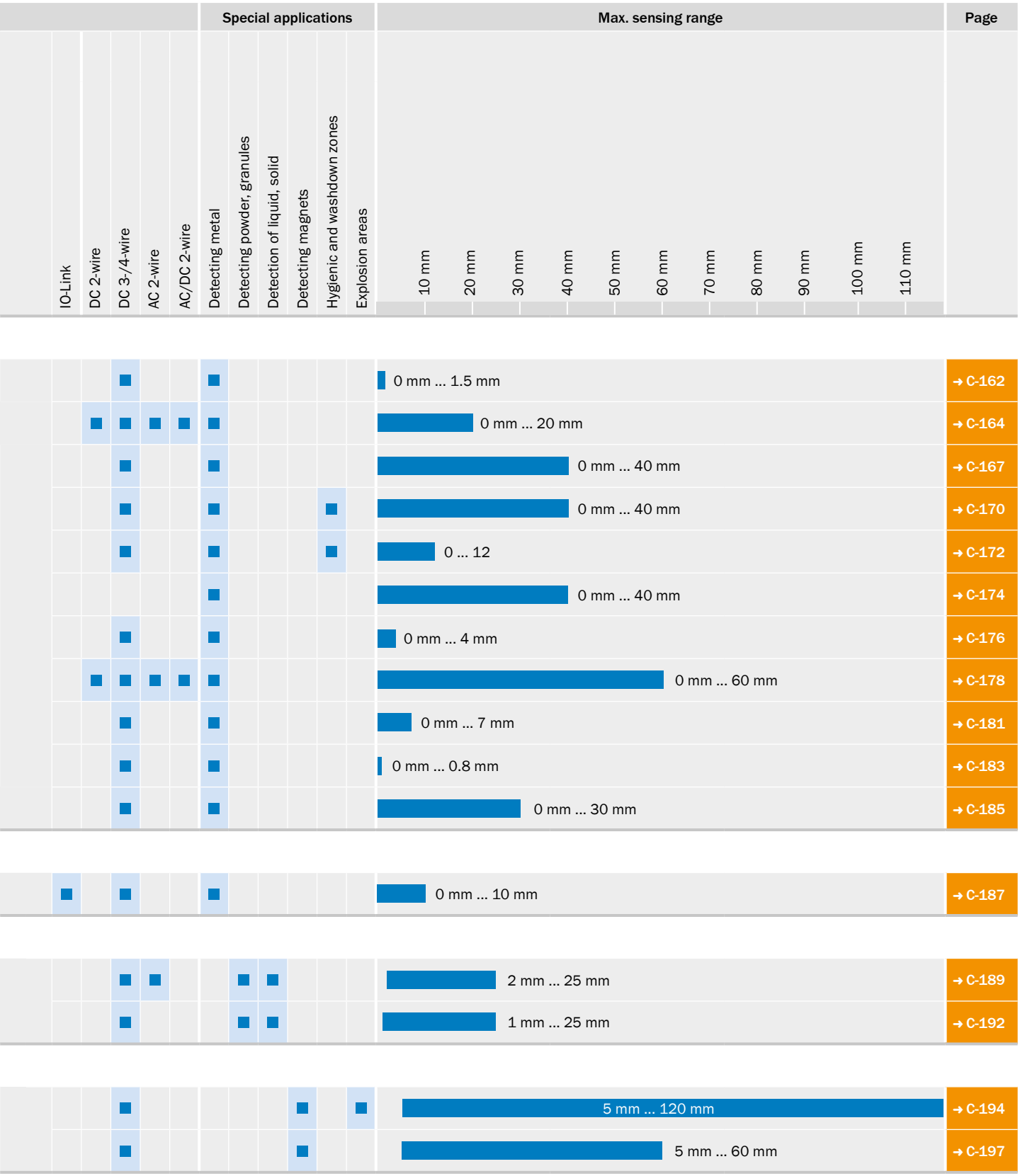
IO-Link
DC 2-wire
DC 3-/4-wire
AC 2-wire
AC/DC 2-wire
Special applications
Detecting metal
Detecting powder, granules
Detection of liquid, solid
Detecting magnets
Hygienic and washdown zones
Explosion areas
Max. sensing range
10 mm
20 mm
30 mm
40 mm
50 mm
60 mm
70 mm
80 mm
90 mm
100 mm
110 mm
Page
0 mm ... 1.5 mm
→ C-162
0 mm ... 20 mm
→ C-164
0 mm ... 40 mm
→ C-167
0 mm ... 40 mm
→ C-170
0 ... 12
→ C-172
0 mm ... 40 mm
→ C-174
0 mm ... 4 mm
→ C-176
0 mm ... 60 mm
→ C-178
0 mm ... 7 mm
→ C-181
0 mm ... 0.8 mm
→ C-183
0 mm ... 30 mm
→ C-185
0 mm ... 10 mm
→ C-187
2 mm ... 25 mm
→ C-189
1 mm ... 25 mm
→ C-192
5 mm ... 120 mm
→ C-194
5 mm ... 60 mm
→ C-197

C

At a glance

- M4 and M5 sizes available
- Small housing sizes and light weight
- Integrated LED indicator
- Rugged stainless steel housing

Your benefits

- Trouble-free installation in space-critical applications provides a high degree of design freedom, saving machine space
- Reliable detection of rapid handling and assembly processes increases throughput
- High-visibility indicator LED for simple monitoring of operational state reduces commissioning time
- High positioning accuracy increases machine throughput
- High resistance to shock and vibrations reduces maintenance costs

➜ www.mysick.com/en/IM_Miniature

For more information, just 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.

Ordering information

Other models and accessories ➜ www.mysick.com/en/IM_Miniature

IM04

- **Housing:** M4 x 0.5
- **Installation type:** flush

Sensing range S_n	Output function	Output type	Connection	Model name	Part no.
0.6 mm	NO	PNP	Cable, 3-wire, 2 m, PUR	IM04-0B6PS-ZU1	6020145
			Cable with connector M8, 3-pin, with knurled nuts, 0.2 m, PUR	IM04-0B6PS-ZR1	6042085
		NPN	Cable, 3-wire, 2 m, PUR	IM04-0B6NS-ZU1	6020146
	NC	PNP	Cable, 3-wire, 2 m, PUR	IM04-0B6PO-ZU1	6020147

IM05

- **Housing:** M5 x 0.5
- **Installation type:** flush

Sensing range S_n	Output function	Output type	Connection	Model name	Part no.
0.8 mm	NO	PNP	Cable, 3-wire, 2 m, PVC	IM05-0B8PS-ZW1	6011591
			Connector M8, 3-pin	IM05-0B8PS-ZT1	6020110
		NPN	Cable, 3-wire, 2 m, PVC	IM05-0B8NS-ZW1	6020155
			Connector M8, 3-pin	IM05-0B8NS-ZT1	6020158
	NC	PNP	Connector M8, 3-pin	IM05-0B8PO-ZT1	6020159
		NPN	Cable, 3-wire, 2 m, PVC	IM05-0B8NO-ZW1	6020157

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Sensing range S_n	Output function	Output type	Connection	Model name	Part no.
1.5 mm	NO	PNP	Cable, 3-wire, 2 m, PUR	IM05-1B5PSVU2S	6049735
			Connector M8, 3-pin	IM05-1B5PSVT0S	6049739
		NPN	Cable, 3-wire, 2 m, PUR	IM05-1B5NSVU2S	6049733
			Connector M8, 3-pin	IM05-1B5NSVT0S	6049737
	NC	PNP	Cable, 3-wire, 2 m, PUR	IM05-1B5P0VU2S	6049736
			Connector M8, 3-pin	IM05-1B5P0VT0S	6049740
		NPN	Cable, 3-wire, 2 m, PUR	IM05-1B5N0VU2S	6049734
			Connector M8, 3-pin	IM05-1B5N0VT0S	6049738

Recommended accessories

	Brief description	Model name	Part no.
Plug connectors and cables			
	Head A: Female connector, M8, 3-pin, straight Head B: cable Cable: PVC, unshielded, 2 m	DOL-0803-G02M	6010785
	Head A: Female connector, M8, 3-pin, angled Head B: cable Cable: PVC, unshielded, 2 m	DOL-0803-W02M	6008489

C

At a glance

- M8 to M30 sizes available
- Precise operating ranges due to ASIC technology
- Extra tough thanks to high fastener torque and hot melt adhesive filling
- Operating range from 1.5 mm to 20 mm
- IP 67 enclosure rating
- Operating temperature from –25° C to +70° C
- DC, AC and AC/DC versions available
- Customer-specific models available

Your benefits

- Reduced machine downtime
- Reduced mechanical damage
- Fewer maintenance costs due to longer service life
- High resistance to shock and vibrations

➜ www.mysick.com/en/IM_Standard

For more information, just 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.

Ordering information

Other models and accessories ➜ www.mysick.com/en/IM_Standard

IME08

- **Output function:** NO
- **Connection:** Connector M8, 3-pin

Housing	Sensing range S_n	Installation type	Electrical wiring	Output type	Housing	Model name	Part no.
M8 x 1	2 mm	Flush	DC 3-wire	NPN	Standard	IME08-02BNSZT0S	1040878
					Short-body	IME08-02BNSZT0K	1040877
				PNP	Standard	IME08-02BPSZT0S	1040870
					Short-body	IME08-02BPSZT0K	1040869
			DC 2-wire	–	Standard	IME08-02BDSZT0S	1067109
	4 mm	Non-flush	DC 3-wire	NPN	Standard	IME08-04NNSZT0S	1040894
					Short-body	IME08-04NNSZT0K	1040893
				PNP	Standard	IME08-04NPSZT0S	1040886
					Short-body	IME08-04NPSZT0K	1040885
			DC 2-wire	–	Standard	IME08-04NDSZT0S	1067177

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IME12

- **Output function:** NO
- **Connection:** Connector M12, 4-pin

Housing	Sensing range S_n	Installation type	Electrical wiring	Output type	Housing	Model name	Part no.
M12 x 1	4 mm	Flush	DC 3-wire	NPN	Standard	IME12-04BNSZC0S	1040772
					Short-body	IME12-04BNSZC0K	1040771
				PNP	Standard	IME12-04BPSZC0S	1040764
					Short-body	IME12-04BPSZC0K	1040763
			DC 2-wire	–	Standard	IME12-04BDSZC0S	1067178
	8 mm	Non-flush	DC 3-wire	NPN	Standard	IME12-08NNSZC0S	1040788
					Short-body	IME12-08NNSZC0K	1040787
				PNP	Standard	IME12-08NPSZC0S	1040780
					Short-body	IME12-08NPSZC0K	1040779
			DC 2-wire	–	Standard	IME12-08NDSZC0S	1067180

IME18

- **Output function:** NO
- **Connection:** Connector M12, 4-pin

Housing	Sensing range S_n	Installation type	Electrical wiring	Output type	Housing	Model name	Part no.
M18 x 1	8 mm	Flush	DC 3-wire	NPN	Standard	IME18-08BNSZC0S	1040974
					Short-body	IME18-08BNSZC0K	1040973
				PNP	Standard	IME18-08BPSZC0S	1040966
					Short-body	IME18-08BPSZC0K	1040965
			DC 2-wire	–	Standard	IME18-08BDSZC0S	1067207
	12 mm	Non-flush	DC 3-wire	NPN	Standard	IME18-12NNSZC0S	1040990
					Short-body	IME18-12NNSZC0K	1040989
				PNP	Standard	IME18-12NPSZC0S	1040982
					Short-body	IME18-12NPSZC0K	1040981
			DC 2-wire	–	Standard	IME18-12NDSZC0S	1067181

IME30

- **Output function:** NO
- **Connection:** Connector M12, 4-pin

Housing	Sensing range S_n	Installation type	Electrical wiring	Output type	Housing	Model name	Part no.
M30 x 1.5	15 mm	Flush	DC 3-wire	NPN	Standard	IME30-15BNSZC0S	1041038
					Short-body	IME30-15BNSZC0K	1041037
				PNP	Standard	IME30-15BPSZC0S	1041030
					Short-body	IME30-15BPSZC0K	1041029
			DC 2-wire	–	Standard	IME30-15BDSZC0S	1067183
	20 mm	Non-flush	DC 3-wire	NPN	Standard	IME30-20NNSZC0S	1041054
					Short-body	IME30-20NNSZC0K	1041053
				PNP	Standard	IME30-20NPSZC0S	1041046
					Short-body	IME30-20NPSZC0K	1041045
			DC 2-wire	–	Standard	IME30-20NDSZC0S	1067184

C

Recommended accessories

	Brief description	Model name	Part no.
Mounting brackets and mounting plates			
	Mounting plate for M12 sensors, Steel, zinc coated, without mounting hardware	BEF-WG-M12	5321869
	Mounting plate for M18 sensors, Steel, zinc coated, without mounting hardware	BEF-WG-M18	5321870
	Mounting plate for M30 sensors, Steel, zinc coated, without mounting hardware	BEF-WG-M30	5321871
	Mounting bracket, M12 thread, Steel, zinc coated, without mounting hardware	BEF-WN-M12	5308447
	Mounting bracket, M18 thread, Steel, zinc coated, without mounting hardware	BEF-WN-M18	5308446
	Mounting bracket, M30 thread, Steel, zinc coated, without mounting hardware	BEF-WN-M30	5308445
Plug connectors and cables			
	Head A: Female connector, M8, 3-pin, straight Head B: cable Cable: PVC, unshielded, 2 m	DOL-0803-G02M	6010785
	Head A: Female connector, M8, 3-pin, angled Head B: cable Cable: PVC, unshielded, 2 m	DOL-0803-W02M	6008489
Illustration may differ	Head A: Female connector, M12, 4-pin, straight Head B: cable Cable: PVC, unshielded, 2 m	DOL-1204-G02M	6009382
Illustration may differ	Head A: Female connector, M12, 4-pin, angled Head B: cable Cable: PVC, unshielded, 2 m	DOL-1204-W02M	6009383

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At a glance

- Triple operating ranges up to 40 mm
- Operating temperature from –25° C to +70 °C
- High switching frequencies
- M8 to M30 housings

Your benefits

- Reduced machine downtime and maintenance costs
- Large operating reserve due to triple operating range improves machine throughput – no missed targets
- Saves installation space on the machine. Less space required for the same operating range when compared with standard sensors
- Lower risk of mechanical damage due their ability to be mounted further from the target
- High level of sensitivity makes them suitable for detecting difficult parts such as wires, thin sheets, small screws – reduces design and installation time

→ www.mysick.com/en/IM_Triplex

For more information, just 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.

Ordering information

Other models and accessories → www.mysick.com/en/IM_Triplex

IM08

- **Housing:** M8 x 1

Sensing range S_n	Installation type	Output function	Output type	Connection	Model name	Part no.
3 mm	Quasi-flush	NO	NPN	Cable, 3-wire, 2 m, PVC	IM08-03BNS-ZW1	6028074
			PNP	Connector M8, 3-pin	IM08-03BPS-ZT1	6025574
				Cable, 3-wire, 2 m, PVC	IM08-03BPS-ZW1	6027505
6 mm	Non-flush	NO	NPN	Cable, 3-wire, 2 m, PVC	IM08-06NNS-ZW1	6027507
			PNP	Connector M8, 3-pin	IM08-06NPS-ZT1	6027508
				Cable, 3-wire, 2 m, PVC	IM08-06NPS-ZW1	6027506

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IM12

- **Housing:** M12 x 1

Sensing range S_n	Installation type	Output function	Output type	Connection	Model name	Part no.
6 mm	Quasi-flush	NO	NPN	Connector M12, 4-pin	IM12-06BNS-ZC1	6030524
			PNP	Connector M12, 4-pin	IM12-06BPS-ZC1	6027511
				Cable, 3-wire, 2 m, PVC	IM12-06BPS-ZW1	6027509
		NC	PNP	Cable, 3-wire, 2 m, PVC	IM12-06BPO-ZW1	6027510
10 mm	Non-flush	NO	PNP	Connector M12, 4-pin	IM12-10NPS-ZC1	6027514
			NPN	Cable, 3-wire, 2 m, PVC	IM12-10NNS-ZW1	6027513
			PNP	Cable, 3-wire, 2 m, PVC	IM12-10NPS-ZW1	6027512

IM18

- **Housing:** M18 x 1

Sensing range S_n	Installation type	Output function	Output type	Connection	Model name	Part no.
12 mm	Quasi-flush	NO	NPN	Cable, 3-wire, 2 m, PVC	IM18-12BNS-ZW1	6027516
			PNP	Connector M12, 4-pin	IM18-12BPS-ZC1	6027517
				Cable, 3-wire, 2 m, PVC	IM18-12BPS-ZW1	6027515
				Connector M12, 4-pin	IM18-12BPS-ZCK	6025569
20 mm	Non-flush	NO	NPN	Connector M12, 4-pin	IM18-20NNS-ZC1	6041997
				Cable, 3-wire, 2 m, PVC	IM18-20NNS-ZW1	6028093
			PNP	Connector M12, 4-pin	IM18-20NPS-ZC1	6027519
				Cable, 3-wire, 2 m, PVC	IM18-20NPS-ZW1	6027518

IM30

- **Housing:** M30 x 1.5

Sensing range S_n	Installation type	Output function	Output type	Connection	Model name	Part no.
22 mm	Quasi-flush	NO	NPN	Connector M12, 4-pin	IM30-22BNS-ZC1	6033033
				Cable, 3-wire, 2 m, PVC	IM30-22BNS-ZW1	6027520
			PNP	Connector M12, 4-pin	IM30-22BPS-ZC1	6027521
					IM30-22BPS-ZCK	6025566
		NC	PNP	Connector M12, 4-pin	IM30-22BPO-ZCK	6025568
40 mm	Non-flush	NO	NPN	Connector M12, 4-pin	IM30-40NNS-ZC1	6033087
			PNP	Connector M12, 4-pin	IM30-40NPS-ZC1	6027522

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Recommended accessories

	Brief description	Model name	Part no.
Mounting brackets and mounting plates			
	Mounting bracket, M8 thread, Steel, zinc coated, without mounting hardware	BEF-WN-M08	5321721
	Mounting bracket, M12 thread, Steel, zinc coated, without mounting hardware	BEF-WN-M12	5308447
	Mounting bracket, M18 thread, Steel, zinc coated, without mounting hardware	BEF-WN-M18	5308446
	Mounting bracket, M30 thread, Steel, zinc coated, without mounting hardware	BEF-WN-M30	5308445
Terminal and alignment brackets			
	Clamping block for round sensors M8, with fixed stop, Plastic (PA12), glass-fiber reinforced, Mounting hardware included	BEF-KHF-M08	2051478
	Clamping block for round sensors M12, with fixed stop, Plastic (PA12), glass-fiber reinforced, Mounting hardware included	BEF-KHF-M12	2051480
	Clamping block for round sensors M18, with fixed stop, Plastic (PA12), glass-fiber reinforced, Mounting hardware included	BEF-KHF-M18	2051482
Plug connectors and cables			
	Head A: Female connector, M8, 3-pin, straight Head B: cable Cable: PVC, unshielded, 2 m	DOL-0803-G02M	6010785
 Illustration may differ	Head A: Female connector, M12, 4-pin, straight Head B: cable Cable: PVC, unshielded, 2 m	DOL-1204-G02M	6009382

C

At a glance

- Stainless steel housing (316L/1.4404)
- Extremely watertight (IP 68/IP 69K)
- Triple sensing range
- High resistance to mechanical stress
- Watertight housing suitable for use in hygienic and wash down areas
- Resistant to aggressive cleaning agents
- Visual adjustment indicator via output LED

Your benefits

- Less machine downtime due to rugged sensor design
- Cost reduction due to long service life even under the most extreme ambient conditions
- Quick and easy installation due to adjustment indicator via LEDs
- Large operating reserve due to triple operating range
- High resistance to shock and impact due to stainless steel sensing face
- No restrictions on cleaning agents or processes, ensuring reliable operation

➜ www.mysick.com/en/IM_Inox

For more information, just 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.

Ordering information

Other models and accessories ➜ www.mysick.com/en/IM_Inox

IM12

- **Housing:** M12 x 1

Sensing range S_n	Installation type	Output function	Output type	Connection	Model name	Part no.
6 mm	Flush	NO	NPN	Connector M12, 4-pin	IM12-06BNS-NC1	6027573
			PNP	Connector M12, 4-pin	IM12-06BPS-NC1	6027572
		NC	PNP	Connector M12, 4-pin	IM12-06BPO-NC1	6027574
10 mm	Non-flush	NO	NPN	Connector M12, 4-pin	IM12-10NNS-NC1	6027576
			PNP	Connector M12, 4-pin	IM12-10NPS-NC1	6027575

IM18

- **Housing:** M18 x 1

Sensing range S_n	Installation type	Output function	Output type	Connection	Model name	Part no.
10 mm	Flush	NO	NPN	Connector M12, 4-pin	IM18-10BNS-NC1	6027578
			PNP	Connector M12, 4-pin	IM18-10BPS-NC1	6027577
		NC	PNP	Connector M12, 4-pin	IM18-10BPO-NC1	6027579
20 mm	Non-flush	NO	NPN	Connector M12, 4-pin	IM18-20NNS-NC1	6027581
			PNP	Connector M12, 4-pin	IM18-20NPS-NC1	6027580

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IM30

- **Housing:** M30 x 1.5

Sensing range S_n	Installation type	Output function	Output type	Connection	Model name	Part no.
20 mm	Flush	NO	NPN	Connector M12, 4-pin	IM30-20BNS-NC1	6027583
			PNP	Connector M12, 4-pin	IM30-20BPS-NC1	6027582
40 mm	Non-flush	NO	NPN	Connector M12, 4-pin	IM30-40NNS-NC1	6027585
			PNP	Connector M12, 4-pin	IM30-40NPS-NC1	6027584

Recommended accessories

	Brief description	Model name	Part no.
Mounting brackets and mounting plates			
	Mounting plate for M12 housing, stainless steel, without mounting hardware	BEF-WG-M12N	5320950
	Mounting plate for M18 housing, stainless steel, without mounting hardware	BEF-WG-M18N	5320948
	Mounting bracket for M12 housing, stainless steel, without mounting hardware	BEF-WN-M12N	5320949
	Mounting bracket for M18 housing, stainless steel, without mounting hardware	BEF-WN-M18N	5320947
Plug connectors and cables			
	Head A: Female connector, M12, 4-pin, straight Head B: cable Cable: PVC, unshielded, 2 m	DOL-1204-G02MN	6028128
	Head A: Female connector, M12, 4-pin, angled Head B: cable Cable: PVC, unshielded, 2 m	DOL-1204-W02MN	6028129

C

At a glance

- Extremely watertight (IP 68/IP 69K) for wash down environments
- Stainless steel housing (316L/1.4404)
- Front cap made of PPS (FDA-certified material)
- Extended temperature range (–40 to +80 °C). Tolerates short-term temperature increases up to 100 °C
- Resistant to industrial cleaning agents, ECOLAB and JohnsonDiversey certified
- Laser etched part number

Your benefits

- Reduced machine downtime
- Hygienic process due to FDA approved material and hygienic design
- Reduced maintenance costs due to sensor's resistance to aggressive cleaning cycles
- No restrictions on cleaning agents or processes, ensuring reliable operation

➜ www.mysick.com/en/IMF

For more information, just 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.

Ordering information

Other models and accessories ➜ www.mysick.com/en/IMF

IMF12

- **Housing:** M12 x 1
- **Output type:** PNP
- **Connection:** Connector M12, 4-pin

Sensing range S_n	Installation type	Output function	Electrical wiring	Model name	Part no.
2 mm	Flush	NC	DC 3-wire	IMF12-02BPOVC0S	6035454
		NO	DC 3-wire	IMF12-02BPSVC0S	6035452
		Complementary	DC 4-wire	IMF12-02BPPVC0S	6035215
4 mm	Flush	NC	DC 3-wire	IMF12-04BPOVC0S	6035462
		NO	DC 3-wire	IMF12-04BPSVC0S	6035460
		Complementary	DC 4-wire	IMF12-04BPPVC0S	6035219
	Non-flush	NC	DC 3-wire	IMF12-04NPOVC0S	6035458
		NO	DC 3-wire	IMF12-04NPSVC0S	6035456
		Complementary	DC 4-wire	IMF12-04NPPVC0S	6035217
8 mm	Non-flush	NC	DC 3-wire	IMF12-08NPOVC0S	6035466
		NO	DC 3-wire	IMF12-08NPSVC0S	6035464
		Complementary	DC 4-wire	IMF12-08NPPVC0S	6035221

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IMF18

- **Housing:** M18 x 1
- **Output type:** PNP
- **Connection:** Connector M12, 4-pin

Sensing range S_n	Installation type	Output function	Electrical wiring	Model name	Part no.
5 mm	Flush	NC	DC 3-wire	IMF18-05BPOVC0S	6035470
		NO	DC 3-wire	IMF18-05BPSVC0S	6035468
		Complementary	DC 4-wire	IMF18-05BPPVC0S	6035223
8 mm	Flush	NC	DC 3-wire	IMF18-08BPOVC0S	6035478
		NO	DC 3-wire	IMF18-08BPSVC0S	6035476
		Complementary	DC 4-wire	IMF18-08BPPVC0S	6035227
	Non-flush	NC	DC 3-wire	IMF18-08NPOVC0S	6035474
		NO	DC 3-wire	IMF18-08NPSVC0S	6035472
		Complementary	DC 4-wire	IMF18-08NPPVC0S	6035225
12 mm	Non-flush	NC	DC 3-wire	IMF18-12NPOVC0S	6035482
		NO	DC 3-wire	IMF18-12NPSVC0S	6035480
		Complementary	DC 4-wire	IMF18-12NPPVC0S	6035229

Recommended accessories

	Brief description	Model name	Part no.
Mounting brackets and mounting plates			
	Mounting plate for M12 housing, stainless steel, without mounting hardware	BEF-WG-M12N	5320950
	Mounting plate for M18 housing, stainless steel, without mounting hardware	BEF-WG-M18N	5320948
	Mounting bracket for M12 housing, stainless steel, without mounting hardware	BEF-WN-M12N	5320949
	Mounting bracket for M18 housing, stainless steel, without mounting hardware	BEF-WN-M18N	5320947
Plug connectors and cables			
	Head A: Female connector, M12, 4-pin, straight Head B: cable Cable: PVC, unshielded, 2 m	DOL-1204-G02MN	6028128
	Head A: Female connector, M12, 4-pin, angled Head B: cable Cable: PVC, unshielded, 2 m	DOL-1204-W02MN	6028129

C

At a glance

- Analog output signal is proportional to distance
- Triple sensing range
- Analog current and voltage signal in one sensor
- High repeatability
- No blind zone

Your benefits

- High positioning accuracy
- High repeatability provides increased machine throughput, less wear and tear, and decreased downtime
- No blind zone – increases machine throughput and efficiency
- Current and voltage output in one sensor requires less inventory of maintenance stock, reducing costs
- Minimal temperature drift provides operational consistency

→ www.mysick.com/en/IMA

For more information, just 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.

Ordering information

Other models and accessories → www.mysick.com/en/IMA

IMA08

- **Housing:** M8 x 1
- **Detection range:** 0 mm ... 4 mm

Installation type	Repeat accuracy typ [1) 2) 3)]	Repeatability (T_a constant)	Connection	Model name	Part no.
Quasi-flush	0.3 mm	± 0.01 mm	Connector M12, 4-pin	IMA08-04BE3ZC0K	6041782

[1)] As per IEC 60947-5-2.
[2)] Ub = DC 20 V ... 30 V.
[3)] TA = 23 °C ± 5 °C.

IMA12

- **Housing:** M12 x 1
- **Detection range:** 0 mm ... 6 mm

Installation type	Repeat accuracy typ [1) 2) 3)]	Repeatability (T_a constant)	Connection	Model name	Part no.
Quasi-flush	0.3 mm	± 0.01 mm	Connector M12, 4-pin	IMA12-06BE3ZC0K	6041792

[1)] As per IEC 60947-5-2.
[2)] Ub = DC 20 V ... 30 V.
[3)] TA = 23 °C ± 5 °C.

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IMA18

- **Housing:** M18 x 1
- **Repeat accuracy typ:** 0.3 mm (As per IEC 60947-5-2.) (Ub = DC 20 V ... 30 V.) (TA = 23 °C ± 5 °C.)
- **Connection:** Connector M12, 4-pin

Detection range	Installation type	Repeatability (T_a constant)	Model name	Part no.
0 mm ... 10 mm	Quasi-flush	± 0.02 mm	IMA18-10BE1ZC0K	6041793
0 mm ... 20 mm	Non-flush	± 0.05 mm	IMA18-20NE1ZC0K	6041794

IMA30

- **Housing:** M30 x 1.5
- **Connection:** Connector M12, 4-pin

Detection range	Installation type	Repeat accuracy typ [1) 2) 3)]	Repeatability (T_a constant)	Model name	Part no.
0 mm ... 20 mm	Quasi-flush	0.3 mm	± 0.05 mm	IMA30-20BE1ZC0K	6041795
0 mm ... 40 mm	Non-flush	0.6 mm	± 0.1 mm	IMA30-40NE1ZC0K	6041796

[1)] As per IEC 60947-5-2.
[2)] Ub = DC 20 V ... 30 V.
[3)] TA = 23 °C ± 5 °C.

Recommended accessories

	Brief description	Model name	Part no.
Mounting brackets and mounting plates			
	Mounting bracket, M8 thread, Steel, zinc coated, without mounting hardware	BEF-WN-M08	5321721
	Mounting bracket, M12 thread, Steel, zinc coated, without mounting hardware	BEF-WN-M12	5308447
	Mounting bracket, M18 thread, Steel, zinc coated, without mounting hardware	BEF-WN-M18	5308446
	Mounting bracket, M30 thread, Steel, zinc coated, without mounting hardware	BEF-WN-M30	5308445
Plug connectors and cables			
Illustration may differ	Head A: Female connector, M12, 4-pin, straight Head B: cable Cable: PVC, unshielded, 2 m	DOL-1204-G02M	6009382
Illustration may differ	Head A: Female connector, M12, 4-pin, angled Head B: cable Cable: PVC, unshielded, 2 m	DOL-1204-W02M	6009383

C

At a glance

- Long sensing range
- Rugged metal and plastic housings
- Narrow design: 5 x 5 or 8 x 8 mm
- Compact, space-saving design

Your benefits

- Trouble-free installation in space-critical applications
- Reliable detection of fast processes
- Quick installation without any fine adjustments
- Long sensing range reduces mechanical damage
- Maintenance cost reduction due to increased sensor life
- High resistance to shock and vibrations

➜ www.mysick.com/en/IQ_Miniature

For more information, just 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.

Ordering information

Other models and accessories ➜ www.mysick.com/en/IQ_Miniature

IQ05

- **Housing:** 5 mm x 5 mm x 25 mm

Sensing range S_n	Installation type	Output function	Output type	Connection	Model name	Part no.
0.8 mm	Flush	NO	NPN	Cable, 3-wire, 2 m, PUR	IQ05-0B8NS-ZU1	6020162
			PNP	Cable, 3-wire, 2 m, PUR	IQ05-0B8PS-ZU1	6020161
		NC	PNP	Cable, 3-wire, 2 m, PUR	IQ05-0B8PO-ZU1	6020163

IQ08

- **Housing:** 8 mm x 8 mm x 40 mm

Sensing range S_n	Installation type	Output function	Output type	Connection	Model name	Part no.
2 mm	Flush	NO	NPN	Connector M8, 3-pin	IQ08-02BNSKT0S	1055496
				Cable, 3-wire, 2 m, PVC	IQ08-02BNSKW2S	1055492
			PNP	Connector M8, 3-pin	IQ08-02BPSKT0S	1055494
				Cable, 3-wire, 2 m, PVC	IQ08-02BPSKW2S	1055490

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Sensing range S_n	Installation type	Output function	Output type	Connection	Model name	Part no.
2 mm	Flush	NC	NPN	Connector M8, 3-pin	IQ08-02BNOKT0S	1055497
				Cable, 3-wire, 2 m, PVC	IQ08-02BNOKW2S	1055493
			PNP	Connector M8, 3-pin	IQ08-02BPOKT0S	1055495
				Cable, 3-wire, 2 m, PVC	IQ08-02BPOKW2S	1055491
4 mm	Non-flush	NO	NPN	Connector M8, 3-pin	IQ08-04NNSKT0S	1055504
				Cable, 3-wire, 2 m, PVC	IQ08-04NNSKW2S	1055500
			PNP	Connector M8, 3-pin	IQ08-04NPSKT0S	1055502
				Cable, 3-wire, 2 m, PVC	IQ08-04NPSKW2S	1055498
		NC	NPN	Connector M8, 3-pin	IQ08-04NNOKT0S	1055505
				Cable, 3-wire, 2 m, PVC	IQ08-04NNOKW2S	1055501
			PNP	Connector M8, 3-pin	IQ08-04NPOKT0S	1055503
				Cable, 3-wire, 2 m, PVC	IQ08-04NPOKW2S	1055499

Recommended accessories

	Brief description	Model name	Part no.
Plug connectors and cables			
	Head A: Female connector, M8, 3-pin, straight Head B: cable Cable: PVC, unshielded, 2 m	DOL-0803-G02M	6010785
	Head A: Female connector, M8, 3-pin, angled Head B: cable Cable: PVC, unshielded, 2 m	DOL-0803-W02M	6008489

C

At a glance

- Long sensing range up to 60 mm
- DC, AC and AC/DC versions available
- Wide range of housing and mounting options
- Variety of connection options including terminal, cable (flying leads) and connector types
- Customer-specific models and value add options are available

Your benefits

- Increased machine throughput with less machine downtime
- Maintenance cost reduction and reduced mechanical damage due to long sensing range
- Reduced maintenance cost due to longer service life
- Time-saving quick and easy installation

➜ www.mysick.com/en/IQ_Standard

For more information, just 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.

Ordering information

Other models and accessories ➜ www.mysick.com/en/IQ_Standard

IQ10

- **Output function:** NO
- **Housing:** 10 mm x 16 mm x 28 mm
- **Electrical wiring:** DC 3-wire

Sensing range S_n	Installation type	Output type	Connection	Model name	Part no.
3 mm	Flush	NPN	Connector M8, 3-pin	IQ10-03BNSKT0S	1055455
			Cable, 3-wire, 2 m, PVC	IQ10-03BNSKW2S	1055450
		PNP	Connector M8, 3-pin	IQ10-03BPSKT0S	1055453
			Cable, 3-wire, 2 m, PVC	IQ10-03BPSKW2S	1055447
6 mm	Non-flush	NPN	Connector M8, 3-pin	IQ10-06NNSKT0S	1055463
			Cable, 3-wire, 2 m, PVC	IQ10-06NNSKW2S	1055459
		PNP	Connector M8, 3-pin	IQ10-06NPSKT0S	1055461
			Cable, 3-wire, 2 m, PVC	IQ10-06NPSKW2S	1055457

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IQ12

- **Output function:** NO
- **Housing:** 12 mm x 26 mm x 40 mm
- **Electrical wiring:** DC 3-wire

Sensing range S_n	Installation type	Output type	Connection	Model name	Part no.
4 mm	Flush	NPN	Connector M8, 3-pin	IQ12-04BNSKT0S	1055434
			Cable, 3-wire, 2 m, PVC	IQ12-04BNSKW2S	1055430
		PNP	Connector M8, 3-pin	IQ12-04BPSKT0S	1055432
			Cable, 3-wire, 2 m, PVC	IQ12-04BPSKW2S	1055428
8 mm	Non-flush	PNP	Connector M8, 3-pin	IQ12-08NPSKT0S	1055440
			Cable, 3-wire, 2 m, PVC	IQ12-08NPSKW2S	1055436
		NPN	Connector M8, 3-pin	IQ12-08NNSKT0S	1055442
			Cable, 3-wire, 2 m, PVC	IQ12-08NNSKW2S	1055438

IQ40

Sensing range S_n	Installation type	Output function	Output type	Housing	Electrical wiring	Connection	Model name	Part no.
15 mm	Flush	Complementary	PNP	40 mm x 40 mm x 118 mm	DC 4-wire	Cable gland	IQ40-15BPP-KK1	6025814
		NC or NO	PNP	40 mm x 40 mm x 121 mm	DC 3-wire	Terminal connection with M20 gland	IQ40-15BPP-KK0	7900219
			–	40 mm x 40 mm x 121 mm	AC/DC 2-wire	Terminal connection with M20 gland	IQ40-15BUP-KK0	7902136
				40 mm x 40 mm x 118 mm	AC 2-wire	Terminal connection with M20 gland	IQ40-15BAP-KK1	6025816
					DC 2-wire	Terminal connection with M20 gland	IQ40-15BDP-KK1	6025817
20 mm	Flush	Complementary	PNP	40 mm x 40 mm x 66 mm	DC 4-wire	Connector M12, 4-pin	IQ40-20BPPKC0K	6037072
		NO	PNP	40 mm x 40 mm x 66 mm	DC 3-wire	Connector M12, 4-pin	IQ40-20BPSKC0K	6037070
	Non-flush	Complementary	PNP	40 mm x 40 mm x 118 mm	DC 4-wire	Terminal connection with M20 gland	IQ40-20NPP-KK1	6025815
		NC or NO	PNP	40 mm x 40 mm x 121 mm	DC 3-wire	Terminal connection with M20 gland	IQ40-20NPP-KK0	7900221
			–	40 mm x 40 mm x 121 mm	AC/DC 2-wire	Terminal connection with M20 gland	IQ40-20NUP-KK0	7902137
40 mm	Non-flush	NO	PNP	40 mm x 40 mm x 66 mm	DC 3-wire	Connector M12, 4-pin	IQ40-40NPSKC0K	6037071
		Complementary	PNP	40 mm x 40 mm x 66 mm	DC 4-wire	Connector M12, 4-pin	IQ40-40NPPKC0K	6037073

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IQ80

Sensing range S_n	Installation type	Output function	Output type	Housing	Electrical wiring	Connection	Model name	Part no.
50 mm	Flush, non-flush, overflush	Complementary	PNP	80 mm x 40 mm x 112 mm	DC 4-wire	Connector M12, 4-pin	IQ80-50BPP-KC0	6026473
60 mm	Non-flush	NC or NO	PNP	80 mm x 40 mm x 105 mm	DC 3-wire	Terminal connection with M20 gland	IQ80-60NPP-KK0	7900227
			PNP, NPN	80 mm x 40 mm x 105 mm	AC/DC 2-wire	Terminal connection with M20 gland	IQ80-60NUP-KK0	7902138

Recommended accessories

	Brief description	Model name	Part no.
Plug connectors and cables			
	Head A: Female connector, M8, 3-pin, straight Head B: cable Cable: PVC, unshielded, 2 m	DOL-0803-G02M	6010785
	Head A: Female connector, M8, 3-pin, angled Head B: cable Cable: PVC, unshielded, 2 m	DOL-0803-W02M	6008489
Illustration may differ	Head A: Female connector, M12, 4-pin, straight Head B: cable Cable: PVC, unshielded, 2 m	DOL-1204-G02M	6009382
Illustration may differ	Head A: Female connector, M12, 4-pin, angled Head B: cable Cable: PVC, unshielded, 2 m	DOL-1204-W02M	6009383

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At a glance

- Flat, compact design
- Long sensing range up to 7mm
- Easily visible indication LEDs
- Available in a plastic (IQ04 and IQ06) and metal housing (IQ20 and IQ25)

Your benefits

- Reduced mechanical damage due to space-saving flat housing, which does not protrude from sensor
- Time-saving simple installation with one or two screws
- No restrictions on machine design

C

➜ www.mysick.com/en/IQ_Flat

For more information, just 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.

Ordering information

Other models and accessories ➜ www.mysick.com/en/IQ_Flat

IQ04

- **Housing:** 8 mm x 16 mm x 4 mm
- **Sensing range S_n:** 1.5 mm

Electrical wiring	Output function	Output type	Connection	Model name	Part no.
DC 3-wire	NO	NPN	Cable, 3-wire, 2 m, PVC	IQ04-1B5NSKW2S	6042019
		PNP	Cable, 3-wire, 2 m, PVC	IQ04-1B5PSKW2S	6042017
	NC	NPN	Cable, 3-wire, 2 m, PVC	IQ04-1B5NOKW2S	6042020
		PNP	Cable, 3-wire, 2 m, PVC	IQ04-1B5POKW2S	6042018

IQ06

- **Housing:** 10 mm x 30 mm x 6 mm
- **Sensing range S_n:** 3 mm

Electrical wiring	Output function	Output type	Connection	Model name	Part no.
DC 3-wire	NO	NPN	Cable, 3-wire, 2 m, PUR	IQ06-03BNSKU2S	6042024
		PNP	Cable, 3-wire, 2 m, PUR	IQ06-03BPSKU2S	6042022
	NC	NPN	Cable, 3-wire, 2 m, PUR	IQ06-03BNOKU2S	6042025
		PNP	Cable, 3-wire, 2 m, PUR	IQ06-03BPOKU2S	6042023

C

IQ20

- **Housing:** 20 mm x 32 mm x 8 mm
- **Sensing range S_n:** 7 mm

Electrical wiring	Output function	Output type	Connection	Model name	Part no.
DC 3-wire	NO	NPN	Cable with connector M8, 3-pin, 0.3 m, PUR	IQ20-07BNSDP0S	6042044
		PNP		IQ20-07BPSDP0S	6042043
DC 4-wire	Complementary	PNP	Cable with connector M12, 4-pin, 0.3 m, PUR	IQ20-07BPPDQ0S	6042045

IQ25

- **Housing:** 25 mm x 50 mm x 10 mm
- **Sensing range S_n:** 5 mm

Electrical wiring	Output function	Output type	Connection	Model name	Part no.
DC 3-wire	NO	PNP	Cable, 3-wire, 2 m, PUR	IQ25-05BPSDU2S	6042046
DC 4-wire	Complementary	PNP	Cable, 4-wire, 2 m, PUR	IQ25-05BPPDU2S	6042047

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At a glance

- Small housing and light weight
- Housing diameters of 3 and 4 mm
- Integrated LED indicator
- Rugged IP 67- rated stainless steel housing
- Flexible connectivity via connecting cable or connector

Your benefits

- Space-saving installation in space-critical applications provides a high degree of design freedom
- Reliable detection of high-speed processes increases machine throughput
- High-visibility indicator LED ensures simple monitoring of the operational state
- High positioning accuracy
- High resistance to shock and vibrations increases service life and reduces maintenance and replacement costs

➜ www.mysick.com/en/IH_Miniature

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Ordering information

Other models and accessories ➜ www.mysick.com/en/IH_Miniature

IH03

- **Diameter:** 3 mm
- **Installation type:** flush

Sensing range S_n	Output function	Output type	Connection	Model name	Part no.
0.6 mm	NO	NPN	Cable, 3-wire, 2 m, PUR	IH03-0B6NS-VU1	6020142
		PNP	Cable, 3-wire, 2 m, PUR	IH03-0B6PS-VU1	6020141
			Cable with connector M8, 3-pin, with knurled nuts, 0.2 m, PUR	IH03-0B6PS-VR1	6038602
	NC	PNP	Cable, 3-wire, 2 m, PUR	IH03-0B6PO-VU1	6020143

IH04

- **Diameter:** 4 mm
- **Installation type:** flush

Sensing range S_n	Output function	Output type	Connection	Model name	Part no.
0.8 mm	NO	NPN	Connector M8, 3-pin	IH04-0B8NS-VT1	6020152
			Cable, 3-wire, 2 m, PVC	IH04-0B8NS-VW1	6020149
		PNP	Connector M8, 3-pin	IH04-0B8PS-VT1	6020114
			Cable, 3-wire, 2 m, PVC	IH04-0B8PS-VW1	6020113
			Cable with connector M8, 3-pin, 0.2 m, PVC	IH04-0B8PS-VR1	6045178

C

Recommended accessories

	Brief description	Model name	Part no.
Plug connectors and cables			
	Head A: Female connector, M8, 3-pin, straight Head B: cable Cable: PVC, unshielded, 2 m	DOL-0803-G02M	6010785
	Head A: Female connector, M8, 3-pin, angled Head B: cable Cable: PVC, unshielded, 2 m	DOL-0803-W02M	6008489

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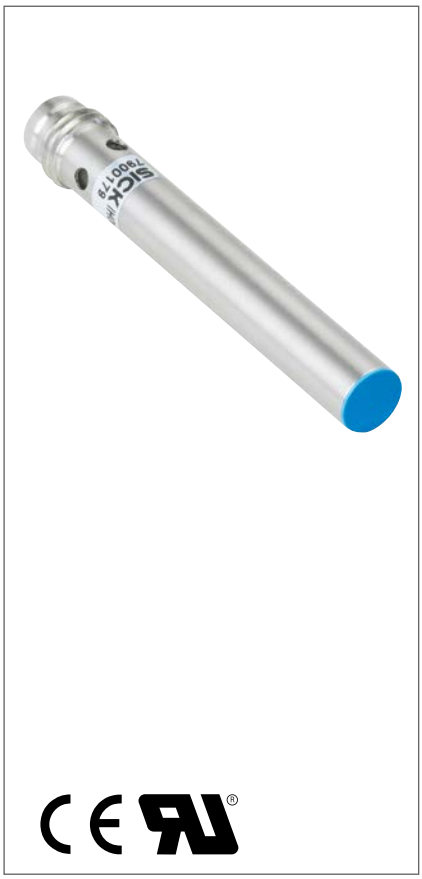

At a glance

- Operating range up to 30 mm
- High switching frequencies up to 5 kHz
- DC and AC/DC versions available
- Plastic and stainless steel housing
- Available in short and standard housing lengths

Your benefits

- Reliable detection of high-speed processes increases machine throughput
- High-visibility indicator LED ensures simple monitoring of the operational state
- High resistance to shock and vibrations increases service life and reduces maintenance and replacement costs

C

➜ www.mysick.com/en/IH_Standard

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Ordering information

Other models and accessories ➜ www.mysick.com/en/IH_Standard

IH06

Sensing range S_n	Installation type	Output function	Output type	Housing	Connection	Model name	Part no.
1.5 mm	Flush	NO	NPN	Short-body	Cable, 3-wire, 2 m, PVC	IH06-1B5NS-VWK	6020166
					Connector M8, 3-pin	IH06-1B5NS-VTK	6020170
			PNP	Short-body	Cable, 3-wire, 2 m, PVC	IH06-1B5PS-VWK	6020165
					Connector M8, 3-pin	IH06-1B5PS-VTK	6020169
		NC	PNP	Short-body	Cable, 3-wire, 2 m, PVC	IH06-1B5PO-VWK	6020167
					Connector M8, 3-pin	IH06-1B5PO-VTK	6020171

C

Sensing range S_n	Installation type	Output function	Output type	Housing	Connection	Model name	Part no.
2 mm	Flush	NO	NPN	Standard	Cable, 3-wire, 2 m, PVC	IH06-02BNS-VW1	7900178
					Connector M8, 3-pin	IH06-02BNS-VT1	7900180
				Short-body	Connector M8, 3-pin	IH06-02BNS-VTK	6025878
					Cable, 3-wire, 2 m, PVC	IH06-02BNS-VWK	6025875
			PNP	Standard	Connector M8, 3-pin	IH06-02BPS-VT1	7900179
					Cable, 3-wire, 2 m, PVC	IH06-02BPS-VW1	7900177
				Short-body	Connector M8, 3-pin	IH06-02BPS-VTK	6025877
					Cable, 3-wire, 2 m, PVC	IH06-02BPS-VWK	6025874
		NC	PNP	Standard	Connector M8, 3-pin	IH06-02BPO-VT1	1016857
				Short-body	Connector M8, 3-pin	IH06-02BPO-VTK	6025879
4 mm	Non-flush	NO	NPN	Standard	Cable, 3-wire, 2 m, PVC	IH06-04NNS-VW1	7900182
				Short-body	Connector M8, 3-pin	IH06-04NNS-VTK	6025883
					Cable, 3-wire, 2 m, PVC	IH06-04NNS-VWK	6025881
			PNP	Standard	Connector M8, 3-pin	IH06-04NPS-VT1	7900183
					Cable, 3-wire, 2 m, PVC	IH06-04NPS-VW1	7900181
				Short-body	Connector M8, 3-pin	IH06-04NPS-VTK	6025882
					Cable, 3-wire, 2 m, PVC	IH06-04NPS-VWK	6025880
		NC	PNP	Short-body	Connector M8, 3-pin	IH06-04NPO-VTK	6025884

Recommended accessories

	Brief description	Model name	Part no.
Plug connectors and cables			
	Head A: Female connector, M8, 3-pin, straight Head B: cable Cable: PVC, unshielded, 2 m	DOL-0803-G02M	6010785
	Head A: Female connector, M8, 3-pin, angled Head B: cable Cable: PVC, unshielded, 2 m	DOL-0803-W02M	6008489

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At a glance

- Speed and acceleration monitoring
- Monitoring range: 6 to 12,000 pulses/min. and 0.1 to 2 pulses/sec.²
- Switching and pulse output
- Intelligent start-up delay
- Speed monitoring can be flexibly configured via two thresholds
- Flexible sensor settings, monitoring, extended diagnostics, and visualization thanks to IO-Link
- Types M18 and M30
- Sensing ranges of up to 10 mm flush

Your benefits

- Speed-independent detection of speed changes
- Faster detection of speed changes than conventional speed monitors
- No readjustment after speed changes necessary
- Precise and convenient configuration via software
- IO-Link provides easy data access from the PLC
- No time-consuming, individual configuration of start-up delay feature necessary
- Reliable output signal thanks to adjustable speed thresholds (hysteresis)
- No expensive counter cards necessary in PLC

→ www.mysick.com/en/SAM

For more information, just 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.

Ordering information

Other models and accessories → www.mysick.com/en/SAM

- **IO-Link:** Standard functions, advanced functions
- **Advanced functions:** pulse and acceleration monitoring
- **Connection:** Connector M12, 4-pin

Speed range	Acceleration range	Housing	Sensing range S_n	Model name	Part no.
6 ... 12,000 impulses / min	0.1 ... 2 impulses / sec²	M18 x 1	7 mm	IMC18-07BPDZC0SA05	1061987
		M30 x 1.5	10 mm	IMC30-10BPDZC0SA05	1061704

Recommended accessories

	Brief description	Model name	Part no.
Mounting brackets and mounting plates			
	Mounting bracket, M18 thread, Steel, zinc coated, without mounting hardware	BEF-WN-M18	5308446
	Mounting bracket, M18 thread, Stainless steel, without mounting hardware	BEF-WN-M18N	5320947
	Mounting bracket, M30 thread, Steel, zinc coated, without mounting hardware	BEF-WN-M30	5308445

C

	Brief description	Model name	Part no.
Terminal and alignment brackets			
	Clamping block for round sensors M18, without fixed stop, Plastic (PA12), glass-fiber reinforced, Mounting hardware included	BEF-KH-M18	2051481
	Clamping block for round sensors M18, with fixed stop, Plastic (PA12), glass-fiber reinforced, Mounting hardware included	BEF-KHF-M18	2051482
Plug connectors and cables			
Illustration may differ	Head A: Female connector, M12, 4-pin, straight Head B: cable Cable: PVC, unshielded, 2 m	DOL-1204-G02M	6009382
	Head A: Female connector, M12, 4-pin, straight Head B: cable Cable: PVC, unshielded, 5 m	DOL-1204-G05M	6009866

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At a glance

- Cylindrical housing
- Detects powders, granulates, liquids and solids.
- Best-in-class electromagnetic compatibility
- 4-wire DC (CM18 and CM30) and 2-wire AC versions (CM30)
- Supply voltage: 10 ... 40 VDC (CM18 and CM30), 20 V... 250 VAC (CM30)
- Short-circuit reverse polarity and power-up pulse suppression protection
- LED status indicator
- IP 67 enclosure rating

Your benefits

- Durable housing withstands harsh industrial applications, reducing maintenance costs and downtime
- Quick and easy adjustment of the switching point saves installation and setup time
- Application flexibility
- Solves applications where other sensing technologies cannot provide a solution
- High shock and vibration resistance increases sensor life and reduces maintenance costs
- Non-contact level measurement, even through container or tank walls, reduces installation and setup time

→ www.mysick.com/en/CM

For more information, just 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.

Ordering information

Other models and accessories → www.mysick.com/en/CM

CM12

- **Housing:** M12 x 1
- **Electrical wiring:** DC 4-wire

Sensing range S_n	Installation type	Output function	Output type	Connection	Model name	Part no.
8 mm	Non-flush, flush	Programmable	PNP, NPN	Connector M12, 4-pin	CM12-08EBP-KC1	6051030
				Cable, 4-wire, 2 m, PVC	CM12-08EBP-KW1	6051029

CM18

- **Housing:** M18 x 1
- **Electrical wiring:** DC 4-wire

Sensing range S_n	Installation type	Output function	Output type	Connection	Model name	Part no.
8 mm	Flush	Complementary	NPN	Connector M12, 4-pin	CM18-08BNP-KC1	6021456
				Cable, 4-wire, 2 m, PVC	CM18-08BNP-KW1	6021455
			PNP	Connector M12, 4-pin	CM18-08BPP-KC1	6020388
				Cable, 4-wire, 2 m, PVC	CM18-08BPP-KW1	6020136

C

Sensing range S_n	Installation type	Output function	Output type	Connection	Model name	Part no.
12 mm	Non-flush	Complementary	NPN	Connector M12, 4-pin	CM18-12NNP-KC1	6021458
				Cable, 4-wire, 2 m, PVC	CM18-12NNP-KW1	6021457
			PNP	Connector M12, 4-pin	CM18-12NPP-KC1	6020410
				Cable, 4-wire, 2 m, PVC	CM18-12NPP-KW1	6020389

CM30

- **Housing:** M30 x 1.5
- **Electrical wiring:** DC 4-wire

Sensing range S_n	Installation type	Output function	Output type	Connection	Model name	Part no.
16 mm	Flush	Complementary	NPN	Connector M12, 4-pin	CM30-16BNP-KC1	6021460
				Cable, 4-wire, 2 m, PVC	CM30-16BNP-KW1	6021459
			PNP	Connector M12, 4-pin	CM30-16BPP-KC1	6020475
				Cable, 4-wire, 2 m, PVC	CM30-16BPP-KW1	6020473
25 mm	Non-flush	Complementary	NPN	Connector M12, 4-pin	CM30-25NNP-KC1	6021462
				Cable, 4-wire, 2 m, PVC	CM30-25NNP-KW1	6021461
			PNP	Connector M12, 4-pin	CM30-25NPP-KC1	6020477
				Cable, 4-wire, 2 m, PVC	CM30-25NPP-KW1	6020476

Recommended accessories

	Brief description	Model name	Part no.
Mounting brackets and mounting plates			
	Mounting bracket, M18 thread, Steel, zinc coated, without mounting hardware	BEF-WN-M18	5308446
	Mounting bracket, M18 thread, Stainless steel, without mounting hardware	BEF-WN-M18N	5320947
	Mounting bracket, M30 thread, Steel, zinc coated, without mounting hardware	BEF-WN-M30	5308445
Terminal and alignment brackets			
	Clamping block for round sensors M12, without fixed stop, Plastic (PA12), glass-fiber reinforced, Mounting hardware included	BEF-KH-M12	2051479
	Clamping block for round sensors M12, with fixed stop, Plastic (PA12), glass-fiber reinforced, Mounting hardware included	BEF-KHF-M12	2051480
	Clamping block for round sensors M18, without fixed stop, Plastic (PA12), glass-fiber reinforced, Mounting hardware included	BEF-KH-M18	2051481
	Clamping block for round sensors M18, with fixed stop, Plastic (PA12), glass-fiber reinforced, Mounting hardware included	BEF-KHF-M18	2051482

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	Brief description	Model name	Part no.
Plug connectors and cables			
Illustration may differ	Head A: Female connector, M12, 4-pin, straight Head B: cable Cable: PVC, unshielded, 2 m	DOL-1204-G02M	6009382
	Head A: Female connector, M12, 4-pin, straight Head B: cable Cable: PVC, unshielded, 5 m	DOL-1204-G05M	6009866
Illustration may differ	Head A: Female connector, M12, 4-pin, angled Head B: cable Cable: PVC, unshielded, 2 m	DOL-1204-W02M	6009383
	Head A: Female connector, M12, 4-pin, angled Head B: cable Cable: PVC, unshielded, 5 m	DOL-1204-W05M	6009867

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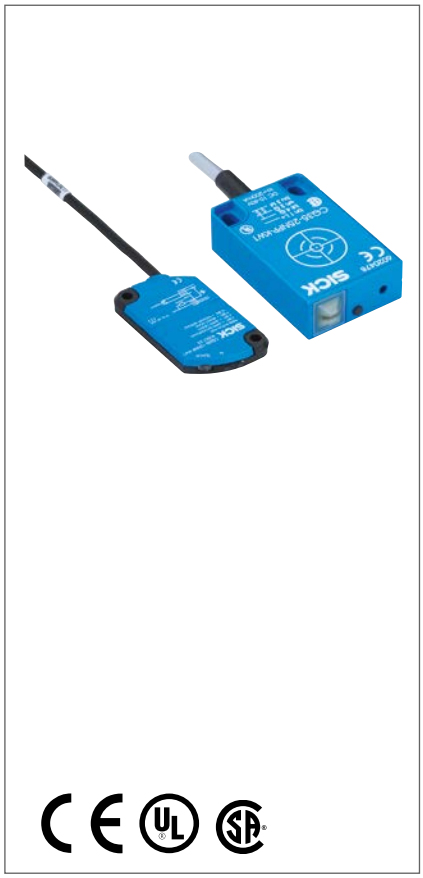

At a glance

- Rectangular housing
- Detects powders, granulates, liquids and solids.
- Best-in-class high electromagnetic compatibility
- Electrical design: DC 4-wire
- Supply voltage: CQ35 10 ... 40 VDC and CQ28 10...30 VDC
- Short-circuit, reverse polarity and power-up pulse suppression protection

Your benefits

- Non-contact level measurement, even through container or tank walls, which eliminates drilling holes and thus reduces installation time
- Durable housing withstands harsh industrial applications, reducing maintenance costs
- Quick and easy adjustment of the switching point - via pushbutton, remote teach for the CQ28 and via potentiometer for CQ35 - saves time
- Simple and safe detection alternative to photoelectric and inductive sensors in applications such as detecting product in a sealed box, container or tank

➜ www.mysick.com/en/CQ

For more information, just 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.

Ordering information

Other models and accessories ➜ www.mysick.com/en/CQ

CQ4

- **Installation type:** non-flush, flush

Sensing range S_n	Output function	Housing	Output type	Connection	Model name	Part no.
8 mm	NO	16 mm x 39.5 mm x 12 mm	NPN	Cable, 3-wire, 2 m, PVC	CQ4-08ENSKU1	6051011
				Connector M8, 3-pin	CQ4-08ENSKT1	6051006
				Cable with connector M8, 3-pin, 0.3 m, PVC	CQ4-08ENSKP1	6051002
			PNP	Cable, 3-wire, 2 m, PVC	CQ4-08EPSKU1	6051009
				Connector M8, 3-pin	CQ4-08EPSKT1	6051004
				Cable with connector M8, 3-pin, 0.3 m, PVC	CQ4-08EPSKP1	6051000
8 mm	NC	16 mm x 39.5 mm x 12 mm	NPN	Cable, 3-wire, 2 m, PVC	CQ4-08ENOKU1	6051012
				Connector M8, 3-pin	CQ4-08ENOKT1	6051007
				Cable with connector M8, 3-pin, 0.3 m, PVC	CQ4-08ENOKP1	6051003
			PNP	Cable, 3-wire, 2 m, PVC	CQ4-08EPOKU1	6051010
				Connector M8, 3-pin	CQ4-08EPOKT1	6051005
				Cable with connector M8, 3-pin, 0.3 m, PVC	CQ4-08EPOKP1	6051001

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CQ28

- **Installation type:** non-flush

Sensing range S_n	Output function	Housing	Output type	Connection	Model name	Part no.
10 mm	NC or NO	28 mm x 46 mm x 5.5 mm	NPN	Cable, 4-wire, 2 m, PVC	CQ28-10NNP-KW1	6030133
			PNP	Cable, 4-wire, 2 m, PVC	CQ28-10NPP-KW1	6030132

CQ35

- **Installation type:** non-flush

Sensing range S_n	Output function	Housing	Output type	Connection	Model name	Part no.
25 mm	Complementary	35 mm x 15 mm x 69.5 mm	NPN	Connector M12, 4-pin	CQ35-25NNP-KC1	6021464
			PNP	Connector M12, 4-pin	CQ35-25NPP-KC1	6020479
		35 mm x 15 mm x 57.5 mm	NPN	Cable, 4-wire, 2 m, PVC	CQ35-25NNP-KW1	6021463
			PNP	Cable, 4-wire, 2 m, PVC	CQ35-25NPP-KW1	6020478

Recommended accessories

	Brief description	Model name	Part no.
Mounting brackets and mounting plates			
	Mounting bracket for wall mounting, Stainless steel 1.4571, Mounting hardware included	BEF-W4-A	2051628
	Mounting bracket for floor mounting, Stainless steel 1.4571, Mounting hardware included	BEF-W4-B	2051630
Terminal and alignment brackets			
	Ball clamp bracket, Plastic, Mounting hardware included	BEF-GH-MINI01	2023160
Plug connectors and cables			
	Head A: Female connector, M8, 3-pin, straight Head B: cable Cable: PVC, unshielded, 2 m	DOL-0803-G02M	6010785
	Head A: Female connector, M8, 3-pin, straight Head B: cable Cable: PVC, unshielded, 5 m	DOL-0803-G05M	6022009
	Head A: Female connector, M8, 3-pin, angled Head B: cable Cable: PVC, unshielded, 2 m	DOL-0803-W02M	6008489
	Head A: Female connector, M8, 3-pin, angled Head B: cable Cable: PVC, unshielded, 5 m	DOL-0803-W05M	6022010
 Illustration may differ	Head A: Female connector, M12, 4-pin, straight Head B: cable Cable: PVC, unshielded, 2 m	DOL-1204-G02M	6009382
	Head A: Female connector, M12, 4-pin, straight Head B: cable Cable: PVC, unshielded, 5 m	DOL-1204-G05M	6009866
 Illustration may differ	Head A: Female connector, M12, 4-pin, angled Head B: cable Cable: PVC, unshielded, 2 m	DOL-1204-W02M	6009383
	Head A: Female connector, M12, 4-pin, angled Head B: cable Cable: PVC, unshielded, 5 m	DOL-1204-W05M	6009867

C

At a glance

- Reliable detection of permanent magnets through non-ferromagnetic materials such as stainless steel, aluminum, plastic or wood
- Precise switching point and exact hysteresis
- Reliable object detection in high temperature zones
- Small housing design with large operating ranges
- Resistant to dust, dirt, and vibrations, increasing sensor life and reducing maintenance costs

Your benefits

- Non-contact operation eliminates interference from dirt, dust and vibrations, increasing sensor life and reducing maintenance costs
- Space-saving installation due to small design
- Large operating ranges with reliable switching increase throughput
- Non-contact, universal detection through several substances, including plastic containers and pipes protective PTFE walls and non-magnetic metal walls

➜ www.mysick.com/en/MM

For more information, just 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.

Ordering information

Other models and accessories ➜ www.mysick.com/en/MM

MM08

- **Housing:** M8 x 1
- **Output function:** NO

Sensing range S_n	Output type	Connection	Model name	Part no.
60 mm	NPN	Connector M8, 3-pin	MM08-60ANS-ZTK	1040068
		Cable, 3-wire, 2 m, PUR/PVC	MM08-60ANS-ZUK	1040066
	PNP	Connector M8, 3-pin	MM08-60APS-ZTK	1040067
		Cable, 3-wire, 2 m, PUR/PVC	MM08-60APS-ZUK	1040027

MM12

- **Housing:** M12 x 1
- **Output function:** NO

Sensing range S_n	Output type	Connection	Model name	Part no.
60 mm	NPN	Connector M12, 4-pin	MM12-60ANS-ZCK	1040071
		Cable, 3-wire, 2 m, PUR/PVC	MM12-60ANS-ZUK	1040026
	PNP	Connector M12, 4-pin	MM12-60APS-ZCK	1040070
		Cable, 3-wire, 2 m, PUR/PVC	MM12-60APS-ZUK	1040069

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MM18

- **Housing:** M18 x 1
- **Output function:** NO

Sensing range S_n	Output type	Connection	Model name	Part no.
70 mm	NPN	Connector M12, 4-pin	MM18-70ANS-ZCK	1040073
		Cable, 3-wire, 2 m, PUR/PVC	MM18-70ANS-ZUK	1040085
	PNP	Connector M12, 4-pin	MM18-70APS-ZCK	1040072
		Cable, 3-wire, 2 m, PUR/PVC	MM18-70APS-ZUK	1040029
120 mm	PNP	Connector M12, 4-pin	MM18-00APS-ZC0	1029861
		Cable, 3-wire, 2 m, PUR/PVC	MM18-00APS-ZU0	1029952

MM12 NAMUR

- **Housing:** M12 x 1

Sensing range S_n	Output type	Connection	Model name	Part no.
60 mm	NAMUR	Connector M12, 4-pin	MM12-60A-N-ZC0	7900287
		Cable, 2-wire, 2 m, PVC	MM12-60A-N-ZW0	7900286

MM18 NAMUR

- **Housing:** M18 x 1

Sensing range S_n	Output type	Connection	Model name	Part no.
70 mm	NAMUR	Connector M12, 4-pin	MM18-70A-N-ZC0	7900289
		Cable, 2-wire, 2 m, PVC	MM18-70A-N-ZW0	7900288

Recommended accessories

	Brief description	Model name	Part no.
Mounting brackets and mounting plates			
	Mounting plate for M8 sensors, Steel, zinc coated, without mounting hardware	BEF-WG-M08	5321722
	Mounting plate for M12 sensors, Steel, zinc coated, without mounting hardware	BEF-WG-M12	5321869
	Mounting plate for M18 sensors, Steel, zinc coated, without mounting hardware	BEF-WG-M18	5321870
Universal bar clamp systems			
	Plate N05N for universal clamp bracket, M12, Stainless steel 1.4571 (sheet), Stainless steel 1.4408 (clamp), Universal clamp, mounting hardware	BEF-KHS-N05N	2051621
	Plate N06 for universal clamp bracket, Zinc plated steel (sheet), Diecast zinc (clamp), Universal clamp, mounting hardware	BEF-KHS-N06	2051612

	Brief description	Model name	Part no.
Plug connectors and cables			
	Head A: Female connector, M8, 3-pin, straight Head B: cable Cable: PVC, unshielded, 2 m	DOL-0803-G02M	6010785
	Head A: Female connector, M8, 3-pin, angled Head B: cable Cable: PVC, unshielded, 2 m	DOL-0803-W02M	6008489
 Illustration may differ	Head A: Female connector, M12, 4-pin, straight Head B: cable Cable: PVC, unshielded, 2 m	DOL-1204-G02M	6009382
 Illustration may differ	Head A: Female connector, M12, 4-pin, angled Head B: cable Cable: PVC, unshielded, 2 m	DOL-1204-W02M	6009383
Magnets			
	–	MAG-3010-B	7901785

At a glance

- Long sensing ranges in a small, compact rectangular plastic housing with an IP 67 enclosure rating
- Detection of permanent magnets through non-ferromagnetic materials such as stainless steel, aluminum, plastic, or wood
- Solves high-temperature applications by installing the temperature-resistant magnet in the high-temperature area and the sensor behind an insulated area
- Non-contact operation that is resistant to dust, dirt, shock and vibration
- Precise switching point and hysteresis
- Sensing range up to 60 mm
- High switching frequency
- Short-circuit, reverse polarity protection and power-up pulse suppression

Your benefits

- Non-contact operation eliminates interference from dirt, dust, shock and vibrations, reducing maintenance costs
- Long sensing range with reliable switching reduces miscounts and increases machine throughput
- Easy to install, low-cost sensor solution saves installation time and costs
- Compact plastic housing saves machine space

→ www.mysick.com/en/MQ

For more information, just 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.

Ordering information

Other models and accessories → www.mysick.com/en/MQ

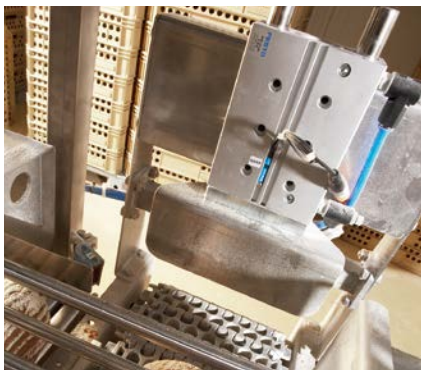
- **Output function:** NO

Sensing range S_n	Output type	Connection	Model name	Part no.
60 mm	NPN	Connector M8, 3-pin	MQ10-60ANS-KT0	7900281
		Cable, 3-wire, 2 m, PUR/PVC	MQ10-60ANS-KU0	7900279
	PNP	Connector M8, 3-pin	MQ10-60APS-KT0	7900280
		Cable, 3-wire, 2 m, PUR/PVC	MQ10-60APS-KU0	7900278

Recommended accessories

	Brief description	Model name	Part no.
Plug connectors and cables			
	Head A: Female connector, M8, 3-pin, straight Head B: cable Cable: PVC, unshielded, 2 m	DOL-0803-G02M	6010785
	Head A: Female connector, M8, 3-pin, angled Head B: cable Cable: PVC, unshielded, 2 m	DOL-0803-W02M	6008489
Magnets			
	–	MAG-3010-B	7901785

MAGNETIC CYLINDER SENSORS



With millimeter precision – cylinder sensors from SICK

Detecting, measuring, positioning, quality control – all crucial tasks in industrial automation. Machinery is becoming ever smaller, yet still offering unprecedented performance levels. Innovative cylinder sensors from SICK were developed for faster and more accurate detection of piston positions in compact pneumatic cylinders. This results in broader fields of application for pneumatic cylinders plus new potential for machinery and production plants. And with our huge range of magnetic cylinder sensors to choose from, we can meet your every need. With features like ease of handling, the option of an analog output, optimum switching characteristics, suitability for use in the food and beverage industry, support for the latest IO-Link technology, and universal mounting options with our comprehensive range of adapters, magnetic cylinder sensors from SICK are equipped for all installation locations and conditions.

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D

Selection guide magnetic cylinder sensors **D-200**

MPS **D-202**
The superior analog sensor for the T-slot

MPA **D-204**
Precision and versatility up to 1,007 millimeters

MZ2Q-C **D-206**
Magnetic cylinder sensors with two individually adjustable switching points

MZC1 . . . . . .**D-208**
Drop-in, install, done

RZC1 . . . . . .**D-210**
Drop-in, install, done

MZ2Q-T **D-212**
Magnetic cylinder sensors with two individually adjustable switching points

MZT8 . . . . . .**D-214**
Compact, resistant, easily installed

RZT6 . . . . . .**D-216**
Widest portfolio for versatile tasks

SELECTION GUIDE MAGNETIC CYLINDER SENSORS

D

Product		Standard application	Housing properties																				
		Principle of operation		Direct mounting		Mounting via adapter								Housing material		Special features				Switching output/ output function			
		Measuring	Detecting	T-slot	C-slot	T-slot	Roundbody cylinder	Dove tail groove cylinder	Profile cylinder	Tie-rod cylinder	SMC rail EDQ2 (T-/C-slot)	Plastics	Aluminum	For lifting cylinder	Enclosure rating IP 69K	Vistal®	Combination screw	PNP	NPN	Reed
Analog positioning sensors																							
	MPS	■		■		■	■	■			■	■		■									
	MPA	■					■			■			■										
Sensors for T-slot cylinders																							
	MZ2Q-T		■	■			■	■	■	■	■	■						■	■				
	MZT8		■	■			■	■	■	■	■	■			■		■	■	■				
	RZT6		■	■			■	■	■	■	■	■								■			
Sensors for C-slot cylinders																							
	MZ2Q-C		■		■						■			■				■	■				
	MZC1		■		■									■	■	■	■	■	■				
	RZC1		■		■										■	■	■			■			

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D

Sensor properties																							Page
			Special features					Measuring ranges															
	Normally closed	Normally open	IO-Link	Analog output	Teach-in	ASIC from SICK	2 adjustable switching points	100 mm	200 mm	300 mm	400 mm	500 mm	600 mm	700 mm	800 mm	900 mm	1,000 mm						
			■	■	■			32 mm ... 256 mm (in 32-mm increments)															→ D-202
			■	■	■			107 mm ... 1,007 mm (in 36-mm increments)															→ D-204
		■	■		■		■																→ D-206
	■	■				■																	→ D-208
		■																					→ D-210
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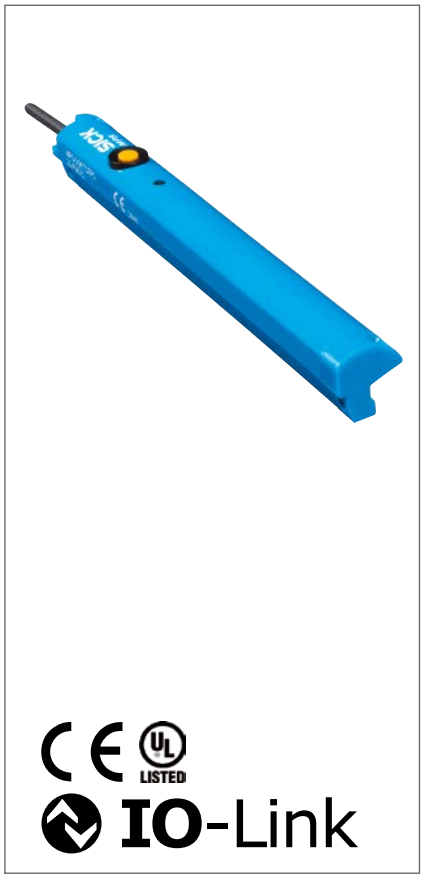

At a glance

- Analog positioning sensor for pneumatic and hydraulic cylinders with T-slot
- Measuring lengths from 32 mm to 256 mm in 32 mm steps
- Output signals 4 mA to 20 mA as well as 0 V to 10 V in a single sensor
- Superior precision: 0.05 mm resolution typ., 0.1 mm repeatability typ., 0.3 mm linearity typ., 1 ms measurement rate typ.
- Electric setting of zero point and end point via teach-in button (optional)

Your benefits

- Convenient installation and sensor replacement due to drop-in installation
- Maximum flexibility through measuring ranges from 32 mm to 256 mm
- Increased machine performance thanks to the sensor's minimal blind zone
- Easy analog output setup: adjustable zero and end point can be taught via single button
- Selectable installation direction to optimize cabling
- Simple commissioning due to "in-range" indicator
- Flexible sensor settings, monitoring, advanced diagnostics, and visualization thanks to IO-Link save time and money

➜ www.mysick.com/en/MPS

For more information, just 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.

Ordering information

Other models and accessories ➜ www.mysick.com/en/MPS

MPS-Analog

- **Output function:** Analog
- **Teach-in:** ✔
- **Cable material:** PUR

Measuring range	Housing length	Connection	Model name	Part no.
32 mm [1]	45 mm	Cable, 2 m [2]	MPS-032TSTU0	1045667
		Cable with connector M8, 4-pin, 0.3 m [2]	MPS-032TSTP0	1045666
64 mm [1]	77 mm	Cable, 2 m [2]	MPS-064TSTU0	1045669
		Cable with connector M8, 4-pin, 0.3 m [2]	MPS-064TSTP0	1045668
96 mm [1]	109 mm	Cable, 2 m [2]	MPS-096TSTU0	1045671
		Cable with connector M8, 4-pin, 0.3 m [2]	MPS-096TSTP0	1045670
128 mm [1]	141 mm	Cable, 2 m [2]	MPS-128TSTU0	1045673
		Cable with connector M8, 4-pin, 0.3 m [2]	MPS-128TSTP0	1045672
160 mm [1]	173 mm	Cable, 2 m [2]	MPS-160TSTU0	1050740
		Cable with connector M8, 4-pin, 0.3 m [2]	MPS-160TSTP0	1050685
192 mm [1]	205 mm	Cable, 2 m [2]	MPS-192TSTU0	1050738
		Cable with connector M8, 4-pin, 0.3 m [2]	MPS-192TSTP0	1047728
224 mm [1]	237 mm	Cable, 2 m [2]	MPS-224TSTU0	1050741
		Cable with connector M8, 4-pin, 0.3 m [2]	MPS-224TSTP0	1050686
256 mm [1]	269 mm	Cable, 2 m [2]	MPS-256TSTU0	1050739
		Cable with connector M8, 4-pin, 0.3 m [2]	MPS-256TSTP0	1050551

[1] ± 1 mm.

[2] Do not bend below 0 °C.

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MPS-IO-Link

- **Output function:** IO-Link
- **Teach-in:** ✔
- **Cable material:** PUR

Measuring range	Housing length	Connection	Model name	Part no.
32 mm [1]	45 mm	Cable with connector M12, 4-pin, 0.3 m [2]	MPS-032TLTQ0	1062506
64 mm [1]	77 mm	Cable with connector M12, 4-pin, 0.3 m [2]	MPS-064TLTQ0	1062507
96 mm [1]	109 mm	Cable with connector M12, 4-pin, 0.3 m [2]	MPS-096TLTQ0	1062508
128 mm [1]	141 mm	Cable with connector M12, 4-pin, 0.3 m [2]	MPS-128TLTQ0	1062518
160 mm [1]	173 mm	Cable with connector M12, 4-pin, 0.3 m [2]	MPS-160TLTQ0	1062521
192 mm [1]	205 mm	Cable with connector M12, 4-pin, 0.3 m [2]	MPS-192TLTQ0	1062519
224 mm [1]	237 mm	Cable with connector M12, 4-pin, 0.3 m [2]	MPS-224TLTQ0	1062522
256 mm [1]	269 mm	Cable with connector M12, 4-pin, 0.3 m [2]	MPS-256TLTQ0	1062520

[1] ± 1 mm.

[2] Do not bend below 0 °C.

Recommended accessories

	Brief description	Model name	Part no.
Brackets for cylinder sensors			
	Mounting bracket for mounting on SMC rails CDQ2 (only MPS-32THTP0), Aluminum	BEF-KHZ-CT45	2061698
	Mounting bracket for cylinder with dovetail slot, Aluminum, without mounting hardware	BEF-KHZ-ST1	2022703
	Mounting bracket for mounting on SMC rails ECDQ2 (T-slot), Aluminum, without mounting hardware	BEF-KHZ-TT1	2046439
	Mounting bracket for mounting on SMC rails CDQ2 (T-slot), Aluminum, without mounting hardware	BEF-KHZ-TT2	2046440
Plug connectors and cables			
	Head A: Female connector, M8, 4-pin, straight Head B: cable Cable: PVC, unshielded, 2 m	DOL-0804-G02M	6009870
	Head A: Female connector, M8, 4-pin, angled Head B: cable Cable: PVC, unshielded, 2 m	DOL-0804-W02M	6009871

D

At a glance

- Analog positioning sensor that can be mounted with adapters on various cylinders thanks to its universal housing, e.g., cylinders with T-slot, round and tie rod cylinders
- Measuring lengths from 107 mm to 1,007 mm in 36 mm steps
- Output signals 4 mA to 20 mA as well as 0 V to 10 V in a single sensor
- Linearity of 0.5 mm at a sample rate of 1.15 ms and an resolution of 0.06 mm
- Electric setting of zero point and end point via teach-in button
- IP 67 enclosure rating

Your benefits

- Maximum flexibility through measuring ranges from 107 mm to 1,007 mm
- Increased machine performance thanks to the sensor's minimal blind zone
- Saves time due to configurable start and end points via intelligent Teach Pad
- A rugged aluminum housing, the capacitive Teach Pad and the anti-kink cable guarantees a long operational lifetime of the sensor and reduces maintenance costs
- Time savings through simple commissioning and diagnostics thanks to a 4-color LED display
- Analog power, voltage signal and IO-Link in a single sensor reduces the range of variants and thereby lowers warehousing costs
- Flexible sensor settings, monitoring, advanced diagnostics, and visualization thanks to IO-Link save time and money

➜ www.mysick.com/en/MPA

For more information, just 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.

Ordering information

Other models and accessories ➜ www.mysick.com/en/MPA

- **Output function:** Analog, IO-Link
- **Teach-in:** ✔
- **Cable material:** PUR

Measuring range	Housing length	Connection	Model name	Part no.
107 mm [1]	109 mm	Cable, 2 m [2]	MPA-107THTU0	1059443
		Cable with connector M8, 4-pin, 0.3 m [2]	MPA-107THTP0	1059442
143 mm [1]	145 mm	Cable, 2 m [2]	MPA-143THTU0	1059445
		Cable with connector M8, 4-pin, 0.3 m [2]	MPA-143THTP0	1059444
179 mm [1]	181 mm	Cable, 2 m [2]	MPA-179THTU0	1059447
		Cable with connector M8, 4-pin, 0.3 m [2]	MPA-179THTP0	1059446
215 mm [1]	217 mm	Cable, 2 m [2]	MPA-215THTU0	1059449
		Cable with connector M8, 4-pin, 0.3 m [2]	MPA-215THTP0	1059448
251 mm [1]	253 mm	Cable, 2 m [2]	MPA-251THTU0	1059451
		Cable with connector M8, 4-pin, 0.3 m [2]	MPA-251THTP0	1059450
287 mm [1]	289 mm	Cable, 2 m [2]	MPA-287THTU0	1059453
		Cable with connector M8, 4-pin, 0.3 m [2]	MPA-287THTP0	1059452
323 mm [1]	325 mm	Cable, 2 m [2]	MPA-323THTU0	1059455
		Cable with connector M8, 4-pin, 0.3 m [2]	MPA-323THTP0	1059454
359 mm [1]	361 mm	Cable with connector M8, 4-pin, 0.3 m [2]	MPA-359THTP0	1059456
395 mm [1]	397 mm	Cable with connector M8, 4-pin, 0.3 m [2]	MPA-395THTP0	1059458
431 mm [1]	433 mm	Cable with connector M8, 4-pin, 0.3 m [2]	MPA-431THTP0	1059460

[1] ± 1 mm.

[2] Do not bend below 0 °C.

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Measuring range	Housing length	Connection	Model name	Part no.
467 mm [1]	469 mm	Cable with connector M8, 4-pin, 0.3 m [2]	MPA-467THTP0	1059462
503 mm [1]	505 mm	Cable with connector M8, 4-pin, 0.3 m [2]	MPA-503THTP0	1059464
539 mm [1]	541 mm	Cable with connector M8, 4-pin, 0.3 m [2]	MPA-539THTP0	1059466
575 mm [1]	577 mm	Cable with connector M8, 4-pin, 0.3 m [2]	MPA-575THTP0	1059467
611 mm [1]	613 mm	Cable with connector M8, 4-pin, 0.3 m [2]	MPA-611THTP0	1059468
647 mm [1]	649 mm	Cable with connector M8, 4-pin, 0.3 m [2]	MPA-647THTP0	1059469
683 mm [1]	685 mm	Cable with connector M8, 4-pin, 0.3 m [2]	MPA-683THTP0	1059470
719 mm [1]	721 mm	Cable with connector M8, 4-pin, 0.3 m [2]	MPA-719THTP0	1059471
755 mm [1]	757 mm	Cable with connector M8, 4-pin, 0.3 m [2]	MPA-755THTP0	1059472
791 mm [1]	793 mm	Cable with connector M8, 4-pin, 0.3 m [2]	MPA-791THTP0	1059473
827 mm [1]	829 mm	Cable with connector M8, 4-pin, 0.3 m [2]	MPA-827THTP0	1059474
863 mm [1]	865 mm	Cable with connector M8, 4-pin, 0.3 m [2]	MPA-863THTP0	1059475
899 mm [1]	901 mm	Cable with connector M8, 4-pin, 0.3 m [2]	MPA-899THTP0	1059476
935 mm [1]	937 mm	Cable with connector M8, 4-pin, 0.3 m [2]	MPA-935THTP0	1059477
971 mm [1]	973 mm	Cable with connector M8, 4-pin, 0.3 m [2]	MPA-971THTP0	1059478
1,007 mm [1]	1,009 mm	Cable with connector M8, 4-pin, 0.3 m [2]	MPA-1007THTP0	1059479

[1] ± 1 mm.

[2] Do not bend below 0 °C.

Recommended accessories

	Brief description	Model name	Part no.
Brackets for cylinder sensors			
	For tie-rod cylinder (diameter tie-rod max. 18 mm), Aluminum alloy (adapter), Stainless steel V2A (mounting-/fixing screw)	BEF-KHZPZ1MPA	2065578
	For T-slot cylinders, Stainless steel V2A (bracket/mounting screw), Brass (fixing screw/sliding nut)	BEF-KHZT01MPA	2065575
Mounting brackets and mounting plates			
	Braket for low mounting, Stainless steel V2A (bracket/mounting screw), Brass (fixing screw)	BEF-WNL01MPA	2065973
	Braket for lateral mounting, Stainless steel V2A (bracket/mounting screw), Brass (fixing screw)	BEF-WNZ01MPA	2065577
Plug connectors and cables			
	Head A: Female connector, M8, 4-pin, straight Head B: cable Cable: PVC, unshielded, 2 m	DOL-0804-G02M	6009870
	Head A: Female connector, M8, 4-pin, angled Head B: cable Cable: PVC, unshielded, 2 m	DOL-0804-W02M	6009871
Magnets			
	Magnet with mounting hole for M4 countersunk screw, Ø 20 mm, height 6.5 mm	MAG-2006-B	7901784
	Magnet with mounting hole for M4 countersunk screw, 3.2 mm x 6 mm x 15.2 mm	Magnet	5327349

D

At a glance

- Magnetic cylinder sensor for all conventional pneumatic cylinders, linear slides, and grippers with C-slots
- Easy adjustment of two switching points via teach-in pushbutton
- Detection range up to 50 mm stroke
- Drop-in mounting from above simplifies handling and assembly

Your benefits

- One sensor with two adjustable switching points reduces installation time and costs
- Highest levels of flexibility thanks to a detection zone up to 50 mm
- Reliable solution for precise pneumatic applications due to intuitive and accurate definition of two switching points
- Convenient installation and sensor replacement due to drop-in installation
- Flexible sensor settings, monitoring, advanced diagnostics, and visualization thanks to IO-Link

IO-Link

➜ www.mysick.com/en/MZ2Q-C

For more information, just 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.

Ordering information

Other models and accessories ➜ www.mysick.com/en/MZ2Q-C

MZ2Q-SMC

- **For SMC cylinder:** ✔
- **Output function:** NO

IO-Link	Output type	Connection	Model name	Part no.
–	PNP	Cable, 4-wire, 2 m	MZ2Q-CSSPSKU0	1042237
		Cable with connector M8, 4-pin, 0.3 m	MZ2Q-CSSPSKP0	1042238
		Cable with connector M8, 4-pin, with knurled nuts, 0.5 m	MZ2Q-CSSPSKR0	1042239
		Cable with connector M12, 4-pin, 0.3 m	MZ2Q-CSSPSKQ0	1042240
✔	PNP	Cable with connector M12, 4-pin, 0.3 m	MZ2Q-CSLPSKQ0	1043696

MZ2Q-Festo

- **For Festo cylinder:** ✔
- **Output function:** NO

IO-Link	Output type	Connection	Model name	Part no.
–	PNP	Cable, 4-wire, 2 m	MZ2Q-CFSPSKU0	1042241
		Cable with connector M8, 4-pin, 0.3 m	MZ2Q-CFSPSKP0	1042242
		Cable with connector M8, 4-pin, with knurled nuts, 0.5 m	MZ2Q-CFSPSKR0	1042243
		Cable with connector M12, 4-pin, 0.3 m	MZ2Q-CFSPSKQ0	1042244
✔	PNP	Cable with connector M12, 4-pin, 0.3 m	MZ2Q-CFLPSKQ0	1043697

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Recommended accessories

	Brief description	Model name	Part no.
Brackets for cylinder sensors			
	Mounting bracket for integrated profile cylinder/tie-rod cylinder, Zinc diecast, Mounting hardware included	BEF-KHZ-PT1	2022702
	Mounting bracket on round body cylinder with piston diameter of 8 mm to 130 mm, Plastic, nickel silver, without mounting hardware	BEF-KHZ-RT1-130	5311506
	Mounting bracket on round body cylinder with diameter of 8 mm to 25 mm, Plastic, nickel silver, without mounting hardware	BEF-KHZ-RT1-25	5311171
	Mounting bracket on round body cylinder with diameter of 8 mm to 63 mm, Plastic, nickel silver, without mounting hardware	BEF-KHZ-RT1-63	5311172
	Mounting bracket for cylinder with dovetail slot, Aluminum, without mounting hardware	BEF-KHZ-ST1	2022703
Plug connectors and cables			
	Head A: Female connector, M8, 4-pin, straight Head B: cable Cable: PVC, unshielded, 2 m	DOL-0804-G02M	6009870
	Head A: Female connector, M8, 4-pin, angled Head B: cable Cable: PVC, unshielded, 2 m	DOL-0804-W02M	6009871
Illustration may differ	Head A: Female connector, M12, 4-pin, straight Head B: cable Cable: PVC, unshielded, 2 m	DOL-1204-G02M	6009382
Illustration may differ	Head A: Female connector, M12, 4-pin, angled Head B: cable Cable: PVC, unshielded, 2 m	DOL-1204-W02M	6009383

D

D

At a glance

- Fits into all commonly used cylinders, linear slides and grippers with C-slots, such as, Festo or SMC
- Complete range with PNP / NPN, PUR and PVC cable, M8 and M12 connector
- Combined Allen and flathead installation screw
- Very short sensor housing, making it easier to install on short stroke cylinders
- LED function indicator
- IP 67 / IP 68 / IP 69K enclosure rating (depending on type)

Your benefits

- Reduced maintenance cost as the sensor keeps its position under shock and vibration and does not move out
- Increased machine throughput thanks to SICK' s proprietary GMR technology (giant magneto resistive) as well as the SICK-ASIC (application specific integrated circuit) that ensure precise one-time switching while eliminating false signals
- Flexible installation via Allen wrench or flathead screwdriver
- Time saving single-hand mounting with ¼-turn installation.
- Convenient installation and sensor replacement due to drop-in installation – installer does not need to disassemble the cylinder from the machine for sensor replacement.
- Extremely rugged VISTAL-housing - rated for IP67 respectively IP 68 and IP 69K, enlarging sensor life time

➜ www.mysick.com/en/MZC1

For more information, just 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.

Ordering information

Other models and accessories ➜ www.mysick.com/en/MZC1

MZC1 – 4 mm

- **Overrun distance typ.:** 4 mm
- **Output function:** NO

Output type	Connection type	Enclosure rating	Cable material	Model name	Part no.
PNP	Cable, 3-wire, 2 m	IP 68, IP 69K	PUR	MZC1-2V2PS-KU0	1059738
	Cable, 3-wire, 5 m	IP 68, IP 69K	PUR	MZC1-2V2PS-KUB	1059739
			PVC	MZC1-2V2PS-KWB	1059741
	Cable with connector M8, 3-pin, 0.3 m	IP 68	PUR	MZC1-2V2PS-KP0	1059735
	Cable with connector M8, 3-pin, with knurled nuts, 0.3 m	IP 68	PUR	MZC1-2V2PS-KR0	1059737
	Cable with connector M12, 3-pin, 0.3 m	IP 68	PUR	MZC1-2V2PS-KQ0	1059736
NPN	Cable, 3-wire, 2 m	IP 68, IP 69K	PUR	MZC1-2V2NS-KU0	1059743
	Cable with connector M8, 3-pin, 0.3 m	IP 68	PUR	MZC1-2V2NS-KP0	1059744
	Cable with connector M8, 3-pin, with knurled nuts, 0.3 m	IP 68	PUR	MZC1-2V2NS-KR0	1059742

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Subject to change without notice

MZC1 – 7 mm

- **Overrun distance typ.:** 7 mm
- **Output function:** NO

Output type	Connection type	Enclosure rating	Cable material	Model name	Part no.
PNP	Cable, 3-wire, 2 m	IP 68, IP 69K	PUR	MZC1-4V3PS-KU0	1059755
	Cable with connector M8, 3-pin, 0.3 m	IP 68	PUR	MZC1-4V3PS-KP0	1059752
	Cable with connector M8, 3-pin, with knurled nuts, 0.3 m	IP 68	PUR	MZC1-4V3PS-KR0	1059753
	Cable with connector M12, 3-pin, 0.3 m	IP 68	PUR	MZC1-4V3PS-KQ0	1059754
NPN	Cable, 3-wire, 2 m	IP 68, IP 69K	PUR	MZC1-4V3NS-KU0	1059756
	Cable with connector M8, 3-pin, 0.3 m	IP 68	PUR	MZC1-4V3NS-KP0	1059757

Recommended accessories

	Brief description	Model name	Part no.
Brackets for cylinder sensors			
	Mounting bracket for mounting on SMC rails ECDQ2 (C-slot), Aluminum, without mounting hardware	BEF-KHZ-TC1	2046441
	Mounting bracket for mounting on SMC rails CDQ2 (C-slot), Aluminum	BEF-KHZ-TC2	2046442
Plug connectors and cables			
	Head A: Female connector, M8, 3-pin, straight Head B: cable Cable: PVC, unshielded, 2 m	DOL-0803-G02M	6010785
	Head A: Female connector, M8, 3-pin, angled Head B: cable Cable: PVC, unshielded, 2 m	DOL-0803-W02M	6008489
	Head A: Female connector, M12, 3-pin, straight Head B: cable Cable: drag chain use, TPU, halogen-free, unshielded, 2 m	DOL-1203-G02MC	6039075
	Head A: Female connector, M12, 3-pin, angled Head B: cable Cable: drag chain use, TPU, halogen-free, unshielded, 2 m	DOL-1203-W02MC	6039078

D

At a glance

- Fits into all commonly used cylinders, linear slides and grippers with C-slots, such as, Festo or SMC
- Complete range with Reed 3-wire, Reed 2-wire, and Reed 120V version
- Combined Allen and flathead installation screw
- Very short sensor housing, making it easier to install on short stroke cylinders
- LED function indicator
- IP 67 / IP 68 / IP 69K enclosure rating (depending on type)

Your benefits

- Reduced maintenance cost as the sensor keeps its position under shock and vibration and does not move out
- Flexible installation via Allen wrench or flathead screwdriver
- Time saving single-hand mounting with ¼-turn installation
- Convenient installation and sensor replacement due to drop-in installation – installer does not need to disassemble the cylinder from the machine for sensor replacement
- Extremely rugged VISTAL-housing - rated for IP67 respectively IP 68 and IP 69K, enlarging sensor life time

➜ www.mysick.com/en/RZC1

For more information, just 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.

Ordering information

Other models and accessories ➜ www.mysick.com/en/RZC1

AC/DC 3-wire

- **Electrical wiring:** AC/DC 3-wire
- **Voltage drop:** < 0.5 V
- **Output current I_a:** ≤ 500 mA

Supply voltage	Connection	Enclosure rating	Model name	Part no.
5 V AC/DC ... 30 V AC/DC	Cable, 3-wire, 2 m	IP 68 [1], IP 69K [2]	RZC1-04ZRS-KU0	1059746
	Cable with connector M8, 3-pin, 0.3 m	IP 67 [1]	RZC1-04ZRS-KP0	1059747

[1] According to EN 60529 (IP67/IP68)

[2] According to DIN 40050 (IP69K)

AC/DC 2-wire

- **Electrical wiring:** AC/DC 2-wire
- **Voltage drop:** < 3.2 V
- **Output current I_a:** ≤ 50 mA

Supply voltage	Connection	Enclosure rating	Model name	Part no.
5 V AC/DC ... 120 V AC/DC	Cable, 2-wire, 2 m	IP 67 [1]	RZC1-04ZUS-KU0	1059750
5 V AC/DC ... 30 V AC/DC	Cable with connector M8, 2-pin, 0.3 m	IP 67 [1]	RZC1-04ZUS-KP0	1059751

[1] According to EN 60529 (IP67/IP68)

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Recommended accessories

	Brief description	Model name	Part no.
Brackets for cylinder sensors			
	Mounting bracket for mounting on SMC rails ECDQ2 (C-slot), Aluminum, without mounting hardware	BEF-KHZ-TC1	2046441
	Mounting bracket for mounting on SMC rails CDQ2 (C-slot), Aluminum	BEF-KHZ-TC2	2046442
Plug connectors and cables			
	Head A: Female connector, M8, 3-pin, straight Head B: cable Cable: PVC, unshielded, 2 m	DOL-0803-G02M	6010785
	Head A: Female connector, M8, 3-pin, angled Head B: cable Cable: PVC, unshielded, 2 m	DOL-0803-W02M	6008489
	Head A: Female connector, M12, 3-pin, straight Head B: cable Cable: drag chain use, TPU, halogen-free, unshielded, 2 m	DOL-1203-G02MC	6039075
	Head A: Female connector, M12, 3-pin, angled Head B: cable Cable: drag chain use, TPU, halogen-free, unshielded, 2 m	DOL-1203-W02MC	6039078

D

D

At a glance

- Magnetic cylinder sensor for all conventional pneumatic cylinders, linear slides, and grippers with T-slots
- Easy adjustment of two switching points via teach-in pushbutton
- Detection range up to 50 mm stroke
- Drop-in mounting from above simplifies handling and assembly

Your benefits

- One sensor with two adjustable switching points reduces installation time and costs
- Highest levels of flexibility thanks to a detection range up to 50 mm
- Reliable solution for precise pneumatic applications due to intuitive and accurate definition of two switching points
- Convenient installation and sensor replacement due to drop-in installation
- Flexible sensor settings, monitoring, advanced diagnostics, and visualization thanks to IO-Link

➜ www.mysick.com/en/MZ2Q-T

For more information, just 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.

Ordering information

Other models and accessories ➜ www.mysick.com/en/MZ2Q-T

MZ2Q-T

- **IO-Link:** -
- **Supply voltage:** 12 V DC ... 30 V DC
- **Output function:** NO

Output type	Connection	Model name	Part no.
PNP	Cable, 4-wire, 2 m	MZ2Q-FTZPS-KU0	1029845
	Cable, 4-wire, 5 m	MZ2Q-FTZPS-KUB	1045267
	Cable with connector M8, 4-pin, 0.3 m	MZ2Q-FTZPS-KP0	1029846
	Cable with connector M12, 4-pin, with knurled nuts, 0.3 m	MZ2Q-FTZPS-KQ0	1041323
	Cable with connector M8, 4-pin, with knurled nuts, 0.5 m	MZ2Q-FTZPS-KR0	1041322
NPN	Cable, 4-wire, 2 m	MZ2Q-FTZNS-KU0	1048103

MZ2Q-T IO-Link

- **IO-Link:** ✔
- **Supply voltage:** 15 V DC ... 30 V DC
- **Output function:** NO

Output type	Connection	Model name	Part no.
PNP	Cable with connector M12, 4-pin, 0.3 m	MZ2Q-TSLPS-KQ0	1042228

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Recommended accessories

	Brief description	Model name	Part no.
Brackets for cylinder sensors			
	Mounting bracket for integrated profile cylinder/tie-rod cylinder, Zinc diecast, Mounting hardware included	BEF-KHZ-PT1	2022702
	Mounting bracket on round body cylinder with piston diameter of 8 mm to 130 mm, Plastic, nickel silver, without mounting hardware	BEF-KHZ-RT1-130	5311506
	Mounting bracket on round body cylinder with diameter of 8 mm to 25 mm, Plastic, nickel silver, without mounting hardware	BEF-KHZ-RT1-25	5311171
	Mounting bracket on round body cylinder with diameter of 8 mm to 63 mm, Plastic, nickel silver, without mounting hardware	BEF-KHZ-RT1-63	5311172
	Mounting bracket for cylinder with dovetail slot, Aluminum, without mounting hardware	BEF-KHZ-ST1	2022703
Plug connectors and cables			
	Head A: Female connector, M8, 4-pin, straight Head B: cable Cable: PVC, unshielded, 2 m	DOL-0804-G02M	6009870
	Head A: Female connector, M8, 4-pin, angled Head B: cable Cable: PVC, unshielded, 2 m	DOL-0804-W02M	6009871
Illustration may differ	Head A: Female connector, M12, 4-pin, straight Head B: cable Cable: PVC, unshielded, 2 m	DOL-1204-G02M	6009382
Illustration may differ	Head A: Female connector, M12, 4-pin, angled Head B: cable Cable: PVC, unshielded, 2 m	DOL-1204-W02M	6009383

D

D

At a glance

- Fits into all commonly used cylinders, linear slides and grippers with T-slots and it can be also applied to multiple cylinders types such as round, tie-rod, integrated profile or dove-tail cylinders with mounting brackets
- Complete range with PNP/ NPN, PUR and PVC cable, M8 and M12 connector
- Combined Allen and flathead installation screw
- Very short sensor housing to install on short stroke cylinders
- LED function indicator
- IP 67 / IP 68 / IP 69K enclosure rating (depending on type)

Your benefits

- Best-in-class switching performance for precise piston position
- Reduced maintenance cost as the sensor keeps its position under shock and vibration and does not move out
- Increased machine throughput thanks to SICK' s proprietary GMR technology (giant magneto resistive) as well as the SICK-ASIC (application specific integrated circuit) that ensure precise one-time switching while eliminating false signals
- Flexible installation via Allen wrench or flathead screwdriver
- Time saving single-hand mounting with ¼-turn installation.
- Convenient installation and sensor replacement due to drop-in installation – installer does not need to disassemble the cylinder from the machine for sensor replacement.
- Extremely rugged housing - rated for IP67 respectively IP 68 and IP 69K, enlarging sensor life time

➜ www.mysick.com/en/MZT8

For more information, just 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.

Ordering information

Other models and accessories ➜ www.mysick.com/en/MZT8

MZT8 - 3 mm

- **Overrun distance typ.:** 3 mm
- **Magnetic field sensitivity, min.:** 2.6 mT

Output type	Output function	Connection type	Cable material	Enclosure rating	Model name	Part no.
PNP	NC	Cable, 3-wire, 2 m	PUR	IP 68, IP 69K	MZT8-03VPO-KU0	1044931
		Cable with connector M8, 3-pin, 0.3 m	PUR	IP 68	MZT8-03VPO-KP0	1044930
	NO	Cable, 3-wire, 2 m	PUR	IP 68, IP 69K	MZT8-03VPS-KU0	1044469
		Cable with connector M8, 3-pin, 0.3 m	PUR	IP 68	MZT8-03VPS-KP0	1044458
		Cable with connector M8, 3-pin, with knurled nuts, 0.5 m	PUR	IP 68	MZT8-03VPS-KR0	1044459
		Cable with connector M12, 3-pin, 0.3 m	PUR	IP 68	MZT8-03VPS-KQ0	1044460
NPN	NO	Cable, 3-wire, 2 m	PUR	IP 68, IP 69K	MZT8-03VNS-KU0	1044934
		Cable with connector M8, 3-pin, 0.3 m	PUR	IP 68	MZT8-03VNS-KP0	1044932

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Subject to change without notice

MZT8 - 9 mm

- **Overrun distance typ.:** 9 mm
- **Magnetic field sensitivity, min.:** 2.8 mT

Output type	Output function	Connection type	Cable material	Enclosure rating	Model name	Part no.
PNP	NO	Cable, 3-wire, 2 m	PUR	IP 68, IP 69K	MZT8-28VPS-KU0	1048049
		Cable with connector M8, 3-pin, 0.3 m	PUR	IP 68	MZT8-28VPS-KP0	1048048
		Cable with connector M8, 3-pin, with knurled nuts, 0.5 m	PUR	IP 68	MZT8-28VPS-KR0	1048050
		Cable with connector M12, 3-pin, 0.3 m	PUR	IP 68	MZT8-28VPS-KQ0	1048051

D

Recommended accessories

	Brief description	Model name	Part no.
Brackets for cylinder sensors			
	Mounting bracket for integrated profile cylinder/tie-rod cylinder, Zinc diecast, Mounting hardware included	BEF-KHZ-PT1	2022702
	Mounting bracket on round body cylinder with piston diameter of 8 mm to 130 mm, Plastic, nickel silver, without mounting hardware	BEF-KHZ-RT1-130	5311506
	Mounting bracket on round body cylinder with diameter of 8 mm to 25 mm, Plastic, nickel silver, without mounting hardware	BEF-KHZ-RT1-25	5311171
	Mounting bracket on round body cylinder with diameter of 8 mm to 63 mm, Plastic, nickel silver, without mounting hardware	BEF-KHZ-RT1-63	5311172
	Mounting bracket for cylinder with dovetail slot, Aluminum, without mounting hardware	BEF-KHZ-ST1	2022703
Plug connectors and cables			
	Head A: Female connector, M8, 3-pin, straight Head B: cable Cable: PVC, unshielded, 2 m	DOL-0803-G02M	6010785
	Head A: Female connector, M8, 3-pin, angled Head B: cable Cable: PVC, unshielded, 2 m	DOL-0803-W02M	6008489

D

At a glance

- Compact housing design
- Combined Allen and flathead fixing screw
- LED function indicator
- For all commonly used cylinders with T-slots, e.g., Festo or SMC and it can be applied to multiple cylinders types such as round, tie-rod, integrated profile or dove-tail cylinders with mounting brackets

Your benefits

- High resistance to shock, vibration and liquids
- Drop-in T-slot mounting from above makes assembly easy
- Easy installation with Allen wrench or flat head screwdriver

➜ www.mysick.com/en/RZT6

For more information, just 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.

Ordering information

Other models and accessories ➜ www.mysick.com/en/RZT6

AC/DC 2-wire

- **Electrical wiring:** AC/DC 2-wire
- **Supply voltage:** 10 V AC/DC ... 120 V AC/DC
- **Output current I_a:** ≤ 100 mA

Connection	Cable material	Enclosure rating	Model name	Part no.
Cable, 2-wire, 2 m	PVC	IP 67 [1]	RZT6-03ZUS-KW0	1025522

[1] According to EN 60529.

AC/DC 3-wire

- **Electrical wiring:** AC/DC 3-wire
- **Supply voltage:** 10 V AC/DC ... 30 V AC/DC
- **Output current I_a:** ≤ 500 mA

Connection	Cable material	Enclosure rating	Model name	Part no.
Cable, 3-wire, 2 m	PVC	IP 67 [1]	RZT6-03ZRS-KW0	1023974
Cable, 3-wire, 5 m	PVC	IP 67 [1]	RZT6-03ZRS-KWB	1025830
Cable with connector M8, 3-pin, 0.3 m	PUR	IP 67 [1]	RZT6-03ZRS-KP0	1023973
Cable with connector M8, 3-pin, with knurled nuts, 0.5 m	PUR	IP 67 [1]	RZT6-03ZRS-KR0	1023975
Cable with connector M12, 3-pin, 0.3 m	PUR	IP 67 [1]	RZT6-03ZRS-KQ0	1025549

[1] According to EN 60529.

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Recommended accessories

	Brief description	Model name	Part no.
Brackets for cylinder sensors			
	Mounting bracket for integrated profile cylinder/tie-rod cylinder, Zinc diecast, Mounting hardware included	BEF-KHZ-PT1	2022702
	Mounting bracket on round body cylinder with diameter of 8 mm to 25 mm, Plastic, nickel silver, without mounting hardware	BEF-KHZ-RT1-25	5311171
	Mounting bracket on round body cylinder with diameter of 8 mm to 63 mm, Plastic, nickel silver, without mounting hardware	BEF-KHZ-RT1-63	5311172
	Mounting bracket for cylinder with dovetail slot, Aluminum, without mounting hardware	BEF-KHZ-ST1	2022703
Plug connectors and cables			
	Head A: Female connector, M8, 3-pin, straight Head B: cable Cable: PVC, unshielded, 2 m	DOL-0803-G02M	6010785
	Head A: Female connector, M8, 3-pin, angled Head B: cable Cable: PVC, unshielded, 2 m	DOL-0803-W02M	6008489

D

E

IDENTIFICATION SOLUTIONS

All you can read – ensure your investment over the long term

Product traceability and anti-counterfeiting solutions require reliable automatic identification products. SICK offers the three most common industrial identification technologies: laser-based scanners for 1D codes, image-based 1D and 2D code readers, and RFID readers. Integrated interfaces enable the readers to communicate inside industrial networks and innovative functionality makes commissioning and operation easy.

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E

Selection guide identification solutions **E-220**

CLV61x **E-224**
Reliable decoding, simple integration

CLV62x **E-226**
Powerful scanner – flexible use

CLV63x **E-228**
Intelligent scanning solution for logistics and automation

CLV64x **E-230**
Dynamic, multi-functional

CLV65x **E-232**
Always in auto focus

CLV69x **E-234**
The highest level of flexibility and power

Lector®62x **E-236**
Clever. Simple. Industrial.

Lector®65x **E-238**
Nonstop code reading flexibility

IDM14x **E-240**
Versatility made easy – from high density to standard range codes

IDM16x **E-242**
Industrial mobile reliability

IDM24x **E-244**
Convenient and secure identification of 2D codes

IDM26x **E-246**
Reliable 2D code identification in harsh environments

RFH6xx **E-248**
Intelligent RFID communication

RFU62x **E-250**
Short-range ultra high frequency scanner

RFU63x **E-252**
Intelligent technology ensures easy integration

SELECTION GUIDE IDENTIFICATION SOLUTIONS

E

Product			IDpro	Focussing			Supported code type					
			IDpro compliance	Fixed focus	Dynamic focus	Auto focus	1D code	Stacked code	2D code	OCR	RFID tags	
Bar code scanners												
	CLV61x	CLV610 Mid Range	■	■			■					
		CLV612 Short Range	■	■			■					
		CLV615 Long Range	■	■			■					
	CLV62x	CLV620 Mid Range	■	■			■					
		CLV621 Long Range	■	■			■					
		CLV622 Short Range	■	■			■					
	CLV63x	CLV630 Long Range	■	■			■					
		CLV631 Mid Range	■	■			■					
		CLV632 Short Range	■	■			■					
	CLV64x	CLV640 Standard Density	■		■		■					
		CLV642 High Density	■		■		■					
	CLV65x	CLV650 Standard Density	■			■	■					
		CLV651 Low Density	■			■	■					
	CLV69x	CLV690 Standard Density	■			■	■					
		CLV691 Low Density	■			■	■					
		CLV692 High Density	■			■	■					
Image-based code readers												
	LECTOR®62x	LECTOR®620 ECO	■			■ [3]	■	■	■			
		LECTOR®620 Professional	■			■ [3]	■	■	■			
		LECTOR®620 High Speed	■			■ [3]	■	■	■			
		LECTOR®620 DPM Plus	■			■ [3]	■	■	■			
		LECTOR®620 OCR	■			■ [3]	■	■	■	■		
	LECTOR®65x	LECTOR®652 Flex	■			■	■	■	■			
		LECTOR®652 Dynamic Focus	■		■		■	■	■			
		LECTOR®654 Flex	■			■	■	■	■			
		LECTOR®654 Dynamic Focus	■		■		■	■	■			

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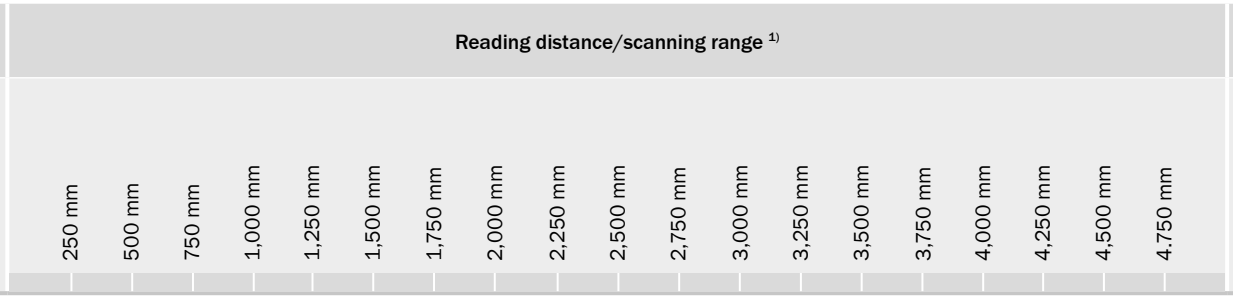

E

60 mm ... 365 mm	→ E-224
43 mm ... 93 mm	→ E-224
25 mm ... 330 mm	→ E-224
60 mm ... 365 mm	→ E-226
60 mm ... 730 mm	→ E-226
55 mm ... 200 mm	→ E-226
58 mm ... 742 mm 2)	→ E-228
87 mm ... 455 mm 2)	→ E-228
58 mm ... 288 mm 2)	→ E-228
58 mm ... 840 mm 2)	→ E-230
30 mm ... 338 mm	→ E-230
125 mm ... 1,625 mm	→ E-232
155 mm ... 930 mm 2)	→ E-232
500 mm ... 2,100 mm	→ E-234
500 mm ... 2,200 mm	→ E-234
400 mm ... 1,600 mm	→ E-234

40 mm ... 1,500 mm	→ E-236
40 mm ... 1,500 mm	→ E-236
30 mm ... 500 mm	→ E-236
30 mm ... 500 mm	→ E-236
30 mm ... 300 mm	→ E-236
300 mm ... 2,200 mm 4)	→ E-238
670 mm ... 2,000 mm	→ E-238
300 mm ... 2,200 mm 4)	→ E-238
670 mm ... 2,000 mm	→ E-238

SELECTION GUIDE IDENTIFICATION SOLUTIONS

Product	IDpro	Focussing			Supported code type				
	IDpro compliance	Fixed focus	Dynamic focus	Auto focus	1D code	Stacked code	2D code	OCR	RFID tags
Hand-held scanners									
IDM14x		■			■	■			
IDM16x		■			■	■			
IDM24x		■			■	■	■		
IDM26x		■			■	■	■		
RFID									
RFH6xx	■								■
RFU62x	■								■
RFU63x	■								■

[1] For details see reading field diagram online.
[2] Depending on the scanner design.
[3] During teach-in.
[4] Depending on lens and illumination.

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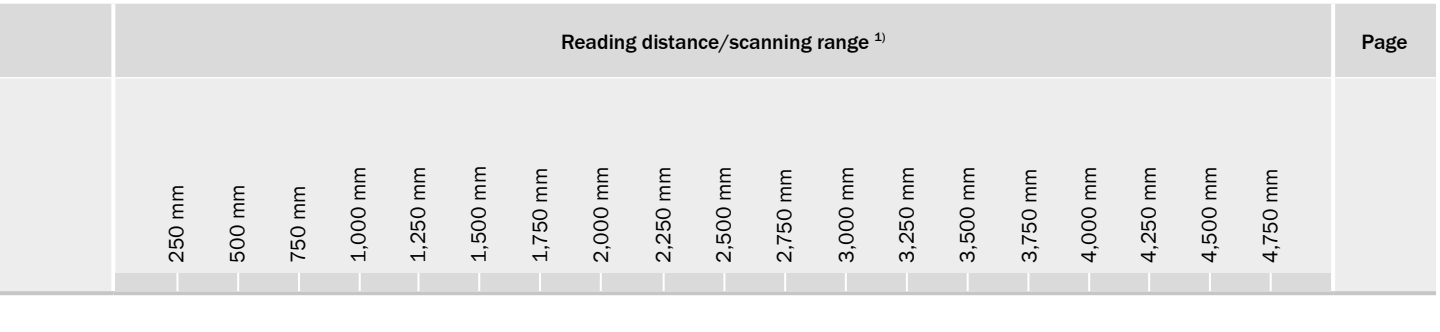

E

50 mm ... 600 mm		→ E-240
50 mm ... 800 mm		→ E-242
30 mm ... 155 mm		→ E-244
30 mm ... 155 mm		→ E-246
0 mm ... 240 mm		→ E-248
0 mm ... 1,000 mm		→ E-250
0 mm ... 5,000 mm		→ E-252

At a glance

- Optimized reading field for intralogistics applications
- Available with SICK CAN sensor network
- Configuration with SOPAS, the configuration tool for all new SICK products
- Available in different versions (CAN, Fieldbus) for use in almost any application
- Adjustable scanning frequency of up to 1000 scans/second
- Compact design

Your benefits

- A suitable scanner version for any CLV61x application
- An optimized reading field for container identification on a conveyor belt, in combination with the intuitive SOPAS user interface, enables quick and easy integration into your conveyor system
- Compact design enables installation even in applications with limited space
- Less programming time required for the control system, since data can be transmitted to the control system in the desired format
- Depending on the version, the CLV61x bar code scanner can be used as a multiplexer in any SICK CAN sensor network, so additional multiplexers are not required
- The optional configuration cloning module in combination with the quick-release mounting bracket enables very fast replacement time in the event of a fault

➜ www.mysick.com/en/CLV61x

For more information, just 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.

Ordering information

Other models and accessories ➜ www.mysick.com/en/CLV61x

Code resolution	Reading distance		Version
	Front	Side	
0.2 mm ... 1 mm	60 mm ... 365 mm [1]	–	**CLV610 Mid Range**
0.1 mm ... 0.2 mm	43 mm ... 93 mm [1]	28 mm ... 78 mm [1]	**CLV612 Short Range**
0.35 mm ... 0.5 mm	–	25 mm ... 330 mm [1]	**CLV615 Long Range**

[1] For details see reading field diagram.

- **Focus:** Fixed focus
- **Connection type:** cable
- **Enclosure rating:** IP 65
- **Front screen:** Glass

Version	Reading field	Scanner design	Items supplied	Model name	Part no.
CLV610 Mid Range	Front	Line scanner	Single scanner	CLV610-C0000	1057125
		Raster scanner	Single scanner	CLV610-C1000	1062846
CLV612 Short Range	Front	Line scanner	Single scanner	CLV612-C0000	1066271
		Raster scanner	Single scanner	CLV612-C1000	1062861
	Side	Line scanner	Single scanner	CLV612-C2000	1066272
		Raster scanner	Single scanner	CLV612-C3000	1062862

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Version	Reading field	Scanner design	Items supplied	Model name	Part no.
CLV615 Long Range	Side	Line scanner	Single scanner	CLV615-F2000	1058334
		Raster scanner	Single scanner	CLV615-F3000	1068240
		Line scanner	Kit including single scanner and fieldbus module PROFIBUS DP (interface 1 x D-Sub, female connector, 9-pin)	CLV615-F2000 CDF600-2100 Kit	1061528
			Kit includes single scanner and fieldbus module PROFIBUS DP (interface 2 x M12, male connector/ female connector, 5-pin)	CLV615-F2000 CDF600-2103 Kit	1061529

E

Recommended accessories

	Brief description	Model name	Part no.
Mounting brackets and mounting plates			
	Bracket with adapter board	Mounting bracket	2042902
Modules			
	Small connection module for one sensor, 4 cable glands, base for CMC600	CDB620-001	1042256
	Fieldbus proxy/gateway for connecting identification sensors to PROFIBUS-DP networks (PROFIBUS interface: 2 x M12, male connector/female connector, 5-pin)	CDF600-2100	1058965
	Fieldbus proxy/gateway for connecting identification sensors to PROFIBUS-DP networks (PROFIBUS interface: 1 x D-Sub, female connector, 9-pin)	CDF600-2103	1058966
	Modular connection module for one sensor	CDM420-0001	1025362
Plug connectors and cables			
	Head A: Female connector, D-Sub, 9-pin, straight Head B: Female connector, D-Sub, 9-pin, straight Cable: serial, unshielded, 3 m For PC connection	Data connection cable (RS-232) to PC	2014054

At a glance

- CAN, Ethernet TCP/IP, PROFINET, and EtherNet/IP available on board, no additional gateway needed (depending on variant)
- SMART620 code reconstruction technology
- Flexible sorting, filtering, and logical functions
- Advanced, easy-to-use SOPAS configuration software
- High scanning frequency of up to 1,200 Hz
- Small housing
- Advanced remote diagnostics and network monitoring capabilities available over Ethernet
- IP 65 or IP 69K rated (depending on type)

Your benefits

- High read rate on damaged and obscured codes using SMART620 code recognition technology
- Increased scanner intelligence enables sophisticated configuration of logical operations, reducing the control system programming effort. Data is then delivered in the desired format
- No supplementary Ethernet gateway required with Ethernet models – lowers costs
- The CLV62x scanner can be used as a multiplexer in any CAN scanner network from SICK – no supplementary multiplexer necessary
- Real-time decoding at very high speeds
- Small size and simple setup enables fast installation, even in compact machines

➜ www.mysick.com/en/CLV62x

For more information, just 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.

Ordering information

Other models and accessories ➜ www.mysick.com/en/CLV62x

Code resolution	Reading distance		Version
	Front	Side	
0.2 mm ... 1 mm	60 mm ... 365 mm [1] (depending on type)	60 mm ... 365 mm [1]	**CLV620 Mid Range**
0.35 mm ... 1 mm	60 mm ... 730 mm [1]	60 mm ... 730 mm [1]	**CLV621 Long Range**
0.15 mm ... 0.5 mm	55 mm ... 200 mm [1]	55 mm ... 200 mm [1]	**CLV622 Short Range**

[1] For details see reading field diagram.

- **Focus:** Fixed focus

Version	Connection type	Reading field	Scanner design	Enclosure rating	Front screen	Model name	Part no.
CLV620 Mid Range	Cable	Front	Line scanner	IP 65	Glass	CLV620-0000	1040288
			Raster scanner	IP 65	Glass	CLV620-1000	1041548
		Side (105°)	Line scanner	IP 65	Glass	CLV620-2000	1041550
			Raster scanner	IP 65	Glass	CLV620-3000	1041552
	Ethernet	Front	Line scanner	IP 65	Glass	CLV620-0120	1041547
			Raster scanner	IP 65	Glass	CLV620-1120	1041549
			Line scanner	IP 65	Glass	CLV620-0830	1050940
		Side (105°)	Line scanner	IP 65	Glass	CLV620-2120	1041551
			Raster scanner	IP 65	Glass	CLV620-3120	1041553
		Front	Line scanner	IP 69K	Plastic	CLV620-0831S01	1066374
			Raster scanner	IP 69K	Plastic	CLV620-1831S01	1067933

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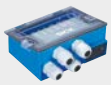
Version	Connection type	Reading field	Scanner design	Enclosure rating	Front screen	Model name	Part no.
CLV621 Long Range	Cable	Front	Line scanner	IP 65	Glass	CLV621-0000	1041784
			Raster scanner	IP 65	Glass	CLV621-1000	1041786
		Side (105°)	Line scanner	IP 65	Glass	CLV621-2000	1041788
			Raster scanner	IP 65	Glass	CLV621-3000	1041790
	Ethernet	Front	Line scanner	IP 65	Glass	CLV621-0120	1041785
			Raster scanner	IP 65	Glass	CLV621-1120	1041787
			Line scanner	IP 65	Glass	CLV621-0830	1067571
			Raster scanner	IP 65	Glass	CLV621-1830	1067572
		Side (105°)	Line scanner	IP 65	Glass	CLV621-2120	1041789
			Raster scanner	IP 65	Glass	CLV621-3120	1041791
CLV622 Short Range	Cable	Front	Line scanner	IP 65	Glass	CLV622-0000	1041792
			Raster scanner	IP 65	Glass	CLV622-1000	1041794
		Side (105°)	Line scanner	IP 65	Glass	CLV622-2000	1041796
			Raster scanner	IP 65	Glass	CLV622-3000	1041798
	Ethernet	Front	Line scanner	IP 65	Glass	CLV622-0120	1041793
			Raster scanner	IP 65	Glass	CLV622-1120	1041795
		Side (105°)	Line scanner	IP 65	Glass	CLV622-2120	1041797
			Raster scanner	IP 65	Glass	CLV622-3120	1041799

Recommended accessories

	Brief description	Model name	Part no.
Mounting brackets and mounting plates			
	Bracket with adapter board	Mounting bracket	2042902
Modules			
	Small connection module for one sensor, 4 cable glands, base for CMC600	CDB620-001	1042256
	Connection device basic for connecting one sensor with 2 A fuse, 5 cable glands and RS-232 interface to sensor via M12, 17-pin female connector, all outputs available on screw/spring-loaded terminals, including trigger unit functionality for external illumination of Lector®65x	CDB650-204	1064114
	Fieldbus proxy/gateway for connecting identification sensors to PROFIBUS-DP networks (PROFIBUS interface: 2 x M12, male connector/female connector, 5-pin)	CDF600-2100	1058965
	Fieldbus proxy/gateway for connecting identification sensors to PROFIBUS-DP networks (PROFIBUS interface: 1 x D-Sub, female connector, 9-pin)	CDF600-2103	1058966
	Modular connection module for one sensor	CDM420-0001	1025362
Plug connectors and cables			
	Head A: female connector, M12, 12-pin, straight Head B: male connector, D-Sub-HD, 15-pin, straight Cable: Power, serial, CAN, digital I/Os, unshielded, 2 m	Connection cable (male connector-female connector)	2041834
	Head A: male connector, M12, 4-pin, straight, D-coded Head B: male connector, RJ45, 8-pin, straight Cable: Ethernet, PUR, shielded, 2 m	SSL-2J04-G02ME	6034414

At a glance

- Integrated pushbuttons for auto setup and reading diagnostics
- Integrated LED bar graph
- CAN, Ethernet TCP/IP, PROFINET, and EtherNet/IP available on board, no additional gateway needed (depending on variant)
- Enhanced SMART code reconstruction technology
- Flexible sorting, filtering, and logical functions
- Advanced, easy-to-use SOPAS configuration software
- High scanning frequency of up to 1,200 Hz
- Advanced remote diagnostics and network monitoring capabilities available over Ethernet

Your benefits

- Intelligent auto setup and multi-function pushbuttons save time during commissioning
- Easily execute firmware updates using the microSD memory card: no need for a PC
- Enhanced SMART technology reads damaged and partially obscured codes, increasing read rates
- Increased scanner intelligence enables sophisticated configuration of logical operations, reducing the control system programming effort. Data is then delivered in the desired format
- Real-time decoding at very high speeds
- Increased reading reliability due to high-performance computing power and a high scanning frequency

➜ www.mysick.com/en/CLV63x

For more information, just 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.

Ordering information

Other models and accessories ➜ www.mysick.com/en/CLV63x

Code resolution	Reading distance			Version
	Front	Side	Oscillating mirror	
0.35 mm ... 1 mm	60 mm ... 735 mm [1] 77 mm ... 718 mm [1] (depending on type)	44 mm ... 683 mm [1]	45 mm ... 659 mm [1]	**CLV630 Long Range**
0.25 mm ... 0.5 mm	90 mm ... 450 mm [1] (depending on type)	74 mm ... 412 mm [1]	78 mm ... 397 mm [1] (depending on type)	**CLV631 Mid Range**
0.2 mm ... 0.5 mm	60 mm ... 285 mm [1] (depending on type)	44 mm ... 256 mm [1]	45 mm ... 245 mm [1]	**CLV632 Short Range**

[1] For details see reading field diagram.

- **Focus:** Fixed focus

Version	Connection type	Reading field	Scanner design	Heating	Enclosure rating	Front screen	Model name	Part no.
CLV630 Long Range	Cable	Front	Line scanner	Optional	IP 65	Glass	CLV630-0000	1040706
			Raster scanner	Optional	IP 65	Glass	CLV630-1000	1041970
		Side (105°)	Line scanner	Optional	IP 65	Glass	CLV630-2000	1041972
			Raster scanner	Optional	IP 65	Glass	CLV630-3000	1041974
		Oscillating mirror	Line scanner	Optional	IP 65	Glass	CLV630-6000	1041976
	Ethernet	Front	Line scanner	Optional	IP 65	Glass	CLV630-0120	1041969
			Raster scanner	Optional	IP 65	Glass	CLV630-1120	1041971
		Side (105°)	Line scanner	Optional	IP 65	Glass	CLV630-2120	1041973
			Raster scanner	Optional	IP 65	Glass	CLV630-3120	1041975
		Oscillating mirror	Line scanner	Optional	IP 65	Glass	CLV630-6120	1041977
		Front	Line scanner	–	IP 69K	Plastic	CLV630-0831S01	1068600

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Version	Connection type	Reading field	Scanner design	Heating	Enclosure rating	Front screen	Model name	Part no.
CLV631 Mid Range	Cable	Front	Line scanner	Optional	IP 65	Glass	CLV631-0000	1041978
			Raster scanner	Optional	IP 65	Glass	CLV631-1000	1041980
		Side (105°)	Line scanner	Optional	IP 65	Glass	CLV631-2000	1041982
			Raster scanner	Optional	IP 65	Glass	CLV631-3000	1041984
		Oscillating mirror	Line scanner	Optional	IP 65	Glass	CLV631-6000	1041986
	Ethernet	Front	Line scanner	Optional	IP 65	Glass	CLV631-0120	1041979
			Raster scanner	Optional	IP 65	Glass	CLV631-1120	1041981
		Side (105°)	Line scanner	Optional	IP 65	Glass	CLV631-2120	1041983
			Raster scanner	Optional	IP 65	Glass	CLV631-3120	1041985
		Oscillating mirror	Line scanner	Optional	IP 65	Glass	CLV631-6120	1041987
		Front	Line scanner	–	IP 69K	Plastic	CLV631-0831S01	1062070
		Oscillating mirror	Line scanner	–	IP 69K	Plastic	CLV631-6831S01	1062136
CLV632 Short Range	Cable	Front	Line scanner	Optional	IP 65	Glass	CLV632-0000	1041988
			Raster scanner	Optional	IP 65	Glass	CLV632-1000	1041990
		Side (105°)	Line scanner	Optional	IP 65	Glass	CLV632-2000	1041992
			Raster scanner	Optional	IP 65	Glass	CLV632-3000	1041994
		Oscillating mirror	Line scanner	Optional	IP 65	Glass	CLV632-6000	1041996
	Ethernet	Front	Line scanner	Optional	IP 65	Glass	CLV632-0120	1041989
			Raster scanner	Optional	IP 65	Glass	CLV632-1120	1041991
		Side (105°)	Line scanner	Optional	IP 65	Glass	CLV632-2120	1041993
			Raster scanner	Optional	IP 65	Glass	CLV632-3120	1041995
		Oscillating mirror	Line scanner	Optional	IP 65	Glass	CLV632-6120	1041997
		Front	Raster scanner	–	IP 69K	Plastic	CLV632-1831S01	1062530

Recommended accessories

	Brief description	Model name	Part no.
Mounting brackets and mounting plates			
	Hanger-shaped mounting bracket, Mounting hardware included	Mounting bracket	2042800
Modules			
	Small connection module for one sensor, 4 cable glands, base for CMC600	CDB620-001	1042256
	Fieldbus proxy/gateway for connecting identification sensors to PROFIBUS-DP networks (PROFIBUS interface: 2 x M12, male connector/female connector, 5-pin)	CDF600-2100	1058965
	Fieldbus proxy/gateway for connecting identification sensors to PROFIBUS-DP networks (PROFIBUS interface: 1 x D-Sub, female connector, 9-pin)	CDF600-2103	1058966
	Modular connection module for one sensor	CDM420-0001	1025362
Plug connectors and cables			
	Head A: Female connector, M12, 12-pin, straight Head B: male connector, D-Sub-HD, 15-pin, straight Cable: Power, serial, CAN, digital I/Os, unshielded, 2 m	Connection cable (male connector-female connector)	2041834
	Head A: male connector, M12, 4-pin, straight, D-coded Head B: male connector, RJ45, 8-pin, straight Cable: Ethernet, PUR, shielded, 2 m	SSL-2J04-G02ME	6034414

At a glance

- Dynamic focus adjustment enables extended depth of field
- Integrated pushbuttons for auto setup and reading diagnostics
- CAN, Ethernet TCP/IP, PROFINET, and EtherNet/IP available on board, no additional gateway needed (depending on variant)
- Enhanced SMART code reconstruction technology
- Flexible sorting, filtering, and logical functions
- Advanced, easy-to-use SOPAS configuration software
- Integrated LED bar graph
- Advanced remote diagnostics and network monitoring capabilities available over Ethernet

Your benefits

- Economical, as only one CLV64x is required for all focus positions
- Intelligent auto setup and multi-function pushbuttons save time during commissioning
- Teach-in of match code possible via the pushbuttons
- Easily execute firmware updates using the microSD memory card: no need for a PC
- No supplementary Ethernet gateway required with Ethernet models – lowers costs
- Enhanced SMART technology reads damaged and partially obscured codes, increasing read rates
- Increased scanner intelligence enables sophisticated configuration of logical operations, reducing the control system programming effort. Data is then delivered in the desired format
- Real-time decoding at very high speeds

➜ www.mysick.com/en/CLV64x

For more information, just 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.

Ordering information

Other models and accessories ➜ www.mysick.com/en/CLV64x

Code resolution	Reading distance			Version
	Front	Side	Oscillating mirror	
0.2 mm ... 1 mm	60 mm ... 840 mm [1] (depending on type)	44 mm ... 738 mm [1]	45 mm ... 798 mm [1] (depending on type)	**CLV640 Standard Density**
0.15 mm ... 0.25 mm	30 mm ... 345 mm [1]	–	–	**CLV642 High Density**

[1] For details see reading field diagram.

- **Focus:** dynamic focus control

Version	Connection type	Reading field	Scanner design	Heating	Enclosure rating	Front screen	Model name	Part no.
CLV640 Standard Density	Cable	Front	Line scanner	Optional	IP 65	Glass	CLV640-0000	1042014
			Raster scanner	Optional	IP 65	Glass	CLV640-1000	1042016
		Side (105°)	Line scanner	Optional	IP 65	Glass	CLV640-2000	1042018
			Raster scanner	Optional	IP 65	Glass	CLV640-3000	1042020
		Oscillating mirror	Line scanner	Optional	IP 65	Glass	CLV640-6000	1042022
	Ethernet	Front	Raster scanner	Optional	IP 65	Glass	CLV640-1120	1042017
			Line scanner	Optional	IP 65	Glass	CLV640-0120	1042015
		Side (105°)	Line scanner	Optional	IP 65	Glass	CLV640-2120	1042019
			Raster scanner	Optional	IP 65	Glass	CLV640-3120	1042021
		Oscillating mirror	Line scanner	Optional	IP 65	Glass	CLV640-6120	1042023
		Front	Line scanner	–	IP 69K	Plastic	CLV640-6831S01	1063932
		Oscillating mirror	Line scanner	–	IP 69K	Plastic	CLV640-0831S01	1064718

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Subject to change without notice

Version	Connection type	Reading field	Scanner design	Heating	Enclosure rating	Front screen	Model name	Part no.
CLV642 High Density	Cable	Front	Line scanner	Optional	IP 65	Glass	CLV642-0000	1044873
		Side (105°)	Line scanner	Optional	IP 65	Glass	CLV642-2000	1044875
		Oscillating mirror	Line scanner	Optional	IP 65	Glass	CLV642-6000	1044877
	Ethernet	Front	Line scanner	Optional	IP 65	Glass	CLV642-0120	1044874
		Side (105°)	Line scanner	Optional	IP 65	Glass	CLV642-2120	1044876
		Oscillating mirror	Line scanner	Optional	IP 65	Glass	CLV642-6120	1044879

Recommended accessories

	Brief description	Model name	Part no.
Mounting brackets and mounting plates			
	Hanger-shaped mounting bracket, Mounting hardware included	Mounting bracket	2042800
Modules			
	Small connection module for one sensor, 4 cable glands, base for CMC600	CDB620-001	1042256
	Connection device basic for connecting one sensor with 2 A fuse, 5 cable glands and RS-232 interface to sensor via M12, 17-pin female connector, all outputs available on screw/spring-loaded terminals, including trigger unit functionality for external illumination of Lector®65x	CDB650-204	1064114
	Fieldbus proxy/gateway for connecting identification sensors to PROFIBUS-DP networks (PROFIBUS interface: 2 x M12, male connector/female connector, 5-pin)	CDF600-2100	1058965
	Fieldbus proxy/gateway for connecting identification sensors to PROFIBUS-DP networks (PROFIBUS interface: 1 x D-Sub, female connector, 9-pin)	CDF600-2103	1058966
	Modular connection module for one sensor	CDM420-0001	1025362
Plug connectors and cables			
	Head A: Female connector, M12, 12-pin, straight Head B: male connector, D-Sub-HD, 15-pin, straight Cable: Power, serial, CAN, digital I/Os, unshielded, 2 m	Connection cable (male connector-female connector)	2041834
	Head A: male connector, M12, 4-pin, straight, D-coded Head B: male connector, RJ45, 8-pin, straight Cable: Ethernet, PUR, shielded, 2 m	SSL-2J04-G02ME	6034414

At a glance

- Huge depth of field due to auto focus
- Integrated pushbuttons for auto setup and reading diagnostics
- CAN, Ethernet TCP/IP, PROFINET, and EtherNet/IP available on board, no additional gateway needed (depending on variant)
- Enhanced SMART code reconstruction technology
- Flexible sorting, filtering, and logical functions
- Integrated web server provides remote diagnostics and monitoring
- Advanced, easy-to-use SOPAS configuration software
- Integrated LED bar graph

Your benefits

- Economical, as auto focus means no versions or additional light barriers are required for focus adjustment
- Intelligent auto setup and multi-function pushbuttons save time during commissioning
- Easily execute firmware updates using the microSD memory card: no need for a PC
- Enhanced SMART technology reads damaged and partially obscured codes, increasing read rates
- Increased scanner intelligence enables sophisticated configuration of logical operations, reducing the control system programming effort. Data is then delivered in the desired format
- Integrated web server provides remote diagnostics and monitoring, no additional software required

➜ www.mysick.com/en/CLV65x

For more information, just 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.

Ordering information

Other models and accessories ➜ www.mysick.com/en/CLV65x

Code resolution	Reading distance			Version
	Front	Oscillating mirror	Front, with polarizing filter	
0.25 mm ... 1 mm	140 mm ... 1,625 mm [1]	125 mm ... 1,570 mm [1]	160 mm ... 1,400 mm [1]	**CLV650 Standard Density**
0.5 mm	170 mm ... 930 mm [1]	155 mm ... 880 mm [1]	–	**CLV651 Low Density**

[1] For details see reading field diagram.

- **Focus:** Auto focus
- **Scanner design:** Line scanner
- **Enclosure rating:** IP 65
- **Front screen:** Glass

Version	Connection type	Reading field	Heating	Model name	Part no.
CLV650 Standard Density	Cable	Front	Optional	CLV650-0000	1041290
		Oscillating mirror	Optional	CLV650-6000	1042124
	Ethernet	Front	Optional	CLV650-0120	1042121
		Front, with polarizing filter	–	CLV650-0120S01	1051957
		Oscillating mirror	Optional	CLV650-6120	1042125
CLV651 Low Density	Cable	Front	Optional	CLV651-0000	1046557
		Oscillating mirror	Optional	CLV651-6000	1046559
	Ethernet	Front	Optional	CLV651-0120	1046558
		Oscillating mirror	Optional	CLV651-6120	1046560

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Recommended accessories

	Brief description	Model name	Part no.
Mounting brackets and mounting plates			
	Hanger-shaped mounting bracket, Mounting hardware included	Mounting bracket	2042800
Modules			
	Small connection module for one sensor, 4 cable glands, base for CMC600	CDB620-001	1042256
	Fieldbus proxy/gateway for connecting identification sensors to PROFIBUS-DP networks (PROFIBUS interface: 2 x M12, male connector/female connector, 5-pin)	CDF600-2100	1058965
	Fieldbus proxy/gateway for connecting identification sensors to PROFIBUS-DP networks (PROFIBUS interface: 1 x D-Sub, female connector, 9-pin)	CDF600-2103	1058966
	Modular connection module for one sensor	CDM420-0001	1025362
Plug connectors and cables			
	Head A: Female connector, M12, 12-pin, straight Head B: male connector, D-Sub-HD, 15-pin, straight Cable: Power, serial, CAN, digital I/Os, unshielded, 2 m	Connection cable (male connector-female connector)	2041834
	Head A: male connector, M12, 4-pin, straight, D-coded Head B: male connector, RJ45, 8-pin, straight Cable: Ethernet, PUR, shielded, 2 m	SSL-2J04-G02ME	6034414

E

At a glance

- Advanced SMART+ code reconstruction technology
- New and flexible cloning plug technology
- CAN, Ethernet and serial communications available on board (dependent on cloning plug variant)
- Large depth of field due to real-time auto focus
- Consistent, user-friendly “SOPAS ET” software
- Built-in tracking without the use of an additional system controller
- Flexible sorting, filtering, and logical functions
- Integrated LED bar graph with pushbuttons

Your benefits

- Higher reading rate on damaged, heavily contaminated and partially damaged bar codes using the SMART+ algorithm
- Increased processing allows for faster and more accurate performance on demanding applications
- Fewer costs since no additional Ethernet gateway is required when using the Ethernet clone plug
- Time savings during commissioning thanks to integrated buttons and bar graph
- Increased scanner intelligence enables sophisticated configuration of logical operations, reducing the control system programming effort. Data is delivered in the desired format
- Cost savings since standard applications can be implemented without an additional system controller due to integrated tracking

➜ www.mysick.com/en/CLV69x

For more information, just 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.

Ordering information

Other models and accessories ➜ www.mysick.com/en/CLV69x

Code resolution	Reading distance		Version
	Front	Oscillating mirror	
0.25 mm ... 1 mm	500 mm ... 2,100 mm [1]	500 mm ... 2,100 mm [1]	**CLV690-0/1 Standard Density**
0.35 mm ... 1.2 mm	500 mm ... 2,200 mm [1]	500 mm ... 2,200 mm [1]	**CLV691-0/1 Low Density**
0.17 mm ... 0.4 mm	400 mm ... 1,600 mm [1]	400 mm ... 1,600 mm [1]	**CLV692-0/1 High Density**

[1] For details see reading field diagram.

- **Focus:** Auto focus
- **Connection type:** depending on the cloning plug used
- **Scanner design:** Line scanner
- **Enclosure rating:** IP 65

Version	Reading field	Front screen	Model name	Part no.
CLV690-0/1 Standard Density	Front	Glass	CLV690-0000	1056600
		Plastic	CLV690-0010	1056614
	Oscillating mirror	Glass	CLV690-1000	1056601
CLV691-0/1 Low Density	Front	Glass	CLV691-0000	1056604
	Oscillating mirror	Glass	CLV691-1000	1056605
CLV692-0/1 High Density	Front	Glass	CLV692-0000	1056608
	Oscillating mirror	Glass	CLV692-1000	1056609

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Recommended accessories

	Brief description	Model name	Part no.
Mounting brackets and mounting plates			
	Simple mounting bracket	Mounting bracket	2013824
Terminal and alignment brackets			
	Quick-action lock system, Mounting hardware included	Quick clamp	2016110
Modules			
	Connection device basic for connecting one sensor with 2 A fuse, 5 cable glands and RS-232 interface to sensor via M12, 17-pin female connector, all outputs available on screw/spring-loaded terminals, including trigger unit functionality for external illumination of Lector®65x	CDB650-204	1064114
	Fieldbus proxy/gateway for connecting identification sensors to PROFIBUS-DP networks (PROFIBUS interface: 2 x M12, male connector/female connector, 5-pin)	CDF600-2100	1058965
	Fieldbus proxy/gateway for connecting identification sensors to PROFIBUS-DP networks (PROFIBUS interface: 1 x D-Sub, female connector, 9-pin)	CDF600-2103	1058966
	Modular connection module for one sensor, 2 A fuse	CDM420-0006	1058634
Plug connectors and cables			
	Head A: male connector, M12, 17-pin Male connector, M12, 5-pin Female connector, M12, 4-pin Cable: Power, digital I/Os, serial, CAN Plug housing I/O, Ethernet	Clone plug	2062452
	Head A: Female connector, M12, 17-pin, straight Head B: male connector, D-Sub-HD, 15-pin, straight Cable: Power, serial, CAN, digital I/Os, unshielded, 2 m	Connection cable (male connector-female connector)	2055419
	Head A: male connector, M12, 17-pin, straight, A-coded Head B: Female connector, M12, 17-pin, straight, A-coded Cable: Power, serial, CAN, digital I/Os, suitable for 2 A, unshielded, 2 m	Connection cable (male connector-female connector)	6052286
	Head A: male connector, M12, 4-pin, straight, D-coded Head B: male connector, RJ45, 8-pin, straight Cable: Ethernet, PUR, shielded, 2 m	SSL-2J04-G02ME	6034414

E

At a glance

- Decoding of all common 1D, 2D, and stacked codes, as well as optical character recognition (depending on type)
- Flexible interfaces: serial interface, USB, and Ethernet
- Function buttons, aiming laser, focus adjustment, auto-setup, and green feedback LED
- Industrial, compact housing with swivel connector
- MicroSD memory card for storing images and backup copies of parameters

Your benefits

- Intelligent decoding algorithms ensure optimal reading performance, good read rates, and high throughput
- ID*pro* facilitates quick and easy integration into many industrial networks
- Intuitive setup with aiming laser, focus adjustment, and auto-setup reduces training and installation time and costs
- Simple mounting thanks to a compact housing and swivel connector, even when space is limited
- Quick and efficient analysis of reading performance and code quality
- Cloning systems create backup copies of parameters, ensuring short machine downtimes in the event of malfunctions
- Proven SICK LifeTime Services

➜ www.mysick.com/en/Lector62x

For more information, just 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.

Ordering information

Other models and accessories ➜ www.mysick.com/en/Lector62x

- **Reading field:** side
- **Sensor resolution:** 752 px x 480 px (WVGA)
- **Lens:** integrated

Version	Focal length	Internal lighting	Enclosure rating	Model name	Part no.
Lector®620 ECO	7 mm	Red	IP 65	ICR620E-H12013 ECO	1054507
Lector®620 Professional	7 mm	Red, blue	IP 65	ICR620S-T11503 Professional	1050589
			IP 67	ICR620S-T11504 Professional	1054375
		Infrared	IP 65	ICR620S-T16503 Professional	1058623
Lector®620 High Speed	7 mm	Red, blue	IP 65	ICR620H-T11503 High Speed	1055890
Lector®620 DPM Plus	7 mm	Red, blue	IP 65	ICR620D-T11503 DPM Plus	1055891
		Blue	IP 65	ICR620D-T17503 DPM Plus Solar	1060912
	12 mm	Red, blue	IP 65	ICR620D-T31503 DPM Plus	1064255
	18 mm	Red, blue	IP 65	ICR620D-T51503 DPM Plus	1064256
Lector®620 OCR	7 mm	Red, blue	IP 65	ICR620C-T11503S50 OCR	1062803

Recommended accessories

	Brief description	Model name	Part no.
Mounting brackets and mounting plates			
	Mounting bracket (simple bracket), Mounting hardware included	Mounting bracket	2020410

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	Brief description	Model name	Part no.
Modules			
	Small connection module for one sensor, 4 cable glands, base for CMC600	CDB620-001	1042256
	Fieldbus proxy/gateway for connecting identification sensors to PROFIBUS-DP networks (PROFIBUS interface: 2 x M12, male connector/female connector, 5-pin)	CDF600-2100	1058965
	Fieldbus proxy/gateway for connecting identification sensors to PROFIBUS-DP networks (PROFIBUS interface: 1 x D-Sub, female connector, 9-pin)	CDF600-2103	1058966
Plug connectors and cables			
	Head A: Female connector, M12, 17-pin, straight Head B: male connector, D-Sub-HD, 15-pin, straight Cable: Power, serial, CAN, digital I/Os, unshielded, 2 m	Connection cable (male connector-female connector)	2055419
	Head A: male connector, M12, 4-pin, D-coded Head B: male connector, M12, 4-pin, D-coded Cable: Ethernet, shielded, 2 m	SSL-1204-G02ME	6034420
	Head A: male connector, M12, 4-pin, straight, D-coded Head B: male connector, RJ45, 8-pin, straight Cable: Ethernet, PUR, shielded, 2 m	SSL-2J04-G02ME	6034414
	Head A: male connector, USB-A Head B: male connector, Micro-B Cable: USB 2.0, unshielded, 2 m	USB cable	6036106

E

At a glance

- 2/4 megapixel resolution; high frame repetition rate of 40 Hz
- Dynamic focus adjustment from object to object
- Integrated high-power LED illumination
- Function buttons, aiming laser, optical and acoustic feedback signal
- Intelligent, rapid decoding algorithms

Your benefits

- Highly flexible code position, object height, and transport speed due to a large field of view and dynamic focus
- Cost-effective, straightforward, modular integration of multiple devices adapted to the width of the conveyor belt
- Minimum training and installation work due to intuitive device equipment that includes function buttons, auto setup, integrated illumination, an aiming laser, an acoustic feedback signal, and a green feedback LED
- Intelligent decoding algorithms ensure maximum reading performance and high package throughput, even with codes that are difficult to read
- SICK ID*pro* platform facilitates quick and easy integration into numerous industrial networks

➜ www.mysick.com/en/Lector65x

For more information, just 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.

Ordering information

Other models and accessories ➜ www.mysick.com/en/Lector65x

- **Reading field:** side
- **Enclosure rating:** IP 65

Version	Sensor resolution	Lens	Focal length	Internal lighting	Model name	Part no.
Lector®652 Flex	2,048 px x 1,088 px	Exchangeable (C-mount), to be ordered separately as accessory	–	–	V2D652R-MCXXA6 Flex	1063404
Lector®652 Dynamic Focus	2,048 px x 1,088 px	Integrated	54 mm	White	V2D652R-MEWHA6 Dynamic Focus	1063405
Lector®654 Flex	2,048 px x 2,048 px	Exchangeable (C-mount), to be ordered separately as accessory	–	–	V2D654R-MCXXA6 Flex	1060892
Lector®654 Dynamic Focus	2,048 px x 2,048 px	Integrated	54 mm	White	V2D654R-MEWHA6 Dynamic Focus	1060893
Lector®654 Dynamic Focus for Systems	2,048 px x 2,048 px	Integrated	54 mm	White	V2D654R-MEWHF6 Dynamic Focus for Systems	1063229

Recommended accessories

	Brief description	Model name	Part no.
Modules			
	Connection device basic for connecting one sensor with 2 A fuse, 5 cable glands and RS-232 interface to sensor via M12, 17-pin female connector, all outputs available on screw/spring-loaded terminals, including trigger unit functionality for external illumination of Lector®65x	CDB650-204	1064114

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	Brief description	Model name	Part no.
Plug connectors and cables			
	Head A: male connector, M8, 4-pin, straight Head B: male connector, USB-A, 4-pin, straight Cable: USB 2.0, unshielded, 2 m	Connecting cable (male connector-male connector)	6051164
	Head A: male connector, M12, 17-pin, straight, A-coded Head B: Female connector, M12, 17-pin, straight, A-coded Cable: Power, serial, CAN, digital I/Os, suitable for 2 A, drag chain use, unshielded, 3 m	Connection cable (male connector-female connector)	6051194
	Head A: male connector, M12, 8-pin, straight, X-coded Head B: male connector, RJ45, 8-pin, straight Cable: Gigabit Ethernet/PoE, shielded, 2 m	Connection cable (male connector-male connector)	6049728
Lens and accessories			
	Optic kit 05 including lens with a focal length of 50 mm, white lighting, distance bracket and protective hood	Optic kit 05	1064776
	Optic kit 06 including lens with a focal length of 75 mm, white lighting, distance bracket and protective hood	Optic kit 06	1064777

E

At a glance

- Reading distance up to 320 mm
- Identifies all popular linear bar codes
- Scan rate up to 500 scans/second
- Withstands 25 drops from 1.6 m height
- Highly visible scan line
- IP 41 enclosure rating

Your benefits

- Increased productivity thanks to high scan rate
- Reliable identification reduces the need to manually input data
- Lightweight, ergonomic design ensures user comfort
- Highly dependable thanks to rugged housing and non-moving parts
- Easy targeting with higly visible scan line for correct aiming

➜ www.mysick.com/en/IDM14x

For more information, just 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.

Ordering information

Other models and accessories ➜ www.mysick.com/en/IDM14x

- **Version:** Mid Range
- **Code resolution:** ≥ 0.076 mm
- **Reading distance:** 50 mm ... 600 mm (for details see reading field diagram)
- **Supported code type:** 1D, 1D, Stacked (depending on type)

Sub product family	Field of application	Items supplied	Included in delivery	Model name	Part no.
IDM140 Corded	General purpose	Single scanner	–	IDM140-201D	6040985
				IDM140-2PDF01D	6040989
		Kit	6040985 IDM140-201D 6036726 Connection cable	IDM140 PS/2 Kit	6040982
			6040985 IDM140-201D 6041540 Connection cable 6036722 Power supply unit	IDM140 RS-232 Kit	6041017
			6040985 IDM140-201D 6036728 Connection cable	IDM140 USB Kit	6040983
			6040989 IDM140-2PDF01D 6036726 Connection cable	IDM140PDF PS/2 Kit	6040986
			6040989 IDM140-2PDF01D 6041540 Connection cable 6036722 Power supply unit	IDM140PDF RS-232 Kit	6041018
			6040989 IDM140-2PDF01D 6036728 Connection cable	IDM140PDF USB Kit	6040987
			6040985 IDM140-201D 2057709 Adapter cable 6041540 Connection cable 1058965 CDF600-2100	IDM140-2 CDF600-2100 PROFIBUS Kit	1063765
			6040985 IDM140-201D 2057709 Adapter cable 6041540 Connection cable 1058966 CDF600-2103	IDM140-2 CDF600-2103 PROFIBUS Kit	1063766

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Sub product family	Field of application	Items supplied	Included in delivery	Model name	Part no.
IDM141 Bluetooth	General purpose, cordless	Single scanner	–	IDM140-2BT	6036729
				IDM140-2PDFBT	6036730
		Kit	6036729 IDM140-2BT 6041266 Charging station 6036722 Power supply unit	IDM140BT Charging Kit	6040993
			6036726 Connection cable 6041267 Base station 6036729 IDM140-2BT 6036722 Power supply unit	IDM140BT PS/2 Kit	6040990
			6041540 Connection cable 6041267 Base station 6036729 IDM140-2BT 6036722 Power supply unit	IDM140BT RS-232 Kit	6040992
			6036728 Connection cable 6041267 Base station 6036729 IDM140-2BT 6036722 Power supply unit	IDM140BT USB Kit	6040991
			6036730 IDM140-2PDFBT 6041266 Charging station 6036722 Power supply unit	IDM140PDF BT Charging Kit	6040997
			6036726 Connection cable 6041267 Base station 6036730 IDM140-2PDFBT 6036722 Power supply unit	IDM140PDF BT PS/2 Kit	6040994
			6041540 Connection cable 6041267 Base station 6036730 IDM140-2PDFBT 6036722 Power supply unit	IDM140PDF BT RS-232 Kit	6040996
			6036728 Connection cable 6041267 Base station 6036730 IDM140-2PDFBT 6036722 Power supply unit	IDM140PDF BT USB Kit	6040995
IDM142 WIFI	General purpose, cordless	Single scanner	–	IDM140-2WLAN12D	6043433
				IDM140-2PDFWLAN12D	6043434
		Kit	6043433 IDM140-2WLAN12D 6036728 Connection cable 6041266 Charging station 6036722 Power supply unit	IDM140 WLAN Kit	6043431
			6043434 IDM140-2PDFWLAN12D 6036728 Connection cable 6041266 Charging station 6036722 Power supply unit	IDM140PDF WLAN Kit	6043432

Recommended accessories

	Brief description	Model name	Part no.
Other mounting accessories			
	Desk holder	Table mount	6036723
Plug connectors and cables			
	Head A: male connector, USB-A Head B: male connector, RJ45 Cable: USB, unshielded, 1.8 m For keyboard wedge or USB Com Port Emulation	Connection cable	6036728
Power supply units and power cord connectors			
	Power supply, input AC 100 ... 240 V, output DC 5 V/2 A (necessary when using RS-232 TTL cable, does not fulfill medical standard EN 60601/ IEC 60601))	Power supply unit	6036722

At a glance

- Identification of all popular 1D codes, with PDF version also stacked codes
- Compact housing with up to IP 65 withstanding 50 drops from 2 m on concrete
- Good read feedback via LED, beeper and vibrator
- Supports all popular corded and cordless interfaces as well as industrial fieldbuses via SICK connectivity
- Tool-free exchange of cable and battery
- Corded and cordless versions available

Your benefits

- Increased productivity and throughput thanks to fast and reliable identification
- Reduced costs thanks to 2-in-1 scan engine: covering standard and high-density codes with a single device
- High reliability thanks to industrial grade and rugged housing
- Intuitive good read feedback for noisy industrial environment via vibration, beeper and LED
- Higher user comfort through ergonomic housing design, well balanced and light weight
- High flexibility and operator mobility with corded and cordless versions
- Quick integration in most corded and cordless PC or industrial networks

➜ www.mysick.com/en/IDM16x

For more information, just 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.

Ordering information

Other models and accessories ➜ www.mysick.com/en/IDM16x

- **Version:** Long Range
- **Code resolution:** ≥ 0.076 mm
- **Reading distance:** 50 mm ... 800 mm (for details see reading field diagram)
- **Supported code type:** 1D, 1D, Stacked (depending on type)

Sub product family	Field of application	Items supplied	Included in delivery	Model name	Part no.
IDM160 Corded	Industrial	Single scanner	–	IDM160-01E	6045078
				IDM160-PDF01E	6045081
		Kit	6045078 IDM160-01E 6045194 Connection cable	IDM160 PS/2 Kit	6045076
			6045078 IDM160-01E 6045196 Connection cable	IDM160 RS-232 Kit	6045077
			6045078 IDM160-01E 6045196 Connection cable 6036722 Power supply unit	IDM160 RS-232 Power Supply Kit	1056245
			6045078 IDM160-01E 6045195 Connection cable	IDM160 USB Kit	6045058
			6045081 IDM160-PDF01E 6045194 Connection cable	IDM160PDF PS/2 Kit	6045079
			6045081 IDM160-PDF01E 6045196 Connection cable 6036722 Power supply unit	IDM160PDF RS-232 Power Supply Kit	1056246
			6045081 IDM160-PDF01E 6045195 Connection cable	IDM160PDF USB Kit	6045059
			6045078 IDM160-01E 2057709 Adapter cable 6045196 Connection cable 1058965 CDF600-2100	IDM160 CDF600-2100 PROFIBUS Kit	1063767

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Sub product family	Field of application	Items supplied	Included in delivery	Model name	Part no.
IDM160 Corded	Industrial	Kit	6045078 IDM160-01E 2057709 Adapter cable 6045196 Connection cable 1058966 CDF600-2103	IDM160 CDF600-2103 PROFIBUS Kit	1063768
IDM161 Bluetooth	Cordless, industrial	Single scanner	–	IDM160-BT11E	6045085
				IDM160-PDFBT11E	6045088
		Kit	6045085 IDM160-BT11E 6045194 Connection cable 6045197 Base station 6036722 Power supply unit	IDM160BT PS/2 Kit	6045082
			6045085 IDM160-BT11E 6045196 Connection cable 6045197 Base station 6036722 Power supply unit	IDM160BT RS-232 Kit	6045083
			6045085 IDM160-BT11E 6045195 Connection cable 6045197 Base station 6036722 Power supply unit	IDM160BT USB Kit	6045060
			6045088 IDM160-PDFBT11E 6045194 Connection cable 6045197 Base station 6036722 Power supply unit	IDM160PDF BT PS/2 Kit	6045086
			6045088 IDM160-PDFBT11E 6045196 Connection cable 6045197 Base station 6036722 Power supply unit	IDM160PDF BT RS-232 Kit	6045087
			6045088 IDM160-PDFBT11E 6045195 Connection cable 6045197 Base station 6036722 Power supply unit	IDM160PDF BT USB Kit	6045061
IDM162 WIFI	Cordless, industrial	Single scanner	–	IDM160-WLAN12E	6047650
				IDM160-PDFWLAN12E	6047651
		Kit	6047650 IDM160-WLAN12E 6036728 Connection cable 6045198 Charging station 6036722 Power supply unit	IDM160 WLAN Kit	6045062
			6047651 IDM160-PDFWLAN12E 6036728 Connection cable 6045198 Charging station 6036722 Power supply unit	IDM160PDF WLAN Kit	6045063

Recommended accessories

	Brief description	Model name	Part no.
Other mounting accessories			
	Desk holder	Table mount	6045192
	Tripod mount for industrial hand-held scanner	Tripod mount	6045193
Plug connectors and cables			
	Head A: male connector, USB-A Head B: male connector, RJ45 Cable: unshielded, 1.8 m For keyboard wedge or USB Com Port Emulation	Connection cable	6045195
	Head A: male connector Head B: male connector Cable: unshielded, 2 m	Connection cable	6045194
	Head A: male connector, RJ45, 10-pin, straight Head B: Female connector, D-Sub, 9-pin, straight Cable: RS-232 TTL, unshielded, 1.8 m Voltage via pin 9 or external power supply required	Connection cable	6045196

At a glance

- Identification of all current 1D, stacked, and 2D codes
- Reliable, secure, and fast code reading
- Compact design, weighs only 150 g
- Manual operation and hands-free operation in presentation mode
- Corded and cordless variants available

Your benefits

- Only one device for a wide range of different code types
- Fast and accurate identification without manual data entry
- Simple and ergonomic operation, even in scanning-intensive applications
- Flexible application possibilities due to various operating options
- Cordless variant ensures mobility in all applications

➜ www.mysick.com/en/IDM24x

For more information, just 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.

Ordering information

Other models and accessories ➜ www.mysick.com/en/IDM24x

Code resolution	Reading distance		Supported code type	Sub product family
	Standard Range	High Density		
≥ 0.08 mm [1] ≥ 0.13 mm [2] (depending on type)	30 mm ... 155 mm [2] [3]	35 mm ... 90 mm [2] [3]	1D, 2D, Stacked	**IDM240 Corded**
	30 mm ... 155 mm [2] [3] (depending on type)	35 mm ... 90 mm [2] [3]	1D, 2D, Stacked	**IDM241 Bluetooth**

[1] Valid for Code 39.

[2] Valid for Data Matrix code.

[3] For details see reading field diagram.

Sub product family	Field of application	Version	Items supplied	Included in delivery	Model name	Part no.
IDM240 Corded	General purpose	Standard Range	Single scanner	–	IDM240-100S	6050643
		High Density	Single scanner	–	IDM240-100H	6050646
		Standard Range	Kit	6050643 IDM240-100S 6036728 Connection cable	IDM240-100S USB Kit	6050644
				6050643 IDM240-100S 6041540 Connection cable 6036722 Power supply unit	IDM240-100S RS-232 Power Supply Kit	1064986
				6050643 IDM240-100S 6036726 Connection cable	IDM240-100S PS/2 Kit	1064985
		High Density	Kit	6036728 Connection cable 6050646 IDM240-100H	IDM240-100H USB Kit	6050647
				6041540 Connection cable 6050646 IDM240-100H 6036722 Power supply unit	IDM240-100H RS-232 Power Supply Kit	1064984
				6036726 Connection cable 6050646 IDM240-100H	IDM240-100H PS/2 Kit	1064983

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Sub product family	Field of application	Version	Items supplied	Included in delivery	Model name	Part no.
IDM241 Bluetooth	General purpose, cordless	Standard Range	Single scanner	–	IDM241-100S	6053048
		High Density	Single scanner	–	IDM241-100H	6053051
		Standard Range	Kit	6053048 IDM241-100S 6036728 Connection cable 6053628 Base station 6036722 Power supply unit	IDM241-100S USB Kit	6053049
				6053048 IDM241-100S 6041540 Connection cable 6053628 Base station 6036722 Power supply unit	IDM241-100S RS-232 Kit	6053050
				6053051 IDM241-100H 6036728 Connection cable 6053628 Base station 6036722 Power supply unit	IDM241-100H USB Kit	6053052
				6053051 IDM241-100H 6041540 Connection cable 6053628 Base station 6036722 Power supply unit	IDM241-100H RS-232 Kit	6053053

E

Recommended accessories

	Brief description	Model name	Part no.
Other mounting accessories			
	Desk holder	Table mount	6045192
	Tripod mount for general purpose hand-held scanners	Tripod mount	6036724
Plug connectors and cables			
	Head A: male connector, USB-A Head B: male connector, RJ45 Cable: USB, unshielded, 1.8 m For keyboard wedge or USB Com Port Emulation	Connection cable	6036728
Power supply units and power cord connectors			
	Power supply, input AC 100 ... 240 V, output DC 5 V/2 A (necessary when using RS-232 TTL cable, does not fulfill medical standard EN 60601/ IEC 60601))	Power supply unit	6036722

At a glance

- Identification of all current 1D, stacked, and 2D codes
- Reliable, secure, and fast code reading
- Rugged, stable housing with IP 65 enclosure rating
- Supports all common corded and cordless interfaces as well as industrial fieldbuses via SICK connectivity
- Good read feedback via LED, beeper, and vibration
- Decoding algorithms ideal for direct part marked codes (depending on type)

Your benefits

- Only one device for a wide range of different code types
- Fast and accurate identification without manual data entry
- Highly reliable thanks to industrial enclosure rating and rugged housing
- Simple and flexible integration in industrial fieldbus networks using SICK connectors
- Simple, intuitive operation thanks to multiple read confirmation
- Direct expert advice all over the world from the SICK sales and service network
- Low contrast or highly reflective DPM codes are identified reliably

→ www.mysick.com/en/IDM26x

For more information, just 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.

Ordering information

Other models and accessories → www.mysick.com/en/IDM26x

Code resolution	Reading distance		Supported code type	Sub product family
	Standard Range	High Density		
≥ 0.08 mm [1] ≥ 0.13 mm [2] (depending on type)	30 mm ... 155 mm [2] [3]	35 mm ... 90 mm [2] [3]	1D, 2D, Stacked	**IDM260 Corded** **IDM261 Bluetooth**

[1] Valid for Code 39.

[2] Valid for Data Matrix code.

[3] For details see reading field diagram.

Sub product family	Field of application	Version	Items supplied	Included in delivery	Model name	Part no.
IDM260 Corded	Industrial	Standard Range	Single scanner	–	IDM260-100S	6050652
		High Density	Single scanner	–	IDM260-100H	6050655
		Standard Range	Kit	6050652 IDM260-100S 6045195 Connection cable	IDM260-100S USB Kit	6050653
				6050652 IDM260-100S 6045196 Connection cable 6036722 Power supply unit	IDM260-100S RS-232 Power Supply Kit	1064990
				6050652 IDM260-100S 6045194 Connection cable	IDM260-100S PS/2 Kit	1064989
		High Density	Kit	6050655 IDM260-100H 6045195 Connection cable	IDM260-100H USB Kit	6050656
				6050655 IDM260-100H 6045196 Connection cable 6036722 Power supply unit	IDM260-100H RS-232 Power Supply Kit	1064988
				6050655 IDM260-100H 6045194 Connection cable	IDM260-100H PS/2 Kit	1064987

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Sub product family	Field of application	Version	Items supplied	Included in delivery	Model name	Part no.
IDM261 Bluetooth	Industrial, cordless	Standard Range	Single scanner	–	IDM261-100S	6053054
		High Density	Single scanner	–	IDM261-100H	6053057
		Standard Range	Kit	6053054 IDM261-100S 6036728 Connection cable 6053629 Base station 6036722 Power supply unit	IDM261-100S USB Kit	6053055
				6053054 IDM261-100S 6041540 Connection cable 6053629 Base station 6036722 Power supply unit	IDM261-100S RS-232 Kit	6053056
		High Density	Kit	6053057 IDM261-100H 6036728 Connection cable 6053629 Base station 6036722 Power supply unit	IDM261-100H USB Kit	6053058
				6053057 IDM261-100H 6041540 Connection cable 6053629 Base station 6036722 Power supply unit	IDM261-100H RS-232 Kit	6053059

E

Recommended accessories

	Brief description	Model name	Part no.
Other mounting accessories			
	Desk holder	Table mount	6045192
	Tripod mount for industrial hand-held scanner	Tripod mount	6045193
Plug connectors and cables			
	Head A: male connector, USB-A Head B: male connector, RJ45 Cable: unshielded, 1.8 m For keyboard wedge or USB Com Port Emulation	Connection cable	6045195
Power supply units and power cord connectors			
	Power supply, input AC 100 ... 240 V, output DC 5 V/2 A (necessary when using RS-232 TTL cable, does not fulfill medical standard EN 60601/ IEC 60601))	Power supply unit	6036722

At a glance

- 13.56 MHz RFID write/read device for ranges up to 240 mm
- Transponder communication according to ISO/IEC 15693 standard
- Compact, industrial design with integrated antenna
- Embedded protocols allow interfacing with standard industrial fieldbus technologies
- Powerful micro-processor executes internally configurable logic
- Flexible trigger control
- Supports parameter cloning via microSD memory card
- Built-in diagnostics

Your benefits

- Reliable identification ensures maximum throughput
- Adapts to changing needs, ensures investment over the long term
- Simple integration saves installation time
- A wide range of functionality ensures flexible solutions
- Maintenance-free
- Uses same connectivity and configuration software as SICK's bar code scanners and image-based code readers – compatible through standardized ID*pro* platform

→ www.mysick.com/en/RFH6xx

For more information, just 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.

Ordering information

Other models and accessories → www.mysick.com/en/RFH6xx

- **Product category:** write/read device with integrated antenna
- **Frequency band:** HF (13.56 MHz)
- **RFID standard:** ISO/IEC 15693, ISO 18000-3 Mode 1
- **Radio approval:** global (EN 300330-2 V1.5.1) (FCC Part 15)

Version	Scanning range	Connection type	Model name	Part no.
RFH620 Short Range	Max. 150 mm [1]	Cable	RFH620-1000001	1044838
		Ethernet	RFH620-1001201	1044839
RFH630 Mid Range	Max. 240 mm [1]	Cable	RFH630-1000001	1054747
		Ethernet	RFH630-1102101	1054746

[1] With RFID ISO card transponder in plane parallel alignment to read/write device antenna; depending on dimensions and quality of transponder.

Recommended accessories

	Brief description	Model name	Part no.
Mounting brackets and mounting plates			
	Mounting bracket, Mounting hardware included	Mounting bracket	2048551
Modules			
	Small connection module for one sensor, 4 cable glands, base for CMC600	CDB620-001	1042256
	Fieldbus proxy/gateway for connecting identification sensors to PROFIBUS-DP networks (PROFIBUS interface: 2 x M12, male connector/female connector, 5-pin)	CDF600-2100	1058965

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	Brief description	Model name	Part no.
	Fieldbus proxy/gateway for connecting one identification sensor to PROFINET-IO networks (interface 2 x M12, female connector/female connector, 4-pin)	CDF600-2200	1062460
Plug connectors and cables			
	Head A: Female connector, M12, 12-pin, straight Head B: male connector, D-Sub-HD, 15-pin, straight Cable: Power, serial, CAN, digital I/Os, unshielded, 2 m	Connection cable (male connector-female connector)	2041834
	Head A: Female connector, M12, 17-pin, straight Head B: male connector, D-Sub-HD, 15-pin, straight Cable: Power, serial, CAN, digital I/Os, unshielded, 2 m	Connection cable (male connector-female connector)	2055419
	Head A: male connector, M12, 4-pin, straight, D-coded Head B: male connector, RJ45, 8-pin, straight Cable: Ethernet, PUR, shielded, 2 m	SSL-2J04-G02ME	6034414
RFID transponder			
	HF transponder, PA 6, diameter 50 mm, NXP ICODE SLIX	Disc (50 mm)	6033781

E

At a glance

- Compact UHF RFID read/write device with integrated antenna for scanning ranges of less than 1 m
- Standard-compatible transponder interface (ISO/IEC 18000-6C / EPC C1G2)
- Supports industry-standard data interfaces and fieldbuses, as well as PoE
- MicroSD memory card for parameter cloning
- Extensive diagnostic and service functions

Your benefits

- Correct assignment and no overshoot thanks to the well-defined read/write range and intelligent filter functions
- Integrated process logic for remote solutions saves additional control and programming effort
- Can be easily integrated into industrial networks thanks to ID*pro* compatibility
- Firmware upgrades and industry-standard compliance ensure long-term reliability
- Minimum changeover times in case of failure thanks to cloning
- RFU62x can be mounted to metal directly – no loss of range
- Easy operation and installation with SOPAS user interface

→ www.mysick.com/en/RFU62x

For more information, just 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.

Ordering information

Other models and accessories → www.mysick.com/en/RFU62x

- **Version:** Mid Range
- **Product category:** write/read device with integrated antenna
- **Frequency band:** UHF (860 ... 960 MHz)
- **RFID standard:** EPCglobal UHF Class 1 Generation 2, ISO/IEC 18000-6 C
- **Scanning range:** max. 1 m (Depending on transponder used and ambient conditions.)

Connection type	Radio approval	Model name	Part no.
Cable	Europe (EN 302 208-2 V1.4.1)	RFU620-10400	1062600
	USA, Canada (FCC Part 15)	RFU620-10401	1062603
Ethernet	Europe (EN 302 208-2 V1.4.1)	RFU620-10100	1062599
	USA, Canada (FCC Part 15)	RFU620-10101	1062602
	Japan (ARIB STD-T107)	RFU620-10107	1068727
PoE	Europe (EN 302 208-2 V1.4.1)	RFU620-10500	1062601
	USA, Canada (FCC Part 15)	RFU620-10501	1062604

Recommended accessories

	Brief description	Model name	Part no.
Mounting brackets and mounting plates			
	Simple mounting bracket	Mounting bracket	2071067

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	Brief description	Model name	Part no.
Modules			
	Small connection module for one sensor, 4 cable glands, base for CMC600	CDB620-001	1042256
	Fieldbus proxy/gateway for connecting identification sensors to PROFIBUS-DP networks (PROFIBUS interface: 2 x M12, male connector/female connector, 5-pin)	CDF600-2100	1058965
	Fieldbus proxy/gateway for connecting one identification sensor to PROFINET-IO networks (interface 2 x M12, female connector/female connector, 4-pin)	CDF600-2200	1062460
Plug connectors and cables			
	Head A: Female connector, M12, 17-pin, straight Head B: male connector, D-Sub-HD, 15-pin, straight Cable: Power, serial, CAN, digital I/Os, unshielded, 2 m	Connection cable (male connector-female connector)	2055419
	Head A: male connector, M12, 8-pin, straight, X-coded Head B: male connector, RJ45, 8-pin, straight Cable: Gigabit Ethernet/PoE, shielded, 2 m	Connection cable (male connector-male connector)	6049728
	Head A: male connector, M12, 4-pin, straight, D-coded Head B: male connector, RJ45, 8-pin, straight Cable: Ethernet, PUR, shielded, 2 m	SSL-2J04-G02ME	6034414
	Head A: male connector, USB-A Head B: male connector, Micro-B Cable: USB 2.0, unshielded, 2 m	USB cable	6036106
RFID transponder			
	UHF transponder, global, thermoplastic, 51.5 mm x 47.5 mm x 10 mm, Impinj Monza 4 QT	On-metal Transponder (52 mm x 48 mm x 10 mm)	6052346

E

At a glance

- UHF RFID read/write unit for industrial applications
- With or without integrated antenna, depending on the type (up to four external antennas can be connected)
- Standard-compliant transponder interface (ISO/IEC 18000-6C/EPC G2C1)
- Supports common industrial data interfaces and fieldbuses
- MicroSD memory card for device parameter cloning
- Several diagnostic and service options available

Your benefits

- Intelligent technology allows stand-alone usage
- Highest reading/writing performance
- Flexible integration in common industrial fieldbuses via ID*pro* compatibility
- Less maintenance time due to an integrated cloning back-up system using microSD memory card
- Easily adapts to application requirements via SOPAS parameter setting tool
- Free usable feedback LED quickly provides read results and diagnostic information directly to the user

➜ www.mysick.com/en/RFU63x

For more information, just 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.

Ordering information

Other models and accessories ➜ www.mysick.com/en/RFU63x

- **Version:** Long Range
- **Frequency band:** UHF (860 ... 960 MHz)
- **RFID standard:** EPCglobal UHF Class 1 Generation 2, ISO/IEC 18000-6 C

Product category	Scanning range	Radio approval	Model name	Part no.
Write/read device with integrated antenna	Typ. 2 m [1]	Japan (ARIB STD-T107)	RFU630-13107	1061498
	Typ. 5 m [1]	Europe, South Africa, Saudi Arabia (EN 302 208-2 V1.4.1)	RFU630-13100	1054396
		USA, Canada, México (FCC Part 15)	RFU630-13101	1054397
		Australia (AS/NZ4268)	RFU630-13102	1058775
		India (EN 302 208-2 V1.4.1)	RFU630-13103	1067473
		China (SRRC)	RFU630-13105	1057943
		Japan (ARIB STD-T106)	RFU630-13106	1067133
Write/read device without integrated antenna	Typ. 5 m [1]	Europe (EN 302 208-2 V1.4.1)	RFU630-04100	1058117
		USA, Canada (FCC Part 15)	RFU630-04101	1059999

[1] Depending on transponder used and ambient conditions.

Recommended accessories

	Brief description	Model name	Part no.
Mounting brackets and mounting plates			
	Mounting bracket for wall mounting, incl. assembly material	Mounting bracket	2060912

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	Brief description	Model name	Part no.
Modules			
	Connection device basic for connecting one sensor with 2 A fuse, 5 cable glands and RS-232 interface to sensor via M12, 17-pin female connector, all outputs available on screw/spring-loaded terminals, including trigger unit functionality for external illumination of Lector®65x	CDB650-204	1064114
	Fieldbus proxy/gateway for connecting identification sensors to PROFIBUS-DP networks (PROFIBUS interface: 2 x M12, male connector/female connector, 5-pin)	CDF600-2100	1058965
	Fieldbus proxy/gateway for connecting identification sensors to PROFIBUS-DP networks (PROFIBUS interface: 1 x D-Sub, female connector, 9-pin)	CDF600-2103	1058966
	Fieldbus proxy/gateway for connecting one identification sensor to PROFINET-IO networks (interface 2 x M12, female connector/female connector, 4-pin)	CDF600-2200	1062460
Plug connectors and cables			
	Head A: Female connector, M12, 17-pin, straight Head B: male connector, D-Sub-HD, 15-pin, straight Cable: Power, serial, CAN, digital I/Os, unshielded, 0.9 m	Connection cable (male connector-female connector)	2049764
	Head A: male connector, M12, 4-pin, straight, D-coded Head B: male connector, RJ45, 8-pin, straight Cable: Ethernet, PUR, shielded, 2 m	SSL-2J04-G02ME	6034414
	Head A: male connector, USB-A Head B: male connector, Micro-B Cable: USB 2.0, unshielded, 2 m	USB cable	6036106
Power supply units and power cord connectors			
	Power supply unit with pre-assembled M12 female connector, 17-pin	Power supply	2062249
RFID transponder			
	UHF transponder, global, thermoplastic, 51.5 mm x 47.5 mm x 10 mm, Impinj Monza 4 QT	On-metal Transponder (52 mm x 48 mm x 10 mm)	6052346

E

F

DETECTION AND RANGING SOLUTIONS

Compact, reliable detection and distance measurement at all times

Laser measurement technology devices can be used for a wide range of applications. These devices detect both 2D and multi-dimensional contour data and can process information either externally or in the sensor itself. They are ideal for indoor and outdoor applications, including anti-collision in harbors, classification in traffic, detection in building automation, or position evaluation in navigation.

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F

	Selection guide detection and ranging solutions	**F-256**
	TiM3xx Incredibly good in detection	**F-258**
	TiM5xx Complete measurement accuracy	**F-260**
	LMS1xx Works in all weather conditions – compact and economical	**F-262**
	LMS5xx More than meets the eye. Powerful unit for big solutions.	**F-264**
	NAV Precise laser navigation for maximum efficiency	**F-266**

SELECTION GUIDE DETECTION AND RANGING SOLUTIONS

F

Product			Principle of operation			Applications											
			Detection	Measurement	Multi-echo technology	Level measurement	Checking height	Area monitoring	Checking presence	Collision prevention	Position detection	Electronic routing	Range finding	Shape recognition	Classification		
2D laser scanners																	
	TiM series	TiM3xx	■				■	■	■	■							
	TiM series	TiM5xx		■			■	■		■	■		■				
	LMS series	LMS1xx	■	■	■	■	■	■	■	■	■	■	■	■	■		
	LMS series	LMS5xx	■	■	■	■	■	■		■	■	■	■	■	■		
		NAV	■	■							■	■	■				

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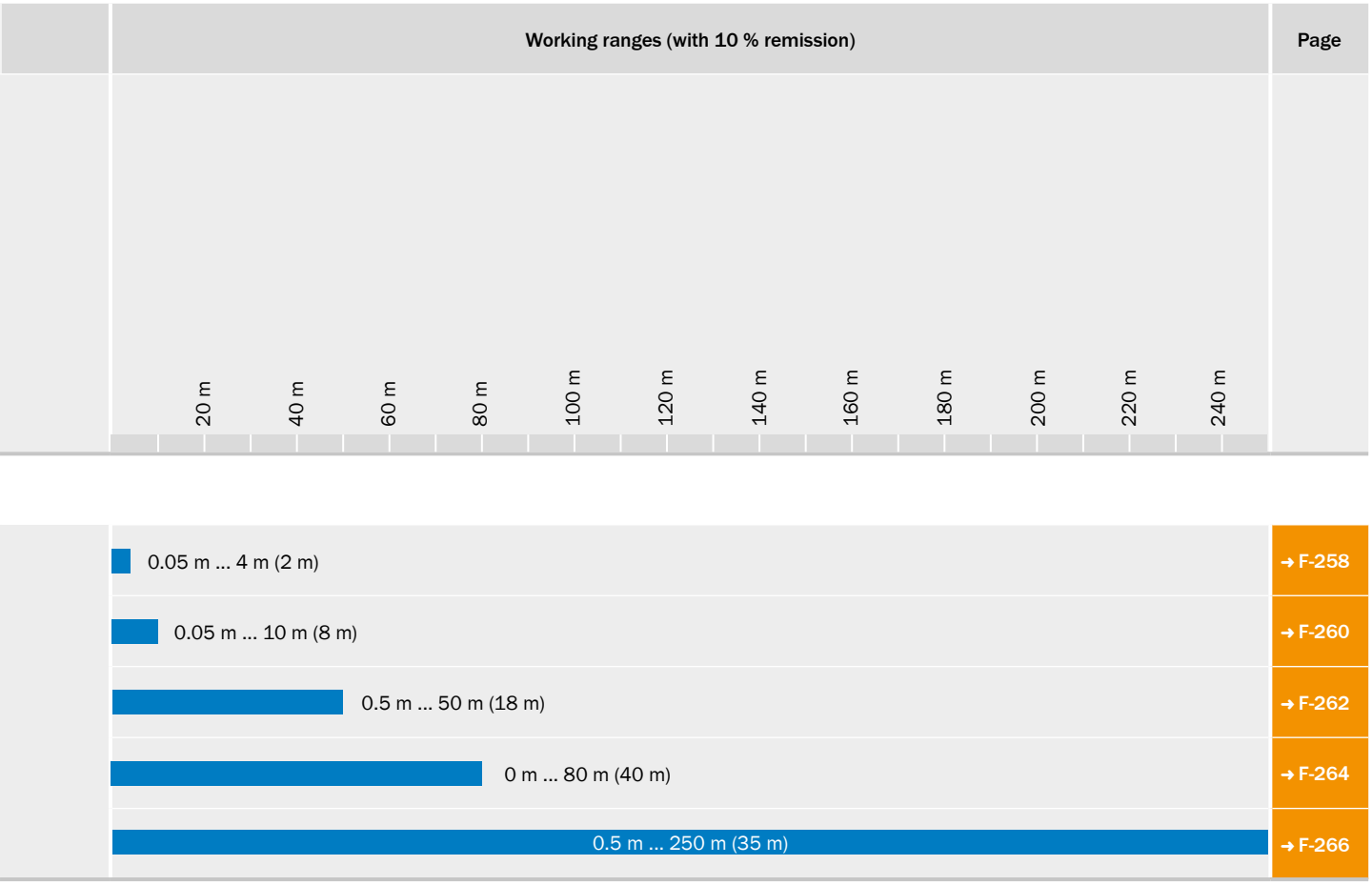
Working ranges (with 10 % remission)
Page
20 m
40 m
60 m
80 m
100 m
120 m
140 m
160 m
180 m
200 m
220 m
240 m
0.05 m ... 4 m (2 m)
→ F-258
0.05 m ... 10 m (8 m)
→ F-260
0.5 m ... 50 m (18 m)
→ F-262
0 m ... 80 m (40 m)
→ F-264
0.5 m ... 250 m (35 m)
→ F-266

F

At a glance

- Configure without a PC using “touch and teach”
- Small, lightweight and economical measurement sensor
- Field evaluation using intelligent algorithms
- Set parameter interface is accessible while device is mounted
- One of the smallest laser scanners on the market
- Proven industrial design
- Low power consumption (typ. 3.5 W)

Your benefits

- Low cost of ownership
- Easily hidden from view due to small dimensions
- Low installation costs and exchange time due to M12 x 12 or D-Sub connector
- Long operation for battery-driven vehicles
- Preconfigured fields ensure short installation time
- Reduced hardware costs since only one sensor can be used for large anti-collision fields (up to 235 qm)
- No wiring necessary between sender and receiver

➜ www.mysick.com/en/TiM3xx

For more information, just 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.

Ordering information

Other models and accessories ➜ www.mysick.com/en/TiM3xx

Field of view	Max. range with 10 % reflectivity	Switching inputs	Sub product family
270°	2 m	4 / 0 (depending on type)	**TiM31x**
		4	**TiM32x**

- **Version:** Short Range
- **Field of application:** Indoor
- **Object remission:** 4 % ... > 1,000 %, reflectors
- **Housing color:** light blue (RAL 5012)

Sub product family	Electrical connection	Switching outputs	Model name	Part no.
TiM31x	1 x 15-pin D-sub HD male connector (0.9 m)	3 (plus 1 x “device ready”)	TIM310-1030000	1052627
		2 (plus 1 x “device ready”)	TIM310-1030000S01	1056791
	1 x M12 12-pin male connector (0.8 m)	3 (plus 1 x “device ready”)	TIM310-1130000	1056550
TiM32x	1 x 15-pin D-sub HD male connector (0.9 m)	3 (plus 1 x “device ready”)	TIM320-1031000	1063467
	1 x M12 12-pin male connector (0.8 m)	3 (plus 1 x “device ready”)	TIM320-1131000	1062219

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Recommended accessories

	Brief description	Model name	Part no.
Mounting brackets/plates			
	1, Mounting set 2, fender and alignment aid	Mounting kit 2	2061776
Modules			
Illustration may differ	Small connection module for one sensor, 4 cable glands (only for TiM3xx-10xxxxx)	CDB730-001	1055981
Plug connectors and cables			
	Head A: Female connector, D-Sub-HD, 15-pin, straight Head B: cable Cable: Power, serial, CAN, digital I/Os, shielded, 2 m	Extension cable 2 m (female connector-open)	2043413
	Head A: male connector, USB-A Head B: male connector, Micro-B Cable: USB 2.0, unshielded, 2 m	USB cable	6036106
Cleaning agent			
	Plastic cleaner and care product, anti-static, 0.5 liter	Plastic cleaner	5600006

F

At a glance

- Monitoring area of up to 235 m² with just one sensor
- High ambient light tolerance due to HDDM technology
- Rugged housing with up to an IP 67 enclosure rating
- Low power consumption of just 3 W
- Compact design with a housing height of just 86 mm maximum
- Integrated Ethernet interface
- Long sensing range of up to max. 10 m
- Industry-standard design and M12 male connector

Your benefits

- Reliable object detection independent of the surface and ambient light
- Rugged IP 67 housing withstands both indoor and outdoor conditions
- Easy integration into compact automated guided vehicles (AGV) due to small size
- Ethernet interface makes easy implementation and remote maintenance possible
- Can determine additional information such as object size, shape, etc. due to measured data output
- Low implementation costs due to scalability: Sensor telegram is identical to sensor telegrams for laser measurement sensors in the SICK portfolio

➜ www.mysick.com/en/TiM5xx

For more information, just 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.

Ordering information

Other models and accessories ➜ www.mysick.com/en/TiM5xx

Field of view	Max. range with 10 % reflectivity	Switching inputs	Sub product family
270°	2 m	0	**TiM51x**
	8 m	0	**TiM55x**

- **Version:** Short Range
- **Field of application:** Outdoor
- **Switching outputs:** 1 (“SYNC”/”device ready”)
- **Object remission:** 4 % ... > 1,000 %, reflectors

Sub product family	Electrical connection	Housing color	Model name	Part no.
TiM51x	1 x cable with 12-pin M12 male connector (0,3 m) 1 x Micro USB female connector, type B	Light blue (RAL 5012)	TIM510-9950000S01	1062210
TiM55x	1 x “Ethernet” connection, 4-pin M12 female connector 1 x connection “Power/Synchronization output” 5-pin, M12 male connector 1 x Micro USB female connector, type B	Gray (RAL 7032)	TIM551-2050001	1060445

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Recommended accessories

	Brief description	Model name	Part no.
Mounting brackets/plates			
	Mounting kit with sun shade/weather protection	Mounting kit	2068398
Plug connectors and cables			
	Head A: Female connector, M12, 5-pin, straight, A-coded Head B: cable Cable: shielded, 5 m	Connecting cable (female connector-open)	6036159
	Head A: male connector, M12, 4-pin, straight, D-coded Head B: male connector, RJ45, 8-pin, straight Cable: Ethernet, shielded, 5 m	Connection cable (male connector-male connector)	6034415

F

At a glance

- Small, light and economical measurement system
- Real-time output of measurement data via Ethernet interface
- Number of switching outputs can be expanded via external CAN module
- Parameterisation interface accessible from the front while device mounted
- Rugged housing
- Field evaluation using intelligent algorithms

Your benefits

- Lightweight housing makes it easy to mount
- No wiring between sender and receiver
- Advanced filtering technology rigorously reduces false trips caused by outdoor environmental factors like fog, rain and snow
- Optional external CAN I/O module increases number of switching outputs for greater application flexibility
- Fast, easy commissioning due to SOPAS software

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➜ www.mysick.com/en/LMS1xx

For more information, just 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.

Ordering information

Other models and accessories ➜ www.mysick.com/en/LMS1xx

Field of view	Max. range with 10 % reflectivity	Switching inputs	Sub product family
270°	18 m	2	**LMS10x**
			LMS11x
		4	**LMS12x**
			LMS13x
		2	**LMS15x**

- **Version:** Short Range
- **Object remission:** 2 % ... > 1,000 %, reflectors

Sub product family	Field of application	Electrical connection	Switching outputs	Housing color	Model name	Part no.
LMS10x	Indoor	1 x system plug with screw terminal block	3	Light blue (RAL 5012)	LMS100-10000	1041113
				Gray (RAL 7032)	LMS101-10000	1048236
				Black (RAL 9005)	LMS102-10000	1048235
LMS11x	Outdoor	1 x M12 circular plug-in connector	3	Gray (RAL 7032)	LMS111-10100	1041114
LMS12x	Security, Indoor	1 x system plug with screw terminal block	3 (2 relay, 1 digital)	Gray (RAL 7032)	LMS121-10000 Security	1051384
				Black (RAL 9005)	LMS122-10000 Security	1044322
				Signal white (RAL 9003)	LMS123-10000 Security	1044321
LMS13x	Security, Semi-Outdoor	1 x M12 circular plug-in connector	3 (2 relay, 1 digital)	Gray (RAL 7032)	LMS131-10100 Security	1051379
				Black (RAL 9005)	LMS132-10100 Security	1051402
				Signal white (RAL 9003)	LMS133-10100 Security	1051403
LMS15x	Outdoor	1 x M12 circular plug-in connector	3	Gray (RAL 7032)	LMS151-10100	1047607
				Signal white (RAL 9003)	LMS153-10100	1065550

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Recommended accessories

	Brief description	Model name	Part no.
Device protection (mechanical)			
	Weather hood, 190°	Weather hood	2046459
Mounting brackets/plates			
	Standard mounting set for 190°/270° weather hood	Mounting bracket	2046025
	1 , Mounting bracket for rear mounting on wall or machine	Mounting kit 1a	2034324
	1 , Mounting bracket for rear mounting on wall or machine with protection of optics hood	Mounting kit 1b	2034325
Terminal and alignment brackets			
	Quick-action lock system for weather hood 190°/270°	Quick clamp	2046989
Modules/gateways			
	External CAN extension module for up to 8 additional outputs	Fieldbus module	6038825
Plug connectors and cables			
	Head A: Female connector, M12, 8-pin, straight, A-coded Head B: cable Cable: RS-232, RS-422, shielded, 5 m	Connecting cable (female connector-open)	6036153
	Head A: Female connector, M12, 5-pin, straight, A-coded Head B: cable Cable: shielded, 5 m	Connecting cable (female connector-open)	6036159
	Head A: male connector, M12, 8-pin, straight, A-coded Head B: cable Cable: shielded, 5 m	Connecting cable (male connector-open)	6036155
	Head A: male connector, M12, 4-pin, straight, D-coded Head B: male connector, RJ45, 8-pin, straight Cable: Ethernet, shielded, 5 m	Connection cable (male connector-male connector)	6034415
Test and monitoring tools			
	Scan finder, receiver to localize infra red scans	LS80b	6020756

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At a glance

- Powerful and efficient laser measurement sensor for ranges of up to 80 m
- Outstanding performance in adverse environmental conditions due to multi-echo technology
- Up to IP 67 enclosure rating, built-in heater for outdoor versions, highly compact design
- Low power consumption
- Fast signal processing
- Multiple I/Os
- Synchronization of multiple sensors possible

Your benefits

- Superior performance in a vast range of applications
- Smallest sensor with highest accuracy in its class
- Comprehensive range of lines and models to suit all performance and price requirements
- Fast, reliable object detection in nearly any weather conditions
- Low power consumption reduces total cost of ownership
- Best price/performance ratio in this sensor class on the market
- Fast, easy commissioning due to SOPAS software
- Self-monitoring functions increase system availability

➜ www.mysick.com/en/LMS5xx

For more information, just 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.

Ordering information

Other models and accessories ➜ www.mysick.com/en/LMS5xx

Field of view	Max. range with 10 % reflectivity	Switching inputs	Sub product family
190°	26 m	2 4 (Encoder) (depending on type)	**LMS500**
	40 m / 26 m (depending on type)	2 4 (Encoder) (depending on type)	**LMS511**
	40 m	2	**LMS531**

- **Version:** Mid Range
- **Object remission:** 2 % ... > 1,000 %, reflectors

Sub product family	Field of application	Variant	Resolution power	Spot size	Electrical connection	Switching outputs	Housing color	Model name	Part no.
LMS500	Indoor	Lite	High Resolution	4.7 mrad	1 x system plug with screw terminal block	3	Light blue (RAL 5012)	LMS500-21000 Lite	1054153
		PRO	High Resolution	4.7 mrad	1 x system plug with screw terminal block	6	Light blue (RAL 5012)	LMS500-20000 PRO	1047468

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Sub product family	Field of application	Variant	Resolution power	Spot size	Electrical connection	Switching outputs	Housing color	Model name	Part no.
LMS511	Outdoor	Lite	Standard Resolution	11.9 mrad	4 x M12 circular plug-in connector	3	Gray (RAL 7032)	LMS511-11100 Lite	1054155
			High Resolution	4.7 mrad	4 x M12 circular plug-in connector	3	Gray (RAL 7032)	LMS511-21100 Lite	1054154
		PRO	Standard Resolution	11.9 mrad	4 x M12 circular plug-in connector	6	Gray (RAL 7032)	LMS511-10100 PRO	1046135
			High Resolution	4.7 mrad	4 x M12 circular plug-in connector	6	Gray (RAL 7032)	LMS511-20100 PRO	1047782
			Standard Resolution	11.9 mrad	4 x M12 4-pin plug-in connector (rear)	6	Gray (RAL 7032)	LMS511-10100S01	1055659
LMS531	Outdoor, Security	Lite	Standard Resolution	11.9 mrad	4 x M12 circular plug-in connector	3 (2 relay, 1 digital)	Gray (RAL 7032)	LMS531-11100	1055376

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Recommended accessories

	Brief description	Model name	Part no.
Device protection (mechanical)			
	Protection hood	Protective hood	2056850
Mounting brackets/plates			
	1, Mounting bracket for direct mounting, from the rear, on wall or machine, not adjustable	Mounting kit 1	2015623
Plug connectors and cables			
	Head A: Female connector, M12, 8-pin, straight, A-coded Head B: cable Cable: RS-232, RS-422, shielded, 5 m	Connecting cable (female connector-open)	6036153
	Head A: Female connector, M12, 5-pin, straight, A-coded Head B: cable Cable: shielded, 5 m	Connecting cable (female connector-open)	6036159
	Head A: Female connector, M12, 12-pin, straight, A-coded Head B: cable Cable: shielded, 5 m	Connecting cable (female connector-open)	6042735
	Head A: male connector, M12, 8-pin, straight, A-coded Head B: cable Cable: shielded, 5 m	Connecting cable (male connector-open)	6036155
	Head A: male connector, M12, 12-pin, straight, A-coded Head B: cable Cable: shielded, 5 m	Connecting cable (male connector-open)	6042732
	Head A: male connector, M12, 4-pin, straight, D-coded Head B: male connector, RJ45, 8-pin, straight Cable: Ethernet, shielded, 5 m	Connection cable (male connector-male connector)	6034415

At a glance

- Mixed-mode navigation provides both spatial contour data and reflector data
- Long scanning range: up to 70 m on reflectors (up to 35 m on black targets)
- High internal computing power and individual AGV configuration
- Measurement, navigation, and determination of position with highest level of precision from three visible reflectors
- Angular resolution of up to 0.1 degrees
- Navigation, spatial and contour data, reflector marks, angular position and/or raw data collection

Your benefits

- Precise, fast collection of spatial contour data and/or simultaneous determination of reflector data (managing up to 12,000 reflectors) in real time
- Integrated evaluation of measured data reduces the computing load in the vehicle computer, minimizing power consumption and reducing operating costs
- High flexibility, since line guidance is also possible in areas without reflector marks, and routes can be easily modified using teach-in mode
- Accurate measurements in harsh industrial environments thanks to IP 65 housing
- High angular resolution for gap-free scanning even under difficult conditions
- Hardware synchronization output ensures precise control

➜ www.mysick.com/en/NAV

For more information, just 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.

Ordering information

Other models and accessories ➜ www.mysick.com/en/NAV

Field of view	Max. range with 10 % reflectivity	Sub product family
360°	35 m	**NAV300**
		NAV310
		NAV340
		NAV350

- **Version:** Long Range
- **Field of application:** Indoor
- **Switching outputs:** 1 (digital)
- **Housing color:** light blue (RAL 5012)

Sub product family	Electrical connection	Model name	Part no.
NAV300	1, 1 x 6-pin terminal block, 15-pin D-Sub HD male connector (0.9 m)	NAV300-2232	1043365
NAV310	3 x M12 male connector/female connector	NAV310-3211	1060834
NAV340	3 x M12 male connector/female connector	NAV340-3232	1060821
NAV350	3 x M12 male connector/female connector	NAV350-3232	1052928

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Recommended accessories

	Brief description	Model name	Part no.
Terminal and alignment brackets			
	Assembly support, Mounting hardware included	Assembly support	5311055
Plug connectors and cables			
	Head A: male connector, M12, 5-pin, straight Head B: cable Cable: shielded, 5 m	Connecting cable (female connector-open)	6043440
	Head A: Female connector, M12, 8-pin, straight, A-coded Head B: cable Cable: RS-232, RS-422, shielded, 5 m	Connecting cable (female connector-open)	6036153
	Head A: Female connector, D-Sub-HD, 15-pin, straight Head B: male connector, RJ45, straight Cable: Ethernet, shielded, 10 m	Connection cable (male connector-female connector)	6036683
	Head A: Female connector, D-Sub-HD, 15-pin, straight Head B: Female connector, D-Sub, 9-pin, straight Cable: RS-232, shielded, 3 m For PC connection	Connection cable (male connector-female connector)	6032508
	Head A: male connector, M12, 4-pin, straight, D-coded Head B: male connector, RJ45, 8-pin, straight Cable: Ethernet, shielded, 5 m	Connection cable (male connector-male connector)	6034415
Reflectors			
	Reflective tape “Diamond Grade”, self-adhesive, sheet, 749 mm x 914 mm, self-adhesive	REF-DG	5320565
Test and monitoring tools			
	Scan finder, receiver to localize infra red scans	LS80b	6020756

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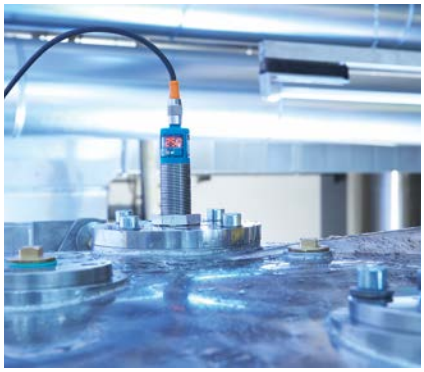
FLUID SENSORS



Efficient instrumentation solutions for factory automation

Optimized control of process parameters is the main driver for increasing efficiency and reducing input of valuable resources. Whether it's pressure measurement, temperature measurement, level control or flow metering – SICK offers a wide range of solutions for measuring process variables for liquids, gases and bulk solids and protecting against overfill and dry run. SICK devices are rugged and easy to use. Innovative sensor technology enables accurate, universal measurement independent of material type.

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LFP Inox G-270
The clean solution

LFP Cubic G-272
Flexible up to the probe tip

LFV200 . . . . . .G-274
The point level sensor for all kinds of liquids

LFV300 . . . . . .G-277
Flexible and robust – tuning forks for all kinds of liquids

UP56 . . . . . .G-279
Tough, non-contact, pressure-resistant

MHF15 . . . . . .G-281
Simple, compact and robust

PBS G-282
Universal pressure switch

PBS Hygienic G-284
The compact pressure switch for hygienic applications

PAC50 . . . . . .G-285
Turns pressure into colors

PBT G-287
All-around pressure transmitter

PFT G-289
The flexible solution

PHT G-291
A clean solution

LFH G-293
At a high level

FFU G-295
Non-contact flow measurement

TBT G-296
Well-proven temperature measurement

TBS G-298
Temperature monitoring made easy

THTS G-300
Simple, hygienic temperature measurement

At a glance

- Level monitoring in hygienic applications
- Manually cutable monoprobe made from stainless steel 1.4404 up to 4,000 mm long with Ra ≤ 0.8 µm
- Process temperature up to 150 °C, process pressure up to 16 bar
- CIP/SIP resistant
- IP 67 and IP 69K enclosure rating
- Interchangeable hygienic process connections
- 3 in 1: combined display, analog output and binary output
- Analog output 4 mA ... 20 mA / 0 V ... 10 V, switchable, plus two binary outputs

Your benefits

- Robust design increases service life
- High flexibility due to cutable probe and interchangeable connection concept
- Cost savings due to multiple output signals: one system for both level detection and continuous level monitoring
- Time and cost savings due to low maintenance and quick commissioning
- No calibration or recalibration required for commissioning, thus saving time and costs

→ www.mysick.com/en/LFP_Inox

For more information, just 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.

Ordering information

Other models and accessories → www.mysick.com/en/LFP_Inox

- **Enclosure rating:** IP 67: EN 60529, IP 69K: EN 40050
- **Process connection:** G ¾ A
- **Output signal:** 1x PNP + 1x PNP/NPN + 4 mA ... 20 mA / 0 V ... 10 V
- **Process temperature:** –20 °C ... +150 °C
- **Process pressure:** –1 bar ... 16 bar
- **Housing material:** 303
- **Electrical connection:** round connector M12 x 1, 5-pin

Housing design	Probe length	Model name	Part no.
with PMMA viewing window	300 mm	LFP0300-G1NMB	1053288
	400 mm	LFP0400-G1NMB	1052069
	500 mm	LFP0500-G1NMB	1052070
	600 mm	LFP0600-G1NMB	1052071
	700 mm	LFP0700-G1NMB	1052072
	800 mm	LFP0800-G1NMB	1052073
	900 mm	LFP0900-G1NMB	1052074
	1,000 mm	LFP1000-G1NMB	1052075
	1,100 mm	LFP1100-G1NMB	1052076
	1,200 mm	LFP1200-G1NMB	1052077
	1,300 mm	LFP1300-G1NMB	1052078
	1,400 mm	LFP1400-G1NMB	1052079
	1,500 mm	LFP1500-G1NMB	1052080
	1,600 mm	LFP1600-G1NMB	1052081
	1,700 mm	LFP1700-G1NMB	1052082

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Housing design	Probe length	Model name	Part no.
with PMMA viewing window	1,800 mm	LFP1800-G1NMB	1052083
	1,900 mm	LFP1900-G1NMB	1052084
	2,000 mm	LFP2000-G1NMB	1052085
with closed cover	300 mm	LFP0300-G2NMB	1056287
	400 mm	LFP0400-G2NMB	1056225
	500 mm	LFP0500-G2NMB	1056288
	600 mm	LFP0600-G2NMB	1056289
	700 mm	LFP0700-G2NMB	1056290
	800 mm	LFP0800-G2NMB	1056291
	1,000 mm	LFP1000-G2NMB	1056204
	1,200 mm	LFP1200-G2NMB	1056294
	1,400 mm	LFP1400-G2NMB	1056296
	1,500 mm	LFP1500-G2NMB	1056297
	1,600 mm	LFP1600-G2NMB	1056298
	1,700 mm	LFP1700-G2NMB	1056299
	1,800 mm	LFP1800-G2NMB	1056300
	1,900 mm	LFP1900-G2NMB	1056301
	2,000 mm	LFP2000-G2NMB	1056302

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Recommended accessories

	Brief description	Model name	Part no.
Flanges			
	Hygienic process connection adapter, collar connector (DIN 11864-1) DN 25 Form A with grooved union nut	BEF-HA-641D25-LFP1	2058795
	Hygienic process connection adapter, collar connector (DIN 11864-2) DN 25 Form A	BEF-HA-642D25-LFP1	2058823
	Hygienic process connection adapter, collar clamp connector (DIN 11864-3) BKS DN 25 Form A	BEF-HA-643D25-LFP1	2058821
	Hygienic process connection adapter, conical connector (DIN 11851) DN 25 with grooved union nut	BEF-HA-851D25-LFP1	2058138
	Hygienic process connection adapter, conical connector (DIN 11851) DN 40 with grooved union nut, material 1.4404 (Ra<= 0.8 µm)	BEF-HA-851D40-LFP1	2058139
	Hygienic process connection adapter, conical connector (DIN 11851) DN 50 with grooved union nut	BEF-HA-851D50-LFP1	2058141
	Hygienic process connection adapter, conical connector (DIN 11851) DN 65 with grooved union nut	BEF-HA-851D65-LFP1	2063328
	Hygienic process connection adapter, Tri-Clamp 1'' and 1 ½''	BEF-HA-TCLI10-LFP1	2058808
	Hygienic process connection adapter, Tri-Clamp 2"	BEF-HA-TCLI20-LFP1	2058824
	Hygienic process connection adapter, Varivent Connector Type N	BEF-HA-VARTYN-LFP1	2058822

At a glance

- No mechanical moving parts
- Manually cutable and exchangeable monoprobe with lengths from 200 mm up to 2,000 mm
- Immune to deposit formation
- Process temperature up to 100 °C; process pressure up to 10 bar
- Small inactive areas, ideal for small containers
- Accurate measurement, even when liquid type changes
- 3 in 1: combined display, analog output (acc. NAMUR NE 43) and binary output
- High enclosure rating of IP 67, rotatable housing

Your benefits

- Rugged design increases service life
- High flexibility due to cutable and exchangable monoprobe
- Cost savings due to multiple output signals: one system for both level detection and continuous level monitoring
- Time and cost savings due to low maintenance and quick commissioning
- No calibration or recalibration required for commissioning, thus saving time and costs
- Compact and rotatable housing ensures flexible installation
- No crosstalk when several sensors are mounted next to each other
- Advanced technology enables adjustment-free measurement of oil- and water-based liquids

➜ www.mysick.com/en/LFP_Cubic

For more information, just 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.

Ordering information

Other models and accessories ➜ www.mysick.com/en/LFP_Cubic

- **Enclosure rating:** IP 67: EN 60529
- **Output signal:** 1x PNP + 1x PNP/NPN + 4 mA ... 20 mA / 0 V ... 10 V
- **Process temperature:** –20 °C ... +100 °C
- **Process pressure:** –1 bar ... 10 bar
- **Housing material:** Plastic PBT
- **Electrical connection:** round connector M12 x 1, 5-pin

Process connection	Probe length	Model name	Part no.
G ¾ A	200 mm	LFP0200-A4NMB	1057073
	300 mm	LFP0300-A4NMB	1057074
	400 mm	LFP0400-A4NMB	1057075
	500 mm	LFP0500-A4NMB	1057076
	600 mm	LFP0600-A4NMB	1057077
	700 mm	LFP0700-A4NMB	1057078
	800 mm	LFP0800-A4NMB	1057079
	900 mm	LFP0900-A4NMB	1057080
	1,000 mm	LFP1000-A4NMB	1057081
	1,100 mm	LFP1100-A4NMB	1057082
	1,200 mm	LFP1200-A4NMB	1057083
	1,300 mm	LFP1300-A4NMB	1057084
	1,400 mm	LFP1400-A4NMB	1057085
	1,500 mm	LFP1500-A4NMB	1057086
	1,600 mm	LFP1600-A4NMB	1057087
	1,700 mm	LFP1700-A4NMB	1057088

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Process connection	Probe length	Model name	Part no.
G ¾ A	1,800 mm	LFP1800-A4NMB	1057089
	1,900 mm	LFP1900-A4NMB	1057090
	2,000 mm	LFP2000-A4NMB	1057091
¾" NPT	200 mm	LFP0200-B4NMB	1057092
	300 mm	LFP0300-B4NMB	1057093
	400 mm	LFP0400-B4NMB	1057094
	500 mm	LFP0500-B4NMB	1057095
	600 mm	LFP0600-B4NMB	1057096
	700 mm	LFP0700-B4NMB	1057097
	800 mm	LFP0800-B4NMB	1057098
	1,000 mm	LFP1000-B4NMB	1057100
	1,200 mm	LFP1200-B4NMB	1057102
	1,400 mm	LFP1400-B4NMB	1057104
	1,500 mm	LFP1500-B4NMB	1057105
	1,600 mm	LFP1600-B4NMB	1057106
	1,800 mm	LFP1800-B4NMB	1057108
	2,000 mm	LFP2000-B4NMB	1057110

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Recommended accessories

	Brief description	Model name	Part no.
Device protection (mechanical)			
Illustration may differ	Coaxial tube for LFP with process connection G 3/4, process connection of coaxial tube G 3/4, material 1.4571/316TI, for probe length 1000 mm	LFPCT-1000G1	2065702
	Coaxial tube for LFP with process connection G 3/4, process connection of coaxial tube G 3/4, material 1.4571/316TI, for probe length 2000 mm	LFPCT-2000G1	2065703
Terminal and alignment brackets			
	1 piece, Centering for bypass- and immersion tube installation with diameter 40 mm ... 100 mm, PTFE	BEF-FL-BYRD40-LFP1	2059612
Nuts and screws			
	Counter nut, G 3/4 A process connection, PA	BEF-MU-0PAG34-LFT1	5321681
	Counter nut, process connection 3/4" NPT, PA	BEF-MU-0PAN34-LFT1	5321680
Modules and gateways			
	Number of IO-Link ports: 4; Communication mode: COM1/COM2/COM3; Switching input: PNP; Supply voltage Vs, IO-Link ports: DC 24 V; Current loading: 800 mA; Data transmission rate: Max. 12 MBaud, Autobaud; Address space occupation: 1 bis 126; Connection type: Connector M12; Connection type, IO-Link ports: Connector M12, 5-pin; Suppyl voltage Vs, module: DC 18 ... 30 V; Power consumption: Typ. 75 mA / max. 100 mA (at UL with DC 24 V), Typ. 25 mA + sensor current / max. 800 mA (at Us with DC 24 V)	IOLSHPB-P3104R01	6039728
Spare parts			
Illustration may differ	Spare probe for LFP Cubic, probe length 1000 mm, material 1.4404/316L, diameter 7 mm	BEF-ER-SN1000-LFPc	2065700
	Spare probe for LFP Cubic, probe length 2000 mm, material 1.4404/316L, diameter 7 mm	BEF-ER-SN2000-LFPC	2065701

At a glance

- Housing made of 316L stainless steel
- Two electrical output versions available
- Commissioning without filling
- Process temperature up to 150 °C
- Immune to deposit formation
- Very high repeatability
- Aseptic versions with polished surface, CIP and SIP resistant
- Tube extension up to 6 m

Your benefits

- Easy installation and commissioning, no calibration necessary
- Easy operation and integration, saves time
- Maintenance-free sensor, reduces downtime
- Testing in place possible – no mounting required, which reduces installation time
- Flexible and robust system for a multitude of applications
- Universal technology works in all kinds of liquids
- Economical solution for vertical mounting
- Can be used in containers and pipes regardless of the mounting situation

➜ www.mysick.com/en/LFV200

For more information, just 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.

Ordering information

Other models and accessories ➜ www.mysick.com/en/LFV200

LFV200

- **Process connection:** G 1 A PN 64
- **Process pressure:** –1 bar ... 64 bar
- **Housing material:** Stainless steel 1.4404, PEI
- **Probe length:** 38 mm

Enclosure rating	Output signal	Process temperature	Electrical connection	Model name	Part no.
IP 65	Contactless electronic switch	–40 °C ... +100 °C	Valve plug DIN 43650	LFV200-XXSGACPV	6036369
IP 67	1x PNP	–40 °C ... +100 °C	Round connector M12 x 1, 4-pin	LFV200-XXSGATPM	6036353
		–40 °C ... +150 °C	Round connector M12 x 1, 4-pin	LFV200-XXTGATPM	6036357

LFV200

- **Process connection:** G ½ A PN 64
- **Process temperature:** –40 °C ... +100 °C
- **Process pressure:** –1 bar ... 64 bar
- **Housing material:** Stainless steel 1.4404, PEI
- **Probe length:** 38 mm

Enclosure rating	Output signal	Electrical connection	Model name	Part no.
IP 65	1x PNP	Valve plug DIN 43650	LFV200-XXSGHTPV	6049356
	Contactless electronic switch	Valve plug DIN 43650	LFV200-XXSGHCPV	6048866
IP 67	1x PNP	Round connector M12 x 1, 4-pin	LFV200-XXSGHTPM	6048704

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LFV200

- **Process connection:** G ¾ A PN 64
- **Process pressure:** –1 bar ... 64 bar
- **Housing material:** Stainless steel 1.4404, PEI
- **Probe length:** 38 mm

Enclosure rating	Output signal	Process temperature	Electrical connection	WHG approval	Model name	Part no.
IP 65	1x PNP	–40 °C ... +150 °C	Valve plug DIN 43650	✔	LFV200-XATGBTPV	6041094
	Contactless electronic switch	–40 °C ... +100 °C	Valve plug DIN 43650	–	LFV200-XXSGBCPV	6036367
		–40 °C ... +150 °C	Valve plug DIN 43650	–	LFV200-XXTGBCPV	6036371
IP 67	1x PNP	–40 °C ... +100 °C	Round connector M12 x 1, 4-pin	–	LFV200-XXSGBTPM	6036351
				✔	LFV200-XASGBTPM	6036359
		–40 °C ... +150 °C	Round connector M12 x 1, 4-pin	–	LFV200-XXTGBTPM	6036355
				✔	LFV200-XATGBTPM	6036363

LFV200

- **Enclosure rating:** IP 67
- **Process connection:** Triclamp 1'' (PN 16, 316L, Ra<0.8µm)
- **Output signal:** 1x PNP
- **Process temperature:** –40 °C ... +150 °C

Process pressure	Housing material	Electrical connection	Probe length	Model name	Part no.
–1 bar ... 64 bar	Stainless steel 1.4404, PEI	Round connector M12 x 1, 4-pin	38 mm	LFV200-XXHCLTPM	6036533

LFV200

- **Enclosure rating:** IP 67
- **Process connection:** ½'' NPT PN 64
- **Output signal:** 1x PNP
- **Process temperature:** –40 °C ... +100 °C

Process pressure	Housing material	Electrical connection	Probe length	Model name	Part no.
–1 bar ... 64 bar	Stainless steel 1.4404, PEI	Round connector M12 x 1, 4-pin	38 mm	LFV200-XXSNHTPM	6048864

LFV200

- **Enclosure rating:** IP 67
- **Process connection:** ¾" NPT PN 64
- **Output signal:** 1x PNP
- **Process temperature:** –40 °C ... +100 °C

Process pressure	Housing material	Electrical connection	Probe length	Model name	Part no.
–1 bar ... 64 bar	Stainless steel 1.4404, PEI	Round connector M12 x 1, 4-pin	38 mm	LFV200-XXSNBTPM	6036352

LFV230

- **Process connection:** G ¾ A PN 64
- **Process pressure:** –1 bar ... 64 bar
- **Housing material:** Stainless steel 1.4404, PEI

Enclosure rating	Output signal	Process temperature	Electrical connection	Probe length	Model name	Part no.
IP 65	Contactless electronic switch	–40 °C ... +100 °C	Valve plug DIN 43650	300 mm	LFV230-XXSGBCPV0300	6044007
IP 67	1x PNP	–40 °C ... +100 °C	Round connector M12 x 1, 4-pin	200 mm	LFV230-XXSGBTPM0200	6041848
				300 mm	LFV230-XXSGBTPM0300	6041850
				500 mm	LFV230-XXSGBTPM0500	6041682
				700 mm	LFV230-XXSGBTPM0700	6041857
				1,000 mm	LFV230-XXSGBTPM1000	6041669
				1,500 mm	LFV230-XXSGBTPM1500	6041871
				2,000 mm	LFV230-XXSGBTPM2000	6041887
				2,500 mm	LFV230-XXSGBTPM2500	6041894
		–40 °C ... +150 °C	Round connector M12 x 1, 4-pin	200 mm	LFV230-XXTGBTPM0200	6041903
				300 mm	LFV230-XXTGBTPM0300	6041905
				500 mm	LFV230-XXTGBTPM0500	6041909
				700 mm	LFV230-XXTGBTPM0700	6041913
				1,000 mm	LFV230-XXTGBTPM1000	6041673
				1,500 mm	LFV230-XXTGBTPM1500	6041926
				2,000 mm	LFV230-XXTGBTPM2000	6041935
				2,500 mm	LFV230-XXTGBTPM2500	6041940

Recommended accessories

	Brief description	Model name	Part no.
Flanges			
	Welded flange/welded connector DIN11851-1 DN25/PN40, Stainless steel 1.4404	BEF-FL-851D25-LFV2	5321527
	Welded flange/welded connector DIN11851-1 DN40/PN40, Stainless steel 1.4404	BEF-FL-851D40-LFV2	5321459
	Welded flange/welded connector DIN11851-1 DN50/PN25, Stainless steel 1.4404	BEF-FL-851D50-LFV2	5321528
	Welded flange/welded connector, process connection G 1, Stainless steel 1.4404	BEF-FL-GEWG10-LFV2	4054605
	Welded flange/welded connector, G 3/4 process connection, Stainless steel 1.4404	BEF-FL-GEWG34-LFV2	4054604
	Welded flange/welded connector, process connection Tri-Clamp 1”, Stainless steel 1.4404	BEF-FL-TCLI10-LFV2	5321678
	Welded flange/welded connector, process connection Tri-Clamp 2”, Stainless steel 1.4404	BEF-FL-TCLI20-LFV2	5321679

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Subject to change without notice

At a glance

- Several housing materials and electrical outputs available
- Commissioning without filling
- Process temperature up to 250 °C
- Immune to deposit formation
- Very high repeatability
- Aseptic versions according to EHEDG and FDA available, CIP and SIP resistant
- ATEX certification available
- Tube extension up to 6 m

Your benefits

- Easy installation and commissioning, no calibration necessary
- Easy operation and integration, saves time
- Maintenance-free sensor, reduces downtime
- Testing in place possible – no mounting required, which reduces installation time
- Flexible and tough system for a multitude of applications
- Universal technology works in all kinds of liquids

→ www.mysick.com/en/LFV300

For more information, just 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.

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Ordering information

Other models and accessories → www.mysick.com/en/LFV300

LFV310

- **Enclosure rating:** IP 66 / IP 67
- **Process connection:** G ¾ A PN 64
- **Output signal:** Double relay (DPDT)
- **Process temperature:** –50 °C ... +150 °C

Process pressure	Housing material	Electrical connection	Probe length	Model name	Part no.
–1 bar ... 64 bar	Stainless steel (casted) 316L	M20 x 1.5	66 mm	LFV310-XXGBVXVRX	6042787

LFV310

- **Enclosure rating:** IP 66 / IP 67
- **Process connection:** G ¾ A PN 64 / 316L
- **Process pressure:** –1 bar ... 64 bar
- **Electrical connection:** M20 x 1.5
- **Probe length:** 66 mm

Output signal	Process temperature	Housing material	WHG approval	ATEX	Model name	Part no.
1 x PNP/NPN	–50 °C ... +150 °C	Aluminum	–	–	LFV310-XXGBVXMTX	6037751
		Plastic	–	–	LFV310-XXGBVXPTX	6037888
	–50 °C ... +250 °C	Aluminum	–	–	LFV310-XXGBVTMTX	6037994
		Plastic	–	–	LFV310-XXGBVTPTX	6037996

Output signal	Process temperature	Housing material	WHG approval	ATEX	Model name	Part no.
Double relay (DPDT)	–50 °C ... +150 °C	Aluminum	–	–	LFV310-XXGBVXMRX	6037991
		Plastic	–	–	LFV310-XXGBVXPRX	6037993
	–50 °C ... +250 °C	Aluminum	–	–	LFV310-XXGBVTMRX	6038000
		Plastic	–	–	LFV310-XXGBVTPRX	6038002
Contactless electronic switch	–50 °C ... +150 °C	Plastic	–	–	LFV310-XXGBVXPCX	6037990
	–50 °C ... +250 °C	Aluminum	–	–	LFV310-XXGBVTMCX	6037998
		Plastic	–	–	LFV310-XXGBVTPCX	6037999

LFV330

- **Enclosure rating:** IP 66 / IP 67
- **Process connection:** G 1 A PN 64
- **Output signal:** Double relay (DPDT)
- **Process temperature:** –50 °C ... +150 °C
- **Process pressure:** –1 bar ... 64 bar
- **Housing material:** Aluminum
- **Electrical connection:** M20 x 1.5

Probe length	Model name	Part no.
1,300 mm	LFV330-XXGAVXMR1300	6039693
1,600 mm	LFV330-XXGAVXMR1600	6039692
2,000 mm	LFV330-XXGAVXMR2000	6039691

LFV330

- **Enclosure rating:** IP 66 / IP 67
- **Process connection:** G ¾ A PN 64 / 316L
- **Process pressure:** –1 bar ... 64 bar
- **Electrical connection:** M20 x 1.5

Output signal	Process temperature	Housing material	Probe length	ATEX	Model name	Part no.
1 x PNP/NPN	–50 °C ... +150 °C	Aluminum	100 mm	–	LFV330-XXGBVXMT0100	6039668
		Plastic	400 mm	–	LFV330-XXGBVXPT0400	6042768
			600 mm	–	LFV330-XXGBVXPT0600	6042769
Double relay (DPDT)	–50 °C ... +150 °C	Aluminum	200 mm	–	LFV330-XXGBVXMR0200	6039665
			1,200 mm	–	LFV330-XXGBVXMR1200	6041285
		Plastic	200 mm	–	LFV330-XXGBVXPR0200	6039512
			300 mm	–	LFV330-XXGBVXPR0300	6039663
			500 mm	–	LFV330-XXGBVXPR0500	6039661
Contactless electronic switch	–50 °C ... +150 °C	Stainless steel (casted) 316L	1,000 mm	–	LFV330-XXGBVXVC1000	6043460
		Plastic	400 mm	–	LFV330-XXGBVXPC0400	6042346
	–50 °C ... +250 °C	Stainless steel (casted) 316L	200 mm	–	LFV330-XXGBVTVC0200	6043463

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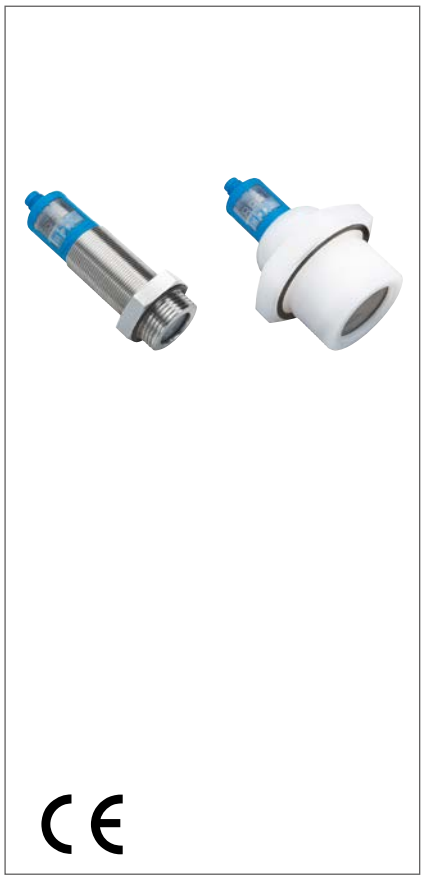

At a glance

- Non-contact level measurement up to 3.4 m operating distance / 8.0 m limit scanning distance
- Pressure resistant up to 6 bar (87 psi)
- Transducer protected by PVDF cover for increased resistance
- 3 in 1: continuous level measurement, level switch and display
- Analog output switchable between 4 mA ... 20 mA and 0 V ... 10 V
- Process connector thread G 1 and G 2
- IP 67 enclosure rating
- Easy to set parameters, also via connect+

Your benefits

- Non-contact measurement in pressurized containers – no wear over time
- Easy to set parameters, saving time
- Flexible measurement system for different container sizes – standardization and stock reduction
- One product for point level and continuous applications, reduces the number of sensors required

➜ www.mysick.com/en/UP56

For more information, just 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.

Ordering information

Other models and accessories ➜ www.mysick.com/en/UP56

UP56-211

- **Process connection:** G 1 A PN 6
- **Process temperature:** –25 °C ... +70 °C
- **Process pressure:** 0 bar ... 6 bar
- **Operating distance:** 30 mm ... 250 mm
- **Limiting scanning distance:** 30 mm ... 990 mm (At 6 bar gauge.)
- **Electrical connection:** round connector M12 x 1, 5-pin

Enclosure rating	Housing material	Output signal	Model name	Part no.
IP 67	Stainless steel 1.4571, PBT, TPU	1 x PNP + 4 mA ... 20 mA / 0 V ... 10 V	UP56-211118	6041658
		2x NPN	UP56-211114	6041664
		2x PNP	UP56-211112	6041661

UP56-212

- **Process connection:** G 1 A PN 6
- **Process temperature:** –25 °C ... +70 °C
- **Process pressure:** 0 bar ... 6 bar
- **Operating distance:** 85 mm ... 350 mm
- **Limiting scanning distance:** 85 mm ... 1,500 mm (At 6 bar gauge.)
- **Electrical connection:** round connector M12 x 1, 5-pin

Enclosure rating	Housing material	Output signal	Model name	Part no.
IP 67	Stainless steel 1.4571, PBT, TPU	1 x PNP + 4 mA ... 20 mA / 0 V ... 10 V	UP56-212118	6041659
		2x NPN	UP56-212114	6041665
		2x PNP	UP56-212112	6041662

UP56-213

- **Process connection:** G 1 A PN 6
- **Process temperature:** –25 °C ... +70 °C
- **Process pressure:** 0 bar ... 6 bar
- **Operating distance:** 200 mm ... 1,300 mm
- **Limiting scanning distance:** 200 mm ... 5,000 mm (At 6 bar gauge.)
- **Electrical connection:** round connector M12 x 1, 5-pin

Enclosure rating	Housing material	Output signal	Model name	Part no.
IP 67	Stainless steel 1.4571, PBT, TPU	1 x PNP + 4 mA ... 20 mA / 0 V ... 10 V	UP56-213118	6041660
		2x NPN	UP56-213114	6041666
		2x PNP	UP56-213112	6041663

UP56-214

- **Process connection:** G 2 A PN 6
- **Process temperature:** –25 °C ... +70 °C
- **Process pressure:** 0 bar ... 6 bar
- **Operating distance:** 350 mm ... 3,400 mm
- **Limiting scanning distance:** 350 mm ... 8,000 mm (At 6 bar gauge.)
- **Electrical connection:** round connector M12 x 1, 5-pin

Enclosure rating	Housing material	Output signal	Model name	Part no.
IP 67	Stainless steel 1.4571, PBT, TPU	1 x PNP + 4 mA ... 20 mA / 0 V ... 10 V	UP56-214118	6041693
		2x NPN	UP56-214114	6041694
		2x PNP	UP56-214112	6041695
	PVDF, PBT, TPU	1 x PNP + 4 mA ... 20 mA / 0 V ... 10 V	UP56-214178	6039866
		2x NPN	UP56-214174	6039865
		2x PNP	UP56-214172	6039864

Recommended accessories

	Brief description	Model name	Part no.
Flanges			
	Welded flange, process connection G 1, Stainless steel 1.4404	BEF-FL-316G10-UP56	4064295
	Welded flange/welded connector, process connection G 2, Stainless steel 1.4404	BEF-FL-316G20-UP56	4063263
Programming and configuration tools			
	Tool for visualization, configuration and cloning, 3-digit LED display, supply voltage: DV 9 V ... 30 V	Connect+ adapter (CPA)	6037782

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At a glance

- Robust level monitoring in liquid without additional requirements
- Small, compact design; no medium calibration required
- Process temperature up to 55 °C, process pressure up to 16 bar
- IP 67 and IP 69K enclosure rating
- Process connection G ½
- Highly medium resistant due to stainless steel housing 1.4404, polysulfone apex
- Output available as PNP or NPN transistor
- FDA-compliant, UL

Your benefits

- Small, compact sensor ideal for difficult installation conditions with limited space
- Quick commissioning without medium calibration saves time and money
- No moving mechanical parts reduce maintenance and eliminate the need to recalibrate -- even after long periods of use.

➜ www.mysick.com/en/MHF15

For more information, just 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.

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Ordering information

Other models and accessories ➜ www.mysick.com/en/MHF15

- **Enclosure rating:** IP 67: EN 60529, IP 69K: EN 40050
- **Process connection:** G ½
- **Process temperature:** –25 °C ... +55 °C
- **Process pressure:** –0.5 bar ... 16 bar
- **Housing material:** Stainless steel 1.4404
- **Electrical connection:** round connector M12 x 1, 4-pin

Output signal	Switching mode	Model name	Part no.
1x NPN	Normally open	MHF15-21NG1TSM	1052274
	Normally closed	MHF15-21NG1NSM	1052272
1x PNP	Normally open	MHF15-21NG1HSM	1052273
	Normally closed	MHF15-21NG1PSM	1052237

Recommended accessories

	Brief description	Model name	Part no.
Flanges			
Illustration may differ	Welded flange G1/2, Stainless steel V4A (1.4404, 316L)	BEF-FL-316G12-LMH1	4065669

At a glance

- Electronic pressure switch with display for monitoring pressure in liquids and gases
- Precise sensor technology with stainless steel membrane
- Integrated process connections manufactured from high-quality stainless steel
- Pressure values indicated on display. Output states are indicated separately via wide-angle LEDs.
- Unit of pressure value in display can be switched
- Min/max memory
- Password protection

Your benefits

- Quick and easy setup and operation due to three large pushbuttons and clear display
- Perfect display readability and optimal cable routing due to rotatable housing
- No compromises: Individual solutions through a variety of configurations
- Universal application due to fully welded, highly durable stainless steel membrane
- Saves space and costs: no adapters required due to broad range of standard process connections
- Highly reliable due to application of proven technologies and high-quality materials, water resistance according to IP 65 and IP 67 as well as excellent overpressure safety
- Ultimate system availability: IO-Link enables fast, reliable parameter setting when changing over products

➜ www.mysick.com/en/PBS

For more information, just 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.

Ordering information

Other models and accessories ➜ www.mysick.com/en/PBS

- Gauge pressure
- **Process temperature:** –20 °C ... +85 °C
- **Accuracy:** ≤ ± 1 % of span
- **Pressure port:** Standard

Output signal	Electrical connection	Process connection	Seal	Measuring range	Model name	Part no.
2x PNP	Round connector M12 x 1, 4-pin, IP 67	G ¼ female	Without seal	0 bar ... 600 bar	PBS-RB600SG2SS0AMA0Z	6041551
				0 bar ... 400 bar	PBS-RB400SG2SS0AMA0Z	6039495
				0 bar ... 250 bar	PBS-RB250SG2SS0AMA0Z	6039615
				0 bar ... 100 bar	PBS-RB100SG2SS0AMA0Z	6039614
				0 bar ... 10 bar	PBS-RB010SG2SS0AMA0Z	6039110
				0 bar ... 1 bar	PBS-RB1X0SG2SS0AMA0Z	6041777
		G ¼ A according to DIN 3852-E	NBR	0 bar ... 600 bar	PBS-RB600SG1SSNAMA0Z	6038867
				0 bar ... 400 bar	PBS-RB400SG1SSNAMA0Z	6041099
				0 bar ... 250 bar	PBS-RB250SG1SSNAMA0Z	6038866
				0 bar ... 100 bar	PBS-RB100SG1SSNAMA0Z	6038865
				0 bar ... 10 bar	PBS-RB010SG1SSNAMA0Z	6038862
				0 bar ... 1 bar	PBS-RB1X0SG1SSNAMA0Z	6038847

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Output signal	Electrical connection	Process connection	Seal	Measuring range	Model name	Part no.
2 x PNP + 4 mA ... 20 mA	Round connector M12 x 1, 5-pin, IP 67	G ¼ A according to DIN 3852-E	NBR	0 bar ... 600 bar	PBS-RB600SG1SSND5A0Z	6038920
				0 bar ... 400 bar	PBS-RB400SG1SSND5A0Z	6042402
				0 bar ... 250 bar	PBS-RB250SG1SSND5A0Z	6038918
				0 bar ... 100 bar	PBS-RB100SG1SSND5A0Z	6038917
				0 bar ... 10 bar	PBS-RB010SG1SSND5A0Z	6038678
				0 bar ... 1 bar	PBS-RB1X0SG1SSND5A0Z	6038912
1 x PNP + 4 mA ... 20 mA	Round connector M12 x 1, 4-pin, IP 67	G ¼ female	Without seal	0 bar ... 600 bar	PBS-RB600SG2SS0BMA0Z	6044103
				0 bar ... 400 bar	PBS-RB400SG2SS0BMA0Z	6041019
				0 bar ... 250 bar	PBS-RB250SG2SS0BMA0Z	6041053
				0 bar ... 100 bar	PBS-RB100SG2SS0BMA0Z	6041615
				0 bar ... 10 bar	PBS-RB010SG2SS0BMA0Z	6039121
				0 bar ... 1 bar	PBS-RB1X0SG2SS0BMA0Z	6041279
		G ¼ A according to DIN 3852-E	NBR	0 bar ... 600 bar	PBS-RB600SG1SSNBMA0Z	6038893
				0 bar ... 400 bar	PBS-RB400SG1SSNBMA0Z	6041724
				0 bar ... 250 bar	PBS-RB250SG1SSNBMA0Z	6038892
				0 bar ... 100 bar	PBS-RB100SG1SSNBMA0Z	6038891
				0 bar ... 10 bar	PBS-RB010SG1SSNBMA0Z	6038888
				0 bar ... 1 bar	PBS-RB1X0SG1SSNBMA0Z	6038885

Recommended accessories

	Brief description	Model name	Part no.
Mounting brackets and mounting plates			
	Mounting bracket for simple and stable wall mounting of pressure sensors with 27 mm hexagon, Aluminum	BEF-FL-ALUPBS-HLDR	5322501
Modules and gateways			
	Number of IO-Link ports: 4; Communication mode: COM1/COM2/COM3; Switching input: PNP; Supply voltage Vs, IO-Link ports: DC 24 V; Current loading: 800 mA; Data transmission rate: Max. 12 MBaud, Autobaud; Address space occupation: 1 bis 126; Connection type: Connector M12; Connection type, IO-Link ports: Connector M12, 5-pin; Suppyl voltage Vs, module: DC 18 ... 30 V; Power consumption: Typ. 75 mA / max. 100 mA (at UL with DC 24 V), Typ. 25 mA + sensor current / max. 800 mA (at Us with DC 24 V)	IOLSHPB-P3104R01	6039728

G

At a glance

- Hygienically-graded pressure switch with display for the food and beverage industry
- Wetted parts are made from stainless steel 1.4435
- Individually programmable switching outputs and analog output
- Pressure values are indicated on the display
- Unit of pressure value in the display can be switched
- Output states are indicated separately via large LEDs

Your benefits

- Safe hygienic operation due to flush-mounted, highly resistant stainless steel membrane and hygienic process connections
- Suitability for CIP and SIP ensures high system availability
- Safe and easy setup with three large pushbuttons and legible, rotatable display
- Rotatable housing for optimum cable routing
- Wide range of available configurations enable customer-specific solutions
- High reliability: Corrosion-resistant design of wetted parts and housing with IP 65 and IP 67 enclosure ratings
- Ultimate system availability: IO-Link enables fast, reliable parameter setting when changing over products

➜ **www.mysick.com/en/PBS_Hygienic**

For more information, just 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.

Ordering information

Other models and accessories ➜ **www.mysick.com/en/PBS_Hygienic**

- Gauge pressure
- **Output signal:** 1 x PNP + 4 mA ... 20 mA
- **Electrical connection:** round connector M12 x 1, 4-pin
- **Seal:** Without seal
- **Process temperature:** –20 °C ... +100 °C, +135 °C for max. 1 h
- **Accuracy:** ≤ ± 1 % of span

Process connection	Measuring range	Model name	Part no.
Tri-Clamp 1 ½''	0 bar ... 25 bar	PBSH-RB025ST1S0BMA0Z	6051833
	0 bar ... 10 bar	PBSH-RB010ST1S0BMA0Z	6051832
	0 bar ... 6 bar	PBSH-RB6X0ST1S0BMA0Z	6051831
	0 bar ... 2.5 bar	PBSH-RB2X5ST1S0BMA0Z	6051830
	0 bar ... 1.6 bar	PBSH-RB1X6ST1S0BMA0Z	6051829
Conical coupling (DIN 11851) DN 40 with union nut	0 bar ... 25 bar	PBSH-RB025S54S0BMA0Z	6051839
	0 bar ... 10 bar	PBSH-RB010S54S0BMA0Z	6051838
	0 bar ... 6 bar	PBSH-RB6X0S54S0BMA0Z	6051837
	0 bar ... 2.5 bar	PBSH-RB2X5S54S0BMA0Z	6051836
	0 bar ... 1.6 bar	PBSH-RB1X6S54S0BMA0Z	6051835
	0 bar ... 1 bar	PBSH-RB1X0S54S0BMA0Z	6051834

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At a glance

- Electronic pressure switch for pneumatic applications
- Large display shows system pressure, output states and set switching points
- Three large function keys and intuitive menu navigation
- Measuring range for gauge pressure (vacuum and overpressure)
- Individually programmable switching outputs and optional analog output
- Installation on a mounting rail, wall or in a control panel

Your benefits

- Bi-color display (green/red) clearly shows the output state to recognize whether the pressure is within the target range
- Quick overview of important system parameters due to advanced display functions
- Intuitive operation allows simple and quick commissioning
- Pressure connections on the back and bottom, various mounting options and configurable output signals provide installation flexibility
- High reliability due to the rugged design (IP 65/IP 67 enclosure rating) and proven technology
- Low storage costs since a few product variants are able to meet a broad range of application requirements.
- Reduced downtime when changing the format or replacing the sensor thanks to IO-Link.

CE

IO-Link

➜ www.mysick.com/en/PAC50

For more information, just 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.

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Ordering information

Other models and accessories ➜ www.mysick.com/en/PAC50

- Gauge pressure
- **Process temperature:** 0 °C ... +60 °C
- **Accuracy:** ≤ ± 1.5 % of span≤ ± 2 % of span incl. temperature error

Output signal	Process connection	Measuring range	Model name	Part no.
PNP/NPN/Push-Pull + 4 mA ... 20 mA / 0 V ... 10 V	PIF 4 mm + G ¼	0 bar ... 10 bar	PAC50-DCB	1062990
		0 bar ... 6 bar	PAC50-CCB	1062978
		–1 bar ... 1 bar	PAC50-BCB	1062965
		–1 bar ... 0 bar	PAC50-ACB	1062952
	2 x G ¼	0 bar ... 10 bar	PAC50-DGB	1062984
		0 bar ... 6 bar	PAC50-CGB	1062971
		–1 bar ... 1 bar	PAC50-BGB	1062959
		–1 bar ... 0 bar	PAC50-AGB	1062946
IO-Link/PNP + PNP/NPN/Push-Pull	PIF 4 mm + G ¼	0 bar ... 10 bar	PAC50-DCD	1062992
		0 bar ... 6 bar	PAC50-CCD	1062980
		–1 bar ... 1 bar	PAC50-BCD	1062967
		–1 bar ... 0 bar	PAC50-ACD	1062954
	2 x G ¼	0 bar ... 10 bar	PAC50-DGD	1062986
		0 bar ... 6 bar	PAC50-CGD	1062974
		–1 bar ... 1 bar	PAC50-BGD	1062961
		–1 bar ... 0 bar	PAC50-AGD	1062948

Output signal	Process connection	Measuring range	Model name	Part no.
2 x PNP/NPN/Push-Pull + 4 mA ... 20 mA / 0 V ... 10 V	PIF 4 mm + G ¼	0 bar ... 10 bar	PAC50-DCC	1062991
		0 bar ... 6 bar	PAC50-CCC	1062979
		–1 bar ... 1 bar	PAC50-BCC	1062966
		–1 bar ... 0 bar	PAC50-ACC	1062953
	2 x G ¼	0 bar ... 10 bar	PAC50-DGC	1062985
		0 bar ... 6 bar	PAC50-CGC	1062973
		–1 bar ... 1 bar	PAC50-BGC	1062960
		–1 bar ... 0 bar	PAC50-AGC	1062947
2 x PNP/NPN/Push-Pull	PIF 4 mm + G ¼	0 bar ... 10 bar	PAC50-DCA	1062989
		0 bar ... 6 bar	PAC50-CCA	1062977
		–1 bar ... 1 bar	PAC50-BCA	1062964
		–1 bar ... 0 bar	PAC50-ACA	1062951
	2 x G ¼	0 bar ... 10 bar	PAC50-DGA	1062983
		0 bar ... 6 bar	PAC50-CGA	1062970
		–1 bar ... 1 bar	PAC50-BGA	1062958
		–1 bar ... 0 bar	PAC50-AGA	1062945

8011993/2014-07-24
Subject to change without notice

At a glance

- Pressure measurement ranges from 0 bar ... 1 bar up to 0 bar ... 600 bar
- Gauge, absolute, and compound measurement ranges
- A large variety of available process connections
- No moving parts: No mechanical wear, fatigue-proof, maintenance-free
- Circularly welded, hermetically sealed stainless steel membrane
- Output signal 4 mA ... 20 mA, 0 V ... 5 V or 0 V ... 10 V
- Electrical connection M12 x 1, L-connector acc. to DIN 175301-803 A or flying leads

Your benefits

- Compact size takes up less space
- Simple and cost-saving installation
- Available in a wide selection of configurations, enabling a perfect match to individual customer requirements
- Robust design enables higher reliability
- Excellent price/performance ratio

→ www.mysick.com/en/PBT

For more information, just 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.

Ordering information

Other models and accessories → www.mysick.com/en/PBT

- Gauge pressure
- **Process temperature:** 0 °C ... +80 °C
- **Accuracy:** ≤ ± 1 % of span
- **Pressure port:** Standard

Output signal	Electrical connection	Process connection	Seal	Measuring range	Model name	Part no.
4 mA ... 20 mA	L-connector (DIN EN 175301-803 A), IP 65	G ¼ A according to DIN 3852-E	NBR	0 bar ... 600 bar	PBT-RB600SG1SSNALA0Z	6043580
				0 bar ... 400 bar	PBT-RB400SG1SSNALA0Z	6041553
				0 bar ... 250 bar	PBT-RB250SG1SSNALA0Z	6041438
				0 bar ... 100 bar	PBT-RB100SG1SSNALA0Z	6041999
				0 bar ... 10 bar	PBT-RB010SG1SSNALA0Z	6040974
				0 bar ... 1 bar	PBT-RB1X0SG1SSNALA0Z	6041998
	Round connector M12 x 1, 4-pin, IP 67	¼'' NPT	Without seal	0 bar ... 600 bar	PBT-RB600SN1SS0AMA0Z	6044002
				0 bar ... 400 bar	PBT-RB400SN1SS0AMA0Z	6042070
				0 bar ... 250 bar	PBT-RB250SN1SS0AMA0Z	6042527
				0 bar ... 100 bar	PBT-RB100SN1SS0AMA0Z	6042006
				0 bar ... 10 bar	PBT-RB010SN1SS0AMA0Z	6039256
				0 bar ... 1 bar	PBT-RB1X0SN1SS0AMA0Z	6043720
	Round connector M12 x 1, 4-pin, IP 67	G ¼ A according to DIN 3852-E	NBR	0 bar ... 600 bar	PBT-RB600SG1SSNAMA0Z	6038660
				0 bar ... 400 bar	PBT-RB400SG1SSNAMA0Z	6038656
				0 bar ... 250 bar	PBT-RB250SG1SSNAMA0Z	6038652
				0 bar ... 100 bar	PBT-RB100SG1SSNAMA0Z	6038648
				0 bar ... 10 bar	PBT-RB010SG1SSNAMA0Z	6038615
				0 bar ... 1 bar	PBT-RB1X0SG1SSNAMA0Z	6038716

Output signal	Electrical connection	Process connection	Seal	Measuring range	Model name	Part no.
0...10 V, 3-wire (R_A > 10 kOhm)	L-connector (DIN EN 175301-803 A), IP 65	G ¼ A according to DIN 3852-E	NBR	0 bar ... 600 bar	PBT-RB600SG1SSNVLC0Z	6049654
0...10 V, 3-wire	L-connector (DIN EN 175301-803 A), IP 65	G ¼ A according to DIN 3852-E	NBR	0 bar ... 250 bar	PBT-RB250SG1SSNVLC0Z	6047659
				0 bar ... 100 bar	PBT-RB100SG1SSNVLC0Z	6047878
				0 bar ... 400 bar	PBT-RB400SG1SSNVLC0Z	6039721
				0 bar ... 10 bar	PBT-RB010SG1SSNVLC0Z	6042101
				0 bar ... 1 bar	PBT-RB1X0SG1SSNVLC0Z	6043989
	Round connector M12 x 1, 4-pin, IP 67	G ¼ A according to DIN 3852-E	NBR	0 bar ... 600 bar	PBT-RB600SG1SSNVMC0Z	6038662
				0 bar ... 400 bar	PBT-RB400SG1SSNVMC0Z	6038658
				0 bar ... 250 bar	PBT-RB250SG1SSNVMC0Z	6038654
				0 bar ... 100 bar	PBT-RB100SG1SSNVMC0Z	6038650
				0 bar ... 10 bar	PBT-RB010SG1SSNVMC0Z	6038638
				0 bar ... 1 bar	PBT-RB1X0SG1SSNVMC0Z	6038627

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- Compound pressure
- **Electrical connection:** round connector M12 x 1, 4-pin, IP 67
- **Process connection:** G ¼ A according to DIN 3852-E
- **Seal:** NBR
- **Process temperature:** 0 °C ... +80 °C
- **Measuring range:** –1 bar ... 0 bar
- **Accuracy:** ≤ ± 1 % of span
- **Pressure port:** Standard

Output signal	Model name	Part no.
4 mA ... 20 mA	PBT-CB1X0SG1SSNAMA0Z	6040917
0...10 V, 3-wire	PBT-CB1X0SG1SSNVMC0Z	6043710

At a glance

- Measurement ranges from 0 mbar ... 100 mbar up to 0 bar ... 600 bar
- Gauge, absolute, and compound measurement ranges
- Variant with flush-mounted membrane available
- Process temperature up to 150 °C (optional)
- Large variety of commonly used process connections
- High shock and vibration resistance
- Accuracy 0.5 % or 0.25 %
- Output signal 4 mA ... 20 mA, 0 V ... 5 V, or 0 V ... 10 V
- Zero and span adjustable
- Electrical connection M12 x 1, L-connector according to DIN 175301-803 A or flying leads

Your benefits

- Reliable and highly accurate measurement technology
- Wide application range
- No mechanical wear, fatigue-proof, maintenance-free as no moving parts
- Simple and cost-saving installation
- Optimal solution for individual requirements due to very versatile configurability

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➜ www.mysick.com/en/PFT

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Ordering information

Other models and accessories ➜ www.mysick.com/en/PFT

- Gauge pressure
- **Electrical connection:** round connector M12 x 1, 4-pin, IP 67
- **Process temperature:** –30 °C ... +100 °C
- **Accuracy:** ≤ ± 0.5 % of span

Output signal	Process connection	Seal	Measuring range	Pressure port	Model name	Part no.
4 mA ... 20 mA, 2-wire	–	NBR	0 bar ... 400 bar	Front-flush membrane	PFT-FRB400SF20SSAMSSZ	6039115
			0 bar ... 250 bar	Front-flush membrane	PFT-FRB250SF20SSAMSSZ	6038816
			0 bar ... 100 bar	Front-flush membrane	PFT-FRB100SF20SSAMSSZ	6038815
			0 bar ... 10 bar	Front-flush membrane	PFT-FRB010SF20SSAMSSZ	6038812
			0 bar ... 2.5 bar	Front-flush membrane	PFT-FRB2X5SF20SSAMSSZ	6038810
			0 bar ... 0.25 bar	Front-flush membrane	PFT-FRBX25SF10SSAMSSZ	6038818
			0 bar ... 0.1 bar	Front-flush membrane	PFT-FRBX10SF10SSAMSSZ	6038817
	G ¼ A according to DIN 3852-E	NBR	0 bar ... 600 bar	Standard	PFT-SRB600SG1SSAAMSSZ	6038754
			0 bar ... 400 bar	Standard	PFT-SRB400SG1SSAAMSSZ	6038594
			0 bar ... 250 bar	Standard	PFT-SRB250SG1SSAAMSSZ	6038750
			0 bar ... 100 bar	Standard	PFT-SRB100SG1SSAAMSSZ	6038746
			0 bar ... 10 bar	Standard	PFT-SRB010SG1SSAAMSSZ	6038735
			0 bar ... 1 bar	Standard	PFT-SRB1X0SG1SSAAMSSZ	6038723
			0 bar ... 0.1 bar	Standard	PFT-SRBX10SG1SSAAMSSZ	6038719

Output signal	Process connection	Seal	Measuring range	Pressure port	Model name	Part no.
0...10 V, 3-wire	G ¼ A according to DIN 3852-E	Without seal	0 bar ... 600 bar	Standard	PFT-SRB600SG1SSAVMSSZ	6038756
			0 bar ... 400 bar	Standard	PFT-SRB400SG1SSAVMSSZ	6043562
			0 bar ... 250 bar	Standard	PFT-SRB250SG1SSAVMSSZ	6038752
			0 bar ... 100 bar	Standard	PFT-SRB100SG1SSAVMSSZ	6038748
			0 bar ... 10 bar	Standard	PFT-SRB010SG1SSAVMSSZ	6038679
			0 bar ... 1 bar	Standard	PFT-SRB1X0SG1SSAVMSSZ	6038724
			0 bar ... 0.1 bar	Standard	PFT-SRBX10SG1SSAVMSSZ	6038721

- Compound pressure
- **Electrical connection:** round connector M12 x 1, 4-pin, IP 67
- **Process connection:** G ¼ A according to DIN 3852-E
- **Seal:** Without seal
- **Process temperature:** –30 °C ... +100 °C
- **Measuring range:** –1 bar ... 0 bar
- **Accuracy:** ≤ ± 0.5 % of span
- **Pressure port:** Standard

Output signal	Model name	Part no.
4 mA ... 20 mA, 2-wire	PFT-SCB1X0SG1SSAAMSSZ	6038782
0...10 V, 3-wire	PFT-SCB1X0SG1SSAVMSSZ	6038784

Recommended accessories

	Brief description	Model name	Part no.
Flanges			
	Weld-in flange/weld-in socket for articles with flush-mounted membrane, process connection G 1 B, material: Stainless steel 1.4571	BEF-FL-316G10-B0PH	5322450
	Weld-in flange/weld-in socket for articles with flush-mounted membrane, process connection G ½ B, material: Stainless steel 1.4571	BEF-FL-316G12-B0PH	5322449

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At a glance

- Robust and precise pressure measurement technology
- Flush-mounted, hermetically sealed stainless steel membrane with roughness Ra < 0.4 µm
- Wetted parts stainless steel 1.4435, housing stainless steel 1.4571
- CIP/SIP resistant
- Large range of hygienic process connectors
- Stainless steel housing with enclosure rating of up to IP 68
- Field housing available (IP 67)

Your benefits

- Perfectly suited for demanding hygienic applications in the food and beverage, pharmaceutical and cosmetics industries
- Safe hygienic operation through EHEDG and 3-A certifications
- High reliability due to robust design and use of high-grade materials
- Withstands CIP/SIP, ensuring high system availability and reliability
- Transmitter housing is easily cleaned
- Versatile configurability optimizes solutions

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→ www.mysick.com/en/PHT

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Ordering information

Other models and accessories → www.mysick.com/en/PHT

- Gauge pressure
- **Output signal:** 4 mA ... 20 mA
- **Seal:** Without seal
- **Process temperature:** –20 °C ... +150 °C
- **Accuracy:** ≤ ± 0.5 % of span

Electrical connection	Process connection	Measuring range	Model name	Part no.
Round connector M12 x 1, 4-pin, IP 67	Varivent Connector Type F	0 bar ... 25 bar	PHT-RB025SVF0S0AMS0Z	6039346
		0 bar ... 10 bar	PHT-RB010SVF0S0AMS0Z	6039345
		0 bar ... 6 bar	PHT-RB6X0SVF0S0AMS0Z	6039344
		0 bar ... 2.5 bar	PHT-RB2X5SVF0S0AMS0Z	6039343
		0 bar ... 1 bar	PHT-RB1X0SVF0S0AMS0Z	6039342
		0 bar ... 0.25 bar	PHT-RBX25SVF0S0AMS0Z	6039340
	Tri-Clamp 1 ½"	0 bar ... 25 bar	PHT-RB025ST10S0AMS0Z	6039297
		0 bar ... 10 bar	PHT-RB010ST10S0AMS0Z	6039296
		0 bar ... 6 bar	PHT-RB6X0ST10S0AMS0Z	6039295
		0 bar ... 2.5 bar	PHT-RB2X5ST10S0AMS0Z	6039294
		0 bar ... 1 bar	PHT-RB1X0ST10S0AMS0Z	6039293
		0 bar ... 0.25 bar	PHT-RBX25ST10S0AMS0Z	6039291
	Conical coupling (DIN 11851) DN 40 with union nut	0 bar ... 25 bar	PHT-RB025S540S0AMS0Z	6039318
		0 bar ... 10 bar	PHT-RB010S540S0AMS0Z	6039317
		0 bar ... 6 bar	PHT-RB6X0S540S0AMS0Z	6039316
		0 bar ... 2.5 bar	PHT-RB2X5S540S0AMS0Z	6039315
		0 bar ... 1 bar	PHT-RB1X0S540S0AMS0Z	6039314
		0 bar ... 0.25 bar	PHT-RBX25S540S0AMS0Z	6039312

Electrical connection	Process connection	Measuring range	Model name	Part no.
Field housing IP 67	Tri-Clamp 1 ½''	0 bar ... 25 bar	PHT-RB025ST10S0AFT0Z	6039409
		0 bar ... 10 bar	PHT-RB010ST10S0AFT0Z	6039408
		0 bar ... 6 bar	PHT-RB6X0ST10S0AFT0Z	6039407
		0 bar ... 2.5 bar	PHT-RB2X5ST10S0AFT0Z	6039406
		0 bar ... 1 bar	PHT-RB1X0ST10S0AFT0Z	6039405
		0 bar ... 0.25 bar	PHT-RBX25ST10S0AFT0Z	6039403
	Conical coupling (DIN 11851) DN 40 with union nut	0 bar ... 25 bar	PHT-RB025S540S0AFT0Z	6039430
		0 bar ... 10 bar	PHT-RB010S540S0AFT0Z	6039429
		0 bar ... 6 bar	PHT-RB6X0S540S0AFT0Z	6039428
		0 bar ... 2.5 bar	PHT-RB2X5S540S0AFT0Z	6039427
		0 bar ... 1 bar	PHT-RB1X0S540S0AFT0Z	6039426
		0 bar ... 0.25 bar	PHT-RBX25S540S0AFT0Z	6039424

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At a glance

- Immersion depth up to 100 m
- Available with various cable lengths
- Measuring ranges from 0 bar ... 0.1 bar up to 0 bar ... 25 bar
- Stainless steel membrane
- Hermetically sealed stainless steel housing with PA protection cap
- Cable made from PUR, FEP-cable for aggressive media optionally available
- Optional temperature measurement with integrated Pt100 element
- Optional surge protection

Your benefits

- Enables level measurement under difficult conditions where other measurement technologies fail
- Rugged and reliable through robust mechanical design and high-grade materials
- For cleaning purposes the probe can easily be taken out of the liquid
- No openings required in the wall of the vessel

➜ www.mysick.com/en/LFH

For more information, just 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.

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Ordering information

Other models and accessories ➜ www.mysick.com/en/LFH

LFH-SB

- **Enclosure rating:** IP 68
- **Output signal:** 4 mA ... 20 mA
- **Process temperature:** –10 °C ... +50 °C
- **Electrical connection:** Cable PUR

Measuring range	Cable length	Model name	Part no.
0 bar ... 0.25 bar	1.5 m	LFH-SBX25G1AS01SZ0	6040938
	3 m	LFH-SBX25G1AS03SZ0	6040939
	5 m	LFH-SBX25G1AS05SZ0	6040940
	10 m	LFH-SBX25G1AS10SZ0	6040941
0 bar ... 0.4 bar	5 m	LFH-SBX40G1AS05SZ0	6040942
	10 m	LFH-SBX40G1AS10SZ0	6040943
	15 m	LFH-SBX40G1AS15SZ0	6040944
	20 m	LFH-SBX40G1AS20SZ0	6040945
0 bar ... 0.6 bar	5 m	LFH-SBX60G1AS05SZ0	6040946
	10 m	LFH-SBX60G1AS10SZ0	6040947
	15 m	LFH-SBX60G1AS15SZ0	6040948
	20 m	LFH-SBX60G1AS20SZ0	6040949
0 bar ... 1 bar	10 m	LFH-SB1X0G1AS10SZ0	6040950
	15 m	LFH-SB1X0G1AS15SZ0	6040951
	20 m	LFH-SB1X0G1AS20SZ0	6040952
	25 m	LFH-SB1X0G1AS25SZ0	6040953

Measuring range	Cable length	Model name	Part no.
0 bar ... 1.6 bar	15 m	LFH-SB1X6G1AS15SZ0	6040954
	20 m	LFH-SB1X6G1AS20SZ0	6040955
	25 m	LFH-SB1X6G1AS25SZ0	6040956
	30 m	LFH-SB1X6G1AS30SZ0	6040957

Recommended accessories

	Brief description	Model name	Part no.
Terminal and alignment brackets			
	Cable tension clamp for mounting the connection cable of the level sensor, max. tensile load = 2.5 kN (not to be used with FEP cable), Steel, zinc coated, Plastic	BEF-CC-LFH001-0001	5324307
Other mounting accessories			
	Additional weight for stabilizing the LFH level sensor in moving liquids. Interior process connection G ½, is fastened to the level sensor instead of the protective cap. Weight: 500 g. Material: Stainless steel 1.4571., Stainless steel 1.4571	BEF-AW-LFHSST-0001	5324308
Adapters and distributors			
	Dimensions (W x D x H) 57 mm x 130 mm x 94 mm, for electrical connection of level probe LFH, with integrated pressure compensation and terminal block	ASK-CB-LFHPC0-0001	5324310
Protection filter			
	Protection filter for level probe LFH. Prevents humidity from entering the ventilation tube of the connection cable. For self-mounting at cable end.	APR-VF-LFH001-0001	5324309

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At a glance

- Flow sensor for conductive and non-conductive liquids
- Compact design with no moving parts
- Process temperature up to 80 °C, process pressure up to 16 bar
- High chemical resistance due to seal-free sensor design
- Large display with membrane keyboard
- Integrated teaching tube detection

Your benefits

- Reduced maintenance costs
- Adjustable measuring ranges reduces the number of variants
- Ability to be used with conductive and non-conductive liquids reduces variants and lowers storage costs
- Straight measuring tube reduces pressure loss, thus reducing energy costs
- Sensor without seals increases process reliability and availability
- Flexible measurement system for all industries

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→ www.mysick.com/en/FFU

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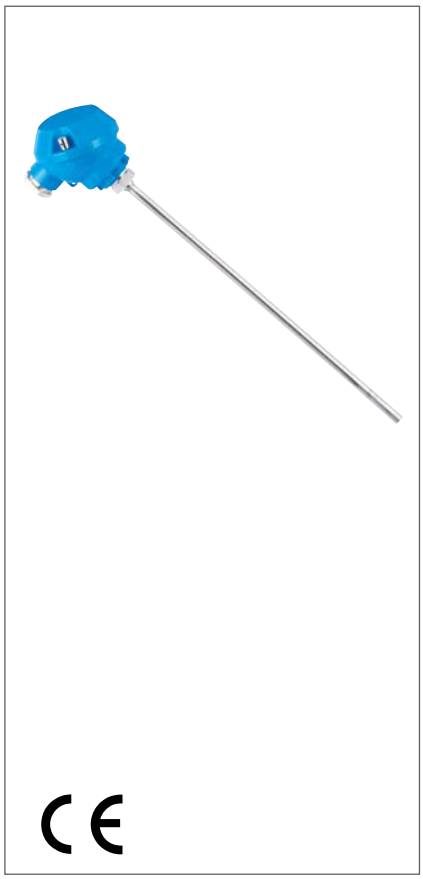
Ordering information

Other models and accessories → www.mysick.com/en/FFU

Process pressure	Nominal width measuring tube	Maximum flow	Process connection	Model name	Part no.
Max. 16 bar	NW 15	0 l/min ... 36 l/min	¾" NPT	FFUS15-1N1I0	6047869
			G ¾	FFUS15-1G1I0	6041249
				FFUS15-1G1SR	6043744
				FFUC15-1G1I0	6049017
			Clamp (DIN 11864-3)	FFUS15-1C1I0	6045162
	NW 10	0 l/min ... 21 l/min	½'' NPT	FFUS10-1G1I0	6047868
			G ½	FFUS10-1G1I0	6041737
				FFUS10-1G1SR	6043743
				FFUC10-1G1I0	6049016
			Clamp (DIN 11864-3)	FFUS10-1C1I0	6049101
Max. 10 bar	NW 25	0 l/min ... 240 l/min	G 1 ¼	FFUS25-1G1I0	6041739
				FFUS25-1G1SR	6043746
				FFUC25-1G1I0	6049019
			Clamp (DIN 11864-3)	FFUS25-1C1I0	6044523
			1 ¼" NPT	FFUS25-1N1I0	6044996
	NW 20	0 l/min ... 60 l/min	G 1	FFUS20-1G1I0	6041738
				FFUS20-1G1SR	6043745
				FFUC20-1G1I0	6049018
			Clamp (DIN 11864-3)	FFUS20-1C1I0	6049061
			1" NPT	FFUS20-1N1I0	6047870



At a glance

- Pt100 element, accuracy class A according to IEC 60751
- Measuring ranges –50 °C ... +150 °C and –50 °C ... +250 °C
- Wetted parts made from corrosion resistant stainless steel 1.4571
- Various mechanical adaptations and insertion lengths
- Pt100 (4-wire) or 4 mA ... 20 mA (2-wire)
- Cable gland M16 x 1.5

Your benefits

- Reliable operation through rugged design and high-quality materials
- Good long-term stability, accuracy and linearity
- Quick and safe installation
- Convenient system integration even in narrow installation spaces
- Optimal solutions for individual requirements

➜ www.mysick.com/en/TBT

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Ordering information

Other models and accessories ➜ www.mysick.com/en/TBT

- **Measuring range:** –50 °C ... +150 °C
- **Electrical connection/enclosure rating:** cable gland M16 x 1.5, IP 65

Output signal	Process connection	Insertion length/ diameter of probe	Model name	Part no.
4 mA ... 20 mA, 2-wire ($R_A \leq (L^+ - 10\ V) / 0.028\ A$ [Ohm])	Thread G ¼ B	100 mm / 6 mm	TBT-1AAG11006GZ	6043046
		150 mm / 6 mm	TBT-1AAG11506GZ	6043047
		250 mm / 6 mm	TBT-1AAG12506GZ	6043048
		50 mm / 3 mm	TBT-1AAG10503GZ	6043045
	Thread G ½ B	100 mm / 6 mm	TBT-1AAGE1006GZ	6043052
		150 mm / 6 mm	TBT-1AAGE1506GZ	6043053
		250 mm / 6 mm	TBT-1AAGE2506GZ	6043054
		50 mm / 3 mm	TBT-1AAGE0503GZ	6043051
	Compression fitting G ½ B, stainless steel ferrule	100 mm / 6 mm	TBT-1AASE1006GZ	6043067
		150 mm / 6 mm	TBT-1AASE1506GZ	6043068
		250 mm / 6 mm	TBT-1AASE2506GZ	6043069
		50 mm / 3 mm	TBT-1AASE0503GZ	6043066
	Without process connection	100 mm / 6 mm	TBT-1AAZZ1006GZ	6043040
		150 mm / 6 mm	TBT-1AAZZ1506GZ	6043041
		250 mm / 6 mm	TBT-1AAZZ2506GZ	6043042
		50 mm / 3 mm	TBT-1AAZZ0503GZ	6043039

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Output signal	Process connection	Insertion length/ diameter of probe	Model name	Part no.
Pt100, 4-wire	Thread G ¼ B	100 mm / 6 mm	TBT-1PAG11006GZ	6043016
		150 mm / 6 mm	TBT-1PAG11506GZ	6043017
		250 mm / 6 mm	TBT-1PAG12506GZ	6043018
		50 mm / 3 mm	TBT-1PAG10503GZ	6043015
	Thread G ½ B	100 mm / 6 mm	TBT-1PAGE1006GZ	6043022
		150 mm / 6 mm	TBT-1PAGE1506GZ	6043023
		250 mm / 6 mm	TBT-1PAGE2506GZ	6043024
		50 mm / 3 mm	TBT-1PAGE0503GZ	6043021
	Compression fitting G ½ B, stainless steel ferrule	100 mm / 6 mm	TBT-1PASE1006GZ	6043034
		150 mm / 6 mm	TBT-1PASE1506GZ	6043035
		250 mm / 6 mm	TBT-1PASE2506GZ	6043036
		50 mm / 3 mm	TBT-1PASE0503GZ	6043033
	Without process connection	100 mm / 6 mm	TBT-1PAZZ1006GZ	6043009
		150 mm / 6 mm	TBT-1PAZZ1506GZ	6043010
		250 mm / 6 mm	TBT-1PAZZ2506GZ	6043011
		50 mm / 3 mm	TBT-1PAZZ0503GZ	6043008

At a glance

- Large display
- Individually programmable transistor outputs PNP or NPN, optional analog output 4 mA ... 20 mA or 0 V ... 10 V
- Round connector M12 x 1
- Measuring ranges –20 °C ... +80 °C
- Pt1000 element, accuracy class A (IEC 60751)
- Various insertion lengths and connection threads
- Wetted parts made from corrosion-resistant stainless steel 1.4571
- Enclosure rating IP 65 and IP 67

Your benefits

- Quick and safe set-up through superior ease of use
- Compact dimensions and rotatable housing facilitate integration
- Very reliable: splash-proof housing, high-grade materials, rugged design, and field-proven technology
- Very good long-term stability, accuracy and linearity
- Quick response time
- Versatile configuration allows for optimal solutions for specific requirements

➜ www.mysick.com/en/TBS

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Ordering information

Other models and accessories ➜ www.mysick.com/en/TBS

- **Electrical connection:** round connector M12 x 1, 4-pin
- **Seal:** NBR

Output signal	Process connection	Insertion length/ diameter of probe	Model name	Part no.
1 x PNP 1 x 4 mA ... 20 mA	Thread G ¼ A, according to DIN 3852-E	50 mm / 6 mm	TBS-1BSG10506NM	6048669
		100 mm / 6 mm	TBS-1BSG11006NM	6048670
		150 mm / 6 mm	TBS-1BSG11506NM	6048671
		250 mm / 6 mm	TBS-1BSG12506NM	6048672
	Thread G ½ A, according to DIN 3852-E	50 mm / 6 mm	TBS-1BSGT0506NM	6048673
		100 mm / 6 mm	TBS-1BSGT1006NM	6048674
		150 mm / 6 mm	TBS-1BSGT1506NM	6048675
		250 mm / 6 mm	TBS-1BSGT2506NM	6048676
2 x PNP	Thread G ¼ A, according to DIN 3852-E	50 mm / 6 mm	TBS-1ASG10506NM	6048661
		100 mm / 6 mm	TBS-1ASG11006NM	6048662
		150 mm / 6 mm	TBS-1ASG11506NM	6048663
		250 mm / 6 mm	TBS-1ASG12506NM	6048664
	Thread G ½ A, according to DIN 3852-E	50 mm / 6 mm	TBS-1ASGT0506NM	6048665
		100 mm / 6 mm	TBS-1ASGT1006NM	6048666
		150 mm / 6 mm	TBS-1ASGT1506NM	6048667
		250 mm / 6 mm	TBS-1ASGT2506NM	6048668

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- **Electrical connection:** round connector M12 x 1, 5-pin
- **Output signal:** 2 x PNP1 x 4 mA ... 20 mA
- **Seal:** NBR

Process connection	Insertion length/diameter of probe	Model name	Part no.
Thread G ¼ A, according to DIN 3852-E	50 mm / 6 mm	TBS-1DSG10506NE	6048677
	100 mm / 6 mm	TBS-1DSG11006NE	6048678
	150 mm / 6 mm	TBS-1DSG11506NE	6048679
	250 mm / 6 mm	TBS-1DSG12506NE	6048680
Thread G ½ A, according to DIN 3852-E	50 mm / 6 mm	TBS-1DSGT0506NE	6048681
	100 mm / 6 mm	TBS-1DSGT1006NE	6048682
	150 mm / 6 mm	TBS-1DSGT1506NE	6048683
	250 mm / 6 mm	TBS-1DSGT2506NE	6048684

At a glance

- Pt100 element, accuracy class A (IEC 60751)
- Measuring ranges –50 °C ... +150 °C and –50 °C ... +250 °C
- Wetted parts: Corrosion-resistant stainless steel 316L/1.4435, R_a ≤ 0.8 µm
- Various hygienic process connections and insertion lengths
- Pt100 (4-wire) or 4 mA ... 20 mA (2-wire)
- Round connector M12 x 1

Your benefits

- Convenient system integration – installation in narrow installation space possible through compact dimensions
- Safe, hygienic operation due to wetted parts made from high-grade stainless steel, hygienically-graded surface finish and a gap- and crevice-free design
- Rugged: Connection housing is easy to clean and splash-proof
- Quick and safe installation
- Very good long-term stability, accuracy and linearity
- Quick response time
- Optimal solutions for individual requirements due to versatile configurability

➜ **www.mysick.com/en/THTS**

For more information, just 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.

Ordering information

Other models and accessories ➜ **www.mysick.com/en/THTS**

- **Measuring range:** –50 °C ... +150 °C
- **Electrical connection/enclosure rating:** round connector M12 x 1, 4-pin, IP 68 and IP 69K

Output signal	Process connection	Insertion length/ diameter of probe	Model name	Part no.
4 mA ... 20 mA, 2-wire (R_A ≤ (L^+ – 10 V) / 0.023 A [Ohm])	Conical coupling (DIN 11851) DN 40 with union nut	100 mm / 6 mm	THTS-1AA541006MZ	6047612
		150 mm / 6 mm	THTS-1AA541506MZ	6047613
		200 mm / 6 mm	THTS-1AA542006MZ	6047614
		25 mm / 6 mm	THTS-1AA540256MZ	6047609
		50 mm / 6 mm	THTS-1AA540506MZ	6047610
		75 mm / 6 mm	THTS-1AA540756MZ	6047611
	Tri-clamp 1'', 1 ½''	100 mm / 6 mm	THTS-1AAT11006MZ	6047606
		150 mm / 6 mm	THTS-1AAT11506MZ	6047607
		200 mm / 6 mm	THTS-1AAT12006MZ	6047608
		25 mm / 6 mm	THTS-1AAT10256MZ	6047603
		50 mm / 6 mm	THTS-1AAT10506MZ	6047604
		75 mm / 6 mm	THTS-1AAT10756MZ	6047605

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Output signal	Process connection	Insertion length/ diameter of probe	Model name	Part no.
Pt100, 4-wire	Conical coupling (DIN 11851) DN 40 with union nut	100 mm / 6 mm	THTS-1PA541006MZ	6047599
		150 mm / 6 mm	THTS-1PA541506MZ	6047600
		200 mm / 6 mm	THTS-1PA542006MZ	6047602
		25 mm / 6 mm	THTS-1PA540256MZ	6047594
		50 mm / 6 mm	THTS-1PA540506MZ	6047596
		75 mm / 6 mm	THTS-1PA540756MZ	6047597
	Tri-clamp 1'', 1 ½''	100 mm / 6 mm	THTS-1PAT11006MZ	6047589
		150 mm / 6 mm	THTS-1PAT11506MZ	6047591
		200 mm / 6 mm	THTS-1PAT12006MZ	6047592
		25 mm / 6 mm	THTS-1PAT10256MZ	6047587
		50 mm / 6 mm	THTS-1PAT10506MZ	6047588
		75 mm / 6 mm	THTS-1PAT10756MZ	6047562

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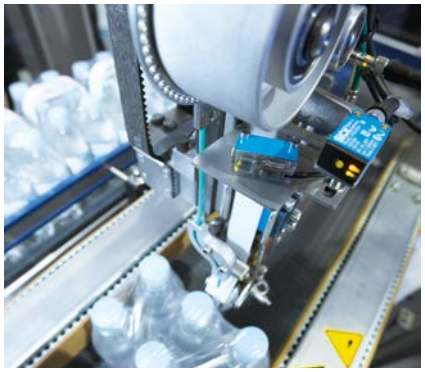
REGISTRATION SENSORS



SICK registration sensors – enhancing performance through precision and speed

The variety of tasks in automated production processes today, such as in packaging and printing machines, require sensors with the highest performance standards. Typical applications are the detection of visible and non-visible marks, labels and colors at high speeds as well as the detection of small parts and precise positioning. SICK offers a wide range of contrast, markless, color, luminescence, fork and array sensors to solve this wide spectrum of demanding tasks.

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Selection guide registration sensors **H-304**

KTM **H-308**
Mini, easy, speedy

KT5. . . . . .**H-310**
Contrast sensor in standard metal housing

KT10 . . . . . .**H-312**
The industry choice for high-speed and precision mark detection

ML20 . . . . . .**H-313**
Running markless for stability and design freedom

CSM **H-315**
Mini, easy, smart

CS8 . . . . . .**H-317**
High-performance color sensing

LUTM. **H-318**
Small, intelligent luminescence sensor

LUT8 . . . . . .**H-320**
For universal use with easy adjustment

LUT9 . . . . . .**H-322**
The new standard for high-performance luminescence sensors

UF **H-324**
The clear choice for detecting transparent labels

WFS **H-325**
Agile and flexible – ideal mounting for labeling applications

WF **H-326**
WFnext - it's next for high-speed applications

WFL **H-328**
Get precise detection of small targets with WFL fork sensors

WFM **H-330**
WFM fork sensors – connect and get started

Ax20 . . . . . **H-332**
Ax20 array sensors for edge and diameter detection solutions

SELECTION GUIDE REGISTRATION SENSORS

Contrast sensors, markless sensors, color sensors, luminescence sensors

Product	Standard applications				Sensor properties										
	Task				Sensing distance [1]										
	Detection of contrast marks, contrast differences	Detection of recurrent design	Color detection	Detection of fluorescent marks, objects	10 mm	12.5 mm	20 mm	40 mm	50 mm	60 mm	80 mm	90 mm	150 mm	20 µs	35 µs
Contrast sensors															
KTM	■					■									■
KT5	■				■		■	■							
KT10	■				■									■	
Markless sensors															
ML20		■					■								
Color sensors															
CSM			■			■									
CS8			■			■				■					
Luminescence sensors															
LUTM				■		■									
LUT8				■	■		■		■			■			
LUT9				■	■		■		■			■	■		

[1] For advanced operating range see product information.

[2] Specific data see product information.

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Response time (µs)							Special features		Object properties: Light sender						Object properties: Light spot size in mm [2]			Page
50 µs	75 µs	85 µs	125 µs	145 µs	200 µs	250 µs	Ethernet TCP/IP	IO-Link	LED: white	LED: green	LED: red, green	LED: red, green, blue	UV-LED	LED: blue	Small (0.8 x 4 ... 1.5 x 6.5)	Medium (2 x 4 ... 13 x 13)	Large (20 x 50 ... 60 x 3)	
■								■	■			■			■			→ H-308
■										■	■	■			■			→ H-310
												■			■			→ H-312
							■		■								■	→ H-313
						■		■				■			■			→ H-315
				■								■				■		→ H-317
			■					■					■		■			→ H-318
					■								■			■		→ H-320
	■	■						■					■	■		■		→ H-322

SELECTION GUIDE REGISTRATION SENSORS

Fork sensors

Product		Standard applications			Housing properties									
		Task			Fork width				Fork depth					
		Detection of transparent labels	Detection of opaque labels	Object detection	2 mm	3 mm	5 mm / 15 mm	30 mm / 50 mm / 80 mm / 120 mm	42 mm	59 mm / 60 mm	69 mm	95 mm	124 mm
Fork sensors														
	UF	■	■			■					■			
	WF		■	■	■		■	■	■	■		■		
	WFL			■	■		■	■	■	■		■		
	WFM			■				■	■	■			■	
	WFS		■			■			■					

Array sensors

Product		Standard applications		Sensoreigenschaften				
		Task		Usage			Sensing distance	
		Edge detection	Diameter detection	Contrast difference > 10 % (with reflector)	Contrast difference > 17 % (with reflector)	Contrast difference > 20 % (without reflector)	25 mm	100 mm
Array sensors								
Ax20	AT20E	■		■	■	■	■	■
	AL20E	■			■		■	■
	AT20D		■	■	■	■	■	■

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	Sensore properties														Page
	Response time					Minimum detectable object (MDO)				Adjustment				Special features	
	50 µs	100 µs	125 µs	250 µs	300 µs	0.05 mm	0.2 mm	0.8 mm	2 mm	Teach-in	Teach-in dynamic/static	Manuel (+/– button)	Without	IO-Link	
				■	■						■	■			→ H-324
		■					■			■		■			→ H-326
		■				■				■	■				→ H-328
			■					■					■		→ H-330
	■								■		■	■		■	→ H-325

	Sensoreigenschaften							Page
	Measuring range		Minimum detectable object (MDO)		Analog output Q_A	Switching output		
	20 mm	30 mm	0.8 mm	1.6 mm	4 mA ... 20 mA	Q (PNP)	Q (NPN)	
	■	■	■	■	■	■	■	→ H-332
	■	■	■	■	■	■	■	→ H-332
	■	■	■	■	■	■	■	→ H-332

At a glance

- Small, tried-and-tested housing, also available in stainless steel
- High grayscale resolution
- Very large dynamic range means reliable detection of contrasts on glossy materials
- Static and dynamic teach-in in a single variant
- Switching frequency: 15 kHz (type-dependent)
- KTM Core for standard applications
- KTM Prime with IO-Link function

Your benefits

- Small housing allows installation even where space is limited
- Three-color LED technology allows a reliable process, with contrast marks detected even in conditions with weak contrast ratios
- Good contrast resolution and a very large dynamic range ensure good detection performance on glossy materials, thus increasing the range of application possibilities
- Various teach-in methods enable more flexible commissioning
- Enhanced diagnostics and visualization of sensor parameters, as well as quick and easy format changes, since parameter settings can be downloaded via IO-Link
- IO-Link provides easy data access from the PLC
- Quick and easy configuration
- Long service life, even in harsh environments, thanks to stainless steel housing; as a result, excellent system throughput and low spare parts costs

➜ www.mysick.com/en/KTM

For more information, just 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.

Ordering information

Other models and accessories ➜ www.mysick.com/en/KTM

KTM Core

- **Housing material:** ABS (plastic)
- **Response time:** 50 µs (Signal transit time with resistive load.)

Sensing distance	Light source	Adjustment	Light spot size	Connection type	Switching output	Model name	Part no.
12.5 mm	LED, white [1]	Potentiometer, manual	1 mm x 1 mm	Connector M8, 4-pin	PNP/NPN	KTM-MB8A191P	1066885
			2 mm x 2 mm	Connector M8, 4-pin	PNP/NPN	KTM-MB31191P	1062203
		Potentiometer, screw driver	2 mm x 2 mm	Connector M8, 4-pin	PNP/NPN	KTM-MB31111P	1062202

[1] Average service life of 100,000 h at T_A = +25 °C.

KTM Prime

- **Housing material:** ABS (plastic)
- **Response time:** 35 µs (Signal transit time with resistive load.)

Sensing distance	Light source	Adjustment	Light spot size	Connection type	Switching output	Model name	Part no.
12.5 mm	LED, white [1] [2]	2-point teach-in static/ dynamic + proximity to mark	2 mm x 2 mm	Connector M8, 4-pin	PNP	KTM-MP31181P	1065756
	LED red, green, blue [1] [2]		1.5 mm x 6.5 mm	Connector M8, 4-pin	PNP	KTM-WP11181P	1062199
				Cable with connector M12, 4-pin	PNP	KTM-WP11182P	1062201
				Connector M8, 4-pin	NPN	KTM-WN11181P	1062200
				Cable with connector M12, 4-pin	NPN	KTM-WN11182P	1062150

[1] Average service life of 100,000 h at T_A = +25 °C.

[2] Wave length: 470 nm, 525 nm, 625 nm.

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Sensing distance	Light source	Adjustment	Light spot size	Connection type	Switching output	Model name	Part no.
12.5 mm	LED red, green, blue [1) 2)]	2-point teach-in static/ dynamic + proximity to mark	1.5 mm x 6.5 mm	Connector M8, 4-pin	PNP, IO-Link	KTM-WP117A1P	1061770
					NPN, IO-Link	KTM-WN117A1P	1061787

[1)] Average service life of 100,000 h at T_A = +25 °C.
[2)] Wave length: 470 nm, 525 nm, 625 nm.

KTM Inox

- **Housing material:** stainless steel 316L
- **Response time:** 35 µs (Signal transit time with resistive load.)

Sensing distance	Light source	Adjustment	Light spot size	Connection type	Switching output	Model name	Part no.
11.5 mm	LED red, green, blue [1) 2)]	2-point teach-in static/ dynamic + proximity to mark	1.5 mm x 6.5 mm	Cable with connector M12, 4-pin	PNP	KTM-WP1A182V	1052956
					NPN	KTM-WN1A182V	1062148
					PNP, IO-Link	KTM-WP1A7A2V	1062147

[1)] Average service life of 100,000 h at T_A = +25 °C.
[2)] Wave length: 470 nm, 525 nm, 625 nm.

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Recommended accessories

	Brief description	Model name	Part no.
Mounting brackets and mounting plates			
	Adapter plate KT3 to KTM, Stainless steel, fastening screws included	BEF-AP-KTMS01	2068786
	Mounting bracket for wall mounting, Stainless steel, Mounting hardware included	BEF-W100-A	5311520
	Mounting bracket for floor mounting, Steel, zinc coated, Mounting hardware included	BEF-W100-B	5311521
Universal bar clamp systems			
	Plate N08 for universal clamp bracket, Zinc plated steel (sheet), Diecast zinc (clamp), Universal clamp, mounting hardware	BEF-KHS-N08	2051607
Plug connectors and cables			
	Head A: Female connector, M8, 4-pin, straight Head B: cable Cable: PVC, unshielded, 2 m	DOL-0804-G02M	6009870
	Head A: Female connector, M8, 4-pin, angled Head B: cable Cable: PVC, unshielded, 2 m	DOL-0804-W02M	6009871
Illustration may differ	Head A: Female connector, M12, 4-pin, straight Head B: cable Cable: PVC, unshielded, 2 m	DOL-1204-G02M	6009382
Illustration may differ	Head A: Female connector, M12, 4-pin, angled Head B: cable Cable: PVC, unshielded, 2 m	DOL-1204-W02M	6009383

At a glance

- Best contrast resolution thanks to RGB LED technology
- Intuitive 10-segment bar display indicates the detection reliability
- Dynamic or static teach-in method or manual potentiometer
- Switching frequency of 10 kHz
- Automatic gloss adjustment for highly reflective materials
- Various sensing distances and light spot directions
- M12 plug can be rotated 90°

Your benefits

- Able to process all packaging materials (yellow mark/white background), resulting in high machine throughput
- Reliable operation, even with jittering and high gloss materials
- High positioning accuracy improves packaging quality
- Simple teach-in and highly visible light spot ensure easy setup
- A range of sensing distances, light spot directions and 180° rotatable plug enables optimal integration
- Interchangeable lenses for maximum mounting flexibility
- Application-specific teach-in processes

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➜ www.mysick.com/en/KT5

For more information, just 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.

Ordering information

Other models and accessories ➜ www.mysick.com/en/KT5

Light source	Adjustment	Sensing distance	Light spot size	Light spot direction	Switching output	Model name	Part no.
LED green [1] [2]	Manual adjustment, potentiometer	10 mm [3]	1.2 mm x 4.2 mm	Vertical [4]	PNP	KT5G-2P1111	1015993
					NPN	KT5G-2N1111	1015981
				Horizontal [4]	PNP	KT5G-2P2111	1016008
					NPN	KT5G-2N2111	1015990
		20 mm [3]	1.5 mm x 5.5 mm	Vertical [4]	PNP	KT5G-2P1211	1015999
					NPN	KT5G-2N1211	1015985
		40 mm [3]	1.1 mm x 4.2 mm	Vertical [4]	PNP	KT5G-2P1311	1016003
					NPN	KT5G-2N1311	1015988
LED red, green [5]	Static 2-point teach-in	10 mm [3]	1.2 mm x 4.2 mm	Vertical [4]	PNP	KT5RG-2P1116	1027393
						KT5RG-2P1126	1027396

[1] Average service life of 100,000 h at T_A = +25 °C.
[2] Wave length: 520 nm.
[3] From front edge of lens.
[4] In relation to long side of housing.
[5] Wave length: 525 nm, 640 nm.
[6] Wave length: 470 nm, 525 nm, 640 nm.

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Light source	Adjustment	Sensing distance	Light spot size	Light spot direction	Switching output	Model name	Part no.
LED red, green, blue [1) 6)]	Dynamic teach-in	10 mm [3)]	1.2 mm x 4.2 mm	Vertical [4)]	PNP	KT5W-2P1113	1016629
					NPN	KT5W-2N1113	1016630
		20 mm [3)]	1.5 mm x 5.5 mm	Vertical [4)]	PNP	KT5W-2P1213	1016715
	Static 2-point teach-in	10 mm [3)]	1.2 mm x 4.2 mm	Vertical [4)]	PNP	KT5W-2P1116	1018044
					NPN	KT5W-2N1116	1018045
					PNP/NPN	KT5W-2B1116	1043006
					PNP	KT5W-2P1126	1018587
			1.5 mm x 5.5 mm	Horizontal [4)]	PNP	KT5W-2P2116	1022312
		20 mm [3)]	1.5 mm x 5.5 mm	Vertical [4)]	PNP	KT5W-2P1216	1018586
					NPN	KT5W-2N1216	1019022
		40 mm [3)]	1.1 mm x 4.2 mm	Vertical [4)]	PNP	KT5W-2P1316	1018961
	Static 2-point teach-in with manual fine adjustment	10 mm [3)]	1.2 mm x 4.2 mm	Vertical [4)]	PNP	KT5W-2P1116D	1026538
					NPN	KT5W-2N1116D	1026540
				Horizontal [4)]	PNP	KT5W-2P2116D	1026584
					NPN	KT5W-2N2116D	1026583
		20 mm [3)]	1.5 mm x 5.5 mm	Vertical [4)]	PNP	KT5W-2P1216D	1026577
					NPN	KT5W-2N1216D	1026580
		40 mm [3)]	1.1 mm x 4.2 mm	Vertical [4)]	PNP	KT5W-2P1316D	1026578
					NPN	KT5W-2N1316D	1026581

[1)] Average service life of 100,000 h at T_A = +25 °C.
[2)] Wave length: 520 nm.
[3)] From front edge of lens.
[4)] In relation to long side of housing.
[5)] Wave length: 525 nm, 640 nm.
[6)] Wave length: 470 nm, 525 nm, 640 nm.

Recommended accessories

	Brief description	Model name	Part no.
Plug connectors and cables			
Illustration may differ	Head A: Female connector, M12, 4-pin, straight Head B: cable Cable: PVC, unshielded, 2 m	DOL-1204-G02M	6009382
Illustration may differ	Head A: Female connector, M12, 4-pin, angled Head B: cable Cable: PVC, unshielded, 2 m	DOL-1204-W02M	6009383
Illustration may differ	Head A: Female connector, M12, 5-pin, straight Head B: cable Cable: PVC, unshielded, 2 m	DOL-1205-G02M	6008899
Illustration may differ	Head A: Female connector, M12, 5-pin, angled Head B: cable Cable: PVC, unshielded, 2 m	DOL-1205-W02M	6008900

At a glance

- Very low jitter (< 10 µs)
- Precise light spot
- Best contrast resolution thanks to RGB LED technology
- Two interchangeable light exits
- Five storage banks for settings
- Automatic drift correction
- Fast switching frequency of 25 kHz
- Easy-to-read bar graph display

Your benefits

- Very precise detection of print marks enables optimal results for packaging and printing applications
- All contrast marks, even pale yellow on white paper, can be reliably detected thanks to RGB LED technology
- Automatic drift correction helps detect difficult to see marks, such as faded print marks, enabling higher production reliability
- Reliable operation, even with high-gloss reflective surfaces, increasing throughput
- Simple teach-in via an external signal can be performed while the material is moving, enabling shorter setup time
- Long-lasting, tough metal housing

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➜ www.mysick.com/en/KT10

For more information, just 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.

Ordering information

Other models and accessories ➜ www.mysick.com/en/KT10

- **Light source:** LED red, green, blue (Average service life of 100,000 h at T_A = +25 °C.) (Wave length: 470 nm, 525 nm, 640 nm.)
- **Sensing distance:** 10 mm (From front edge of lens.)
- **Sensing distance tolerance:** ± 3 mm
- **Response time:** 20 µs (Signal transit time with resistive load.)
- **Light spot size:** 0.8 mm x 4 mm

Light spot direction	Switching output	Model name	Part no.
Vertical [1]	PNP	KT10W-2P1115	1028232
	NPN	KT10W-2N1115	1028233
Horizontal [1]	PNP	KT10W-2P2115	1029070
	NPN	KT10W-2N2115	1029071

[1] In relation to long side of housing.

Recommended accessories

	Brief description	Model name	Part no.
Universal bar clamp systems			
	Plate K for universal clamp bracket, Steel, zinc coated, universal clamp and mounting hardware included	BEF-KHS-K01	2022718
Plug connectors and cables			
Illustration may differ	Head A: Female connector, M12, 5-pin, straight Head B: cable Cable: PVC, unshielded, 2 m	DOL-1205-G02M	6008899
Illustration may differ	Head A: Female connector, M12, 5-pin, angled Head B: cable Cable: PVC, unshielded, 2 m	DOL-1205-W02M	6008900

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At a glance

- Tough metal housing
- Scanning speed of 7 m/s
- Monitor process quality via a control panel or SOPAS, via Ethernet
- Easy sensor teach-in and alignment
- Reproducibility of 0.6 mm (2 Sigma)
- Plug can be rotated 90°

Your benefits

- Reliable detection, even with complex images reduces system downtime and waste
- Fewer machine builder restrictions mean more freedom when designing packaging
- Allows for more efficient utilization of space on the product instead of using unnecessary print marks and place markers
- Faster and easier format change by teaching of saved formats via Ethernet
- Monitor process and teach quality via a display or SOPAS, increasing reliability
- Fast and simple sensor alignment via a visible light spot and notches on the housing
- Easy sensor teach-in, directly via the control panel, external teach-in signal or using SOPAS via Ethernet

→ **www.mysick.com/en/ML20**

For more information, just 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.

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Ordering information

Other models and accessories → **www.mysick.com/en/ML20**

- **Data interface:** Ethernet TCP/IP
- **Light spot size:** 60 mm x 3 mm

Light source	Max. movement speed	Sensing distance	Repeatability	Switching output	Model name	Part no.
LED, white [1]	7 m/s	20 mm	0.6 mm [2]	PNP	ML20M-P1211	1044675

[1] Average service life of 100,000 h at T_A = +25 °C.

[2] Statistical error 2 σ.

Recommended accessories

	Brief description	Model name	Part no.
Universal bar clamp systems			
	Plate N04 for universal clamp bracket, Zinc plated steel (sheet), Diecast zinc (clamp), Universal clamp, mounting hardware	BEF-KHS-N04	2051610
Plug connectors and cables			
	Head A: male connector, M12, 4-pin, straight, D-coded Head B: male connector, RJ45, 8-pin, straight Cable: Ethernet, shielded, 5 m	Connection cable (male connector-male connector)	6034415
	Head A: male connector, M12, 4-pin, angled, D-coded Head B: male connector, RJ45, 8-pin, straight Cable: Ethernet, shielded, 5 m	Connection cable (male connector-male connector)	6039488
	Head A: Female connector, M12, 12-pin, angled Head B: cable Cable: PVC, shielded, 5 m	DOL-1212-W05MAS02	6044109

	Brief description	Model name	Part no.
	Head A: Female connector, M12, 12-pin, straight Head B: cable Cable: PVC, shielded, 5 m	DOL1212-G05MAS02	6042754
	Head A: Female connector, M12, 12-pin, straight Head B: male connector, M12, 12-pin, straight Cable: PVC, shielded, 5 m	DSL-1212-G05MAS02	6045234

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Subject to change without notice

At a glance

- Color sensor in a new miniature housing
- Static and automatic teach-in method using control panel or IO-Link
- Improved gloss behavior
- Switching frequency of 2 kHz
- 12.5 mm (± 3 mm) sensing distance
- RGB light source
- Remote monitoring and rapid diagnostics using IO-Link
- Compatibility with older color sensors thanks to M12 pigtail

Your benefits

- Fast, seamless integration into existing applications thanks to a new miniature housing, saving time and money
- Increased switching frequency for improved machine productivity
- Enhanced process reliability thanks to gloss suppression and improved color resolution
- Flexible application possibilities thanks to a wide range of color tolerances
- Enhanced, intelligent diagnostics and visualization, as well as quick and easy format changes, thanks to IO-Link function
- Improved tolerance range for sensing distance
- Simple, static teach-in method cuts down on installation time
- Rapid conversion thanks to mounting brackets available

→ www.mysick.com/en/CSM

For more information, just 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.

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Ordering information

Other models and accessories → www.mysick.com/en/CSM

- **Light source:** LED red, green, blue (Average service life of 100,000 h at T_A = +25 °C.) (Wave length: 470 nm, 525 nm, 640 nm.)
- **Response time:** 250 µs (Signal transit time with resistive load.)
- **Switching frequency:** 2 kHz (With light/dark ratio 1:1.)
- **Connection type:** male connector M12, 4-pin

Sensing distance	Sensing distance tolerance	Light spot size	Light spot direction	Switching output	Model name	Part no.
12.5 mm [1]	± 3 mm	1.5 mm x 6.5 mm	Vertical	PNP	CSM-WP11122P	1067291
				PNP, IO-Link	CSM-WP117A2P	1067294
				NPN	CSM-WN11122P	1067293

[1] From front edge of lens.

Recommended accessories

	Brief description	Model name	Part no.
Mounting brackets and mounting plates			
	Adapter plate KT3 to KTM, Stainless steel, fastening screws included	BEF-AP-KTMS01	2068786
	Mounting bracket for wall mounting, Stainless steel, Mounting hardware included	BEF-W100-A	5311520
	Mounting bracket for floor mounting, Steel, zinc coated, Mounting hardware included	BEF-W100-B	5311521

	Brief description	Model name	Part no.
Universal bar clamp systems			
	Plate N08 for universal clamp bracket, Zinc plated steel (sheet), Diecast zinc (clamp), Universal clamp, mounting hardware	BEF-KHS-N08	2051607
Plug connectors and cables			
Illustration may differ	Head A: Female connector, M12, 4-pin, straight Head B: cable Cable: PVC, unshielded, 2 m	DOL-1204-G02M	6009382
Illustration may differ	Head A: Female connector, M12, 4-pin, angled Head B: cable Cable: PVC, unshielded, 2 m	DOL-1204-W02M	6009383

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Subject to change without notice

At a glance

- One (CS8-1) or four (CS8-4) colors can be saved
- 12.5 mm or 60 mm sensing distance
- Fast response time up to 85 µs
- High resolution color
- Bar graph display shows the correlation of the colors
- Extremely precise light spot and high resolution
- Metal housing with two light exits (interchangeable)

Your benefits

- Identify and store up to four colors. No need to reprogram the sensor for changeovers, reducing downtime.
- High resolution colors can be matched exactly for better process reliability
- Maintains the extreme precision of the light spot, enabling a consistent object detection
- A bar graph display provides information about the color quality and detection reliability, ensuring simple process monitoring
- Broad spectrum of color tolerances enables more flexible use
- Fast response times at high speeds for reliable detection
- Detection reliability is not affected by varying temperatures

➜ **www.mysick.com/en/CS8**

For more information, just 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.

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Ordering information

Other models and accessories ➜ **www.mysick.com/en/CS8**

- **Light source:** LED red, green, blue (Average service life of 100,000 h at T_A = +25 °C.) (Wave length: 470 nm, 525 nm, 640 nm.)
- **Response time:** 1,000 µs, 500 µs, 145 µs (Signal transit time with resistive load.)
- **Switching frequency:** 0.5 kHz / 1 kHz / 3.5 kHz (With light/dark ratio 1:1.), adjustable
- **Connection type:** male connector M12, 8-pin

Sensing distance	Sensing distance tolerance	Light spot size	Light spot direction	Switching output	Model name	Part no.
12.5 mm [1]	± 3 mm	2 mm x 4 mm	Vertical	PNP	CS84-P1112	1028226
				NPN	CS84-N1112	1028230
60 mm [1]	± 9 mm	13 mm x 13 mm	–	PNP	CS84-P3612	1028227
				NPN	CS84-N3612	1028231

[1] From front edge of lens.

Recommended accessories

	Brief description	Model name	Part no.
Universal bar clamp systems			
	Plate K for universal clamp bracket, Steel, zinc coated, universal clamp and mounting hardware included	BEF-KHS-K01	2022718
Plug connectors and cables			
	Head A: Female connector, M12, 8-pin, straight Head B: cable Cable: PVC, shielded, 2 m	DOL-1208-G02MA	6020633
	Head A: Female connector, M12, 8-pin, angled Head B: cable Cable: PVC, shielded, 2 m	DOL-1208-W02MA	6020992

At a glance

- Luminescence sensor in a miniature housing
- Static and dynamic teach-in methods in a single variant
- Reliable detection even at a low level luminescence
- Improved gloss behavior
- Switching frequency of 4 kHz
- 12.5 mm + / - 3 mm sensing distance
- Remote monitoring and rapid analysis using IO-Link function
- Compatibility with older LUT sensors thanks to M12 pigtail

Your benefits

- Miniature housing enables installation in small spaces
- Quick and easy commissioning saves time and costs
- Increased switching frequency for improved machine productivity
- Enhanced process reliability thanks to gloss suppression
- Highly flexible during commissioning thanks to a range of teach-in methods
- Enhanced, intelligent diagnostics and visualization of sensor parameters, as well as quick and easy format changes, thanks to IO-Link function
- Improved tolerance range at longer detection distances
- Rapid conversion thanks to mounting brackets available

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➜ **www.mysick.com/en/LUTM**

For more information, just 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.

Ordering information

Other models and accessories ➜ **www.mysick.com/en/LUTM**

Scanning range	Operating range	Light spot size	Receiving range	Switching output	Model name	Part no.
12.5 mm [1]	8 mm ... 20 mm	2 mm x 2.5 mm [2]	450 nm ... 750 nm	PNP	LUTM-UP11162P	1067295
				PNP, IO-Link	LUTM-UP117A2P	1067297
				NPN	LUTM-UN11162P	1067296

[1] From front edge of lens.

[2] At sensing distance.

Recommended accessories

	Brief description	Model name	Part no.
Mounting brackets and mounting plates			
	Adapter plate KT3 to KTM, Stainless steel, fastening screws included	BEF-AP-KTMS01	2068786
	Mounting bracket for wall mounting, Stainless steel, Mounting hardware included	BEF-W100-A	5311520
	Mounting bracket for floor mounting, Steel, zinc coated, Mounting hardware included	BEF-W100-B	5311521
Universal bar clamp systems			
	Plate N08 for universal clamp bracket, Zinc plated steel (sheet), Diecast zinc (clamp), Universal clamp, mounting hardware	BEF-KHS-N08	2051607

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	Brief description	Model name	Part no.
Plug connectors and cables			
Illustration may differ	Head A: Female connector, M12, 4-pin, straight Head B: cable Cable: PVC, unshielded, 2 m	DOL-1204-G02M	6009382
Illustration may differ	Head A: Female connector, M12, 4-pin, angled Head B: cable Cable: PVC, unshielded, 2 m	DOL-1204-W02M	6009383

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At a glance

- Tough metal housing
- Simple sensitivity adjustment in 8 stages
- Bar graph display provides information about the luminescence intensity
- Sensing distances selectable through interchangeable lenses
- Additional optical filters suppress background luminescence
- Fiber-optic cable connection (with 20 mm lens)
- Switching and analog output

Your benefits

- An 8-step rotary switch easily adjusts to accurately determine the switching output position for different materials
- Bar graph display provides continual process control through easy visualization of the luminescence intensity
- Filters ensure that background luminescence is reliably suppressed, ensuring greater process reliability
- Interchangeable lenses for different sensing distances provide flexibility

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➜ **www.mysick.com/en/LUT8**

For more information, just 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.

Ordering information

Other models and accessories ➜ **www.mysick.com/en/LUT8**

Scanning range	Operating range	Light spot size	Receiving filters	Receiving range	Model name	Part no.
10 mm [1]	0 mm ... 20 mm	2 mm x 6 mm	KV 418 (standard)	450 nm ... 750 nm	LUT8U-11101	1046711
20 mm [1]	10 mm ... 40 mm	3 mm x 9 mm	KV 418 (standard)	450 nm ... 750 nm	LUT8U-11201	1047042
50 mm [1]	20 mm ... 70 mm	5 mm x 15 mm	KV 418 (standard)	450 nm ... 750 nm	LUT8U-11301	1047043
			OG 570	570 nm ... 750 nm	LUT8U-11311	1047045
			RG 610	610 nm ... 750 nm	LUT8U-11321	1047046
			RG 665	670 nm ... 750 nm	LUT8U-11331	1047047
		Ø 6 mm	KV 418 (standard)	450 nm ... 750 nm	LUT8U-11701	1047048
90 mm [1]	30 mm ... 110 mm	12 mm x 12 mm	KV 418 (standard)	450 nm ... 750 nm	LUT8U-11401	1047044

[1] From front edge of lens.

Recommended accessories

	Brief description	Model name	Part no.
Plug connectors and cables			
Illustration may differ	Head A: Female connector, M12, 5-pin, straight Head B: cable Cable: PVC, unshielded, 2 m	DOL-1205-G02M	6008899

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Subject to change without notice

	Brief description	Model name	Part no.
Lens and accessories			
	Lens, 10 mm scanning distance, M25 x 0.75	OBJ-LUT3-10	2016348
	Lens, 20 mm scanning distance, M25 x 0.75	OBJ-LUT3-20	2016349
	Lens, 50 mm scanning distance, M25 x 0.75	OBJ-LUT3-50	2016350
Reference materials			
	Crayon, red fluorescence	LUM-FT	1004460
	Writing chalk, red fluorescence	LUM-KLK	1002959
Fiber-optic cables			
	Length, fiber-optic cable: 1,000 mm Min. bend radius: 40 mm	LLUV8-1000	2017099
	Length, fiber-optic cable: 500 mm Min. bend radius: 40 mm	LLUV8-500	2017098

At a glance

- Simple teach-in
- Operating range up to 250 mm
- Version with IO-Link for remote monitoring
- Bar graph display provides information about the luminescence intensity
- High speed (6.5 kHz), standard (2.5 kHz), high resolution (500 Hz) models
- Additional optical filters suppress background luminescence
- Fiber-optic cable connection (with 20 mm lens)
- Switching and analog output

Your benefits

- Simple sensitivity adjustment via teach-in for optimum adaptation to the application
- Long sensing distance tolerance leads to less mechanical height adjustments of the sensor on the machine
- Using IO-Link, the sensor can be configured and monitored by the central control system, enabling simple, cost-effective diagnostics and data collection
- Bar graph display provides continual process control through easy visualization of the luminescence intensity
- Filters ensure that background luminescence is reliably suppressed, ensuring greater process reliability
- Interchangeable lenses for different sensing distances and the second light exit provide flexibility
- High detection reliability ensures the process and reduces downtime
- Select speed or high resolution, making it ideal for any application.

➜ www.mysick.com/en/LUT9

For more information, just 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.

Ordering information

Other models and accessories ➜ www.mysick.com/en/LUT9

LUT9x-xx1xx

- **Sensing distance:** 10 mm (From front edge of lens.)

Light source	Light spot size	Operating range	Light emission	Receiving range	Switching output	Model name	Part no.
UV-LED [1) 2)]	2 mm x 6 mm	0 mm ... 20 mm	Long side	450 nm ... 750 nm	PNP/NPN	LUT9U-11106	1047049

[1)] Average service life of 100,000 h at T_A = +25 °C.
[2)] Wave length: 375 nm.

LUT9x-xx2xx

- **Sensing distance:** 20 mm (From front edge of lens.)

Light source	Light spot size	Operating range	Light emission	Receiving range	Switching output	Model name	Part no.
UV-LED [1) 2)]	3 mm x 9 mm	10 mm ... 40 mm	Long side	450 nm ... 750 nm	PNP/NPN	LUT9U-11206	1047050
					PNP, IO-Link	LUT9U-P120L	1046188
					NPN, IO-Link	LUT9U-N120L	1046189

[1)] Average service life of 100,000 h at T_A = +25 °C.
[2)] Wave length: 375 nm.

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LUT9x-xx3xx

- **Sensing distance:** 50 mm (From front edge of lens.)

Light source	Light spot size	Operating range	Light emission	Receiving range	Switching output	Model name	Part no.
UV-LED [1] [2]	5 mm x 15 mm	20 mm ... 70 mm	Long side	450 nm ... 750 nm	PNP/NPN	LUT9U-11306	1046712
				570 nm ... 750 nm	PNP/NPN	LUT9U-11316	1047052
				610 nm ... 750 nm	PNP/NPN	LUT9U-11326	1047053
				670 nm ... 750 nm	PNP/NPN	LUT9U-11336	1047054
				450 nm ... 750 nm	PNP, IO-Link	LUT9U-P130L	1045606
					NPN, IO-Link	LUT9U-N130L	1046190
			Long and short side, exchangeable	450 nm ... 750 nm	PNP/NPN	LUT9U-12306	1047055

[1] Average service life of 100,000 h at T_A = +25 °C.
[2] Wave length: 375 nm.

LUT9x-xx4xx

- **Sensing distance:** 90 mm (From front edge of lens.)

Light source	Light spot size	Operating range	Light emission	Receiving range	Switching output	Model name	Part no.
UV-LED [1] [2]	12 mm x 12 mm	30 mm ... 110 mm	Long side	450 nm ... 750 nm	PNP/NPN	LUT9U-11406	1047051

[1] Average service life of 100,000 h at T_A = +25 °C.
[2] Wave length: 375 nm.

LUT9x-xx6xx

- **Sensing distance:** 150 mm (From front edge of lens.)

Light source	Light spot size	Operating range	Light emission	Receiving range	Switching output	Model name	Part no.
UV-LED [1] [2]	5 mm x 12 mm	50 mm ... 250 mm	Long side	450 nm ... 750 nm	PNP/NPN	LUT9U-11606	1047414
Blue LED [1] [3]	5 mm x 12 mm	50 mm ... 250 mm	Long side	610 nm ... 750 nm	PNP/NPN	LUT9B-11626	1047056

[1] Average service life of 100,000 h at T_A = +25 °C.
[2] Wave length: 375 nm.
[3] Wave length: 470 nm.

Recommended accessories

	Brief description	Model name	Part no.
Plug connectors and cables			
Illustration may differ	Head A: Female connector, M12, 5-pin, straight Head B: cable Cable: PVC, unshielded, 2 m	DOL-1205-G02M	6008899
Lens and accessories			
	Lens, 10 mm scanning distance, M25 x 0.75	OBJ-LUT3-10	2016348
	Lens, 20 mm scanning distance, M25 x 0.75	OBJ-LUT3-20	2016349
	Lens, 50 mm scanning distance, M25 x 0.75	OBJ-LUT3-50	2016350
Reference materials			
	Crayon, red fluorescence	LUM-FT	1004460
	Writing chalk, red fluorescence	LUM-KLK	1002959
Fiber-optic cables			
	Length, fiber-optic cable: 1,000 mm Min. bend radius: 40 mm	LLUV8-1000	2017099
	Length, fiber-optic cable: 500 mm Min. bend radius: 40 mm	LLUV8-500	2017098

At a glance

- Detection of transparent, opaque or printed labels
- Unaffected by metallic foils and labels
- Fast response time of 250 µs
- Simple and accurate adjustment via “+”/”–”-buttons or teach-in
- Rugged, IP 65 aluminum housing

Your benefits

- Reliable label detection, regardless if labels are transparent, opaque or have a printed design, ensuring greater flexibility with one sensor
- Fast response times enable precise detection – even at high web speeds
- The aluminum housing meets all requirements for use in harsh industrial conditions
- Setting the switching threshold using the +/- push buttons or teach-in
- Ultrasonic technology prevents false detection, which may be caused by ambient light or shiny surfaces

➜ www.mysick.com/en/UF

For more information, just 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.

Ordering information

Other models and accessories ➜ www.mysick.com/en/UF

- **Fork width:** 3 mm
- **Fork depth:** 69 mm

Response time	MDO	Adjustment	Connection type	Switching output	Model name	Part no.
250 µs [1]	Gap between labels: 2 m Size of labels: 2 mm [2]	Dynamic teach-in, Static teach-in	Male connector M8, 4-pin	PNP	UFN3-70P415	6049679
				NPN	UFN3-70N415	6049680
				PNP/NPN	UFN3-70B413	6049678

[1] Signal transit time with resistive load.

[2] Minimum detectable object.

Recommended accessories

	Brief description	Model name	Part no.
Plug connectors and cables			
	Head A: Female connector, M8, 4-pin, straight Head B: cable Cable: PVC, unshielded, 2 m	DOL-0804-G02M	6009870
	Head A: Female connector, M8, 4-pin, angled Head B: cable Cable: PVC, unshielded, 2 m	DOL-0804-W02M	6009871

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At a glance

- Optimized housing with slim fork shape
- Dynamic teach-in via teach or control panel and manual fine adjustment with "+"/"–" buttons
- Light/dark switching function
- Fast response time of 50 µs
- PNP or NPN
- IP 65 plastic housing
- Switching output also during teach-in active

Your benefits

- Slim design allows flexible mounting close to the dispenser of the label which ensures higher accuracy in the process
- Compact housing ensures space-saving installation
- User friendly adjustment allows easy and quick start-up
- External teach-in allows automatic threshold adjustment via the PLC during the process which ensures reliable detection all the time
- Short and fast response times enables precise detection – even at high web speeds

→ www.mysick.com/en/WFS

For more information, just 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.

Ordering information

Other models and accessories → www.mysick.com/en/WFS

- **Response time:** 50 µs (Signal transit time with resistive load.)
- **Adjustment:** Dynamic teach-in, Static teach-in, Manual ("+"/"–" button)

Fork width	Fork depth	Connection type	Switching output	Model name	Part no.
3 mm	42 mm	Male connector M8, 4-pin	PNP	WFS3-40P415	6043919
			NPN	WFS3-40N415	6043920

Recommended accessories

	Brief description	Model name	Part no.
Plug connectors and cables			
	Head A: Female connector, M8, 4-pin, straight Head B: cable Cable: PVC, unshielded, 2 m	DOL-0804-G02M	6009870
	Head A: Female connector, M8, 4-pin, angled Head B: cable Cable: PVC, unshielded, 2 m	DOL-0804-W02M	6009871

At a glance

- Infrared light source
- Simple and accurate adjustment via teach-in or manually via “+”/”–” buttons
- Fast response time (max. 100 µs)
- PNP and NPN switching output
- Light/dark switching function
- 21 different models with different fork widths and depths
- Rugged, IP 65 aluminum housing

Your benefits

- Fast response time and fine resolution ensure reliable detection even at high speeds
- Infrared light source provides excellent ambient light immunity
- User friendly setting via teach-in or “+”/”–” button
- A wide range of different fork sizes enables flexible installation
- The aluminum housing meets all requirements for use in harsh industrial conditions

➜ www.mysick.com/en/WF

For more information, just 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.

Ordering information

Other models and accessories ➜ www.mysick.com/en/WF

- **Response time:** 100 µs (Signal transit time with resistive load.)
- **MDO:** 0.2 mm (Minimum detectable object.)
- **Switching output:** PNP/NPN

Fork width	Adjustment	Fork depth	Model name	Part no.
2 mm	Teach-in	42 mm	WF2-40B416	6028450
		59 mm	WF2-60B416	6028457
		95 mm	WF2-95B416	6028464
	Manual (“+”/”–” button)	42 mm	WF2-40B410	6028428
		59 mm	WF2-60B410	6028436
		95 mm	WF2-95B410	6028443
5 mm	Teach-in	42 mm	WF5-40B416	6028451
		59 mm	WF5-60B416	6028458
	Manual (“+”/”–” button)	42 mm	WF5-40B410	6028429
15 mm	Teach-in	42 mm	WF15-40B416	6028452
		59 mm	WF15-60B416	6028459
	Manual (“+”/”–” button)	42 mm	WF15-40B410	6028430
		59 mm	WF15-60B410	6028438
30 mm	Teach-in	42 mm	WF30-40B416	6028453
		59 mm	WF30-60B416	6028460
	Manual (“+”/”–” button)	42 mm	WF30-40B410	6028431
		59 mm	WF30-60B410	6028439

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Fork width	Adjustment	Fork depth	Model name	Part no.
50 mm	Teach-in	42 mm	WF50-40B416	6028454
		59 mm	WF50-60B416	6028461
	Manual (“+”/”–” button)	42 mm	WF50-40B410	6028432
		59 mm	WF50-60B410	6028440
80 mm	Teach-in	42 mm	WF80-40B416	6028455
		59 mm	WF80-60B416	6028462
	Manual (“+”/”–” button)	42 mm	WF80-40B410	6028433
		59 mm	WF80-60B410	6028441
120 mm	Teach-in	42 mm	WF120-40B416	6028456
	Manual (“+”/”–” button)	42 mm	WF120-40B410	6028435
		59 mm	WF120-60B410	6028442

Recommended accessories

	Brief description	Model name	Part no.
Plug connectors and cables			
	Head A: Female connector, M8, 4-pin, straight Head B: cable Cable: PVC, unshielded, 2 m	DOL-0804-G02M	6009870
	Head A: Female connector, M8, 4-pin, angled Head B: cable Cable: PVC, unshielded, 2 m	DOL-0804-W02M	6009871

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At a glance

- Very precise laser beam (Class 1 laser)
- Simple and accurate adjustment via teach-in
- Fast response time (max. 100 µs)
- Minimum detectable object size of 0.05 mm
- PNP and NPN switching output
- Light/dark switching function
- 21 different models with different fork widths and depths
- Rugged, IP 65 aluminum housing

Your benefits

- A highly precise laser beam ensures consistent measurement accuracy along the entire measuring range and reliable detection of the smallest objects
- A visible laser light spot enables easy alignment and fast adjustment
- Reliable and simple setting via teach-in ensures high process reliability
- A wide range of different fork sizes increases installation flexibility
- The aluminum housing meets all requirements for use in harsh industrial conditions

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➜ www.mysick.com/en/WFL

For more information, just 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.

Ordering information

Other models and accessories ➜ www.mysick.com/en/WFL

- **Response time:** 100 µs (Signal transit time with resistive load.)
- **MDO:** 0.05 mm
- **Switching output:** PNP/NPN
- **Adjustment:** Teach-in

Fork width	Fork depth	Model name	Part no.
2 mm	59 mm	WFL2-60B416	6036828
	42 mm	WFL2-40B416	6036821
	95 mm	WFL2-95B416	6036835
5 mm	59 mm	WFL5-60B416	6036829
	42 mm	WFL5-40B416	6036822
	95 mm	WFL5-95B416	6036836
15 mm	42 mm	WFL15-40B416	6036823
	59 mm	WFL15-60B416	6036830
	95 mm	WFL15-95B416	6036837
30 mm	42 mm	WFL30-40B416	6036824
	59 mm	WFL30-60B416	6036831
	95 mm	WFL30-95B416	6036838
50 mm	42 mm	WFL50-40B416	6036825
	59 mm	WFL50-60B416	6036832
	95 mm	WFL50-95B416	6036839

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Fork width	Fork depth	Model name	Part no.
80 mm	42 mm	WFL80-40B416	6036826
	59 mm	WFL80-60B416	6036833
	95 mm	WFL80-95B416	6036840
120 mm	42 mm	WFL120-40B416	6036827
	59 mm	WFL120-60B416	6036834
	95 mm	WFL120-95B416	6036841

Recommended accessories

	Brief description	Model name	Part no.
Plug connectors and cables			
	Head A: Female connector, M8, 4-pin, straight Head B: cable Cable: PVC, unshielded, 2 m	DOL-0804-G02M	6009870
	Head A: Female connector, M8, 4-pin, angled Head B: cable Cable: PVC, unshielded, 2 m	DOL-0804-W02M	6009871

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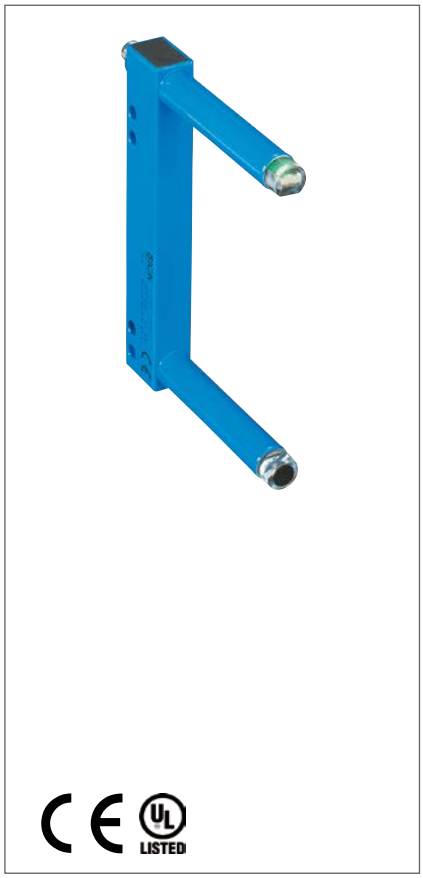

At a glance

- Highly visible red emitted light
- No setup, out-of-the-box operation
- 360° output indicator
- 5 fork sizes: maximum depth 120 mm, maximum width 180 mm
- Rugged, IP 67 aluminum housing

Your benefits

- Fixed housings guarantee a high level of operational safety with simple commissioning
- A visible red light enables easy alignment and fast adjustment
- The 360-degree yellow output indicator makes continual process control possible
- A wide range of different fork sizes increases installation flexibility
- The aluminum housing meets all requirements for use in harsh industrial conditions

➜ www.mysick.com/en/WFM

For more information, just 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.

Ordering information

Other models and accessories ➜ www.mysick.com/en/WFM

WFM30-40

- **Fork width:** 30 mm
- **Fork depth:** 42 mm

Response time	MDO	Connection type	Switching output	Output function	Model name	Part no.
125 µs [1]	0.8 mm [2]	Male connector M8, 3-pin	PNP	Dark-switching	WFM30-40P321	6037819
				Light switching	WFM30-40P311	6037820
			NPN	Dark-switching	WFM30-40N321	6037821
		Cable 2 m, 3-pin	PNP	Dark-switching	WFM30-40P121	6037823

[1] Signal transit time with resistive load.
[2] Minimum detectable object.

WFM50-60

- **Fork width:** 50 mm
- **Fork depth:** 60 mm

Response time	MDO	Connection type	Switching output	Output function	Model name	Part no.
125 µs [1]	0.8 mm [2]	Male connector M8, 3-pin	PNP	Dark-switching	WFM50-60P321	6037824
				Light switching	WFM50-60P311	6037825
			NPN	Dark-switching	WFM50-60N321	6037826

[1] Signal transit time with resistive load.
[2] Minimum detectable object.

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WFM80-60

- **Fork width:** 80 mm
- **Fork depth:** 60 mm

Response time	MDO	Connection type	Switching output	Output function	Model name	Part no.
125 µs [1]	0.8 mm [2]	Male connector M8, 3-pin	PNP	Dark-switching	WFM80-60P321	6037828
				Light switching	WFM80-60P311	6037829
			NPN	Dark-switching	WFM80-60N321	6037830

[1] Signal transit time with resistive load.
[2] Minimum detectable object.

WFM120-120

- **Fork width:** 120 mm
- **Fork depth:** 124 mm

Response time	MDO	Connection type	Switching output	Output function	Model name	Part no.
125 µs [1]	0.8 mm [2]	Male connector M8, 3-pin	PNP	Dark-switching	WFM120-120P321	6037832
				Light switching	WFM120-120P311	6037833
			NPN	Dark-switching	WFM120-120N321	6037834

[1] Signal transit time with resistive load.
[2] Minimum detectable object.

WFM180-120

- **Fork width:** 180 mm
- **Fork depth:** 124 mm

Response time	MDO	Connection type	Switching output	Output function	Model name	Part no.
125 µs [1]	1 mm [2]	Male connector M8, 3-pin	PNP	Dark-switching	WFM180-120P321	6037836
				Light switching	WFM180-120P311	6037837
			NPN	Light switching	WFM180-120N311	6037839

[1] Signal transit time with resistive load.
[2] Minimum detectable object.

Recommended accessories

	Brief description	Model name	Part no.
Plug connectors and cables			
	Head A: Female connector, M8, 3-pin, straight Head B: cable Cable: PVC, unshielded, 2 m	DOL-0803-G02M	6010785
	Head A: Female connector, M8, 3-pin, angled Head B: cable Cable: PVC, unshielded, 2 m	DOL-0803-W02M	6008489

At a glance

- Proximity contrast line sensor in a compact housing
- Application-specific sensor functions
- Detect position of edge of material
- Diameter, width and gap detection of different objects
- Very high reproducibility of 0.03 mm
- Large measurement range: 30 mm
- Visible white LED light spot to enable accurate alignment
- Simple setup, no teach-in necessary

Your benefits

- Cost-effective solution to reliably determine edge position and width measurement
- Easy-to-integrate, compact housing can be mounted over the web so less downtime is required for maintenance
- No reflector is required, reducing maintenance and providing greater product reliability. Reduces downtime. Only array sensors available in diffuse mode, making them ideal for environments where dirt and dust can interfere with other types of solutions that require a reflector.
- High reproducibility of 0.03 mm and industry-leading resolution enable greater accuracy and quality control
- Highly visible white LED light spot ensures fast and accurate alignment, reducing time-consuming fine adjustment
- No teach, program or menu activities make setup virtually hassle free

➜ www.mysick.com/en/Ax20

For more information, just 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.

Ordering information

Other models and accessories ➜ www.mysick.com/en/Ax20

Functional principle	Sensing distance	Measurement range	Repeatability	MDO	Switching output	Model name	Part no.
Edge detection, proximity and reflector	25 mm	20 mm	0.03 mm [1]	0.8 mm [2]	Q (PNP) [3]	AT20E-PM111	1044484
					Q (NPN) [3]	AT20E-NM111	1046458
	100 mm	30 mm	0.05 mm [1]	1.6 mm [2]	Q (PNP) [3]	AT20E-PM331	1045990
					Q (NPN) [3]	AT20E-NM331	1046459
Edge detection, reflector	25 mm	20 mm	0.03 mm [1]	0.8 mm [2]	Q (PNP) [3]	AL20E-PM111	1046463
					Q (NPN) [3]	AL20E-NM111	1046460
	100 mm	30 mm	0.05 mm [1]	1.6 mm [2]	Q (PNP) [3]	AL20E-PM331	1046462
					Q (NPN) [3]	AL20E-NM331	1046461
Diameter detection, proximity and reflector	25 mm	20 mm	0.03 mm [1]	0.8 mm [2]	Q (PNP) [3]	AT20D-PM111	1046464
					Q (NPN) [3]	AT20D-NM111	1046466
	100 mm	30 mm	0.05 mm [1]	1.6 mm [2]	Q (PNP) [3]	AT20D-PM331	1046465
					Q (NPN) [3]	AT20D-NM331	1046467

[1] With respect to sensing distance.
[2] Minimum detectable object.
[3] Active when object detected.

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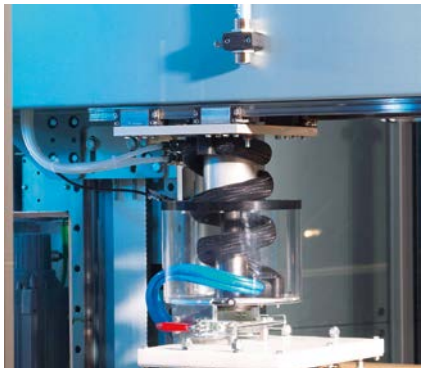
Recommended accessories

	Brief description	Model name	Part no.
Mounting brackets and mounting plates			
	Mounting bracket, stainless steel (1.4404), without mounting material, for DT20 Hi, without mounting hardware	BEF-WN-DT20	4043524
Plug connectors and cables			
Illustration may differ	Head A: Female connector, M12, 5-pin, angled Head B: cable Cable: PVC, unshielded, 2 m	DOL-1205-W02M	6008900
Reflectors			
	IRF 2000 reflective tape, 110 mm x 30 mm x 2.3 mm, without polarization effect, self-adhesive	REF-AX002	2049250
	IRF 2000 reflective tape, 110 mm x 30 mm x 3 mm, without polarization effect, self-adhesive	REF-AX002	2049249

DISTANCE SENSORS

I

Photo: viastore, Stuttgart



Distance sensors from SICK – precision for measuring tasks

SICK has a wide range of optic and ultrasonic solutions that measure from sub-microns to kilometers. They solve measuring, detecting and positioning applications using triangulation and time-of-flight modes. Sensors using triangulation are ideal for short-range, highly precise measurement. They can inspect miniature parts, thickness and shape, etc. Time-of-flight sensors work at longer distances, are not influenced by reflectivity or ambient light – perfect for positioning AS/RS, rail cars and gantry cranes.

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Selection guide distance sensors I-336

OD Mini I-338
Compact, lightweight sensor for precise measurement

OD Value I-340
Simply accurate measurement

OD Precision I-342
Three sensor heads with one controller unit: measuring each dimension with high precision

Dx35 . . . . . I-344
Larger than life performance – flexible measurement and detection up to 35 m

Dx50 . . . . . I-346
Measuring distances – reliable, precise and versatile

Dx100 . . . . . I-348
Leading in versatility and flexibility

OLM100 . . . . . I-350
Great flexibility in a small housing

UM18 . . . . . I-352
Simple setup, perfect detection

UM30 . . . . . I-354
The universal application solver

UC4 . . . . . I-356
Small, precise, ultrasonic

UC12 . . . . . I-358
Ultrasonic technology housed in an industry-proven design

ISD400 . . . . . I-360
Wireless communication – fast and easy

SELECTION GUIDE DISTANCE SENSORS

Product	Principle of operation					
	Triangulation	Time-of-flight	Optical linear	Ultrasonic	Optical data transmission	
Short range distance sensors (displacement)						
OD Mini	■					
OD Value	■					
OD Precision	■					
Mid range distance sensors						
Dx35		■				
Dx50		■				
Long range distance sensors						
Dx100		■				
Linear measurement sensors						
OLM100			■			
Ultrasonic sensors						
UM18				■		
UM30				■		
UC4				■		
UC12				■		
Optical data transmission						
ISD400					■	

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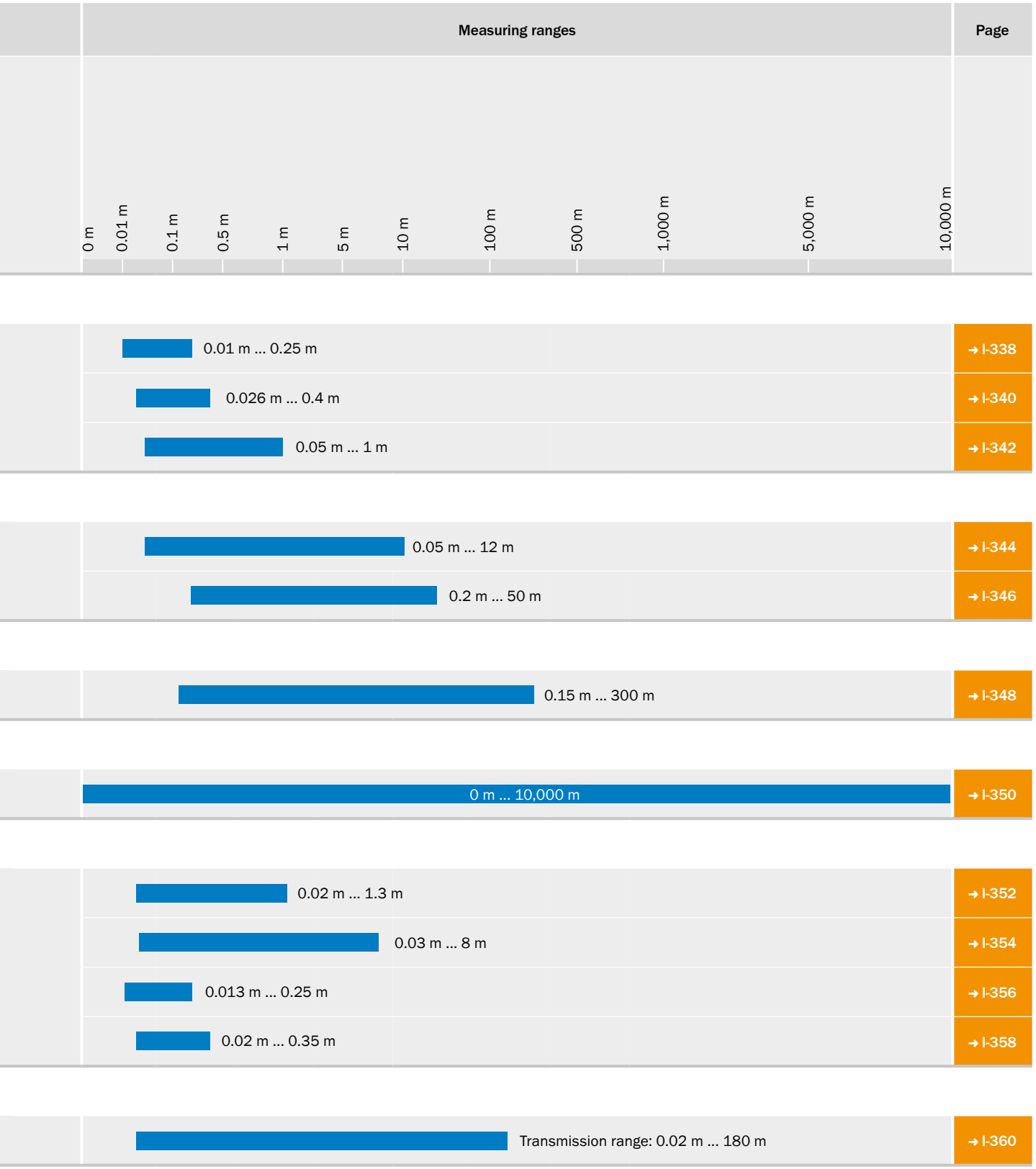
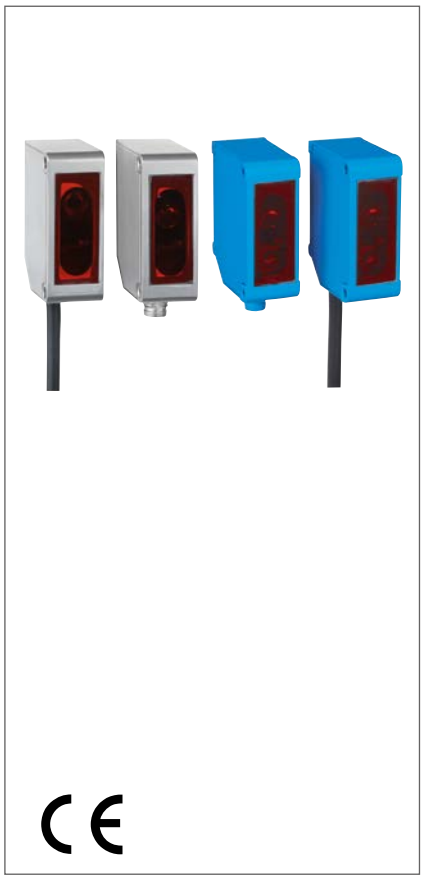

Measuring ranges
Page
0 m
0.01 m
0.1 m
0.5 m
1 m
5 m
10 m
100 m
500 m
1,000 m
5,000 m
10,000 m
0.01 m ... 0.25 m
→ I-338
0.026 m ... 0.4 m
→ I-340
0.05 m ... 1 m
→ I-342
0.05 m ... 12 m
→ I-344
0.2 m ... 50 m
→ I-346
0.15 m ... 300 m
→ I-348
0 m ... 10,000 m
→ I-350
0.02 m ... 1.3 m
→ I-352
0.03 m ... 8 m
→ I-354
0.013 m ... 0.25 m
→ I-356
0.02 m ... 0.35 m
→ I-358
Transmission range: 0.02 m ... 180 m
→ I-360



At a glance

- Compact, robust housing
- Integrated amplifier unit, no additional unit necessary
- Display and LEDs on device for visualization of current status
- Wide range of interfaces available
- Simple teach-in using display or external teaching input
- CMOS receiver unit for precise, fast measurement in the µm range
- Different measuring ranges enabling measurement from 10 mm up to 250 mm

Your benefits

- Cost-saving commissioning through simple operating concept and display
- Small installation size and low weight also allow use in highly dynamic applications
- Reduction in cabling, as no additional amplifier unit is necessary
- High machine throughput thanks to reliable measurement, regardless of brightness and color of surface
- The wide range of available interfaces enables simple integration into industrial networks
- Optimum performance even at high production speeds

I

➜ www.mysick.com/en/OD_Mini

For more information, just 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.

Ordering information

Other models and accessories ➜ www.mysick.com/en/OD_Mini

Sub product family	Housing material	Measurement range	Data interface	Connection type	Switching output	Model name	Part no.
OD Mini Core	Aluminum housing with PPSU lens	20 mm ... 50 mm	–	Cable with connector M12, 5-pin 30 cm	1 x PNP/NPN, selectable	OD1-B035C15Q15	6052309
				Male connector M8, 4-pin	1 x PNP/NPN, selectable	OD1-B035C15Q14	6052308
		50 mm ... 250 mm	–	Cable with connector M12, 5-pin 30 cm	1 x PNP/NPN, selectable	OD1-B150F0AQ15	6052327
				Male connector M8, 4-pin	1 x PNP/NPN, selectable	OD1-B150F0AQ14	6052326

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Sub product family	Housing material	Measurement range	Data interface	Connection type	Switching output	Model name	Part no.
OD Mini Prime	Aluminum housing with PPSU lens	10 mm ... 20 mm	1 x 4 mA ... 20 mA (< 300 Ω)	Cable with connector M12, 5-pin 30 cm	1 x PNP/NPN, selectable	OD1-B015C05I25	6050520
				Male connector M8, 4-pin	–	OD1-B015C05I14	6050519
		20 mm ... 50 mm	1 x 4 mA ... 20 mA (< 300 Ω)	Cable with connector M12, 5-pin 30 cm	1 x PNP/NPN, selectable	OD1-B035C15I25	6050524
				Male connector M8, 4-pin	–	OD1-B035C15I14	6050523
		50 mm ... 150 mm	1 x 4 mA ... 20 mA (< 300 Ω)	Cable with connector M12, 5-pin 30 cm	1 x PNP/NPN, selectable	OD1-B100C50I25	6050528
				Male connector M8, 4-pin	–	OD1-B100C50I14	6050527
	Stainless steel housing with PPSU lens	10 mm ... 20 mm	1 x 0 V ... 10 V (> 10 kΩ)	Cable with connector M12, 5-pin 30 cm	1 x PNP/NPN, selectable	OD1-B015H05U25	6050498
				Male connector M8, 4-pin	–	OD1-B015H05U14	6050497
			1 x 4 mA ... 20 mA (< 300 Ω)	Cable with connector M12, 5-pin 30 cm	1 x PNP/NPN, selectable	OD1-B015H05I25	6050496
				Male connector M8, 4-pin	–	OD1-B015H05I14	6050495
		20 mm ... 50 mm	1 x 0 V ... 10 V (> 10 kΩ)	Cable with connector M12, 5-pin 30 cm	1 x PNP/NPN, selectable	OD1-B035H15U25	6050506
				Male connector M8, 4-pin	–	OD1-B035H15U14	6050505
			1 x 4 mA ... 20 mA (< 300 Ω)	Cable with connector M12, 5-pin 30 cm	1 x PNP/NPN, selectable	OD1-B035H15I25	6050504
				Male connector M8, 4-pin	–	OD1-B035H15I14	6050503
		50 mm ... 150 mm	1 x 0 V ... 10 V (> 10 kΩ)	Cable with connector M12, 5-pin 30 cm	1 x PNP/NPN, selectable	OD1-B100H50U25	6050514
				Male connector M8, 4-pin	–	OD1-B100H50U14	6050513
			1 x 4 mA ... 20 mA (< 300 Ω)	Cable with connector M12, 5-pin 30 cm	1 x PNP/NPN, selectable	OD1-B100H50I25	6050512
				Male connector M8, 4-pin	–	OD1-B100H50I14	6050511

Recommended accessories

	Brief description	Model name	Part no.
Plug connectors and cables			
	Head A: Female connector, M8, 4-pin, straight Head B: cable Cable: PVC, unshielded, 2 m	DOL-0804-G02M	6009870
	Head A: Female connector, M8, 4-pin, angled Head B: cable Cable: PVC, unshielded, 2 m	DOL-0804-W02M	6009871
Illustration may differ	Head A: Female connector, M12, 5-pin, straight Head B: cable Cable: PVC, unshielded, 2 m	DOL-1205-G02M	6008899

At a glance

- Several measurement ranges from 26 mm ... 34 mm to 100 mm ... 500 mm
- CMOS receiving element for measurement independent of surface
- Easy, LED-based user and teach-in concept
- Wide range of models and a wide range of standard interfaces
- Laser technology for precise measurement of very small objects
- Compact stand-alone device
- Excellent price-performance ratio

Your benefits

- Reliable measurement independent of surface, minimizes machine downtime
- Extremely simple sensor teach-in makes setup faster and more costeffective
- Minimal space requirements and less wiring due to its compact, standalone design
- Many measurement ranges and output interfaces make it ideal for cost-effective integration into any production environment
- Low investment costs make consistent, regular quality inspection possible
- Non-contact measurement technology from a safe distance allows the inspection to be carried out directly during the production process
- Wear and damage-free inspection, due to non-contact measurement

I

➜ www.mysick.com/en/OD_Value

For more information, just 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.

Ordering information

Other models and accessories ➜ www.mysick.com/en/OD_Value

Measuring frequency: 1.3 kHz

- **Measuring range:** 100 mm ... 400 mm, 6 % ... 90 % remission
- **Resolution:** 75 µm ... 75 µm (At averaging function medium.)
- **Repeatability:** 225 µm (6 % ... 90 % remission.) (At averaging function medium.) (Constant ambient conditions.) (For best performance consider warm up time ≤ 5 minutes.)
- **Linearity:** ± 750 µm (At averaging function medium.) (Measurement on 90 % remission (ceramic, white)) (For best performance consider warm up time ≤ 5 minutes.) (When calibrated in the application regularly.)
- **Typ. light spot size (distance):** 1.8 mm x 3.5 mm (250 mm)
- **Response time:** 2 ms / 15 ms / 50 ms (Automatic sensitivity adjustment ≤ 4 ms, 6 ms for the models with measuring range of 100 mm ... 400 mm.)

Data interface	Connection type	Switching output [1]	Model name	Part no.
–	Male connector M12, 8-pin	2 x PNP (100 mA)	OD2-P250W150C0	6036647
0 V ... 10 V (≥ 10 kΩ) [2]	Male connector M12, 8-pin	2 x NPN (100 mA)	OD2-N250W150U0	6036638
		2 x PNP (100 mA)	OD2-P250W150U0	6036646
4 mA ... 20 mA (≤ 300 Ω) [2]	Male connector M12, 8-pin	2 x NPN (100 mA)	OD2-N250W150I0	6036637
		2 x PNP (100 mA)	OD2-P250W150I0	6036645
RS-422 [2]	Cable 2 m	1 x PNP (100 mA)	OD2-P250W150A2	6036644

[1] PNP: HIGH = V_S - (< 2 V) / LOW = < 2 V; NPN: HIGH = < 2 V / LOW = V_S.

[2] Resolution analog output 16 bit.

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Measuring frequency: 2 kHz

- **Response time:** 1 ms / 10 ms / 35 ms
  (Automatic sensitivity adjustment ≤ 4 ms, 6 ms for the models with measuring range of 100 mm ... 400 mm.)

Measuring range	Resolution [1]	Repeatability [1] [2] [3] [4]	Linearity [1] [4] [5] [6]	Typ. light spot size (distance)	Data interface [7]	Connection type	Switching output [8]	Model name	Part no.
26 mm ... 34 mm, 6 % ... 90 % remission	2 µm ... 2 µm	6 µm	± 8 µm	0.1 mm x 0.1 mm (30 mm)	0 V ... 10 V (≥ 10 kΩ)	Male connector M12, 8-pin	2 x PNP (100 mA)	OD2-P30W04U0	6036581
					4 mA ... 20 mA (≤ 300 Ω)	Cable 2 m	2 x PNP (100 mA)	OD2-P30W04I2	6036576
						Male connector M12, 8-pin	2 x PNP (100 mA)	OD2-P30W04I0	6036580
40 mm ... 60 mm, 6 % ... 90 % remission	5 µm ... 5 µm	15 µm	± 20 µm	0.5 mm x 1 mm (50 mm)	0 V ... 10 V (≥ 10 kΩ)	Cable 2 m	2 x NPN (100 mA)	OD2-N50W10U2	6036585
						Male connector M12, 8-pin	2 x PNP (100 mA)	OD2-P50W10U0	6036598
					4 mA ... 20 mA (≤ 300 Ω)	Cable 2 m	2 x NPN (100 mA)	OD2-N50W10I2	6036584
							2 x PNP (100 mA)	OD2-P50W10I2	6036592
						Male connector M12, 8-pin	2 x PNP (100 mA)	OD2-P50W10I0	6036597
60 mm ... 180 mm, 6 % ... 90 % remission	30 µm ... 30 µm	90 µm	± 120 µm	1 mm x 1.5 mm (120 mm)	0 V ... 10 V (≥ 10 kΩ)	Cable 2 m	2 x NPN (100 mA)	OD2-N120W60U2	6036618
						Male connector M12, 8-pin	2 x PNP (100 mA)	OD2-P120W60U0	6036630
					4 mA ... 20 mA (≤ 300 Ω)	Cable 2 m	2 x PNP (100 mA)	OD2-P120W60I2	6036625
						Male connector M12, 8-pin	2 x PNP (100 mA)	OD2-P120W60I0	6036629
					RS-422	Male connector M12, 8-pin	1 x PNP (100 mA)	OD2-P120W60A0	6036632
65 mm ... 105 mm, 6 % ... 90 % remission	10 µm ... 10 µm	30 µm	± 40 µm	0.8 mm x 1.3 mm (85 mm)	0 V ... 10 V (≥ 10 kΩ)	Cable 2 m	2 x PNP (100 mA)	OD2-P85W20U2	6036610
						Male connector M12, 8-pin	2 x PNP (100 mA)	OD2-P85W20U0	6036614

[1] At averaging function medium.
[2] 6 % ... 90 % remission.
[3] Constant ambient conditions.
[4] For best performance consider warm up time ≤ 5 minutes.
[5] Measurement on 90 % remission (ceramic, white)
[6] When calibrated in the application regularly.
[7] Resolution analog output 16 bit.
[8] PNP: HIGH = V_S - (< 2 V) / LOW = < 2 V; NPN: HIGH = < 2 V / LOW = V_S.

Recommended accessories

	Brief description	Model name	Part no.
Plug connectors and cables			
Illustration may differ	Head A: Female connector, M12, 8-pin, straight Head B: cable Cable: special color code, PVC, shielded, 2 m	DOL-1208-G02MF	6020663

At a glance

- Many measurement ranges from 24 mm ... 26 mm up to 300 mm ... 700 mm
- CMOS receiving element for measurement independent of surface
- High measuring accuracy and frequency
- Glass thickness measurement with just one sensor head
- Different light spot sizes
- Integrated calculations for up to three sensors
- Stand alone use via RS-422

Your benefits

- Non-contact measurement improves quality inspection during production
- Surface-independent measurement algorithms ensure minimum machine downtime, regardless of surface gloss or color
- Reduced processing times as a result of the high measuring frequency of up to 10 kHz
- Simple, cost-effective solution for challenging measuring tasks due to a variety of sensor models
- Optional stand-alone operation via RS-422 means the OD Precision offers maximum performance at lower investment costs
- High visibility LC display enables simple, cost-effective setup
- Many interfaces for simple integration into an existing production environment

➜ www.mysick.com/en/OD_Precision

For more information, just 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.

Ordering information

Other models and accessories ➜ www.mysick.com/en/OD_Precision

OD Precision sensor head

- **Response time:** 0.1 ms (Time needed for automatic sensitivity adjustment is calculated as: sampling period x 20. At default setting 100 µs (10kHz) this is <= 2ms.) (Default setting for OD5-350x100 and OD5-500x200 = 0.8 ms, 1.25 kHz likewise, all other types = 0.1 ms / 10 kHz.)

Note	Measuring range	Resolution	Repeatability	Linearity	Typ. light spot size (distance)	Model name	Part no.
OD Precision sensor head is compatible with AOD5 hardware version 1.7. and software version 4.3 (correspond with production date from Lot 1338)	110 mm ... 190 mm, 6 % ... 90 % remission; at default settings	2 µm ... 2 µm [1]	6 µm [2]	± 40 µm	Ø 180 µm (150 mm)	OD5-150T40	6049579
					0.33 mm x 1.6 mm (150 mm)	OD5-150W40	6049580

[1] Measurement on 90 % remission (ceramic, white), for OD5-25x measurement on mirror; averaging set to: 4096.

[2] Measurement on 90 % remission (ceramic, white), for OD5-25x measurement on mirror; averaging set to: 4096; constant ambient conditions.

[3] Measurement on 90 % remission (ceramic, white), for OD25-x measurement on mirror; averaging set to: 256, for OD25-x: 4096.

[4] Measurement on 90 % remission (ceramic, white), for OD25-x measurement on mirror; averaging set to: 256, for OD25-x: 4096; constant ambient conditions.

Note	Measuring range	Resolution	Repeatability	Linearity	Typ. light spot size (distance)	Model name	Part no.
OD Precision sensor head can be used with AOD5-P/N1 or stand-alone via RS-422	24 mm ... 26 mm, 6 % ... 90 % remission; at default settings	0.02 µm ... 0.02 µm [3]	0.06 µm [4]	± 1.6 µm [1]	25 µm x 35 µm (25 mm)	OD5-25T01	6035975
					100 µm x 700 µm (25 mm)	OD5-25W01	6035976
	25 mm ... 35 mm, 6 % ... 90 % remission; at default settings	0.2 µm ... 0.2 µm [1]	0.6 µm [2]	± 8 µm [1]	30 µm x 100 µm (30 mm)	OD5-30T05	6035977
					260 µm x 1,000 µm (30 mm)	OD5-30W05	6035978
	65 mm ... 105 mm, 6 % ... 90 % remission; at default settings	1 µm ... 1 µm [1]	3 µm [2]	± 20 µm [1]	70 µm x 290 µm (85 mm)	OD5-85T20	6035979
					260 µm x 1,200 µm (85 mm)	OD5-85W20	6035980
	250 mm ... 450 mm, 6 % ... 90 % remission; at default settings	5 µm ... 5 µm [1]	15 µm [2]	± 160 µm [1]	700 µm x 2,400 µm (350 mm)	OD5-350W100	6035981
	300 mm ... 700 mm, 6 % ... 90 % remission; at default settings	10 µm ... 10 µm [1]	30 µm [2]	± 400 µm [1]	1,000 µm x 3,700 µm (500 mm)	OD5-500W200	6035982

[1] Measurement on 90 % remission (ceramic, white), for OD5-25x measurement on mirror; averaging set to: 4096.

[2] Measurement on 90 % remission (ceramic, white), for OD5-25x measurement on mirror; averaging set to: 4096; constant ambient conditions.

[3] Measurement on 90 % remission (ceramic, white), for OD25-x measurement on mirror; averaging set to: 256, for OD25-x: 4096.

[4] Measurement on 90 % remission (ceramic, white), for OD25-x measurement on mirror; averaging set to: 256, for OD25-x: 4096; constant ambient conditions.

OD Precision controller unit

- **Note:** OD Precision sensor head can be used with AOD5-P/N1 or stand-alone via RS-422

Model name	Part no.
AOD5-N1	6035984
AOD5-P1	6035985

Recommended accessories

	Brief description	Model name	Part no.
Plug connectors and cables			
	Head A: Female connector, M12, 12-pin, straight Head B: male connector, M12, 12-pin, straight Cable: RS-422, PVC, shielded, 2 m OD Precision specific	DSL-1212-G02M	6035986
	Head A: male connector, 50-pin, straight Head B: cable Cable: PVC, shielded, 3 m In- and output expansion cable for AOD5-P/N1 (OD Precision)	IO-EXP-AOD5	6035990
	Head A: male connector, 12-pin Head B: terminal connector, 12-pin Cable: unshielded Terminal block for AOD5-P/N1 (OD Precision)	TERM.-AOD5	6035989

At a glance

- Maximum reliability, immunity to ambient light, and best price/performance ratio thanks to HDDM™ technology
- Measuring range of 0.05 m to 12 m for natural objects or 0.2 m to 35 m on reflective tape
- Devices with analog and switching output, or just switching
- Infrared or red laser in class 1 or class 2
- Repeatability: 0.5 mm to 5 mm
- Small housing size
- IO-Link

Your benefits

- Precise and reliable measurement regardless of object color extends run time and process quality
- A small size and blind zone make flexible mounting possible when space is limited
- Optimum solution thanks to flexible settings for speed, range and repeatability
- Flexible interface use: 4 mA to 20 mA, 0 V to 10 V, PNP output, NPN output, or IO-Link – making machine integration simple
- Offering easy alignment, optimal performance or inconspicuous measurement, versatile light senders make it an ideal solution for all scenarios
- Low investment costs and high performance levels guarantee a quick return on investment
- IO-Link offers full process control, from commissioning to service
- A wide variety of control options ensures rapid commissioning and fast batch changes

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For more information, just 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.

Ordering information

Other models and accessories ➜ **www.mysick.com/en/Dx35**

Measuring range	Analog output [3]	Switching output [4] [5]	Response time [6] [7]	Variant	Model name	Part no.
50 mm ... 12,000 mm, 90 % remision [1] [2] 50 mm ... 5,300 mm, 18 % remission 50 mm ... 3,100 mm, 6 % remission	1 x 4 mA ... 20 mA (≤ 450 Ω) / 1 x 0 V ... 10 V (≥ 50 kΩ) / –	1 x / 2 x push-pull: PNP/NPN (100 mA), IO-Link [3]	2.5 ms / 6.5 ms / 12.5 ms / 24.5 ms / 96.5 ms	Red laser, class 2	DT35-B15251	1057652
			4.5 ms / 12.5 ms / 24.5 ms / 48.5 ms / 192.5 ms	Red laser, class 1	DT35-B15551	1057651
			2.5 ms / 6.5 ms / 12.5 ms / 24.5 ms / 96.5 ms	Infrared laser, class 1	DT35-B15851	1057653
	–	2 x push-pull: PNP/NPN (100 mA), IO-Link [8]		Red laser, class 2	DS35-B15221	1057655
			4.5 ms / 12.5 ms / 24.5 ms / 48.5 ms / 192.5 ms	Red laser, class 1	DS35-B15521	1057654
			2.5 ms / 6.5 ms / 12.5 ms / 24.5 ms / 96.5 ms	Infrared laser, class 1	DS35-B15821	1057656
200 mm ... 35,000 mm, on reflective tape "Diamond Grade" [2]	1 x 4 mA ... 20 mA (≤ 450 Ω) / 1 x 0 V ... 10 V (≥ 50 kΩ) / –	1 x / 2 x push-pull: PNP/NPN (100 mA), IO-Link [8]	2.5 ms / 6.5 ms / 12.5 ms / 24.5 ms / 96.5 ms	Red laser, class 1	DL35-B15552	1057657
				Infrared laser, class 1	DL35-B15852	1057658
	–	2 x push-pull: PNP/NPN (100 mA), IO-Link [8]		Red laser, class 1	DR35-B15522	1057659
				Infrared laser, class 1	DR35-B15822	1057660

[1] For speed setting Slow.
[2] See characteristic curves repeatability.
[3] Output $Q_{2,}$ selectable: 4 mA ... 20 mA / 0 V ... 10 V / switching output.
[4] Output Q short-circuit protected.
[5] Voltage drop < 3 V.
[6] Dependent on the set speed: Super Fast ... Super Slow.
[7] Lateral entry of object into measuring range.
[8] Output $Q_{2,}$ selectable: 4 mA ... 20 mA / 0 V ... 10 V / switching output / Q_1 not/ not active.

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Recommended accessories

	Brief description	Model name	Part no.
Mounting brackets and mounting plates			
	Mounting bracket, steel, zinc coated, Steel, zinc coated, mounting hardware for the sensor included	BEF-WN-DX50	2048370
Terminal and alignment brackets			
	Alignment unit, steel, zinc coated, Steel, zinc coated, mounting hardware for the sensor included	BEF-AH-DX50	2048397
Universal bar clamp systems			
	Plate N02 for universal clamp bracket, Zinc plated steel (sheet), Diecast zinc (clamp), Universal clamp, mounting hardware	BEF-KHS-N02	2051608
Plug connectors and cables			
Illustration may differ	Head A: Female connector, M12, 5-pin, straight Head B: cable Cable: PVC, unshielded, 2 m	DOL-1205-G02M	6008899
Illustration may differ	Head A: Female connector, M12, 5-pin, angled Head B: cable Cable: PVC, unshielded, 2 m	DOL-1205-W02M	6008900
Reflectors			
	Reflector plate, reflective tape “Diamond Grade”, 330 mm x 330 mm, material base plate: aluminum, screw connection, Screw-on, 4 hole mounting	PL240DG	1017910
	Reflective tape “Diamond Grade”, self-adhesive, customizable size by sheet, 74.9 cm x 91.4 cm, self-adhesive [1]	REF-DG-K	4019634

[1] Customizable length by sheet. Width max. 74.9 cm, length max. 91.4 cm.

At a glance

- HDDM™ technology offers best reliability, immunity to ambient light and price/performance ratio
- Measurement ranges of 10 or 20 m directly onto the object or even 50 m on reflector
- Different performance levels depending on product and laser class chosen
- Different interfaces: switching, analog or serial interface
- Display with intuitive and consistent operating concept
- Robust die-cast zinc metal housing
- Operating temperature from –30 °C to +65 °C

Your benefits

- Wide measurement ranges up to 10, 20 or 50 m in combination with different interfaces allow an easy and fast integration in any production environment
- Highly reliable and precise measurement helps to increase process quality and stability
- High measurement or switching frequencies enable a fast material flow
- Dx50 product family is based on a common platform, offering multiple performance levels, making it easy to accommodate future changes
- Intuitive setup via display or remote teach reduces installation time and costs
- Temperature range from –30 °C to +65 °C allows for outdoor use without additional cooling or heating
- Up to 40 klx ambient light immunity – allows for use in optically challenging environments

➜ www.mysick.com/en/Dx50

For more information, just 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.

Ordering information

Other models and accessories ➜ www.mysick.com/en/Dx50

Measuring range	Analog output	Switching output [1]	Response time	Model name	Part no.
200 mm ... 10,000 mm, 90 % remision 200 mm ... 6,500 mm, 18 % remission 200 mm ... 4,000 mm, 6 % remission	1 x 4 mA ... 20 mA (≤ 300 Ω)	1 x PNP (100 mA) [2]	20 ms / 30 ms [3] [4]	DT50-P1113	1044369
	1 x 0 V ... 10 V (≥ 5 kΩ)	1 x PNP (100 mA) [2]	20 ms / 30 ms [3] [4]	DT50-P1114	1047581
	1 x 4 mA ... 20 mA (≤ 300 Ω)	1 x NPN (100 mA) [5]	20 ms / 30 ms [3] [4]	DT50-N1113	1047396
	1 x 0 V ... 10 V (≥ 5 kΩ)	1 x NPN (100 mA) [5]	20 ms / 30 ms [3] [4]	DT50-N1114	1047582
200 mm ... 10,000 mm, 90 % remision 200 mm ... 5,000 mm, 18 % remission 200 mm ... 2,500 mm, 6 % remission	1 x 4 mA ... 20 mA (≤ 300 Ω)	1 x PNP (100 mA) [2]	20 ms / 30 ms [3] [4]	DT50-P1123	1047118
	1 x 0 V ... 10 V (≥ 5 kΩ)	1 x PNP (100 mA) [2]	20 ms / 30 ms [3] [4]	DT50-P1124	1047616
	1 x 4 mA ... 20 mA (≤ 300 Ω)	1 x NPN (100 mA) [5]	20 ms / 30 ms [3] [4]	DT50-N1123	1047397
	1 x 0 V ... 10 V (≥ 5 kΩ)	1 x NPN (100 mA) [5]	20 ms / 30 ms [3] [4]	DT50-N1124	1047617
200 mm ... 20,000 mm, 90 % remision 200 mm ... 8,500 mm, 18 % remission 200 mm ... 5,000 mm, 6 % remission	1 x 4 mA ... 20 mA (≤ 300 Ω)	1 x PNP (100 mA) [2]	15 ms / 30 ms / 80 ms [4] [6]	DT50-P2113	1047314
		1 x NPN (100 mA) [5]	15 ms / 30 ms / 80 ms [4] [6]	DT50-N2113	1047398

[1] Output Q short-circuit protected.
[2] PNP: HIGH = V_S - (< 2.5 V) / LOW = 0 V.
[3] Dependent on the set average: fast/slow.
[4] Lateral entry of object into measuring range.
[5] NPN: HIGH = < 2.5 V / LOW = V_S.
[6] Dependent on the set average: fast/medium/slow.
[7] On reflective tape "Diamond Grade"
[8] Dependent on the set function MF: switching output 2 / laser off, external teach.

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Measuring range	Analog output	Switching output [1]	Response time	Model name	Part no.
200 mm ... 13,000 mm, 90 % remision 200 mm ... 5,800 mm, 18 % remission 200 mm ... 3,400 mm, 6 % remission	1 x 4 mA ... 20 mA (≤ 300 Ω)	1 x PNP (100 mA) [2]	15 ms / 30 ms / 80 ms [4] [6]	DT50-P2123	1047399
		1 x NPN (100 mA) [5]	15 ms / 30 ms / 80 ms [4] [6]	DT50-N2123	1047400
200 mm ... 10,000 mm, 90 % remision 200 mm ... 6,000 mm, 18 % remission 200 mm ... 4,000 mm, 6 % remission	–	2 x PNP (100 mA) [2]	10 ms / 50 ms [3]	DS50-P1112	1047402
		2 x NPN (100 mA) [5]	10 ms / 50 ms [3]	DS50-N1112	1047404
		2 x PNP (100 mA) [2]	20 ms / 100 ms [3]	DS50-P1122	1047405
		2 x NPN (100 mA) [5]	20 ms / 100 ms [3]	DS50-N1122	1047406
200 mm ... 50,000 mm, on reflective tape “Diamond Grade” [7]	1 x 4 mA ... 20 mA (≤ 300 Ω)	1 x PNP (100 mA) [2]	15 ms / 30 ms [3] [4]	DL50-P1123	1047361
		1 x NPN (100 mA) [5]	15 ms / 30 ms [3] [4]	DL50-N1123	1047401
	–	2 x / 1 x PNP (100 mA) [2] [8]	10 ms / 40 ms / 160 ms [4] [6]	DL50-P2225	1048418
		2 x / 1 x NPN (100 mA) [5] [8]	10 ms / 40 ms / 160 ms [4] [6]	DL50-N2225	1048419
				DL50-N2228	1058987
		2 x / 1 x PNP (100 mA) [2] [8]	10 ms / 40 ms / 160 ms [4] [6]	DL50-P2228	1058986

[1] Output Q short-circuit protected.
[2] PNP: HIGH = V_S - (< 2.5 V) / LOW = 0 V.
[3] Dependent on the set average: fast/slow.
[4] Lateral entry of object into measuring range.
[5] NPN: HIGH = < 2.5 V / LOW = V_S.
[6] Dependent on the set average: fast/medium/slow.
[7] On reflective tape “Diamond Grade”
[8] Dependent on the set function MF: switching output 2 / laser off, external teach.

Recommended accessories

	Brief description	Model name	Part no.
Terminal and alignment brackets			
	Alignment unit, steel, zinc coated, Steel, zinc coated, mounting hardware for the sensor included	BEF-AH-DX50	2048397
Plug connectors and cables			
Illustration may differ	Head A: Female connector, M12, 5-pin, straight Head B: cable Cable: PVC, unshielded, 2 m	DOL-1205-G02M	6008899
Illustration may differ	Head A: Female connector, M12, 5-pin, angled Head B: cable Cable: PVC, unshielded, 2 m	DOL-1205-W02M	6008900
	Head A: Female connector, M12, 8-pin, straight Head B: cable Cable: TPU, halogen-free, unshielded, 2 m	DOL-1208-G02MAH1	6032448
Reflectors			
	Reflector plate, reflective tape “Diamond Grade”, 330 mm x 330 mm, material base plate: aluminum, screw connection, Screw-on, 4 hole mounting	PL240DG	1017910

At a glance

- 3-axis alignment bracket with quick lock system
- SpeedCon™ and standard M12 electrical connections
- Small and rugged metal housing
- Display with intuitive menu and easy-to-see status LEDs
- Pre-failure and diagnostic data available
- Numerous fieldbus and Ethernet interfaces
- Elongated holes for precise adjustment of sensor offset (or “home position”)
- Versatile accessories

Your benefits

- 3-axis alignment bracket ensures fast alignment and easy exchange, reducing maintenance and setup costs
- Enhanced closed-loop behavior offers highest performance and productivity
- Fast setup with an intuitive and easy-to-use display guarantees the perfect sensor settings
- Pre-failure and extensive diagnostic data allow for preventive maintenance, ensuring the highest machine uptime
- Numerous fieldbus and Ethernet-based interfaces offer the highest flexibility and fast communication for maximum efficiency
- Small, rugged metal housing and SpeedCon™ compatible connectors ensure hassle-free installation – even in confined spaces
- Numerous accessories allow flexible use and guarantee high operation functionality

I

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Ordering information

Other models and accessories ➜ **www.mysick.com/en/Dx100**

Ambient temperature	Power consumption	Measuring range	Accuracy [2]	Repeatability [3]	Interface	Model name	Part no.
Operation –20 °C ... +55 °C [1] Operation with cooling case –20 °C ... +75 °C Storage –40 °C ... +75 °C	At 24 V DC < 250 mA	0.15 m ... 100 m, On reflective tape “Diamond Grade”	± 2 mm	0.5 mm	EtherNet/IP	DL100-21AA2110	1066427
		0.15 m ... 200 m, On reflective tape “Diamond Grade”	± 2.5 mm	1 mm	EtherNet/IP	DL100-22AA2110	1066428
		0.15 m ... 300 m, On reflective tape “Diamond Grade”	± 3 mm	2 mm	EtherNet/IP	DL100-23AA2110	1066429
		0.15 m ... 100 m, On reflective tape “Diamond Grade”	± 2 mm	0.5 mm	SSI	DL100-21AA2101	1052684
		0.15 m ... 300 m, On reflective tape “Diamond Grade”	± 3 mm	2 mm	SSI	DL100-23AA2101	1052696
Operation with heating –40 °C ... +55 °C Operation with cooling case –40 °C ... +75 °C Storage –40 °C ... +75 °C	At 24 V DC < 1,000 mA	0.15 m ... 100 m, On reflective tape “Diamond Grade”	± 2 mm	0.5 mm	RS-422	DL100-21HA2103	1052689

[1] Temperatures < –10 °C require warm-up time of typ. 7 minutes.

[2] From 150 mm ... 180 mm measuring range the accuracy can reach ± 4 mm.

[3] Statistical error 1 σ, environmental conditions constant, min. warm-up time 10 min.

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Ambient temperature	Power consumption	Measuring range	Accuracy [2]	Repeatability [3]	Interface	Model name	Part no.
Operation –20 °C ... +55 °C [1] Operation with cooling case –20 °C ... +75 °C Storage –40 °C ... +75 °C	At 24 V DC < 250 mA	0.15 m ... 100 m, On reflective tape "Diamond Grade"	± 2 mm	0.5 mm	PROFINET	DL100-21AA2112	1058164
Operation with heating –40 °C ... +55 °C Operation with cooling case –40 °C ... +75 °C Storage –40 °C ... +75 °C	At 24 V DC < 1,000 mA	0.15 m ... 300 m, On reflective tape "Diamond Grade"	± 3 mm	2 mm	PROFINET	DL100-23HA2112	1058169
Operation –20 °C ... +55 °C [1] Operation with cooling case –20 °C ... +75 °C Storage –40 °C ... +75 °C	At 24 V DC < 250 mA	0.15 m ... 300 m, On reflective tape "Diamond Grade"	± 3 mm	2 mm	PROFIBUS DP	DL100-23AA2102	1052698
Operation with heating –40 °C ... +55 °C Operation with cooling case –40 °C ... +75 °C Storage –40 °C ... +75 °C	At 24 V DC < 1,000 mA	0.15 m ... 300 m, On reflective tape "Diamond Grade"	± 3 mm	2 mm	CANopen	DL100-23HA2109	1060391

[1] Temperatures < –10 °C require warm-up time of typ. 7 minutes.

[2] From 150 mm ... 180 mm measuring range the accuracy can reach ± 4 mm.

[3] Statistical error 1 σ, environmental conditions constant, min. warm-up time 10 min.

Recommended accessories

	Brief description	Model name	Part no.
Terminal and alignment brackets			
	Alignment unit for Dx100, steel, zinc coated, incl. mounting material, Steel, zinc coated	BEF-AH-DX100	2058653
Sets and kits			
	Accessory kit for upgrade from DME3000 PROFIBUS to Dx100 PROFIBUS	DME3000 Dx100 PROFIBUS upgrade kit	2065222
	Accessory kit for upgrade from DME3000 SSI/RS-422 to Dx100 SSI/RS-422	DME3000 Dx100 SSI/ RS-422 upgrade kit	2065223
	Accessory kit for upgrade from DME4000/5000 PROFIBUS to Dx100 PROFIBUS	DME4000/5000 Dx100 PROFIBUS upgrade kit	2065220
	Accessory kit for upgrade from DME4000/5000 SSI/RS-422 to Dx100 SSI/ RS-422	DME4000/5000 Dx100 SSI/ RS-422 upgrade kit	2065221

At a glance

- Highly accurate non-contact bar code positioning system
- Travel speed of up to 10 m/s can be achieved
- Wear and maintenance-free thanks to camera technology
- Adjustable resolution as low as 0.1 mm
- Precise positioning up to 10,000 m
- Compact, extremely rugged magnesium housing
- Wide range of interfaces: SSI, RS-422, RS-485, and CANopen
- Large temperature range from –30°C to +60°C

Your benefits

- High travel speed linked to precise positioning increases system efficiency and improves throughput
- Camera-based system with no moving parts increases the sensor's service life, thus reducing lifecycle costs considerably
- Minimal housing dimensions combined with the latest industrial interfaces ensure integration into almost any system design, even where space is limited
- Serial interfaces (RS-422, RS-485, SSI, and CANopen) offer highest flexibility and easiest system integration, hence saving costs for interface converters and protocol adaption
- The large temperature range from –30°C to +60°C offers reliable use in many applications

→ www.mysick.com/en/OLM100

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Ordering information

Other models and accessories → www.mysick.com/en/OLM100

Sensing distance	Bar code width	Output rate	Resolution	Data interface	Model name	Part no.
100 mm ± 20 mm (to bar code tape, 30 mm bar code width)	30 mm	5 ms	0.1 mm, 1 mm	RS-485	OLM100-1005	1046580
		1 ms	0.1 mm, 1 mm	SSI	OLM100-1001	1047411
		5 ms	0.1 mm, 1 mm	RS-422	OLM100-1003	1047412
				CANopen	OLM100-1006	1047413
			1 mm	RS-485	OLM100-1005S01	1050976
130 mm ± 20 mm (to bar code tape, 40 mm bar code width)	40 mm	1 ms	0.1 mm, 1 mm	SSI	OLM100-1051	1050136

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Recommended accessories

	Brief description	Model name	Part no.
Plug connectors and cables			
	Head A: male connector, M12, 4-pin, angled, D-coded Head B: male connector, RJ45, 8-pin, straight Cable: EtherNet/IP, TPU, halogen-free, shielded, 2 m	SSL-2J04-H02ME	6047911
Codes			
	30 mm, height: 30 mm, measuring range: customer-specific	Bar code tape	5322556
	30 mm, height: 30 mm, measuring range: 0 m ... 5 m	Bar code tape	5324252
	30 mm, height: 30 mm, measuring range: 0 m ... 20 m	Bar code tape	5324069
	30 mm, height: 30 mm, measuring range: 20 m ... 40 m	Bar code tape	5324070
	30 mm, height: 30 mm, measuring range: 40 m ... 60 m	Bar code tape	5324071
	30 mm, height: 30 mm, measuring range: 60 m ... 80 m	Bar code tape	5324072
	30 mm, height: 30 mm, measuring range: 80 m ... 100 m	Bar code tape	5324073
	30 mm, height: 30 mm, measuring range: 100 m ... 120 m	Bar code tape	5324074
	30 mm, height: 40 mm, measuring range: customer-specific	Bar code tape	5323951
	30 mm, height: 40 mm, measuring range: 0 m ... 5 m	Bar code tape	5324251
	30 mm, height: 40 mm, measuring range: 0 m ... 10 m	Bar code tape	5328824
	30 mm, height: 40 mm, measuring range: 0 m ... 20 m	Bar code tape	5324090
	30 mm, height: 40 mm, measuring range: 20 m ... 40 m	Bar code tape	5324091
	30 mm, height: 40 mm, measuring range: 40 m ... 60 m	Bar code tape	5324092
	30 mm, height: 40 mm, measuring range: 60 m ... 80 m	Bar code tape	5324093
	30 mm, height: 40 mm, measuring range: 80 m ... 100 m	Bar code tape	5324094

At a glance

- Reliable measurement independent of material color, transparency, gloss and ambient light
- Four ranges up to 1,300 mm
- Short metal or plastic M18 housing with a length of 41 mm
- Straight or right-angle version
- High immunity to dirt, dust, humidity and fog
- PNP/NPN switching output, analog output or push-pull switching output with IO-Link
- Synchronization and multiplex modes are available

Your benefits

- Four sensing ranges up to 1,300 mm provide a range of flexible mounting options
- Easy machine integration due to short M18 housing available in straight or right-angle versions
- Intelligent measurement filters and versions with temperature compensation guarantee reliable measurement results for maximum process reliability
- Solid, one-piece housing secures highest machine availability
- Easy system integration due to a wide range of available output signals
- Synchronization or multiplex mode enables simultaneous operation of up to 10 sensors, improving application flexibility and process reliability
- Unintentional adjustments to sensor settings are eliminated since teach-in process is done with an external wire
- Variety of application solutions due to insensitivity and reliability of ultrasound technology

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For more information, just 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.

Ordering information

Other models and accessories ➜ **www.mysick.com/en/UM18**

- **Sub product family:** UM18-2 Pro

Working range, limiting range	Response time	Output rate	Sending axis	Switching output [1] [2]	Analog output	Model name	Part no.
20 mm ... 150 mm, 250 mm	32 ms	8 ms	Straight	1 x push-pull: PNP/NPN (100 mA)	–	UM18-21712A211	6048384
			Angled	1 x push-pull: PNP/NPN (100 mA)	–	UM18-21712A212	6048385
			Straight	–	1 x 4 mA ... 20 mA (≤ 500 Ω) [3] [4]	UM18-217126111	6048386
			Angled	–	1 x 4 mA ... 20 mA (≤ 500 Ω) [3] [4]	UM18-217126112	6048387
			Straight	–	1 x 0 V ... 10 V (≥ 100 kΩ) [4]	UM18-217127111	6048388
			Angled	–	1 x 0 V ... 10 V (≥ 100 kΩ) [4]	UM18-217127112	6048389

[1] Output Q short-circuit protected.

[2] Push-Pull: PNP/NPN HIGH = U_V - (< 4 V) / LOW < 2 V.

[3] For 4 mA ... 20 mA and V_s ≤ 20 V max. load ≤ 100 Ω.

[4] Subsequent smoothing of the analog output, depending on the application, may increase the response time by up to 200 %.

Working range, limiting range	Response time	Output rate	Sending axis	Switching output [1] [2]	Analog output	Model name	Part no.
30 mm ... 250 mm, 350 mm	32 ms	8 ms	Straight	1 x push-pull: PNP/NPN (100 mA)	–	UM18-21112A211	6048390
			Angled	1 x push-pull: PNP/NPN (100 mA)	–	UM18-21112A212	6048391
			Straight	–	1 x 4 mA ... 20 mA (≤ 500 Ω) [3] [4]	UM18-211126111	6048392
			Angled	–	1 x 4 mA ... 20 mA (≤ 500 Ω) [3] [4]	UM18-211126112	6048393
			Straight	–	1 x 0 V ... 10 V (≥ 100 kΩ) [4]	UM18-211127111	6048394
			Angled	–	1 x 0 V ... 10 V (≥ 100 kΩ) [4]	UM18-211127112	6048395
65 mm ... 350 mm, 600 mm	64 ms	16 ms	Straight	1 x push-pull: PNP/NPN (100 mA)	–	UM18-21212A211	6048396
			Angled	1 x push-pull: PNP/NPN (100 mA)	–	UM18-21212A212	6048397
			Straight	–	1 x 4 mA ... 20 mA (≤ 500 Ω) [3] [4]	UM18-212126111	6048398
			Angled	–	1 x 4 mA ... 20 mA (≤ 500 Ω) [3] [4]	UM18-212126112	6048399
			Straight	–	1 x 0 V ... 10 V (≥ 100 kΩ) [4]	UM18-212127111	6048400
			Angled	–	1 x 0 V ... 10 V (≥ 100 kΩ) [4]	UM18-212127112	6048401
120 mm ... 1,000 mm, 1,300 mm	80 ms	20 ms	Straight	1 x push-pull: PNP/NPN (100 mA)	–	UM18-21812A211	6048402
			Angled	1 x push-pull: PNP/NPN (100 mA)	–	UM18-21812A212	6048403
			Straight	–	1 x 4 mA ... 20 mA (≤ 500 Ω) [3] [4]	UM18-218126111	6048404
			Angled	–	1 x 4 mA ... 20 mA (≤ 500 Ω) [3] [4]	UM18-218126112	6048405
			Straight	–	1 x 0 V ... 10 V (≥ 100 kΩ) [4]	UM18-218127111	6048406
			Angled	–	1 x 0 V ... 10 V (≥ 100 kΩ) [4]	UM18-218127112	6048407

[1] Output Q short-circuit protected.

[2] Push-Pull: PNP/NPN HIGH = U_V - (< 4 V) / LOW < 2 V.

[3] For 4 mA ... 20 mA and V_s ≤ 20 V max. load ≤ 100 Ω.

[4] Subsequent smoothing of the analog output, depending on the application, may increase the response time by up to 200 %.

Recommended accessories

	Brief description	Model name	Part no.
Programming and configuration tools			
	Tool for visualization, configuration and cloning, 3-digit LED display, supply voltage: DV 9 V ... 30 V	Connect+ adapter (CPA)	6037782

At a glance

- Integrated time-of-flight technology detects objects such as glass, liquids and transparent foils, independent of color
- Range up to 8,000 mm
- Display enables fast and flexible sensor adjustment
- Immune to dust, dirt and fog
- Available with combined analog and digital outputs
- Synchronization and multiplexing
- Adjustable sensitivity
- Three operation modes: Distance to Object (DtO), Window (Wnd) or Object between sensor and background (ObSB)

Your benefits

- Easy machine integration due to compact size
- Various setup options ensure flexible adaptation to applications
- Multiplex mode eliminates crosstalk interference for consistent and reliable detection and high measurement reliability
- Synchronization mode allows multiple sensors to work as one large sensor, providing a low-cost solution for area detection
- Display enables setup prior to installation, reducing on-site installation time
- Integrated temperature compensation and time-of-flight technology ensure high measurement accuracy
- ObSB-mode enables detection of any object between the sensor and a taught background

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➜ www.mysick.com/en/UM30

For more information, just 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.

Ordering information

Other models and accessories ➜ www.mysick.com/en/UM30

- **Sub product family:** UM30-2
- **Sending axis:** straight

Working range, limiting range	Response time	Output rate	Switching output [1]	Analog output	Model name	Part no.
30 mm ... 250 mm, 350 mm	50 ms	8 ms	1 x PNP (200 mA) [2]	–	UM30-211111	6037660
			2 x PNP (200 mA) [2]	–	UM30-211112	6037664
			–	1 x 0 V ... 10 V (≥ 100 kΩ) [3] 1 x 4 mA ... 20 mA (≤ 500 Ω) [3] [4] [5]	UM30-211113	6036916
			1 x PNP (200 mA) [2]		UM30-211118	6036921
65 mm ... 350 mm, 600 mm	70 ms	16 ms	1 x PNP (200 mA) [2]	–	UM30-212111	6037661
			2 x PNP (200 mA) [2]	–	UM30-212112	6037665
			–	1 x 0 V ... 10 V (≥ 100 kΩ) [3] 1 x 4 mA ... 20 mA (≤ 500 Ω) [3] [4] [5]	UM30-212113	6036917
			1 x NPN (200 mA) [6]	–	UM30-212115	6037670
			1 x PNP (200 mA) [2]	1 x 0 V ... 10 V (≥ 100 kΩ) [3] 1 x 4 mA ... 20 mA (≤ 500 Ω) [3] [4] [5]	UM30-212118	6036922

[1] Output Q short-circuit protected.

[2] PNP: HIGH = V_S - (< 2 V) / LOW = 0 V.

[3] Automatic selection of analog current or voltage output dependent on load.

[4] For 4 mA ... 20 mA and V_s ≤ 20 V max. load ≤ 100 Ω.

[5] Subsequent smoothing of the analog output, depending on the application, may increase the response time by up to 200 %.

[6] NPN: HIGH ≤ 2 V / LOW = V_S.

Working range, limiting range	Response time	Output rate	Switching output [1]	Analog output	Model name	Part no.
200 mm ... 1,300 mm, 2,000 mm	110 ms	23 ms	1 x PNP (200 mA) [2]	–	UM30-213111	6037537
			2 x PNP (200 mA) [2]	–	UM30-213112	6037666
			–	1 x 0 V ... 10 V (≥ 100 kΩ) [3] 1 x 4 mA ... 20 mA (≤ 500 Ω) [3] [4] [5]	UM30-213113	6036918
			2 x NPN (200 mA) [6]	–	UM30-213114	6037676
			1 x NPN (200 mA) [6]	–	UM30-213115	6037671
			1 x PNP (200 mA) [2]	1 x 0 V ... 10 V (≥ 100 kΩ) [3] 1 x 4 mA ... 20 mA (≤ 500 Ω) [3] [4] [5]	UM30-213118	6036923
350 mm ... 3,400 mm, 5,000 mm	180 ms	43 ms	1 x PNP (200 mA) [2]	–	UM30-214111	6037662
			2 x PNP (200 mA) [2]	–	UM30-214112	6037667
			–	1 x 0 V ... 10 V (≥ 100 kΩ) [3] 1 x 4 mA ... 20 mA (≤ 500 Ω) [3] [4] [5]	UM30-214113	6036919
			1 x NPN (200 mA) [6]	–	UM30-214115	6037672
			1 x PNP (200 mA) [2]	1 x 0 V ... 10 V (≥ 100 kΩ) [3] 1 x 4 mA ... 20 mA (≤ 500 Ω) [3] [4] [5]	UM30-214118	6036924
600 mm ... 6,000 mm, 8,000 mm	240 ms	60 ms	1 x PNP (200 mA) [2]	–	UM30-215111	6037663
			2 x PNP (200 mA) [2]	–	UM30-215112	6037668
			–	1 x 0 V ... 10 V (≥ 100 kΩ) [3] 1 x 4 mA ... 20 mA (≤ 500 Ω) [3] [4] [5]	UM30-215113	6036920
			1 x PNP (200 mA) [2]		UM30-215118	6036925

[1] Output Q short-circuit protected.

[2] PNP: HIGH = V_S - (< 2 V) / LOW = 0 V.

[3] Automatic selection of analog current or voltage output dependent on load.

[4] For 4 mA ... 20 mA and V_s ≤ 20 V max. load ≤ 100 Ω.

[5] Subsequent smoothing of the analog output, depending on the application, may increase the response time by up to 200 %.

[6] NPN: HIGH ≤ 2 V / LOW = V_S.

Recommended accessories

	Brief description	Model name	Part no.
Programming and configuration tools			
	Tool for visualization, configuration and cloning, 3-digit LED display, supply voltage: DV 9 V ... 30 V	Connect+ adapter (CPA)	6037782

At a glance

- Integrated time-of-flight technology detects objects such as glass, liquids and transparent foils, independent of color
- Three operation modes: Distance to Object (DtO), Window (Wnd) or Object between sensor and background (ObSB)
- Immunity to dirt, dust and fog
- One PNP/NPN switching output
- Excellent background suppression

Your benefits

- Mini housing allows for quick and easy integration, even in the most confined spaces
- Immunity to dirt and dust ensures reliable object detection, even in challenging environmental conditions
- Integrated temperature compensation ensures high measurement accuracy
- Various switching outputs provide application flexibility, which increases reliability and productivity
- Full mechanical compatibility to photoelectric sensors increase application flexibility without machine modification
- Economical version available for simple, cost-sensitive applications
- Fast machine setup due to easy-to-use teach-in button

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➜ www.mysick.com/en/UC4

For more information, just 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.

Ordering information

Other models and accessories ➜ www.mysick.com/en/UC4

- **Response time:** 30 ms
- **Output rate:** 8 ms
- **Sending axis:** straight

Working range, limiting range [1]	Switching output [2]	Model name	Part no.
13 mm ... 100 mm, 150 mm	1 x PNP (200 mA) [3]	UC4-11341	6034667
	1 x NPN (200 mA) [4]	UC4-11345	6034668
13 mm ... 150 mm, 250 mm	1 x PNP (200 mA) [3]	UC4-13341	6034669
	1 x NPN (200 mA) [4]	UC4-13345	6034670

[1] Teach-in from 21 mm.

[2] Output Q short-circuit protected.

[3] PNP: HIGH = V_S - (< 2 V) / LOW = 0 V.

[4] NPN: HIGH ≤ 2 V / LOW = V_S.

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Recommended accessories

	Brief description	Model name	Part no.
Mounting brackets and mounting plates			
	Mounting bracket for wall mounting, Stainless steel 1.4571, Mounting hardware included	BEF-W4-A	2051628
Terminal and alignment brackets			
	Ball clamp bracket, Plastic, Mounting hardware included	BEF-GH-MINI02	2027128
Universal bar clamp systems			
	Plate H for universal clamp bracket, Steel, zinc coated, universal clamp and mounting hardware included	BEF-KHS-H01	2022465
Plug connectors and cables			
	Head A: Female connector, M8, 3-pin, straight Head B: cable Cable: PVC, unshielded, 2 m	DOL-0803-G02M	6010785
	Head A: Female connector, M8, 3-pin, angled Head B: cable Cable: PVC, unshielded, 2 m	DOL-0803-W02M	6008489

At a glance

- Object detection independent of material color and ambient light – even transparent foils, glass, liquids and bottles are reliably detected
- Fast and easy teach-in with single push-button
- Immune to dirt, dust and fog
- Two ambivalent switching outputs (Q, /Q)
- Excellent background suppression
- Three operation modes: Distance to Object (DtO), Window (Wnd) or Object between sensor and background (ObSB)

Your benefits

- Fast commissioning due to single-button teach-in
- Full mechanical compatibility to photoelectric sensors increase application flexibility without machine modification
- Standard proximity, window and reflection modes provide application flexibility, which increases reliability and productivity
- Integrated temperature compensation ensures high measurement accuracy
- Complementary switching outputs immediately signal broken wiring, reducing faulty production results

➜ www.mysick.com/en/UC12

For more information, just 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.

Ordering information

Other models and accessories ➜ www.mysick.com/en/UC12

- **Response time:** 30 ms
- **Output rate:** 8 ms
- **Sending axis:** straight

Working range, limiting range	Switching output [1] [2]	Model name	Part no.
20 mm ... 150 mm, 250 mm	2 x PNP (500 mA) [3]	UC12-11231	6029831
	2 x NPN (500 mA) [4]	UC12-11235	6029833
55 mm ... 250 mm, 350 mm	2 x PNP (500 mA) [3]	UC12-12231	6029832
	2 x NPN (500 mA) [4]	UC12-12235	6029834

[1] Output Q short-circuit protected.

[2] Complementary switching outputs (Q, /Q)

[3] PNP: HIGH = V_S - (< 2 V) / LOW = 0 V.

[4] NPN: HIGH ≤ 2 V / LOW = V_S.

Recommended accessories

	Brief description	Model name	Part no.
Mounting brackets and mounting plates			
	Mounting bracket, large, Stainless steel, Mounting hardware included	BEF-WG-W12	2013942
	Mounting bracket, small, Stainless steel, Mounting hardware included	BEF-WK-W12	2012938
Universal bar clamp systems			
	Plate D for universal clamp bracket, Steel, zinc coated, universal clamp and mounting hardware included	BEF-KHS-D01	2022461
	Plate L for universal clamp bracket, Steel, zinc coated, universal clamp and mounting hardware included	BEF-KHS-L01	2023057
	Plate N02 for universal clamp bracket, Zinc plated steel (sheet), Diecast zinc (clamp), Universal clamp, mounting hardware	BEF-KHS-N02	2051608
Plug connectors and cables			
Illustration may differ	Head A: Female connector, M12, 4-pin, straight Head B: cable Cable: PVC, unshielded, 2 m	DOL-1204-G02M	6009382
Illustration may differ	Head A: Female connector, M12, 4-pin, angled Head B: cable Cable: PVC, unshielded, 2 m	DOL-1204-W02M	6009383

At a glance

- PROFIBUS DP interface for the ISD400 Core
- Protocol-free Fast Ethernet interface for the ISD400 Pro
- Fast Ethernet with a transmission rate of 100 Mbps for the ISD400 Pro
- Connection and operation without opening the device
- Version with heating for use in temperatures as low as –40 °C

Your benefits

- An integrated optical and electronic alignment aid supports fast and cost-effective commissioning
- Wide operating temperature range guarantees high system throughput, even in cold stores
- Integrated PROFIBUS DP repeater for the ISD400 Core for cost-effective and straightforward multi-master configuration
- Output of operating parameters and status information via display and switching output in the ISD400 Pro to prevent unexpected failures

➜ www.mysick.com/en/ISD400

For more information, just 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.

Ordering information

Other models and accessories ➜ www.mysick.com/en/ISD400

Data interface	Data transmission rate	Transmission range	Ambient temperature operation	Power consumption	Model name	Part no.
PROFIBUS DP	3 Mbit/s	0.2 m ... 180 m	–25 °C ... +55 °C	≤ 0.4 A	ISD400-1111	1042286
			–40 °C ... +55 °C	≤ 0.8 A	ISD400-1121	1043511
Ethernet [1]	3 Mbit/s	0.2 m ... 180 m	–25 °C ... +55 °C	≤ 0.4 A	ISD400-6111	1046119
			–40 °C ... +55 °C	≤ 0.8 A	ISD400-6121	1046120
Ethernet	100 Mbit/s	0.2 m ... 150 m	–20 °C ... +55 °C	< 0.2 A	ISD400-7211	1065100
					ISD400-7212	1065101
			–40 °C ... +55 °C	< 1.3 A	ISD400-7221	1065102
					ISD400-7222	1065103

[1] Internal buffer 8 kB.

Recommended accessories

	Brief description	Model name	Part no.
Terminal and alignment brackets			
	Alignment unit for DME4000/ISD400, aluminum, anodised	BEF-DME/ISD	2046052
Plug connectors and cables			
Illustration may differ	Head A: Female connector, M12, 4-pin, straight Head B: cable Cable: PVC, unshielded, 2 m	DOL-1204-G02M	6009382

AUTOMATION LIGHT GRIDS

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SICK automation light grids – simple integration through high flexibility

Two-dimensional inspection or counting tasks are important in automation. SICK's automation light grids can be used in a number of these solutions, such as detecting and counting irregularly shaped objects, people and vehicles, and checking for presence and pallet overhang detection. The tasks are so versatile that one light grid cannot fulfill the requirements of every application. Light grids from SICK offer multiple ranges, heights, sizes, orientations, and resolutions which simplify integration through high flexibility and performance.

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	Selection guide automation light grids	**J-364**
	MLG-2 The solution for high-precision measurement tasks	**J-366**
	ELG ELG – the extremely tough and versatile light grid for standard applications	**J-368**
	FLG Two in one: sender and receiver in one housing	**J-370**
	VLC100 A new dimension of vision-based automation light grids	**J-372**
	SAS Better machine control in a small housing	**J-373**
	SPL Error-proof picking	**J-375**
	SGS Opens the door to smart sensing	**J-377**

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SELECTION GUIDE AUTOMATION LIGHT GRIDS

Product	Standard application	Special application																		
	Task		Task			Function				Minimum detectable object (MDO)										
	Object presence	Application at toll station and on industrial doors	Position determination	Pick-to-light	Measuring tasks	Sender/receiver system	Retro-reflective system	Switching	Measuring	2 mm ... 4 mm	5 mm ... 10 mm	10 mm ... 20 mm	20 mm ... 30 mm	30 mm ... 40 mm	40 mm ... 50 mm	60 mm ... 70 mm	70 mm ... 80 mm	80 mm ... 90 mm		
Measuring automation light grids																				
MLG-2	■	■			■	■		■	■	■ [1]	■	■		■		■	■	■		
Switching automation light grids																				
ELG		■	■			■		■			■ [1]	■		■		■	■			
FLG		■				■		■		■										
VLC100		■	■				■	■			■									
SAS		■				■		■					■ [1]		■					
SPL		■		■		■		■					■ [1]		■					
SGS		■	■			■		■					■ [1]		■			■		

[1] Cross beam.

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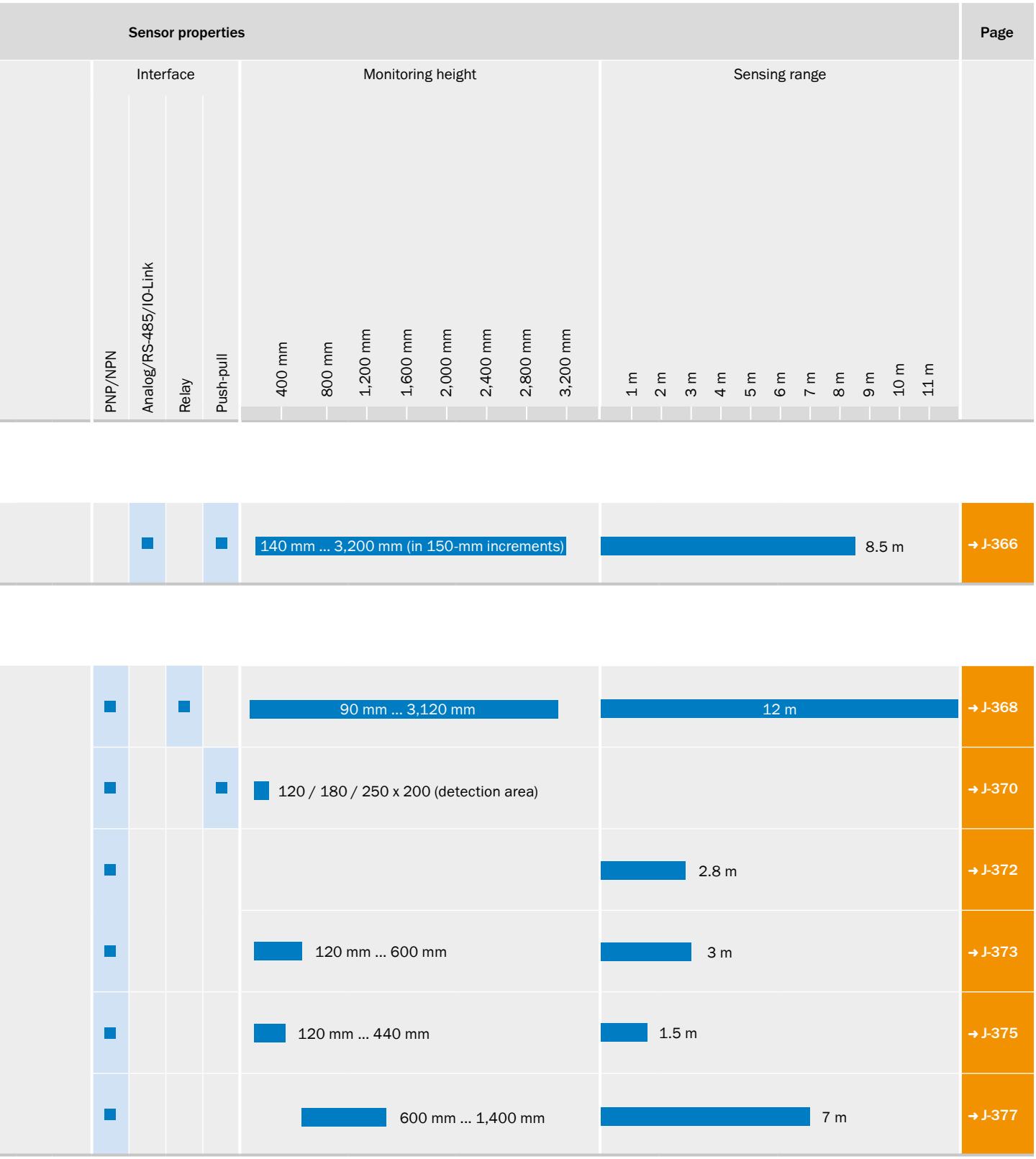
Sensor properties
Page
Interface
Monitoring height
Sensing range
PNP/NPN
Analog/RS-485/IO-Link
Relay
Push-pull
400 mm
800 mm
1,200 mm
1,600 mm
2,000 mm
2,400 mm
2,800 mm
3,200 mm
1 m
2 m
3 m
4 m
5 m
6 m
7 m
8 m
9 m
10 m
11 m
140 mm ... 3,200 mm (in 150-mm increments)
8.5 m
→ J-366
90 mm ... 3,120 mm
12 m
→ J-368
120 / 180 / 250 x 200 (detection area)
→ J-370
2.8 m
→ J-372
120 mm ... 600 mm
3 m
→ J-373
120 mm ... 440 mm
1.5 m
→ J-375
600 mm ... 1,400 mm
7 m
→ J-377

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At a glance

- High-resolution light grid: Available with beam separation of 2.5 mm (coming soon), 5 mm, 10 mm, 25 mm, and 50 mm
- Measuring field lengths from 150 mm to 3,200 mm
- "High-speed scan" function with triple scanning speed
- "Transparent mode" function for detecting transparent materials
- Cloning function
- Flexible interfaces via IO-Link, analog outputs, push-pull outputs to state-of-the-art, Ethernet-based interfaces (coming soon)
- Numerous pre-programmed measuring functions available for selection
- Temperature range from –30 °C to +55 °C

Your benefits

- The MLG-2 offers future-proof application solutions from a leading technology specialist
- Short response time for operational safety from objects traveling at high speeds
- Modular concept offers the perfect solution every time from a single source
- Easy concept: Time and cost savings due to simple configuration and quick commissioning
- Simple maintenance without the need for specialist staff thanks to the cloning function with IO-Link
- Saves energy when the machine is not in use, ensuring environmentally-friendly operation
- Quick setup thanks to menu-driven configuration via web server or display
- Integrated interfaces and function blocks make it easy to connect to bus systems

➜ www.mysick.com/en/MLG-2

For more information, just 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.

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Ordering information

Other models and accessories ➜ www.mysick.com/en/MLG-2

MLG-2 Prime

- **Connection type:** Connector M12, 5-pin

Data interface	Beam separation	Detection height	Working range	Model name	Part no.
2 x Analog + 1 x Q (IO-Link)	5 mm	145 mm	5 m	MLG05S-0145A10501	1213504
		295 mm	5 m	MLG05S-0295A10501	1213707
		745 mm	5 m	MLG05S-0745A10501	1213709
	10 mm	290 mm	5 m	MLG10S-0290A10501	1213541
		740 mm	5 m	MLG10S-0740A10501	1213710
	25 mm	575 mm	5 m	MLG25S-0575A10501	1213542
	50 mm	1,150 mm	5 m	MLG50S-1150A10501	1213479
		2,200 mm	5 m	MLG50S-2200A10501	1213508
3 x Q (IO-Link)	5 mm	145 mm	5 m	MLG05S-0145D10501	1213494
	10 mm	740 mm	5 m	MLG10S-0740D10501	1213539
	25 mm	275 mm	5 m	MLG25S-0275D10501	1213513
		725 mm	5 m	MLG25S-0725D10501	1213503
	50 mm	250 mm	5 m	MLG50S-0250D10501	1213711
		1,750 mm	5 m	MLG50S-1750D10501	1213540
		3,100 mm	5 m	MLG50S-3100D10501	1213510

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MLG-2 Pro

- **Connection type:** Connector M12, 8-pin

Data interface	Beam separation	Detection height	Working range	Model name	Part no.
2 x Analog + 2 x I/O (IO-Link)	5 mm	145 mm	5 m	MLG05A-0145B10501	1213492
		595 mm	8.5 m	MLG05A-0595B10801	1213480
		745 mm	5 m	MLG05A-0745B10501	1213438
		895 mm	8.5 m	MLG05A-0895B10801	1213633
	10 mm	590 mm	8.5 m	MLG10A-0590B10802	1213784
RS-485 + 2 x I/O (IO-Link)	5 mm	745 mm	5 m	MLG05A-0745I10501	1213478
		2,395 mm	5 m	MLG05A-2395I10501	1213502
	10 mm	140 mm	5 m	MLG10A-0140I10501	1213501
		3,140 mm	5 m	MLG10A-3140I10501	1213514
	25 mm	575 mm	5 m	MLG25A-0575I10501	1213723
4 x Q (IO-Link)	5 mm	145 mm	5 m	MLG05A-0145R10501	1213493
		295 mm	5 m	MLG05A-0295R10501	1213718
	10 mm	440 mm	5 m	MLG10A-0440R10501	1213481
	25 mm	575 mm	5 m	MLG25A-0575R10501	1213537
		1,025 mm	8.5 m	MLG25A-1025R10801	1213511
		1,175 mm	8.5 m	MLG25A-1175R10801	1213538
	50 mm	250 mm	5 m	MLG50A-0250R10501	1213512

Recommended accessories

	Brief description	Model name	Part no.
Terminal and alignment brackets			
	4 pieces, FlexFix bracket, Plastic	BEF-1SHABPKU4	2066614
	2 pieces, QuickFix bracket, Plastic	BEF-3SHABPKU2	2066048
Adapters and distributors			
	Male connector M12, 8-pin, to 1 x female connector M12, 8-pin, to 1 x female connector M12, 5-pin, for connecting on PLC	SBO-02F12-SM1	6053172
	Male connector M12, 5-pin, to 1 x female connector M12, 8-pin, to 1 x female connector M12, 5-pin, for connecting on IO-Link-Master	SBO-02F12-SM2	6053283
Plug connectors and cables			
	Head A: male connector, M12, 4-pin, straight, D-coded Head B: male connector, RJ45, 8-pin, straight Cable: Ethernet, shielded, 5 m	Connection cable (male connector-male connector)	6034415
Illustration may differ	Head A: Female connector, M12, 5-pin, straight Head B: cable Cable: PVC, unshielded, 5 m	DOL-1205-G05M	6009868
	Head A: Female connector, M12, 8-pin, straight Head B: cable Cable: special color code, PVC, shielded, 5 m	DOL-1208-G05MF	6020664
	Head A: male connector, M12, 5-pin, straight Head B: Female connector, M12, 5-pin, straight Cable: drag chain use, TPU, halogen-free, unshielded, 5 m	DSL-1205-G05MC	6029282
	Head A: Female connector, M12, 8-pin, straight Head B: male connector, M12, 8-pin, straight Cable: TPU, halogen-free, shielded, 5 m	DSL-1208-G05MAC	6032325

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At a glance

- Up to 128 beams
- Different beam resolutions 10 mm / 30 mm and 60 mm
- High functional reserve (gain) for ranges up to 12 m
- Potentiometer for sensitivity setting
- Ambient light up to 200,000 lx
- Tough, aluminum housing
- PNP/NPN, relay output and a test input
- Optical synchronization

Your benefits

- Insensitive to ambient light when exposed to direct sunlight, strobe lights, and highly reflective objects, eliminating false trips
- High functional reserve (excess gain) ensures operation even if it gets dirty, dusty, or misaligned, reducing maintenance costs
- Efficient and effective way to combine multiple sensors in one housing with one connector
- Simple commissioning thanks to a larger optical aperture angle and manual fine adjustment option
- Optical synchronization enables quick installation and cost-effective connection
- The sensitivity adjustment can be used to detect or ignore translucent materials to reduce production problems

➜ www.mysick.com/en/ELG

For more information, just 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.

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Ordering information

Other models and accessories ➜ www.mysick.com/en/ELG

Beam separation	Working range	Evaluation beams	Detection height	Switching output	Model name	Part no.
10 mm	3 m	Parallel beam	150 mm	2 x PNP (Q and /Q)	ELG1-0150P531	1026741
		Multiple scan	100 mm	2 x PNP (Q and /Q)	ELG1-0100P533	1026808
			150 mm	2 x PNP (Q and /Q)	ELG1-0150P533	1026809
	5 m	Parallel beam	150 mm	2 x PNP (Q and /Q)	ELG1-0150P571	1028333
30 mm	2 m	Parallel beam	90 mm	2 x PNP (Q and /Q)	ELG3-0090P511	1024290
			210 mm	2 x PNP (Q and /Q)	ELG3-0210P511	1025510
			390 mm	2 x PNP (Q and /Q)	ELG3-0390P591	1042615
			570 mm	2 x PNP (Q and /Q)	ELG3-0570P511	1025501
			690 mm	2 x NPN (Q and /Q)	ELG3-0690N511	1041956
		Multiple scan	150 mm	2 x PNP (Q and /Q)	ELG3-0150P513	1025578
			210 mm	2 x NPN (Q and /Q)	ELG3-0210N513	1052378
	12 m	Parallel beam	210 mm	2 x PNP (Q and /Q)	ELG3-0210P521	1025574
			450 mm	Relais (DC 60 V, AC 25 V)	ELG3-0450R221	1024268
			690 mm	2 x NPN (Q and /Q)	ELG3-0690N521	1025615
			930 mm	Relais (DC 60 V, AC 25 V)	ELG3-0930R521	1025449
			1,050 mm	2 x PNP (Q and /Q)	ELG3-1050P521	1025570
			2,370 mm	2 x PNP (Q and /Q)	ELG3-2370P521	1025573
		Multiple scan	930 mm	Relais (DC 60 V, AC 25 V)	ELG3-0930R523	1026537
			1,170 mm	2 x PNP (Q and /Q)	ELG3-1170P523	1040580

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Beam separation	Working range	Evaluation beams	Detection height	Switching output	Model name	Part no.
60 mm	12 m	Parallel beam	1,080 mm	2 x PNP (Q and /Q)	ELG6-1080P521	1025586
			1,380 mm	1 x PNP (Q and /Q)	ELG6-1380P521	1025587
			2,340 mm	0 x PNP (Q and /Q)	ELG6-2340P521	1025596
			2,460 mm	Relais (DC 60 V, AC 25 V)	ELG6-2460R521	1026183
			3,120 mm	1 x PNP (Q and /Q)	ELG6-3120P521	1047475
		Multiple scan	1,860 mm	2 x PNP (Q and /Q)	ELG6-1860P523	1025593
			2,040 mm	2 x PNP (Q and /Q)	ELG6-2040P523	1025594

Recommended accessories

	Brief description	Model name	Part no.
Terminal and alignment brackets			
	4 pieces, Mounting kit 1, rotatable, swivel mount, Plastic	BEF-2SMKEAKU4	2019649
Plug connectors and cables			
Illustration may differ	Head A: Female connector, M12, 4-pin, straight Head B: cable Cable: PVC, unshielded, 2 m	DOL-1204-G02M	6009382

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At a glance

- Dynamic or static operating mode, switchable
- Simple adjustment
- Adjustable sensitivity
- Adjustable pushbutton lock
- Rugged metal housing
- Adjustable pulse lengthening
- Switchable NO/NC

Your benefits

- Simple installation and alignment due to sender and receiver in one housing
- The adjustable pushbutton lock protects against unwanted changes to parameters and manipulation during operation
- The device's adjustable sensitivity, operating mode and pulse lengthening features enable individual parameter changes to fit the requirements of your application
- Also available as an one side open version for simple integration into your application environment
- Large monitoring area, so only one device is required for monitoring small and large parts
- Using the sensitivity setting, it is possible to hide falling debris and only recognize objects that are relevant to detect

➜ www.mysick.com/en/FLG

For more information, just 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.

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Ordering information

Other models and accessories ➜ www.mysick.com/en/FLG

- **Connection type:** Connector M12, 4-pin
- **Minimum detectable object (MDO):** dynamic: 2 mm or 4 mm, statiic: 6 mm (2 mm MDO in limited detection area.)

Version	Beam separation	Detection area (W x H)	Model name	Part no.
Close	2 mm	120 mm x 200 mm [1]	FLG2-20012011	6049334
		180 mm x 200 mm [1]	FLG2-20018011	6049333
		250 mm x 200 mm [1]	FLG2-20025011	6049138
	4 mm	120 mm x 200 mm	FLG4-20012011	6049135
		180 mm x 200 mm	FLG4-20018011	6049136
		250 mm x 200 mm	FLG4-20025011	6049137
Open	2 mm	120 mm x 200 mm [1]	FLG2-20012021	6050064
		180 mm x 200 mm [1]	FLG2-20018021	6050065
		250 mm x 200 mm [1]	FLG2-20025021	6050066
	4 mm	120 mm x 200 mm	FLG4-20012021	6050067
		180 mm x 200 mm	FLG4-20018021	6050068
		250 mm x 200 mm	FLG4-20025021	6050069

[1] 2 mm MDO in limited detection area.

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Recommended accessories

	Brief description	Model name	Part no.
Plug connectors and cables			
Illustration may differ	Head A: Female connector, M12, 4-pin, straight Head B: cable Cable: PVC, unshielded, 2 m	DOL-1204-G02M	6009382
Illustration may differ	Head A: Female connector, M12, 4-pin, angled Head B: cable Cable: PVC, unshielded, 2 m	DOL-1204-W02M	6009383

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At a glance

- Sensing range up to 2.8 m
- Resolution 6 mm up to 18 mm
- One device only: integrated sender and receiver
- Intuitive one-button operation
- Automatic alignment
- Synchronization of 2 systems
- Easy teach-in function

Your benefits

- Flexible and individual design of detection area
- Quick commissioning without additional software
- Intuitive, time-saving operation
- No variants: one device concept for all detection areas
- Reduced storage, shipping and commissioning costs
- No expert knowledge required
- High reliability and simple maintenance

➜ www.mysick.com/en/VLC100

For more information, just 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.

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Ordering information

Other models and accessories ➜ www.mysick.com/en/VLC100

- **Task:** Switching camera system
- **Response time:** ≥ 20 ms (With resistive load.)

Working range	Output type	Model name	Part no.
2 m x 2 m	2 x PNP	VLC100-0201000	1054540

Recommended accessories

	Brief description	Model name	Part no.
Terminal and alignment brackets			
	Mounting kit for mounting the sensor on the profile frame	Mounting kit	2045375
Plug connectors and cables			
	Head A: Female connector, M12, 8-pin, straight Head B: cable Cable: PVC, shielded, 5 m	DOL-1208-G05MA	6020993
Reflectors			
	Reflective tape, 1,500 mm x 48 mm x 0.8 mm, protective field size max. 2.0 m x 2.0 m, self-adhesive, abrasion-resistant, 3 pieces, 48 mm x 0.8 mm x 1,500 mm, self-adhesive, 3 pieces	Reflective tape 3 x 1.5 m	2061272

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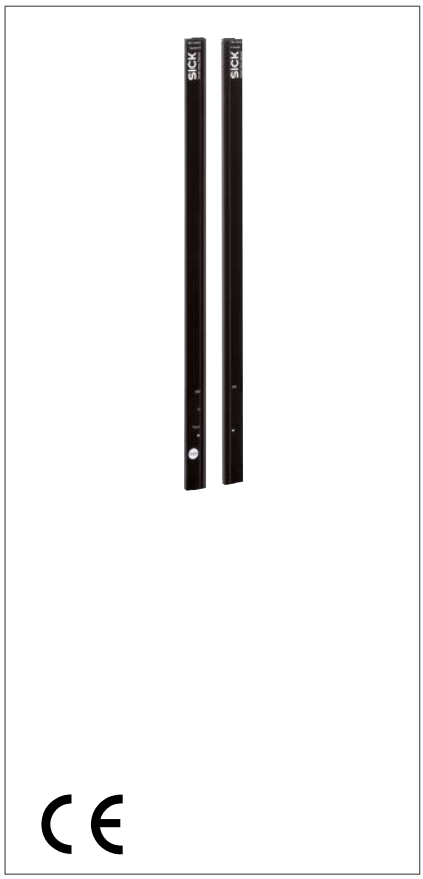

At a glance

- Variable detection lengths from 120 mm up to 600 mm (in 160 mm increments)
- Set parameters via teach-in with no PC
- Simple teach-in setup
- Maximum range 4 m
- Response time 18 ms
- 25 mm resolution with 40 mm beam separation possible
- Highly immune to sunlight up to 150,000 lx
- Small blind zone < 11 mm

Your benefits

- Small, slim and sleek design enables easy integration into applications
- Capacitive teach-in button and LEDs make commissioning easier for complex solutions
- Slim and flat models offer flexible mounting options and optimize space while reducing damage
- Customized preset configurations or set parameters via one-touch teach-in with no PC
- Optical synchronization eliminates the need to lay cables, saving time
- Auto-teach and auto-muting enable Plug & Play. And, an alignment aid and “Click & Go” provide faster installation.

➜ **www.mysick.com/en/SAS**

For more information, just 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.

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Ordering information

Other models and accessories ➜ **www.mysick.com/en/SAS**

- **Beam separation:** 40 mm
- **Working range:** 3 m

Optical light exit	Aluminum stabilizer	Detection height	Switching output	Model name	Part no.
Flat	Without stabilizer	120 mm	1 x PNP	SAS4-F012P3PS1T00	1207475
				SAS4-F012P3PS1T01	1209637
				SAS4-F012P3PS1W00	1208450
			1 x NPN	SAS4-F012N3PS1T00	1208785
		280 mm	1 x PNP	SAS4-F028P3PS1T00	1208171
			1 x NPN	SAS4-F028N3PS1T00	1208786
		440 mm	1 x PNP	SAS4-F044P3PS1T00	1045020
			1 x NPN	SAS4-F044N3PS1T00	1207761
		600 mm	1 x PNP	SAS4-F060P3PS1T00	1048058
			1 x NPN	SAS4-F060N3PS1T00	1208787
	With stabilizer	280 mm	1 x PNP	SAS4-F028P3PS2T00	1207711
		600 mm	1 x PNP	SAS4-F060P3PS2T00	1209213

Optical light exit	Aluminum stabilizer	Detection height	Switching output	Model name	Part no.
Slim	Without stabilizer	120 mm	1 x PNP	SAS4-S012P3PS1T00	1047364
			1 x NPN	SAS4-S012N3PS1T00	1047009
				SAS4-S012N3PS1W00	1047014
		280 mm	1 x PNP	SAS4-S028P3PS1T00	1047063
			1 x NPN	SAS4-S028N3PS1T00	1207707
				SAS4-S028N3PS1W00	1207704
		440 mm	1 x PNP	SAS4-S044P3PS1T00	1045019
				SAS4-S044P3PS1W00	1209581
			1 x NPN	SAS4-S044N3PS1T0D	1209170
				SAS4-S044N3PS1T00	1207708
				SAS4-S044N3PS1W00	1207705
		600 mm	1 x PNP	SAS4-S060P3PS1T00	1047587
				SAS4-S060P3PS1W00	1047525
			1 x NPN	SAS4-S060N3PS1T0D	1209171
				SAS4-S060N3PS1T00	1207709
				SAS4-S060N3PS1W00	1207706
				SAS4-S060N3PS1W02	1207752
	With stabilizer	120 mm	1 x PNP	SAS4-S012P3PS2W04	1208464
		600 mm	1 x PNP	SAS4-S060P3PS2W0A	1209013

Recommended accessories

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	Brief description	Model name	Part no.
Plug connectors and cables			
	Head A: Female connector, M8, 4-pin, straight Head B: cable Cable: PVC, unshielded, 2 m	DOL-0804-G02M	6009870
	Head A: Female connector, M8, 4-pin, straight Head B: male connector, M12, 4-pin, straight Cable: PVC, unshielded, 2 m	DSL-8204-G02M	6022573

At a glance

- Variable detection lengths from 120 mm up to 440 mm
- No commissioning necessary – Plug & Play operation
- Maximum range 3 m
- Response time 18 ms
- 25 mm resolution with 40 mm beam separation possible
- Highly visible job LEDs along the entire length of the sensor
- Green job LEDs for correct pick and red job LEDs for incorrect pick
- Can be connected to bus systems

Your benefits

- Highly visible job LEDs can be seen from any position
- Picking error display for order picking improves quality
- Plug & Play operation saves time
- Automatic teach-in when turned on
- Slim and flat models offer flexible mounting options and optimize shelf/bin space while reducing damage
- Quick, cost-effective installation thanks to optical synchronization – no need to wire the sender and receiver together
- Auto-muting, auto-teach and an alignment aid provide more uptime

→ www.mysick.com/en/SPL

For more information, just 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.

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Ordering information

Other models and accessories → www.mysick.com/en/SPL

- **Beam separation:** 40 mm
- **Working range:** 1.5 m

Optical light exit	Aluminum stabilizer	Detection height	Switching output	Model name	Part no.
Flat	Without stabilizer	120 mm	1 x PNP	SPL-F120PPC1W04	1208391
				SPL-F120PPS1W04	1046128
			1 x NPN	SPL-F120NPS1W04	1208550
		280 mm	1 x PNP	SPL-F280PPS1W04	1046764
		440 mm	1 x PNP	SPL-F440PPS1W04	1046314
	With stabilizer	120 mm	1 x PNP	SPL-F120PPS2W04	1047344
		280 mm	1 x PNP	SPL-F280PPS2W04	1046996
Slim	Without stabilizer	120 mm	1 x PNP	SPL-S120PPS1W04	1046127
		280 mm	1 x PNP	SPL-S280PPS1W04	1046763
		440 mm	1 x PNP	SPL-S440PPS1W04	1046312
			1 x NPN	SPL-S440NPS1W04	1047365
	With stabilizer	280 mm	1 x PNP	SPL-S280PPS2W04	1209197
		440 mm	1 x PNP	SPL-S440PPS2W04	1045018

Recommended accessories

	Brief description	Model name	Part no.
Mounting brackets and mounting plates			
	Mounting bracket for light grids from a monitoring height of 600 mm, mounting on the face sides, 4x BEF-SLG1	BEF-SLG-SET2	2056518
Adapters and distributors			
	Consolidation of sensor and actuator signals, with 2 dust covers and 10 attachable labels	SBL-04D12-KC05	6028394
		SBL-08D12-KC05	6028396
Plug connectors and cables			
	Head A: Female connector, M8, 4-pin, straight Head B: cable Cable: PVC, unshielded, 2 m	DOL-0804-G02M	6009870
	Head A: Female connector, M8, 4-pin, straight Head B: male connector, M12, 4-pin, straight Cable: PVC, unshielded, 2 m	DSL-8204-G02M	6022573

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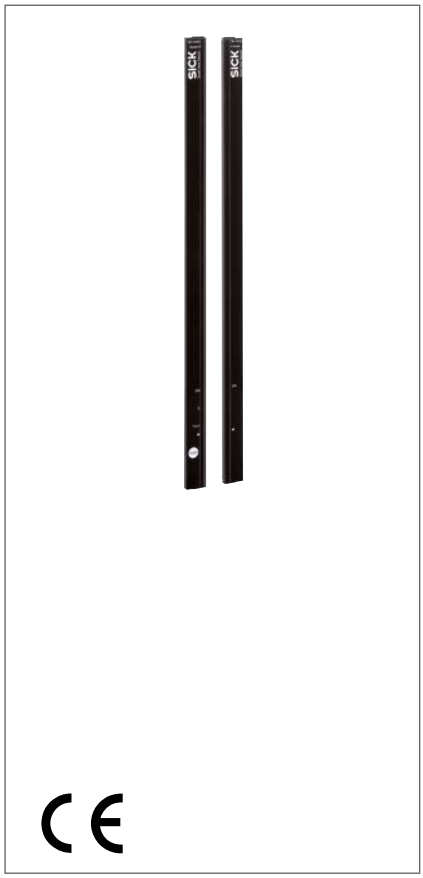

At a glance

- Variable detection lengths from 600 mm up to 1,400 mm (in 160 mm increments)
- Simple teach-in setup via cable
- Optional parameter setting with teach-in button, no PC required
- Maximum range 10 m
- Response time 18 ms
- 25 mm or 45 mm MDO possible
- Highly immune to sunlight at 150,000 lx
- Small blind zone < 11 mm

Your benefits

- Small, slim and sleek design enables easy integration into applications
- Slim and flat models offer flexible mounting options and optimize shelf/bin space while reducing damage
- Customized preset configurations or set parameters via one-touch teach-in with no PC
- Optical synchronization eliminates the need to lay cables, saving time
- Optional: Capacitive teach-in button and LEDs make commissioning easier for complex solutions
- Auto-teach and auto-muting enable Plug & Play. And, an alignment aid and “Click & Go” provide faster installation.

➜ **www.mysick.com/en/SGS**

For more information, just 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.

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Ordering information

Other models and accessories ➜ **www.mysick.com/en/SGS**

Beam separation	Optical light exit	Aluminum stabilizer	Working range	Detection height	Switching output	Model name	Part no.
40 mm	Flat	Without stabilizer	3 m	920 mm	1 x NPN	SGS4-F092N3CS1T00	1208794
				1,080 mm	1 x PNP	SGS4-F108P3PS1W00	1045008
				1,400 mm	1 x PNP	SGS4-F140P3PS1W00	1045012
			7 m	600 mm	1 x PNP	SGS4-F060P7PS1W00	1209723
				760 mm	1 x PNP	SGS4-F076P7PS1W00	1209287
				920 mm	1 x PNP	SGS4-F092P7PS1T00	1208151
				1,080 mm	1 x PNP	SGS4-F108P7PS1W00	1045010
		With stabilizer	3 m	1,240 mm	1 x PNP	SGS4-F124P3PS2T00	1048038
				1,400 mm	1 x PNP	SGS4-F140P3PS2T00	1208809
	Slim	Without stabilizer	3 m	760 mm	1 x PNP	SGS4-S076P3PS1T00	1047092
				920 mm	1 x PNP	SGS4-S092P3PS1T00	1208201
				1,080 mm	1 x NPN	SGS4-S108N3PS1T00	1208155
					1 x PNP	SGS4-S108P3PS1W00	1045007
				1,400 mm	1 x PNP	SGS4-S140P3PS1W00	1045011
			7 m	600 mm	1 x PNP	SGS4-S060P7PS1W00	1209722
				920 mm	1 x PNP	SGS4-S092P7PS1T00	1208200
				1,080 mm	1 x PNP	SGS4-S108P7PS1T00	1209457
						SGS4-S108P7PS1W00	1045009

Beam separation	Optical light exit	Aluminum stabilizer	Working range	Detection height	Switching output	Model name	Part no.
40 mm	Slim	With stabilizer	3 m	920 mm	1 x PNP	SGS4-S092P3PS2T00	1208108
				1,240 mm	1 x PNP	SGS4-S124P3PS2W00	1047815
						SGS4-S124P3PS2W04	1047903
				1,400 mm	1 x PNP	SGS4-S140P3PS2T00	1208109
			7 m	1,400 mm	1 x PNP	SGS4-S140P7PS2T00	1208241
80 mm	Flat	With stabilizer	3 m	880 mm	1 x PNP	SGS8-F088P3PS2W0E	1208797
				1,360 mm	1 x PNP	SGS8-F136P3PS2W0C	1208516
	Slim	Without stabilizer	3 m	560 mm	2 x PNP	SGS8-S056F3PS1T00	1209297
					1 x PNP	SGS8-S056P3PS1W00	1208141
				720 mm	1 x PNP	SGS8-S072P3PS1W00	1209568
				880 mm	1 x PNP	SGS8-S088P3PS1W00	1209597
			7 m	1,040 mm	2 x PNP	SGS8-S104F7PS1T00	1047499
		With stabilizer	3 m	720 mm	1 x PNP	SGS8-S072P3PS2W0C	1208519
				1,360 mm	1 x PNP	SGS8-S136P3PS2T00	1209554
						SGS8-S136P3PS2W00	1047161

Recommended accessories

	Brief description	Model name	Part no.
Mounting brackets and mounting plates			
	Mounting bracket for light grids up to a monitoring height of 600 mm, mounting on the face sides, 2x BEF-SLG1, 2x BEF-SLG2	BEF-SLG-SET1	2055427
	Mounting bracket for light grids from a monitoring height of 600 mm, mounting on the face sides, 4x BEF-SLG1	BEF-SLG-SET2	2056518
Universal bar clamp systems			
	Bracket for SLG, stainless steel, Stainless steel	VZA-SLG	2048519
Plug connectors and cables			
	Head A: Female connector, M8, 4-pin, straight Head B: cable Cable: PVC, unshielded, 2 m	DOL-0804-G02M	6009870
	Head A: Female connector, M8, 4-pin, straight Head B: male connector, M12, 4-pin, straight Cable: PVC, unshielded, 2 m	DSL-8204-G02M	6022573

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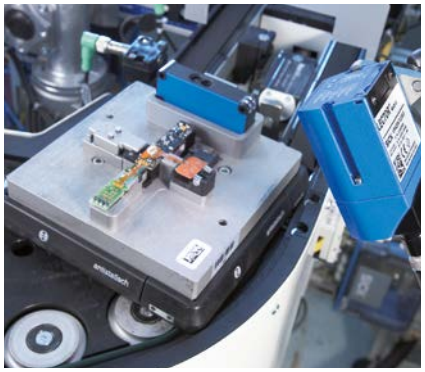
VISION



A new dimension in vision

Vision solutions are ideal for automated inspection and measurement tasks. SICK's 2D and 3D vision cameras can be used to solve a wide range of applications where there is a need to measure, locate, inspect and identify. Our vision products are built for industrial environments, carefully designed to leverage SICK's 60-plus years of experience with industrial sensors.

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	Selection guide Vision	**K-382**
	Inspector An intelligent vision solution in an easy-to-use sensor package	**K-384**
	Lector®62x Clever. Simple. Industrial.	**K-386**
	Lector®65x Nonstop code reading flexibility	**K-388**
	IVC-3D The world's first 3D smart camera makes advanced vision easy	**K-390**
	Ranger Fastest 3D and MultiScan for advanced industrial solutions	**K-392**

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SELECTION GUIDE VISION

Product	Main tasks				Color inspection	Fieldbus / industrial networks				
	Positioning	Inspection	Measuring	Reading		Serial interface	Ethernet	CAN bus	PROFIBUS DP	
2D vision										
Inspector	■	■	■				■			
Lector®62x				■		■	■	■	■	
Lector®65x				■		■	■	□	□	
3D vision										
IVC-3D	■	■	■	■		■	□			
Ranger	■	■	■		■	■	□			

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		Main industries							Maximum resolution	Page
	USB	Automotive	Beverage	Electronics and solar	Food	Pharma and cosmetics	Storage and conveyor	Traffic		
		■	■	■	■	■	■		640 px x 480 px	→ K-384
	■	■	■	■	■	■			752 px x 480 px	→ K-386
	■	■			■	■	■		2,048 px x 2,048 px	→ K-388
		■	■	■	■	■			1,536 px (3D)	→ K-390
		■			■			■	1,536 px (3D, gray scale)	→ K-392

K

At a glance

- High-speed positioning, inspection and measurement
- Powerful “object locator” tool, independent of position, rotation and scale
- Unique, interchangeable housing design supporting dome and various optical accessories
- Simple step-by-step configuration in PC including emulator
- Easy-to-use operator interfaces
- Flexible machine and HMI design interfaces

Your benefits

- The multi-functional vision toolbox offers smart camera-level performance but with sensor ease-of-use
- Unique, interchangeable housing design provides the easiest way to improve image quality
- The simple configuration in SOPAS, including emulator for offline configuration and testing, will reduce downtimes in production to a minimum
- The easy-to-use operator interfaces are optimized to make it easier for the operator to oversee daily work more efficiently
- Ethernet communication and web API gives excellent connectivity and freedom to customize user’s HMI

➜ **www.mysick.com/en/Inspector**

For more information, just 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.

Ordering information

Other models and accessories ➜ **www.mysick.com/en/Inspector**

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Sub product family	Sensor resolution	Lens	Window material	Light source	Product name	Model name	Part no.
Inspector P-series	384 px x 384 px	6 mm, exchangeable (M12-mount)	PMMA	White	Inspector P30	VSPP-3F1122	1051982
Inspector I-series	384 px x 384 px	6 mm, integrated	PMMA	White	Inspector I10 Standard	VSPI-1R111	1042779
		6 mm, exchangeable (M12-mount)	PMMA	White	Inspector I20	VSPI-2F111	1046732
				Infrared	Inspector I20-IR	VSPI-2F141	1054704
	640 px x 480 px	10 mm, exchangeable (M12-mount)	PMMA	White	Inspector I40	VSPI-4F2111	1047913
				Infrared	Inspector I40-IR	VSPI-4F2411	1054705
Inspector PI-series	640 px x 480 px	10 mm, exchangeable (M12-mount)	PMMA	White	Inspector PI50	VSPP-5F2113	1056082
				Infrared	Inspector PI50-IR	VSPP-5F2413	1057303
				White	Inspector PI50 EtherCAT	VSPP-5F2134	1056394
Inspector PIM-series	640 px x 480 px	Not included (M12-mount)	No front window included	White	Inspector PIM60 Base	VSPM-6B2113	1064565
				Infrared	Inspector PIM60-IR Base	VSPM-6B2413	1064566
		10 mm, exchangeable (M12-mount)	PMMA	White	Inspector PIM60	VSPM-6F2113	1062407
			Glass	UV	Inspector PIM60-LUT	VSPM-6F2313	1062409
			PMMA	Infrared	Inspector PIM60-IR	VSPM-6F2413	1062408

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Recommended accessories

	Brief description	Model name	Part no.
Plug connectors and cables			
	Head A: Female connector, M12, 12-pin, straight Head B: cable Cable: PUR, shielded, 5 m	DOL-1212-G05MAS01	6036556
	Head A: male connector, M12, 4-pin, straight, D-coded Head B: male connector, RJ45, 8-pin, straight Cable: Ethernet, PUR, shielded, 2 m	SSL-2J04-G02ME	6034414
Lens and accessories			
	Replaces the front window and creates even and homogeneous illumination. For shiny surfaces.	Inspector Flex Dome	2050678
	Interchangeable lens, focal length 6 mm, Round connector M12 x 0.5	OBJ-B06025BA	2049668
	Interchangeable lens, focal length 16 mm, including distance ring, Round connector M12 x 0.5	OBJ-B16018BA	2049418
Optical filters			
	Color filter blue (468 nm ± 62 nm) for variants with exchangeable lens and front window, PMMA	Inspector Flex blue color filter	2050676
	Color filter green (544 nm ± 53 nm) for variants with exchangeable lens and front window, PMMA	Inspector Flex green color filter	2050677
	Color filter red (> 548 nm) for variants with exchangeable lens and front window, PMMA	Inspector Flex red color filter	2050675
	Visible block filter (> 730 nm) for variants with exchangeable lens and front window, PMMA	Inspector Flex visible block filter	2061248
	Visible block filter (> 770 nm) for variants with exchangeable lens and front window, PMMA	Inspector Flex visible block filter	2073707
Test and monitoring tools			
	Inspector Viewer for Inspector I-/P-/PI-series	VSPV-22222	2057556

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At a glance

- Decoding of all common 1D, 2D, and stacked codes, as well as optical character recognition (depending on type)
- Flexible interfaces: serial interface, USB, and Ethernet
- Function buttons, aiming laser, focus adjustment, auto-setup, and green feedback LED
- Industrial, compact housing with swivel connector
- microSD memory card for storing images and backup copies of parameters

Your benefits

- Intelligent decoding algorithms ensure optimal reading performance, good read rates, and high throughput
- IDpro facilitates quick and easy integration into many industrial networks
- Intuitive setup with aiming laser, focus adjustment, and auto-setup reduces training and installation time and costs
- Simple mounting thanks to a compact housing and swivel connector, even when space is limited
- Quick and efficient analysis of reading performance and code quality
- Cloning systems create backup copies of parameters, ensuring short machine downtimes in the event of malfunctions
- Proven SICK LifeTime Services

➜ www.mysick.com/en/Lector62x

For more information, just 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.

Ordering information

Other models and accessories ➜ www.mysick.com/en/Lector62x

- **Reading field:** side
- **Sensor resolution:** 752 px x 480 px (WVGA)
- **Lens:** integrated

Version	Focal length	Internal lighting	Enclosure rating	Model name	Part no.
Lector®620 ECO	7 mm	Red	IP 65	ICR620E-H12013 ECO	1054507
Lector®620 Professional	7 mm	Red, blue	IP 65	ICR620S-T11503 Professional	1050589
			IP 67	ICR620S-T11504 Professional	1054375
		Infrared	IP 65	ICR620S-T16503 Professional	1058623
Lector®620 High Speed	7 mm	Red, blue	IP 65	ICR620H-T11503 High Speed	1055890
Lector®620 DPM Plus	7 mm	Red, blue	IP 65	ICR620D-T11503 DPM Plus	1055891
		Blue	IP 65	ICR620D-T17503 DPM Plus Solar	1060912
	12 mm	Red, blue	IP 65	ICR620D-T31503 DPM Plus	1064255
	18 mm	Red, blue	IP 65	ICR620D-T51503 DPM Plus	1064256
Lector®620 OCR	7 mm	Red, blue	IP 65	ICR620C-T11503S50 OCR	1062803

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Recommended accessories

	Brief description	Model name	Part no.
Mounting brackets and mounting plates			
	Mounting bracket (simple bracket), Mounting hardware included	Mounting bracket	2020410
Modules			
	Small connection module for one sensor, 4 cable glands, base for CMC600	CDB620-001	1042256
	Fieldbus proxy/gateway for connecting identification sensors to PROFIBUS-DP networks (PROFIBUS interface: 2 x M12, male connector/female connector, 5-pin)	CDF600-2100	1058965
	Fieldbus proxy/gateway for connecting identification sensors to PROFIBUS-DP networks (PROFIBUS interface: 1 x D-Sub, female connector, 9-pin)	CDF600-2103	1058966
Plug connectors and cables			
	Head A: Female connector, M12, 17-pin, straight Head B: male connector, D-Sub-HD, 15-pin, straight Cable: Power, serial, CAN, digital I/Os, unshielded, 2 m	Connection cable (male connector-female connector)	2055419
	Head A: male connector, M12, 4-pin, D-coded Head B: male connector, M12, 4-pin, D-coded Cable: Ethernet, shielded, 2 m	SSL-1204-G02ME	6034420
	Head A: male connector, M12, 4-pin, straight, D-coded Head B: male connector, RJ45, 8-pin, straight Cable: Ethernet, PUR, shielded, 2 m	SSL-2J04-G02ME	6034414
	Head A: male connector, USB-A Head B: male connector, Micro-B Cable: USB 2.0, unshielded, 2 m	USB cable	6036106

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At a glance

- 2/4 megapixel resolution; high frame repetition rate of 40 Hz
- Dynamic focus adjustment from object to object
- Integrated high-power LED illumination
- Function buttons, aiming laser, optical and acoustic feedback signal
- Intelligent, rapid decoding algorithms

Your benefits

- Highly flexible code position, object height, and transport speed due to a large field of view and dynamic focus
- Cost-effective, straightforward, modular integration of multiple devices adapted to the width of the conveyor belt
- Minimum training and installation work due to intuitive device equipment that includes function buttons, auto setup, integrated illumination, an aiming laser, an acoustic feedback signal, and a green feedback LED
- Intelligent decoding algorithms ensure maximum reading performance and high package throughput, even with codes that are difficult to read
- SICK IDpro platform facilitates quick and easy integration into numerous industrial networks

➜ www.mysick.com/en/Lector65x

For more information, just 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.

Ordering information

Other models and accessories ➜ www.mysick.com/en/Lector65x

- **Reading field:** side
- **Enclosure rating:** IP 65

Version	Sensor resolution	Lens	Focal length	Internal lighting	Model name	Part no.
Lector®652 Flex	2,048 px x 1,088 px	Exchangeable (C-mount), to be ordered separately as accessory	–	–	V2D652R-MCXXA6 Flex	1063404
Lector®652 Dynamic Focus	2,048 px x 1,088 px	Integrated	54 mm	White	V2D652R-MEWHA6 Dynamic Focus	1063405
Lector®654 Flex	2,048 px x 2,048 px	Exchangeable (C-mount), to be ordered separately as accessory	–	–	V2D654R-MCXXA6 Flex	1060892
Lector®654 Dynamic Focus	2,048 px x 2,048 px	Integrated	54 mm	White	V2D654R-MEWHA6 Dynamic Focus	1060893
Lector®654 Dynamic Focus for Systems	2,048 px x 2,048 px	Integrated	54 mm	White	V2D654R-MEWHF6 Dynamic Focus for Systems	1063229

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Recommended accessories

	Brief description	Model name	Part no.
Modules			
	Connection device basic for connecting one sensor with 2 A fuse, 5 cable glands and RS-232 interface to sensor via M12, 17-pin female connector, all outputs available on screw/spring-loaded terminals, including trigger unit functionality for external illumination of Lector®65x	CDB650-204	1064114
Plug connectors and cables			
	Head A: male connector, M8, 4-pin, straight Head B: male connector, USB-A, 4-pin, straight Cable: USB 2.0, unshielded, 2 m	Connecting cable (male connector-male connector)	6051164
	Head A: male connector, M12, 17-pin, straight, A-coded Head B: Female connector, M12, 17-pin, straight, A-coded Cable: Power, serial, CAN, digital I/Os, suitable for 2 A, drag chain use, unshielded, 3 m	Connection cable (male connector-female connector)	6051194
	Head A: male connector, M12, 8-pin, straight, X-coded Head B: male connector, RJ45, 8-pin, straight Cable: Gigabit Ethernet/PoE, shielded, 2 m	Connection cable (male connector-male connector)	6049728
Lens and accessories			
	Optic kit 05 including lens with a focal length of 50 mm, white lighting, distance bracket and protective hood	Optic kit 05	1064776
	Optic kit 06 including lens with a focal length of 75 mm, white lighting, distance bracket and protective hood	Optic kit 06	1064777

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At a glance

- Easy 3D measurement – provides information about object height, shape and volume
- Independent of contrast and color
- Easy-to-use graphical user interface for fast application development
- Simple connection of PLCs, robots, and other control systems, e.g., via EtherNet/IP or OPC
- Scans up to 5,000 profiles per second
- Industrial, robust metal housing

Your benefits

- The IVC-3D makes advanced 3D shape inspections easy, enabling cost-efficient solutions
- Contrast-independent measurement provides greater reliability even at varying object color and when the object color is the same as the background
- Factory calibrated – instantly providing true metric dimensions at production speed
- The camera's OPC server and EtherNet/IP interface enables simple communication with PLCs, robots and control systems, making integration easy
- Stand-alone operation – no PC is needed after configuration

➜ www.mysick.com/en/IVC-3D

For more information, just 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.

Ordering information

Other models and accessories ➜ www.mysick.com/en/IVC-3D

- **Processor:** 800 MHz
- **Memory:** 128 MB RAM, 16 MB flash
- **Image sensor:** CMOS
- **Maximum performance:** 5,000 3D profiles/s

Sub product family	Housing material	Window material	Product name	Model name	Part no.
IVC-3D 30	Anodized aluminum	Safety glass	IVC-3D 30	IVC-3D31111	1041205
		PMMA	IVC-3D 30, plastic windows	IVC-3D31112	1046810
IVC-3D 40	Anodized aluminum	Safety glass	IVC-3D 40	IVC-3D61111	1067153
IVC-3D 50	Anodized aluminum	Safety glass	IVC-3D 50	IVC-3D21111	1027538
		PMMA	IVC-3D 50, plastic windows	IVC-3D21112	1041710
	Stainless steel	PMMA	IVC-3D 50, stainless steel	IVC-3D21113	1050157
IVC-3D 100	Anodized aluminum	Safety glass	IVC-3D 100	IVC-3D51111	1043579
		PMMA	IVC-3D 100, plastic windows	IVC-3D51112	1046912
		Safety glass	IVC-3D 100, class IIIb / 3B laser	IVC-3D51121	1046868
	Stainless steel	PMMA	IVC-3D 100, stainless steel	IVC-3D51113	1050158
IVC-3D 200	Anodized aluminum	Safety glass	IVC-3D 200	IVC-3D11111	1027539
		PMMA	IVC-3D 200, plastic windows	IVC-3D11112	1042152
	Stainless steel	PMMA	IVC-3D 200, stainless steel	IVC-3D11113	1048004

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Sub product family	Housing material	Window material	Product name	Model name	Part no.
IVC-3D 300	Anodized aluminum	Safety glass	IVC-3D 300	IVC-3D41111	1041204
		PMMA	IVC-3D 300, plastic windows	IVC-3D41112	1049024
	Stainless steel	PMMA	IVC-3D 300, stainless steel	IVC-3D41113	1048269

Recommended accessories

	Brief description	Model name	Part no.
Modules and gateways			
	I/O box extension with 2 ethernet ports enabling switch functionality, number of logical input: 4, output: 8	I/O box extension, 4 in/8 out	6037654
Plug connectors and cables			
Illustration may differ	Head A: Female connector, M12, 5-pin, straight Head B: cable Cable: PVC, unshielded, 2 m	DOL-1205-G02M	6008899
	Head A: Female connector, M12, 8-pin, straight Head B: cable Cable: PVC, shielded, 2 m	DOL-1208-G02MA	6020633
	Head A: Female connector, M12, 4-pin, straight Head B: male connector, M12, 4-pin, straight Cable: Ethernet, unshielded Connection cable, expansion cable 1:1, shielded, for Inspector TKK70 and MLG	EtherNet/IP adapter	2044264
	Head A: male connector, M12, 4-pin, straight, D-coded Head B: male connector, RJ45, 8-pin, straight Cable: Ethernet, drag chain use, PUR, shielded, 3 m	SSL-2J04-G03ME	6029630
	Head A: male connector, M12, 8-pin, straight Head B: cable Cable: digital I/Os, shielded, 2 m	STL-1208-G02MA	6029330

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At a glance

- High speed 3D at unmatched speed and quality
- MultiScan technology to measure 3D, contrast, color and scatter at the same time
- Sensor resolutions of up to 1,536 pixels in 3D and 3,072 pixels in grayscale and color
- Full flexibility in configuration, working distance, and field of view
- In-machine 3D calibration tool
- Gigabit Ethernet and CameraLink interfaces

Your benefits

- High-speed and high-resolution measurement allow you to increase production throughput and still ensure product quality
- Get accurate size and position measurements in 3D regardless of an object's height or color, ensuring reliable solutions
- Fully flexible field of view in combination with in-machine 3D calibration, provides dimensions in millimeters
- Unique MultiScan technology lets one camera do the job of many, reducing costs for integration, maintenance, and accessories, creating cost-efficient solutions
- The high level of flexibility and versatility of Ranger makes it an ideal choice for the most challenging tasks

➜ www.mysick.com/en/Ranger

For more information, just 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.

Ordering information

Other models and accessories ➜ www.mysick.com/en/Ranger

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Sub product family	Maximum performance	MultiScan Technology	Sensor resolution	Hi-Res Gray resolution	IR filter	Product name	Model name	Part no.
Ranger C	30,000 3D profiles/s	✔	512 px x 512 px	–	No IR pass filter	Ranger C40	Ranger-C40412	1014218
			1,536 px x 512 px	–	No IR pass filter	Ranger C50	Ranger-C50412	1014216
					IR pass filter	Ranger C50 IR	Ranger-C50422	1014223
				3,072 px	No IR pass filter	Ranger C55	Ranger-C55412	1014217
					IR pass filter	Ranger C55 IR	Ranger-C55422	1014224
Ranger D	1,000 3D profiles/s	–	512 px x 512 px	–	No IR pass filter	Ranger D40	Ranger-D40213	1040383
			1,536 px x 512 px	–	No IR pass filter	Ranger D50	Ranger-D50213	1040384
Ranger E	35,000 3D profiles/s	✔	512 px x 512 px	–	No IR pass filter	Ranger E40	Ranger-E40414	1040378
			1,536 px x 512 px	–	No IR pass filter	Ranger E50	Ranger-E50414	1040379
					IR pass filter	Ranger E50 IR	Ranger-E50424	1040381
				3,072 px	No IR pass filter	Ranger E55	Ranger-E55414	1040380
					IR pass filter	Ranger E55 IR	Ranger-E55424	1040382

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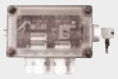
Sub product family	Maximum performance	MultiScan Technology	Sensor resolution	Hi-Res Gray resolution	IR filter	Product name	Model name	Part no.
ColorRanger E	35,000 3D profiles/s	✔	512 px x 512 px	–	No IR pass filter	ColorRanger E40	Ranger-E40434	1050266
			1,536 px x 512 px	–	No IR pass filter	ColorRanger E50	Ranger-E50434	1050267
					IR pass filter	ColorRanger E50 IR	Ranger-E50444	1050269
				3,072 px	No IR pass filter	ColorRanger E55	Ranger-E55434	1050268
					IR pass filter	ColorRanger E55 IR	Ranger-E55444	1050270

Recommended accessories

	Brief description	Model name	Part no.
Illuminations			
	Terminal box to connect one or two lasers to IVC-2D or Ranger E/D, ICT-B can also be used to connect a trigger sensor to IVC-2D or Ranger E/D, ICT-B is especially designed to be used with SICK ILP lasers	ICT-B	1028342
	Laser module with line projecting lens (red, 660 nm, 35 mW, refocusable), with open wires, 30° fan angle	Ranger laser	6033005
Calibration tools			
	Calibration target, 300 mm, sawtooth heigth 10 mm, sawtooth width 20 mm	RCAL-300	2051127
Sets and kits			
	Ranger C accessory kit with 24 V power supply, power I/O terminal, cables 3 m, lens, manual and camera mounting parts	Ranger C accessory kit	1014313
	Ranger E/D accessory kit with 24 V power supply, power I/O terminal, Y-cable (2 m), Gigabit Ethernet cable (5 m), lens, manual and camera mounting parts	Ranger E/D accessory kit	2040857

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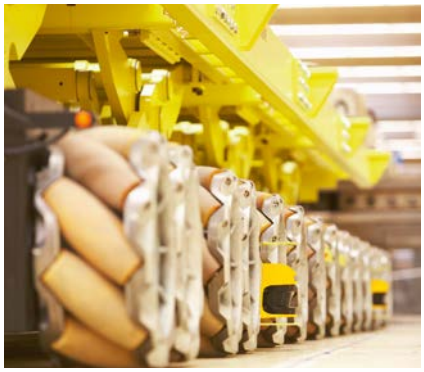
OPTO-ELECTRONIC PROTECTIVE DEVICES



Optical protection – remove the barrier to greater productivity

Opto-electronic protective devices from SICK are the first choice for maximum machine and system productivity. Unlike fences and doors, they do not disrupt handling or material transport and allow a better view into the machine room. SICK's comprehensive portfolio is ideal for hazardous point protection, access protection, and hazardous area protection. The SICK's proprietary interface, EFI, offers additional process optimization.

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Selection guide opto-electronic protective devices **L-396**

Safety laser scanners
S300 Mini Standard L-398
S300 Mini Remote L-400
S300 Expert L-402
S3000 Standard L-404
S3000 Expert L-406
S3000 PROFINET IO Advanced. . .L-408
S3000 Cold Store L-410

Safety light curtains
deTec4 Core L-411
C4000 Standard L-413
C4000 Advanced L-416
C4000 Micro in IP69K Housing . .L-419
miniTwin4 . . . . . .L-421
miniTwin2 . . . . . .L-423
deTec2 Core L-425

Safety camera systems
V300 Work Station Extended . . .L-427

Multiple light beam safety devices
M4000 Standard L-428
M4000 Standard
in IP69K Housing L-430
M4000 Advanced L-432
M2000 Standard L-435

Single-beam photoelectric safety switches
L4000 Systeme L-437
L41 . . . . . .L-439
L21 . . . . . .L-441

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SELECTION GUIDE OPTO-ELECTRONIC PROTECTIVE DEVICES

Product		Recommended safety application							Features							Ambient operating temperature							Scanning angle			
		Hazardous point protection with finger or hand detection	Hazardous point protection with hand and person detection	One-sided access protection Multi-sided access protection	Mehrseitige Zugangsabsicherung	Muting/differentiation between people and material	Mobile hazardous area protection	Stationary hazardous area protection	Type (IEC 61496)	Performance level (EN ISO 13849)	Enclosure rating IP 54	Enclosure rating IP 65	Enclosure rating IP 66	Enclosure rating IP 67	Enclosure rating IP 69K	–10 °C ... + 50 °C	–30 °C ... + 50 °C	0 °C ... + 50 °C	0 °C ... + 55 °C	–20 °C ... + 55 °C	–30 °C ... + 55 °C	–40 °C ... + 55 °C	180°	190°	270°	
Safety laser scanners																										
	S300 Mini Standard			■		■	■	■	3	d		■				■									■	
	S300 Mini Remote			■		■	■	■	3	d		■				■									■	
	S300 Expert			■		■	■	■	3	d		■				■									■	
	S3000 Standard			■		■	■	■	3	d		■				■								■		
	S3000 Expert			■		■	■	■	3	d		■				■								■		
	S3000 PROFINET IO Advanced			■		■	■	■	3	d		■				■								■		
	S3000 Cold Store			■		■	■	■	3	d		■			■			■						■			
Safety light curtains																										
	deTec4 Core	■	■	■				■	4	e		■		■								■				
	C4000 Standard	■	■	■				■	4	e		■								■						
	C4000 Advanced	■	■	■				■	4	e		■								■						
	C4000 Micro in IP69K Housing	■	■	■				■	4	e		■	■	■	■							■				
	miniTwin4	■	■	■				■	4	e		■									■					
	miniTwin2	■	■	■				■	2	d		■									■					
	deTec2 Core	■	■	■				■	2	c		■		■								■				
Safety camera systems																										
	V300 Work Station Extended	■						■	3	d	■							■								
Multiple light beam safety devices																										
	M4000 Standard			■	■				4	e		■										■				
	M4000 Standard in IP69K Housing			■	■				4	e		■	■	■	■							■				
	M4000 Advanced			■	■	■			4	e		■										■				
	M2000 Standard			■	■				2	d		■							■							
Single-beam photoelectric safety switches																										
	L4000 Systems			■	■				4	e				■						■						
	L41			■	■				4	e				■									■				
	L21			■	■				2	c				■									■				

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	Field sets				Resolution						Protective field height			Number of beams					Beam separation			Functions							Scanning range in m		Page
	1	4	16	21 / 32 (triple field mode / dual field mode)	14 mm	20 mm	24 mm	30 mm	34 mm	30 mm ... 150 mm, configurable	120 mm ... 1,200 mm	300 mm ... 1,800 mm	300 mm ... 2,100 mm	1	2	3	4	5 ... 8	220 mm ... 600 mm	300 mm ... 400 mm	300 mm ... 450 mm	Safe device communication via EFI	Direct integration into bus systems	External device monitoring (EDM)	Restart interlock	Blanking	PSDI mode with UE402	Muting with UE 403	Minimum	Maximum	
	■									■														■					0	3	→ L-398
			■							■												■							0	3	→ L-400
			■							■												■		■					0	3	→ L-402
	■									■												■		■					0	7	→ L-404
				■						■												■		■					0	7	→ L-406
		■								■													■						0	7	→ L-408
		■								■												■							0	7	→ L-410
					■			■					■																	0	10	→ L-411
					■			■				■										■		■	■		■		0	19	→ L-413
					■			■				■										■		■	■	■	■		0	19	→ L-416
					■			■				■												■	■				0	14.5	→ L-419
					■		■		■		■													■	■				0	5	→ L-421
					■		■		■		■													■	■				0	8	→ L-423
					■			■					■																	0	10	→ L-425
						■	■	■																■	■					0	1.5	→ L-427
														■	■	■	■	■	■					■	■				0.5	70	→ L-428
															■	■				■				■					0.5	53	→ L-430
														■	■	■	■	■	■			■		■	■			■	0.5	70	→ L-432
														■	■	■					■			■					0	70	→ L-435
														■										■	■				0	60	→ L-437
														■															0	60	→ L-439
														■															0	60	→ L-441

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At a glance

- Very compact design
- 2 m or 3 m protective field range
- 270° scan angle
- One field set (one protective field, two warning fields)
- Selectable resolution for hand, leg or body detection
- Contour as reference for vertical applications
- Integrated external device monitoring (EDM)
- Easy-to-configure fields and functions

Your benefits

- Simple integration due to ultracompact design
- Easy installation, commissioning and maintenance for stationary and mobile applications
- Unbeatable cost-effectiveness – 270° scan angle allows complete application protection with only two scanners
- Safety engineering – with no loss of productivity
- Decades of proven safety technology guarantee maximum reliability and availability – even under difficult conditions
- Easy to manage, reducing costs and work time
- Reduction of downtime and brake wear thanks to triple field function
- Simple alignment and safe operation in vertical mode

→ www.mysick.com/en/S300_Mini_Standard

For more information, just 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.

Ordering information

Other models and accessories → www.mysick.com/en/S300_Mini_Standard

Protective field range	Model name	Part no.
2 m	S32B-2011BA	1050932
3 m	S32B-3011BA	1056430

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Recommended accessories

	Brief description	Model name	Part no.
Mounting brackets and mounting plates			
	1 piece, Mounting bracket for rear mounting on wall or machine	Mounting kit 1a	2034324
	1 piece, Mounting bracket for rear mounting on wall or machine with protection of optics hood	Mounting kit 1b	2034325
	1 piece, Mounting bracket, adjustable longitudinal and lateral axes, only in conjunction with mounting kit 1a (2034324) or 1b (2034325)	Mounting kit 2	2039302
	1 piece, Mounting plate, adjustable longitudinal axis, only in conjunction with mounting kit 2 (2039302)	Mounting kit 3	2039303

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	Brief description	Model name	Part no.
Plug connectors and cables			
	Head A: Female connector, M12, 8-pin, straight Head B: cable Cable: TPU, halogen-free, shielded, 5 m	DOL-127SG05ME25KM0	6020354
	Head A: Female connector, M12, 8-pin, straight Head B: cable Cable: TPU, halogen-free, shielded, 10 m	DOL-127SG10ME25KM0	6020352
	Head A: Female connector, M12, 8-pin, straight Head B: cable Cable: TPU, halogen-free, shielded, 20 m	DOL-127SG20ME25KM0	6033096
	Head A: Female connector, M12, 8-pin, straight Head B: cable Cable: TPU, halogen-free, shielded, 2.5 m	DOL-127SG2M5E25KM0	6020537
	Head A: Female connector, M12, 8-pin, angled Head B: cable Cable: TPU, halogen-free, shielded, 5 m	DOL-127SW05ME25KM0	6021342
	Head A: Female connector, M12, 8-pin, angled Head B: cable Cable: TPU, halogen-free, shielded, 10 m	DOL-127SW10ME25KM0	6035566
	Head A: Female connector, M12, 8-pin, angled Head B: cable Cable: TPU, halogen-free, shielded, 15 m	DOL-127SW15ME25KM0	6021343
	Head A: male connector, M8, 4-pin, straight Head B: male connector, USB-A, straight Cable: PVC, unshielded, 2 m For connecting the configuration connection to the USB interface on the PC	DSL-8U04G02M025KM1	6034574
Spare parts			
	Spare part set optic cover with replacement seal and screws	Spare part set optic cover	2039248

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At a glance

- Can only be used in EFI system network, e.g., with a Flexi Soft safety controller or another safety laser scanner
- Very compact design
- 2 m or 3 m protective field range
- 270° scan angle
- Up to 16 switchable field sets (16 protective fields, 32 warning fields)
- Selectable resolution for hand, leg or body detection
- Extended system solutions in combination with Flexi Soft safety controller

Your benefits

- Simple integration due to ultracompact design
- Easy installation, commissioning and maintenance for stationary and mobile applications
- Unbeatable cost-effectiveness – 270° scan angle allows complete application protection with only two scanners
- Variety of field sets guarantees safety and productivity when protecting vehicles or moving machine parts
- Easy modular expansions, simple cabling and additional functions using SICK safety controllers with EFI
- Decades of proven safety technology guarantee maximum reliability and availability – even under difficult conditions
- Simple alignment and safe operation in vertical mode

➜ www.mysick.com/en/S300_Mini_Remote

For more information, just 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.

Ordering information

Other models and accessories ➜ www.mysick.com/en/S300_Mini_Remote

Protective field range	Model name	Part no.
2 m	S32B-2011EA	1051884
3 m	S32B-3011EA	1056431

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Recommended accessories

	Brief description	Model name	Part no.
Mounting brackets and mounting plates			
	1 piece, Mounting bracket for rear mounting on wall or machine	Mounting kit 1a	2034324
	1 piece, Mounting bracket for rear mounting on wall or machine with protection of optics hood	Mounting kit 1b	2034325
	1 piece, Mounting bracket, adjustable longitudinal and lateral axes, only in conjunction with mounting kit 1a (2034324) or 1b (2034325)	Mounting kit 2	2039302
	1 piece, Mounting plate, adjustable longitudinal axis, only in conjunction with mounting kit 2 (2039302)	Mounting kit 3	2039303

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Subject to change without notice

	Brief description	Model name	Part no.
Plug connectors and cables			
	Head A: Female connector, M12, 7-pin, straight, SICK-coded Head B: cable Cable: shielded, 5 m Extension cable S300 Mini Remote	DOL-1SS2G5M0E15KM3	6042338
	Head A: male connector, M8, 4-pin, straight Head B: male connector, USB-A, straight Cable: PVC, unshielded, 2 m For connecting the configuration connection to the USB interface on the PC	DSL-8U04G02M025KM1	6034574
Spare parts			
	Spare part set optic cover with replacement seal and screws	Spare part set optic cover	2039248

L

At a glance

- Compact design
- 2 m or 3 m protective field range
- 270° scan angle
- 16 switchable field sets (16 protective fields, 32 warning fields)
- Configuration memory integrated in the system plug
- EFI interface for safe SICK device communication
- Incremental encoder inputs for speed-dependent field switching
- Extended measured data output via RS-422 with landmark recognition

Your benefits

- Simple integration due to compact design
- Unbeatable cost-effectiveness – 270° scan angle allows complete application protection with only two scanners
- Easy installation, commissioning and maintenance for stationary and mobile applications
- Variety of field sets ensures safety and productivity when protecting vehicles or moving machine parts
- Quick recommissioning via configuration memory
- Easy modular expansions, simple cabling and additional functions using SICK safety controllers with EFI
- The correct protective field at any speed avoids unnecessary stops.
- Personnel protection and navigation support in one device

➜ www.mysick.com/en/S300_Expert

For more information, just 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.

Ordering information

Other models and accessories ➜ www.mysick.com/en/S300_Expert

Protective field range	Model name	Part no.
2 m	S30B-2011GB	1050193
3 m	S30B-3011GB	1057641

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Recommended accessories

	Brief description	Model name	Part no.
Mounting brackets and mounting plates			
	1 piece, Mounting bracket for rear mounting on wall or machine	Mounting kit 1a	2034324
	1 piece, Mounting bracket for rear mounting on wall or machine with protection of optics hood	Mounting kit 1b	2034325
	1 piece, Mounting bracket, adjustable longitudinal and lateral axes, only in conjunction with mounting kit 1a (2034324) or 1b (2034325)	Mounting kit 2	2039302
	1 piece, Mounting plate, adjustable longitudinal axis, only in conjunction with mounting kit 2 (2039302)	Mounting kit 3	2039303

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Subject to change without notice

	Brief description	Model name	Part no.
Plug connectors and cables			
	Head A: male connector, M8, 4-pin, straight Head B: male connector, USB-A, straight Cable: PVC, unshielded, 2 m For connecting the configuration connection to the USB interface on the PC	DSL-8U04G02M025KM1	6034574
	Head A: System plug Cable: without cable Not for use with incremental encoders, integrated configuration memory	SX0B-A0000G	2032807
	Head A: System plug Cable: without cable For use with incremental encoders, integrated configuration memory	SX0B-A0000J	2032856
	Head A: System plug Cable: pre-assembled, PVC, unshielded, 5 m For use with incremental encoders, integrated configuration memory	SX0B-B1105J	2032857
	Head A: System plug Cable: pre-assembled, PVC, unshielded, 5 m Not for use with incremental encoders, integrated configuration memory	SX0B-B1505G	2034264
Spare parts			
	Spare part set optic cover with replacement seal and screws	Spare part set optic cover	2039248

L

At a glance

- 4 m, 5.5 m or 7 m protective field range
- One field set (one protective fields, two warning fields)
- Configuration memory integrated in the system plug
- EFI interface for safe SICK device communication
- Selectable resolution for hand, leg or body detection
- Simultaneous monitoring of up to four protective fields
- Contour as reference for vertical applications
- Integrated external device monitoring (EDM)

Your benefits

- Largest protective field range in the market increases the variety of application possibilities
- Safety engineering – with no loss of productivity.
- Quick recommissioning via configuration memory
- Expandable modular system, simple cabling and additional functions such as the simultaneous monitoring of up to four protective fields using SICK safety controllers with EFI
- Easy installation, commissioning and maintenance for stationary and mobile applications
- Decades of proven safety technology guarantee maximum reliability and productivity – even under difficult conditions
- Simple alignment and safe operation in vertical mode

➜ www.mysick.com/en/S3000_Standard

For more information, just 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.

Ordering information

Other models and accessories ➜ www.mysick.com/en/S3000_Standard

- **System part:** sensor head with I/O module

Protective field range	Model name	Part no.
4 m	S30A-4011BA	1028934
5.5 m	S30A-6011BA	1023546
7 m	S30A-7011BA	1023890

Recommended accessories

	Brief description	Model name	Part no.
Mounting brackets and mounting plates			
	1 piece, Mounting bracket for direct mounting, from the rear, on wall or machine, not adjustable	Mounting kit 1	2015623
	1 piece, Mounting bracket for rear mounting on wall or machine, adjustable longitudinal and lateral axes, only in conjunction with mounting kit 1 (2015623)	Mounting kit 2	2015624
	1 piece, Mounting bracket for rear mounting on wall, floor, or machine, adjustable longitudinal and lateral axes, only in conjunction with mounting kit 1 (2015623) and 2 (2015624)	Mounting kit 3	2015625

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Subject to change without notice

	Brief description	Model name	Part no.
Plug connectors and cables			
	Head A: male connector, M8, 4-pin, straight Head B: male connector, USB-A, straight Cable: PVC, unshielded, 2 m For connecting the configuration connection to the USB interface on the PC	DSL-8U04G02M025KM1	6034574
	Head A: System plug Cable: without cable Not for use with incremental encoders, integrated configuration memory	SX0A-A0000B	2023797
	Head A: System plug Cable: pre-assembled, PVC, unshielded, 5 m Not for use with incremental encoders, integrated configuration memory	SX0A-B0905B	2027170
	Head A: System plug Cable: pre-assembled, PVC, unshielded, 10 m Not for use with incremental encoders, integrated configuration memory	SX0A-B0910B	2027171
	Head A: System plug Cable: pre-assembled, PVC, unshielded, 20 m Not for use with incremental encoders, integrated configuration memory	SX0A-B0920B	2027814
Spare parts			
	Front screen replacement kit with replacement seal and screws	Front screen replacement kit	2027180

L

At a glance

- 4 m, 5.5 m or 7 m protective field range
- 21 switchable field sets (21 protective fields, 42 warning fields)
- Configuration memory integrated in the system plug
- EFI interface for safe SICK device communication
- Incremental encoder inputs for speed-dependent field switching
- Extended measured data output via RS-422 with landmark recognition
- Simultaneous monitoring of up to four protective fields

Your benefits

- Largest protective field range in the market increases the variety of application possibilities
- Variety of field sets ensures safety and productivity when protecting vehicles or moving machine parts
- Expandable modular system, simple cabling and additional functions such as the simultaneous monitoring of up to four protective fields using SICK safety controllers with EFI
- Quick recommissioning via configuration memory
- The correct protective field at any speed avoids unnecessary stops.
- Personnel protection and navigation support in one device
- Easy installation, commissioning and maintenance for stationary and mobile applications
- Decades of proven safety technology guarantee maximum reliability and productivity – even under difficult conditions

➜ www.mysick.com/en/S3000_Expert

For more information, just 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.

Ordering information

Other models and accessories ➜ www.mysick.com/en/S3000_Expert

- **System part:** sensor head with I/O module

Protective field range	Model name	Part no.
4 m	S30A-4011GB	1052107
5.5 m	S30A-6011GB	1052108
7 m	S30A-7011GB	1052109

Recommended accessories

	Brief description	Model name	Part no.
Mounting brackets and mounting plates			
	1 piece, Mounting bracket for direct mounting, from the rear, on wall or machine, not adjustable	Mounting kit 1	2015623
	1 piece, Mounting bracket for rear mounting on wall or machine, adjustable longitudinal and lateral axes, only in conjunction with mounting kit 1 (2015623)	Mounting kit 2	2015624
	1 piece, Mounting bracket for rear mounting on wall, floor, or machine, adjustable longitudinal and lateral axes, only in conjunction with mounting kit 1 (2015623) and 2 (2015624)	Mounting kit 3	2015625

	Brief description	Model name	Part no.
Plug connectors and cables			
	Head A: male connector, M8, 4-pin, straight Head B: male connector, USB-A, straight Cable: PVC, unshielded, 2 m For connecting the configuration connection to the USB interface on the PC	DSL-8U04G02M025KM1	6034574
	Head A: System plug Cable: without cable Not for use with incremental encoders, integrated configuration memory	SX0A-A0000B	2023797
	Head A: System plug Cable: without cable For use with incremental encoders, integrated configuration memory	SX0A-A0000D	2023310
	Head A: System plug Cable: pre-assembled, PVC, unshielded, 5 m For use with incremental encoders, integrated configuration memory	SX0A-B1305D	2027176
	Head A: System plug Cable: pre-assembled, PVC, unshielded, 5 m Not for use with incremental encoders, integrated configuration memory	SX0A-B1705B	2027174
Spare parts			
	Front screen replacement kit with replacement seal and screws	Front screen replacement kit	2027180

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At a glance

- Direct integration in PROFINET IO safe bus system
- 4 m, 5.5 m or 7 m protective field range
- Four switchable field sets (four protective fields, four warning fields)
- Managed 2-Port switch for copper or optical fiber based conductors
- Configuration memory integrated in the system plug
- Remote diagnostics and configuration through safety controller
- Simultaneous monitoring of two protective fields

Your benefits

- Reliable, fault-tolerant communication with PLC controller using state-of-the-art fiber-optic technology.
- Efficient, cost-effective protection – networked through direct connection to PROFINET IO networks
- Rapid diagnosis by means of remote access prevents downtimes
- Standardized integration in PLC controllers, thanks to GSDML generic station description
- Largest protective field range in the market increases the variety of application possibilities
- Quick recommissioning via configuration memory
- Easy installation, commissioning and maintenance for stationary and mobile applications
- Decades of proven safety technology guarantee maximum reliability and availability – even under difficult conditions

➜ www.mysick.com/en/S3000_PROFINET_IO_Advanced

For more information, just 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.

Ordering information

Other models and accessories ➜ www.mysick.com/en/S3000_PROFINET_IO_Advanced

- **System part:** sensor head with I/O module

Protective field range	Connection type	Model name	Part no.
4 m	Optical fiber conductor (2 female connectors for SCRJ push-pull plug)	S30A-4111CL	1052591
	Copper conductor (2 female connectors for RJ-45 push-pull plug)	S30A-4111CP	1045650
5.5 m	Optical fiber conductor (2 female connectors for SCRJ push-pull plug)	S30A-6111CL	1052593
	Copper conductor (2 female connectors for RJ-45 push-pull plug)	S30A-6111CP	1045652
7 m	Optical fiber conductor (2 female connectors for SCRJ push-pull plug)	S30A-7111CL	1052595
	Copper conductor (2 female connectors for RJ-45 push-pull plug)	S30A-7111CP	1045654

Recommended accessories

	Brief description	Model name	Part no.
Mounting brackets and mounting plates			
	1 piece, Mounting bracket for direct mounting, from the rear, on wall or machine, not adjustable	Mounting kit 1	2015623
	1 piece, Mounting bracket for rear mounting on wall or machine, adjustable longitudinal and lateral axes, only in conjunction with mounting kit 1 (2015623)	Mounting kit 2	2015624
	1 piece, Mounting bracket for rear mounting on wall, floor, or machine, adjustable longitudinal and lateral axes, only in conjunction with mounting kit 1 (2015623) and 2 (2015624)	Mounting kit 3	2015625

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Subject to change without notice

	Brief description	Model name	Part no.
Plug connectors and cables			
	Cable: unshielded, 0.3 m	Adapter cable RJ45PP/M12	6044052
	Head A: male connector, M8, 4-pin, straight Head B: male connector, USB-A, straight Cable: PVC, unshielded, 2 m For connecting the configuration connection to the USB interface on the PC	DSL-8U04G02M025KM1	6034574
	Head A: System plug Cable: without cable Not for use with incremental encoders, integrated configuration memory	SX1A-A0000L	2047286
	Head A: System plug Cable: pre-assembled, PVC, unshielded, 1 m Not for use with incremental encoders, integrated configuration memory	SX1A-B0201L	2049575
	Head A: System plug Cable: pre-assembled with power y-junction, PVC, unshielded, 1 m Not for use with incremental encoders, integrated configuration memory	SX1A-B0201M	2049857
Spare parts			
	Front screen replacement kit with replacement seal and screws	Front screen replacement kit	2027180

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At a glance

- Designed and certified for temperatures down to –30 °C
- Modified housing with integrated temperature controller
- IP 67 enclosure rating
- 7 m protective field range
- Four switchable field sets (four protective fields, eight warning fields)
- EFI interface for safe SICK device communication
- Selectable resolution for hand, leg or body detection
- Contour as reference for vertical applications

Your benefits

- First safety laser scanner available on the market which can be used at temperatures as low as –30 °C.
- Hazard area, hazard point, access or vehicle protection in cold areas.
- Largest protective field range in the market increases the variety of application possibilities
- Expandable modular system, simple cabling and additional functions such as the simultaneous monitoring of up to four protective fields using SICK safety controllers with EFI
- Easy installation, commissioning and maintenance for stationary and mobile applications
- Decades of proven safety technology guarantee maximum reliability and productivity – even under difficult conditions

➜ www.mysick.com/en/S3000_Cold_Store

For more information, just 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.

Ordering information

Other models and accessories ➜ www.mysick.com/en/S3000_Cold_Store

Protective field range	Model name	Part no.
7 m	S31A-7011CA	1041648

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Recommended accessories

	Brief description	Model name	Part no.
Mounting brackets and mounting plates			
	Mounting kit for wall-mounting (adjustment bracket)	Mounting kit	2018303
Plug connectors and cables			
	Head A: male connector, 16-pin Head B: - Cable: unshielded	16-pin connection plug	2018301
	Head A: cable Head B: cable Cable: PVC, unshielded	Connecting cable	6025729
	Head A: 16-pin Head B: - Cable: unshielded For connection plug of the laser scanner	Connection inlay 16-pin (spring strip)	6004379
	Cable: RS-232, RS-422, unshielded, 5 m, configuration cable pre-assembled for RS-232, for the connection of PCs/power supply	Service cable	2019561
Drying agent cartridges			
	Dry cartridge	Desiccant cartridge with male thread M36 x 1.5	5306179

8011993/2014-07-24
Subject to change without notice

At a glance

- Type 4 (IEC 61496), SIL3 (IEC 61508), PL e (EN ISO 13849)
- Absence of blind zones
- Resolution of 14 mm or 30 mm
- Protective field height of 300 mm to 2.100 mm
- Automatic calibration on the protective field width up to 10 m range
- Ambient operating temperature of –30 °C to +55 °C
- Enclosure rating IP 65 and IP 67
- Flexi Loop-compatible M12 male connector

Your benefits

- Simple assembly with innovative mounting and no blind zones
- Quick commissioning thanks to integrated LED display and automatic calibration on the protective field width up to 10 m range
- Simply safe: rugged and reliable thanks to enclosure rating IP 67 and an ambient operating temperature down to –30 °C, enabling use in harsh ambient conditions
- Intelligently standardized: M12, 5-pin provide cost reductions and enables a safe series connection with Flexi Loop
- Basic function without configuration effort enables quick replacement when servicing is required

→ www.mysick.com/en/deTec4_Core

For more information, just 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.

Ordering information

Other models and accessories → www.mysick.com/en/deTec4_Core

- **Resolution:** 14 mm
- **Scanning range:** 0 m ... 7 m

Protective field height	Sender		Receiver	
	Model name	Part no.	Model name	Part no.
300 mm	C4C-SA03010A10000	1211450	C4C-EA03010A10000	1211463
450 mm	C4C-SA04510A10000	1211469	C4C-EA04510A10000	1211470
600 mm	C4C-SA06010A10000	1211471	C4C-EA06010A10000	1211472
750 mm	C4C-SA07510A10000	1211473	C4C-EA07510A10000	1211474
900 mm	C4C-SA09010A10000	1211475	C4C-EA09010A10000	1211515
1,050 mm	C4C-SA10510A10000	1211476	C4C-EA10510A10000	1211477
1,200 mm	C4C-SA12010A10000	1211478	C4C-EA12010A10000	1211479
1,350 mm	C4C-SA13510A10000	1211480	C4C-EA13510A10000	1211481
1,500 mm	C4C-SA15010A10000	1211482	C4C-EA15010A10000	1211483
1,650 mm	C4C-SA16510A10000	1211484	C4C-EA16510A10000	1211485
1,800 mm	C4C-SA18010A10000	1211486	C4C-EA18010A10000	1211487
1,950 mm	C4C-SA19510A10000	1211488	C4C-EA19510A10000	1211489
2,100 mm	C4C-SA21010A10000	1211490	C4C-EA21010A10000	1211491

- **Resolution:** 30 mm
- **Scanning range:** 0 m ... 10 m

Protective field height	Sender		Receiver	
	Model name	Part no.	Model name	Part no.
300 mm	C4C-SA03030A10000	1211462	C4C-EA03030A10000	1211464
450 mm	C4C-SA04530A10000	1211492	C4C-EA04530A10000	1211493
600 mm	C4C-SA06030A10000	1211494	C4C-EA06030A10000	1211495
750 mm	C4C-SA07530A10000	1211496	C4C-EA07530A10000	1211497
900 mm	C4C-SA09030A10000	1211498	C4C-EA09030A10000	1211516
1,050 mm	C4C-SA10530A10000	1211499	C4C-EA10530A10000	1211500
1,200 mm	C4C-SA12030A10000	1211501	C4C-EA12030A10000	1211502
1,350 mm	C4C-SA13530A10000	1211503	C4C-EA13530A10000	1211504
1,500 mm	C4C-SA15030A10000	1211505	C4C-EA15030A10000	1211506
1,650 mm	C4C-SA16530A10000	1211507	C4C-EA16530A10000	1211508
1,800 mm	C4C-SA18030A10000	1211509	C4C-EA18030A10000	1211510
1,950 mm	C4C-SA19530A10000	1211511	C4C-EA19530A10000	1211512
2,100 mm	C4C-SA21030A10000	1211513	C4C-EA21030A10000	1211514

Recommended accessories

	Brief description	Model name	Part no.
Terminal and alignment brackets			
	4 pieces, FlexFix bracket, Plastic	BEF-1SHABPKU4	2066614
	2 pieces, QuickFix bracket, Plastic	BEF-3SHABPKU2	2066048
Adapters and distributors			
	T-connector plugs directly into receiver, splits the single home run from control cabinet between sender and receiver	DSC-1205T000025KM0	6030664
Plug connectors and cables			
	Head A: Female connector, M12, 5-pin, straight Head B: cable Cable: TPU, halogen-free, unshielded, 5 m	DOL-1205-G05MC	6025907
	Head A: Female connector, M12, 5-pin, straight Head B: cable Cable: TPU, halogen-free, unshielded, 10 m	DOL-1205-G10MC	6025908
	Head A: Female connector, M12, 5-pin, straight Head B: cable Cable: TPU, halogen-free, unshielded, 20 m	DOL-1205-G20MC	6050247

8011993/2014-07-24
Subject to change without notice

At a glance

- Type 4 (IEC 61496), SIL3 (IEC 61508), PL e (EN ISO 13849)
- 7-segment display
- PSDI mode with the UE402 switching amplifier
- External device monitoring (EDM) and restart interlock (RES)
- Configuration and diagnostics via PC
- Cascade up to three systems
- ADO (Application Diagnostic Output) signaling output for contamination indicator
- Accessory Clone Plug – for configuration memory

Your benefits

- 7-segment display saves time during alignment and diagnostics
- Beam coding protects the systems against opticalinterference by ensuring a high level of availability
- Ability to cascade up to three systems optimizes the safety application and reduces wiring costs
- Preconfigured light curtains and the clone plug enables easy and rapid commissioning
- Precise, convenient configuration and diagnostics reduces downtime

→ www.mysick.com/en/C4000_Standard

For more information, just 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.

Ordering information

Other models and accessories → www.mysick.com/en/C4000_Standard

Standalone device

- **Resolution:** 14 mm
- **Scanning range:** 0 m ... 8 m

Protective field height	Sender		Receiver	
	Model name	Part no.	Model name	Part no.
300 mm	C40S-0301CA010	1018591	C40E-0301CA010	1018592
450 mm	C40S-0401CA010	1018347	C40E-0401CA010	1018348
600 mm	C40S-0601CA010	1018593	C40E-0601CA010	1018594
750 mm	C40S-0701CA010	1018595	C40E-0701CA010	1018596
900 mm	C40S-0901CA010	1018597	C40E-0901CA010	1018598
1,200 mm	C40S-1201CA010	1018601	C40E-1201CA010	1018602
1,500 mm	C40S-1501CA010	1018605	C40E-1501CA010	1018606
1,800 mm	C40S-1801CA010	1018609	C40E-1801CA010	1018610

- **Resolution:** 30 mm
- **Scanning range:** 0 m ... 19 m

Protective field height	Sender		Receiver	
	Model name	Part no.	Model name	Part no.
300 mm	C40S-0303CA010	1018635	C40E-0303CA010	1018636
450 mm	C40S-0403CA010	1018637	C40E-0403CA010	1018638
600 mm	C40S-0603CA010	1018639	C40E-0603CA010	1018640
750 mm	C40S-0703CA010	1018641	C40E-0703CA010	1018642
900 mm	C40S-0903CA010	1018643	C40E-0903CA010	1018644
1,200 mm	C40S-1203CA010	1018647	C40E-1203CA010	1018648
1,500 mm	C40S-1503CA010	1018651	C40E-1503CA010	1018652
1,800 mm	C40S-1803CA010	1018655	C40E-1803CA010	1018656

Cascade device

- **Resolution:** 14 mm
- **Scanning range:** 0 m ... 8 m

Protective field height	Sender		Receiver	
	Model name	Part no.	Model name	Part no.
300 mm	C40S-0301DA010	1018690	C40E-0301DA010	1018691
450 mm	C40S-0401DA010	1018349	C40E-0401DA010	1018350
600 mm	C40S-0601DA010	1018692	C40E-0601DA010	1018693
750 mm	C40S-0701DA010	1018694	C40E-0701DA010	1018695
900 mm	C40S-0901DA010	1018696	C40E-0901DA010	1018697
1,200 mm	C40S-1201DA010	1018700	C40E-1201DA010	1018701
1,500 mm	C40S-1501DA010	1018704	C40E-1501DA010	1018705
1,800 mm	C40S-1801DA010	1018708	C40E-1801DA010	1018709

- **Resolution:** 30 mm
- **Scanning range:** 0 m ... 19 m

Protective field height	Sender		Receiver	
	Model name	Part no.	Model name	Part no.
300 mm	C40S-0303DA010	1018733	C40E-0303DA010	1018734
450 mm	C40S-0403DA010	1018735	C40E-0403DA010	1018736
600 mm	C40S-0603DA010	1018737	C40E-0603DA010	1018738
750 mm	C40S-0703DA010	1018739	C40E-0703DA010	1018740
900 mm	C40S-0903DA010	1018741	C40E-0903DA010	1018742
1,200 mm	C40S-1203DA010	1018745	C40E-1203DA010	1018746
1,500 mm	C40S-1503DA010	1018749	C40E-1503DA010	1018750
1,800 mm	C40S-1803DA010	1018753	C40E-1803DA010	1018754

UE402 switching amplifier

Description	Model name	Part no.
Expands C4000 Standard, Advanced, Palletizer, Entry/Exit and Fusion with the functions described in the technical data, e.g., bypass, operating mode switching or in addition PSDI mode on C4000 Standard, Advanced.	UE402	1023577

8011993/2014-07-24
Subject to change without notice

Recommended accessories

	Brief description	Model name	Part no.
Terminal and alignment brackets			
	4 pieces, Mounting kit 6, side bracket, rotatable, Zinc diecast	BEF-1SHABAZN4	2019506
	4 pieces, Mounting kit 2, rotatable, swivel mount, Polyamide PA6	BEF-2SMMEAKU4	2019659
Plug connectors and cables			
	Head A: Female connector, M26, 12-pin, straight Head B: cable Cable: PVC, unshielded, 5 m	DOL-0612G05M075KM0	2022545
	Head A: Female connector, M26, 12-pin, straight Head B: cable Cable: PVC, unshielded, 10 m	DOL-0612G10M075KM0	2022547
	Head A: Female connector, M26, 12-pin, straight Head B: cable Cable: PVC, unshielded, 15 m	DOL-0612G15M075KM0	2022548
	Head A: Female connector, M26, 12-pin, straight Head B: cable Cable: PVC, unshielded, 20 m	DOL-0612G20M075KM0	2022549
	Head A: male connector, M26, 12-pin, straight Head B: Female connector, M26, 12-pin, straight Cable: PVC, unshielded, 1 m	DSL-0612G01M075KM0	2022279
	Head A: male connector, M26, 12-pin, straight Head B: Female connector, M26, 12-pin, straight Cable: PVC, unshielded, 0.5 m	DSL-0612G0M5075KM0	2021838
	Head A: male connector, M26, 12-pin, straight Head B: Female connector, M26, 12-pin, straight Cable: PVC, unshielded, 2.5 m	DSL-0612G2M5075KM0	2022282

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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 increase the productivity in the process
- 7-segment display saves time during alignment and diagnostics
- Beam coding protects the systems against opticalinterference by ensuring a high level of availability
- Clone plug enables easy and rapid commissioning, saving time and costs
- Ability to cascade up to three systems optimizes the safety application and reduces wiring costs
- Precise, convenient configuration and diagnostics reduce downtime

➜ www.mysick.com/en/C4000_Advanced

For more information, just 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.

Ordering information

Other models and accessories ➜ www.mysick.com/en/C4000_Advanced

Standalone device

- **Resolution:** 14 mm
- **Scanning range:** 0 m ... 8 m

Protective field height	Sender		Receiver	
	Model name	Part no.	Model name	Part no.
300 mm	C40S-0301CA010	1018591	C40E-0301CB010	1018781
450 mm	C40S-0401CA010	1018347	C40E-0401CB010	1018782
600 mm	C40S-0601CA010	1018593	C40E-0601CB010	1018783
750 mm	C40S-0701CA010	1018595	C40E-0701CB010	1018784
900 mm	C40S-0901CA010	1018597	C40E-0901CB010	1018785
1,200 mm	C40S-1201CA010	1018601	C40E-1201CB010	1018787
1,500 mm	C40S-1501CA010	1018605	C40E-1501CB010	1018789
1,800 mm	C40S-1801CA010	1018609	C40E-1801CB010	1018791

8011993/2014-07-24
Subject to change without notice

- **Resolution:** 30 mm
- **Scanning range:** 0 m ... 19 m

Protective field height	Sender		Receiver	
	Model name	Part no.	Model name	Part no.
300 mm	C40S-0303CA010	1018635	C40E-0303CB010	1018803
450 mm	C40S-0403CA010	1018637	C40E-0403CB010	1018804
600 mm	C40S-0603CA010	1018639	C40E-0603CB010	1018805
750 mm	C40S-0703CA010	1018641	C40E-0703CB010	1018806
900 mm	C40S-0903CA010	1018643	C40E-0903CB010	1018807
1,200 mm	C40S-1203CA010	1018647	C40E-1203CB010	1018810
1,500 mm	C40S-1503CA010	1018651	C40E-1503CB010	1018812
1,800 mm	C40S-1803CA010	1018655	C40E-1803CB010	1018814

Cascade device

- **Resolution:** 14 mm
- **Scanning range:** 0 m ... 8 m

Protective field height	Sender		Receiver	
	Model name	Part no.	Model name	Part no.
300 mm	C40S-0301DA010	1018690	C40E-0301DB010	1018827
450 mm	C40S-0401DA010	1018349	C40E-0401DB010	1018828
600 mm	C40S-0601DA010	1018692	C40E-0601DB010	1018829
750 mm	C40S-0701DA010	1018694	C40E-0701DB010	1018830
900 mm	C40S-0901DA010	1018696	C40E-0901DB010	1018831
1,200 mm	C40S-1201DA010	1018700	C40E-1201DB010	1018833
1,500 mm	C40S-1501DA010	1018704	C40E-1501DB010	1018835
1,800 mm	C40S-1801DA010	1018708	C40E-1801DB010	1018837

- **Resolution:** 30 mm
- **Scanning range:** 0 m ... 19 m

Protective field height	Sender		Receiver	
	Model name	Part no.	Model name	Part no.
300 mm	C40S-0303DA010	1018733	C40E-0303DB010	1018849
450 mm	C40S-0403DA010	1018735	C40E-0403DB010	1018850
600 mm	C40S-0603DA010	1018737	C40E-0603DB010	1018851
750 mm	C40S-0703DA010	1018739	C40E-0703DB010	1018852
900 mm	C40S-0903DA010	1018741	C40E-0903DB010	1018853
1,200 mm	C40S-1203DA010	1018745	C40E-1203DB010	1018855
1,500 mm	C40S-1503DA010	1018749	C40E-1503DB010	1018857
1,800 mm	C40S-1803DA010	1018753	C40E-1803DB010	1018859

UE402 switching amplifier

Description	Model name	Part no.
Expands C4000 Standard, Advanced, Palletizer, Entry/Exit and Fusion with the functions described in the technical data, e.g., bypass, operating mode switching or in addition PSDI mode on C4000 Standard, Advanced.	UE402	1023577

Recommended accessories

	Brief description	Model name	Part no.
Terminal and alignment brackets			
	4 pieces, Mounting kit 6, side bracket, rotatable, Zinc diecast	BEF-1SHABAZN4	2019506
	4 pieces, Mounting kit 2, rotatable, swivel mount, Polyamide PA6	BEF-2SMMEAKU4	2019659
Plug connectors and cables			
	Head A: Female connector, M26, 12-pin, straight Head B: cable Cable: PVC, unshielded, 5 m	DOL-0612G05M075KM0	2022545
	Head A: Female connector, M26, 12-pin, straight Head B: cable Cable: PVC, unshielded, 10 m	DOL-0612G10M075KM0	2022547
	Head A: Female connector, M26, 12-pin, straight Head B: cable Cable: PVC, unshielded, 15 m	DOL-0612G15M075KM0	2022548
	Head A: Female connector, M26, 12-pin, straight Head B: cable Cable: PVC, unshielded, 20 m	DOL-0612G20M075KM0	2022549
	Head A: male connector, M26, 12-pin, straight Head B: Female connector, M26, 12-pin, straight Cable: PVC, unshielded, 1 m	DSL-0612G01M075KM0	2022279
	Head A: male connector, M26, 12-pin, straight Head B: Female connector, M26, 12-pin, straight Cable: PVC, unshielded, 0.5 m	DSL-0612G0M5075KM0	2021838
	Head A: male connector, M26, 12-pin, straight Head B: Female connector, M26, 12-pin, straight Cable: PVC, unshielded, 2.5 m	DSL-0612G2M5075KM0	2022282

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8011993/2014-07-24
Subject to change without notice

At a glance

- Type 4 (IEC 61496), SIL3 (IEC 61508), PL e (EN ISO 13849)
- IP 69K, IP 67, IP 66 and IP 65 enclosure ratings incl. cable
- Withstands wash-down pressure up to 100 bar and water temperature up to 80 °C
- ECOLAB and Diversey certified
- Resistant steel materials
- Ventilation valve prevents fogging of the front screen
- Smooth surfaces prevent accumulation of bacteria
- Compact design up to 1,800 mm protective field height

Your benefits

- The longer service life saves costs. IP 69K-tested product – from the housing materials right up to the connection cable
- As an alternative to hard guards, personnel can quickly access protected areas for service, keeping productivity high
- Saves time in the cleaning and is resistant to high pressure cleaners
- Reliable safeguarding, even when temperatures fluctuate

→ www.mysick.com/en/C4000_Micro_in_IP69K_Housing

For more information, just 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.

Ordering information

Other models and accessories → www.mysick.com/en/C4000_Micro_in_IP69K_Housing

- **Resolution:** 14 mm
- **Scanning range:** 0 m ... 1.8 m

Protective field height	Sender		Receiver	
	Model name	Part no.	Model name	Part no.
300 mm	C45S-0301AA220	1025722	C45E-0301AG220	1025723
450 mm	C45S-0401AA220	1025727	C45E-0401AG220	1025728
600 mm	C45S-0601AA220	1025732	C45E-0601AG220	1025733
750 mm	C45S-0701AA220	1025737	C45E-0701AG220	1025738
900 mm	C45S-0901AA220	1025742	C45E-0901AG220	1025743
1,050 mm	C45S-1001AA220	1025747	C45E-1001AG220	1025748
1,200 mm	C45S-1201AA220	1025753	C45E-1201AG220	1025754
1,350 mm	C45S-1301AA220	1055506	C45E-1301AG220	1055507
1,500 mm	C45S-1501AA220	1055511	C45E-1501AG220	1055512
1,650 mm	C45S-1601AA220	1055516	C45E-1601AG220	1055517
1,800 mm	C45S-1801AA220	1055521	C45E-1801AG220	1055522

- **Resolution:** 30 mm
- **Scanning range:** 0 m ... 4.5 m

Protective field height	Sender		Receiver	
	Model name	Part no.	Model name	Part no.
300 mm	C45S-0303AA220	1025724	C45E-0303AG220	1025725
450 mm	C45S-0403AA220	1025729	C45E-0403AG220	1025730
600 mm	C45S-0603AA220	1025734	C45E-0603AG220	1025735
750 mm	C45S-0703AA220	1025739	C45E-0703AG220	1025740
900 mm	C45S-0903AA220	1025744	C45E-0903AG220	1025745
1,050 mm	C45S-1003AA220	1025749	C45E-1003AG220	1025750
1,200 mm	C45S-1203AA220	1025755	C45E-1203AG220	1025756
1,350 mm	C45S-1303AA220	1055508	C45E-1303AG220	1055509
1,500 mm	C45S-1503AA220	1055513	C45E-1503AG220	1055514
1,650 mm	C45S-1603AA220	1055518	C45E-1603AG220	1055519
1,800 mm	C45S-1803AA220	1055523	C45E-1803AG220	1055524

- **Resolution:** 30 mm
- **Scanning range:** 4 m ... 14.5 m

Protective field height	Sender		Receiver	
	Model name	Part no.	Model name	Part no.
300 mm	C45S-0303BA220	1055627	C45E-0303AG220	1025725
450 mm	C45S-0403BA220	1055628	C45E-0403AG220	1025730
600 mm	C45S-0603BA220	1055629	C45E-0603AG220	1025735
750 mm	C45S-0703BA220	1055630	C45E-0703AG220	1025740
900 mm	C45S-0903BA220	1055631	C45E-0903AG220	1025745
1,050 mm	C45S-1003BA220	1055632	C45E-1003AG220	1025750
1,200 mm	C45S-1203BA220	1055633	C45E-1203AG220	1025756
1,350 mm	C45S-1303BA220	1055634	C45E-1303AG220	1055509
1,500 mm	C45S-1503BA220	1055635	C45E-1503AG220	1055514
1,650 mm	C45S-1603BA220	1055636	C45E-1603AG220	1055519
1,800 mm	C45S-1803BA220	1055637	C45E-1803AG220	1055524

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Recommended accessories

	Brief description	Model name	Part no.
Device protection (mechanical)			
	Bidirectional ventilation membrane made from Gore-Tex	Bidirectional ventilation membrane	5309082
Other mounting accessories			
	1 piece, Mounting tool for M12 cable socket, small housing	Installation wrench	4034690
Terminal and alignment brackets			
	2 pieces, Stainless steel support bracket, Stainless steel	BEF-2AAAADES2	2026849
	4 pieces, Stainless steel bracket, rotatable, Stainless steel	BEF-2SMMEAES4	2023708
	4 pieces, Reinforced stainless steel bracket, rotatable, Stainless steel	BEF-2SMMVAES4	2026850

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Subject to change without notice

At a glance

- Type 4 (IEC 61496), SIL3 (IEC 61508), PL e (EN ISO 13849)
- Compact cross section (15 mm x 32 mm) with no dead zones
- Cascadable twin stick design – sender and receiver in a single housing
- Customized protective field heights in 60-mm increments from 120 mm to 1,200 mm
- Typical scanning ranges 0 m ... 5 m
- Intelligent, software-free configuration of external device monitoring (EDM) and reset function (RES)
- M12, 5-pin device connection

Your benefits

- Cost-effective machine integration: its small design, cascadable features and incremental protective field heights enable a flexible adjustment to the machine design
- Standardization saves time and resources because of more straightforward logistics, order entry and service
- Simplified handling and setup: Software-free, almost fully automatic commissioning and intuitive operation with sustainable optics
- Bright LED display provides fast alignment, easy start up and clear protective field visualization ensure quick diagnostics
- End-to-end coverage in cascadable applications eliminates dead zones and shortens the safety distance, increasing productivity
- Application-specific brackets provide increased flexibility and reduce installation time

→ www.mysick.com/en/miniTwin4

For more information, just 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.

Ordering information

Other models and accessories → www.mysick.com/en/miniTwin4

Standalone device

- **Resolution:** 14 mm

Cable length	Protective field height	Model name	Part no.
160 mm	120 mm	C4MT-01214ABB03BE0	1207094
	180 mm	C4MT-01814ABB03BE0	1207097
350 mm	240 mm	C4MT-02414ABB03DE0	1207098
	300 mm	C4MT-03014ABB03DE0	1207099
	360 mm	C4MT-03614ABB03DE0	1207100
	420 mm	C4MT-04214ABB03DE0	1207101
	480 mm	C4MT-04814ABB03DE0	1207102
	540 mm	C4MT-05414ABB03DE0	1207103
700 mm	600 mm	C4MT-06014ABB03FE0	1207104
	660 mm	C4MT-06614ABB03FE0	1207105
	720 mm	C4MT-07214ABB03FE0	1207106
	780 mm	C4MT-07814ABB03FE0	1207107
	840 mm	C4MT-08414ABB03FE0	1207108
	900 mm	C4MT-09014ABB03FE0	1207109

- **Resolution:** 24 mm

Cable length	Protective field height	Model name	Part no.
350 mm	240 mm	C4MT-02424ABB03DE0	1207224
	300 mm	C4MT-03024ABB03DE0	1207225
	360 mm	C4MT-03624ABB03DE0	1207227
	480 mm	C4MT-04824ABB03DE0	1207229

Cable length	Protective field height	Model name	Part no.
700 mm	600 mm	C4MT-06024ABB03FE0	1207231
	720 mm	C4MT-07224ABB03FE0	1207233
	900 mm	C4MT-09024ABB03FE0	1207236
	1,020 mm	C4MT-10224ABB03FE0	1207238
	1,200 mm	C4MT-12024ABB03FE0	1207241

Cascade device

- **Resolution:** 14 mm

Cable length	Protective field height	Model name	Part no.
160 mm	180 mm	C4MT-01814ABB04BE0	1207116
350 mm	240 mm	C4MT-02414ABB04DE0	1207117
	300 mm	C4MT-03014ABB04DE0	1207118
	480 mm	C4MT-04814ABB04DE0	1207121
700 mm	600 mm	C4MT-06014ABB04FE0	1207123
	720 mm	C4MT-07214ABB04FE0	1207125
	900 mm	C4MT-09014ABB04FE0	1207128

Recommended accessories

	Brief description	Model name	Part no.
Mounting brackets and mounting plates			
	2 pieces, C-Fix-Flex bracket, adjustable +4°/–4°, metal version, for flat and connector side assembly/assembling/construction/mounting, for all protective field heights, Metal	BEF-1SHABMAL2	2056598
	2 pieces, Combination C-Fix bracket with L-Fix bracket, 2 pieces each, for all sizes, for all protective field heights	BEF-3AAA0MKU2S04	2045843
	2 pieces, O-Fix bracket, 2 pieces, for all sizes, for all protective field heights	BEF-3SHAEMKU2	2045835
Plug connectors and cables			
Illustration may differ	Head A: Female connector, M12, 5-pin, straight Head B: cable Cable: PVC, unshielded, 5 m	DOL-1205-G05M	6009868
	Head A: Female connector, M12, 5-pin, straight Head B: cable Cable: PVC, unshielded, 10 m	DOL-1205-G10M	6010544
	Head A: male connector, M12, 5-pin, straight Head B: Female connector, M12, 5-pin, straight Cable: drag chain use, TPU, halogen-free, unshielded, 1 m	DSL-1205-G01MC	6029280
	Head A: male connector, M12, 5-pin, straight Head B: Female connector, M12, 5-pin, straight Cable: drag chain use, TPU, halogen-free, unshielded, 2 m	DSL-1205-G02MC	6025931
	Head A: Female connector, M12, 5-pin, straight Head B: male connector, M12, 5-pin, straight Cable: unshielded, 0.35 m Connector for cascaded Mini Twin, with 2 connecting cables and 1 male and 1 female connector M12, 5-pin	System plug cascade	2046454
	Head A: Female connector, M12, 5-pin, straight Head B: male connector, M12, 5-pin, straight Cable: unshielded, 0.7 m Connector for cascaded Mini Twin, with 2 connecting cables and 1 male and 1 female connector M12, 5-pin	System plug cascade	2046456
	Cable: unshielded, 10 m, for miniTwin Standalone	System plug standalone	2051290

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8011993/2014-07-24
Subject to change without notice

At a glance

- Type 2 (IEC 61496), SIL2 (IEC 61508), PL d (EN ISO 13849)
- Compact cross section (15 mm x 32 mm) with no dead zones
- Cascadable twin stick design – sender and receiver in a single housing
- Customized protective field heights in 60-mm increments from 120 mm to 1,200 mm
- Typical scanning ranges 0 m ... 8 m
- Intelligent, software-free configuration of external device monitoring (EDM) and reset function (RES)
- M12, 5-pin device connection

Your benefits

- Cost-effective machine integration: its small design, cascadable features and incremental protective field heights enable a flexible adjustment to the machine design
- Standardization saves time and resources because of more straightforward logistics, order entry and service
- Simplified handling and setup: Software-free, almost fully automatic commissioning and intuitive operation with sustainable optics
- Bright LED display provides fast alignment, easy start up and clear protective field visualization ensure quick diagnostics
- End-to-end coverage in cascadable applications eliminates dead zones and shortens the safety distance, increasing productivity
- Application-specific brackets provide increased flexibility and reduce installation time

➜ **www.mysick.com/en/miniTwin2**

For more information, just 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.

Ordering information

Other models and accessories ➜ **www.mysick.com/en/miniTwin2**

Standalone device

- **Resolution:** 14 mm

Cable length	Protective field height	Model name	Part no.
160 mm	120 mm	C2MT-01214BBC03BE0	1207793
	180 mm	C2MT-01814BBC03BE0	1207794
350 mm	240 mm	C2MT-02414BBC03DE0	1207795
	300 mm	C2MT-03014BBC03DE0	1207796
	360 mm	C2MT-03614BBC03DE0	1207797
	420 mm	C2MT-04214BBC03DE0	1207798
	480 mm	C2MT-04814BBC03DE0	1207799
	540 mm	C2MT-05414BBC03DE0	1207800
700 mm	600 mm	C2MT-06014BBC03FE0	1207801

- **Resolution:** 24 mm

Cable length	Protective field height	Model name	Part no.
350 mm	240 mm	C2MT-02424BBC03DE0	1207824
	300 mm	C2MT-03024BBC03DE0	1207825
	360 mm	C2MT-03624BBC03DE0	1207832
	480 mm	C2MT-04824BBC03DE0	1207834

Cable length	Protective field height	Model name	Part no.
700 mm	600 mm	C2MT-06024BBC03FE0	1207836
	720 mm	C2MT-07224BBC03FE0	1207838
	900 mm	C2MT-09024BBC03FE0	1207841
	1,020 mm	C2MT-10224BBC03FE0	1207843
	1,200 mm	C2MT-12024BBC03FE0	1207846

Cascade device

- **Resolution:** 24 mm

Cable length	Protective field height	Model name	Part no.
160 mm	180 mm	C2MT-01824BBC04BE0	1207886
350 mm	240 mm	C2MT-02424BBC04DE0	1207887
	300 mm	C2MT-03024BBC04DE0	1207888
	480 mm	C2MT-04824BBC04DE0	1207891
700 mm	600 mm	C2MT-06024BBC04FE0	1207893
	720 mm	C2MT-07224BBC04FE0	1207895
	900 mm	C2MT-09024BBC04FE0	1207898

Recommended accessories

	Brief description	Model name	Part no.
Mounting brackets and mounting plates			
	2 pieces, C-Fix-Flex bracket, adjustable +4°/–4°, metal version, for flat and connector side assembly/assembling/construction/mounting, for all protective field heights, Metal	BEF-1SHABMAL2	2056598
	2 pieces, Combination C-Fix bracket with L-Fix bracket, 2 pieces each, for all sizes, for all protective field heights	BEF-3AAA0MKU2S04	2045843
	2 pieces, O-Fix bracket, 2 pieces, for all sizes, for all protective field heights	BEF-3SHAEMKU2	2045835
Plug connectors and cables			
Illustration may differ	Head A: Female connector, M12, 5-pin, straight Head B: cable Cable: PVC, unshielded, 5 m	DOL-1205-G05M	6009868
	Head A: Female connector, M12, 5-pin, straight Head B: cable Cable: PVC, unshielded, 10 m	DOL-1205-G10M	6010544
	Head A: male connector, M12, 5-pin, straight Head B: Female connector, M12, 5-pin, straight Cable: drag chain use, TPU, halogen-free, unshielded, 1 m	DSL-1205-G01MC	6029280
	Head A: male connector, M12, 5-pin, straight Head B: Female connector, M12, 5-pin, straight Cable: drag chain use, TPU, halogen-free, unshielded, 2 m	DSL-1205-G02MC	6025931
	Head A: Female connector, M12, 5-pin, straight Head B: male connector, M12, 5-pin, straight Cable: unshielded, 0.35 m Connector for cascaded Mini Twin, with 2 connecting cables and 1 male and 1 female connector M12, 5-pin	System plug cascade	2046454
	Head A: Female connector, M12, 5-pin, straight Head B: male connector, M12, 5-pin, straight Cable: unshielded, 0.7 m Connector for cascaded Mini Twin, with 2 connecting cables and 1 male and 1 female connector M12, 5-pin	System plug cascade	2046456
	Cable: unshielded, 10 m, for miniTwin Standalone	System plug standalone	2051290

8011993/2014-07-24
Subject to change without notice

At a glance

- Type 2 (IEC 61496), SIL1 (IEC 61508), PL c (EN ISO 13849)
- Absence of blind zones
- Resolution of 14 mm or 30 mm
- Protective field height of 300 mm to 2,100 mm
- Automatic calibration on the protective field width up to 10 m range
- Ambient operating temperature of –30 °C to +55 °C
- Enclosure rating IP 65 and IP 67
- Flexi Loop-compatible M12 male connector

Your benefits

- Simple assembly with innovative mounting and no blind zones
- Quick commissioning thanks to integrated LED display and automatic calibration on the protective field width up to 10 m range
- Simply safe: rugged and reliable thanks to enclosure rating IP 67 and an ambient operating temperature down to –30 °C, enabling use in harsh ambient conditions
- Intelligently standardized: M12, 5-pin provide cost reductions and enables a safe series connection with Flexi Loop
- Basic function without configuration effort enables quick replacement when servicing is required

➜ **www.mysick.com/en/deTec2_Core**

For more information, just 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.

Ordering information

Other models and accessories ➜ **www.mysick.com/en/deTec2_Core**

- **Resolution:** 14 mm
- **Scanning range:** 0 m ... 7 m

Protective field height	Sender		Receiver	
	Model name	Part no.	Model name	Part no.
300 mm	C2C-SA03010A10000	1213163	C2C-EA03010A10000	1213188
450 mm	C2C-SA04510A10000	1213189	C2C-EA04510A10000	1213190
600 mm	C2C-SA06010A10000	1213191	C2C-EA06010A10000	1213192
750 mm	C2C-SA07510A10000	1213193	C2C-EA07510A10000	1213194
900 mm	C2C-SA09010A10000	1213195	C2C-EA09010A10000	1213196
1,050 mm	C2C-SA10510A10000	1213197	C2C-EA10510A10000	1213198
1,200 mm	C2C-SA12010A10000	1213183	C2C-EA12010A10000	1213199

- **Resolution:** 30 mm
- **Scanning range:** 0 m ... 10 m

Protective field height	Sender		Receiver	
	Model name	Part no.	Model name	Part no.
300 mm	C2C-SA03030A10000	1213200	C2C-EA03030A10000	1213184
450 mm	C2C-SA04530A10000	1213202	C2C-EA04530A10000	1213203
600 mm	C2C-SA06030A10000	1213204	C2C-EA06030A10000	1213205
750 mm	C2C-SA07530A10000	1213206	C2C-EA07530A10000	1213207
900 mm	C2C-SA09030A10000	1213208	C2C-EA09030A10000	1213209
1,050 mm	C2C-SA10530A10000	1213210	C2C-EA10530A10000	1213211
1,200 mm	C2C-SA12030A10000	1213212	C2C-EA12030A10000	1213213
1,350 mm	C2C-SA13530A10000	1213214	C2C-EA13530A10000	1213215
1,500 mm	C2C-SA15030A10000	1213216	C2C-EA15030A10000	1213217
1,650 mm	C2C-SA16530A10000	1213218	C2C-EA16530A10000	1213219
1,800 mm	C2C-SA18030A10000	1213220	C2C-EA18030A10000	1213221
1,950 mm	C2C-SA19530A10000	1213222	C2C-EA19530A10000	1213223
2,100 mm	C2C-SA21030A10000	1213201	C2C-EA21030A10000	1213164

Recommended accessories

	Brief description	Model name	Part no.
Terminal and alignment brackets			
	4 pieces, FlexFix bracket, Plastic	BEF-1SHABPKU4	2066614
	2 pieces, QuickFix bracket, Plastic	BEF-3SHABPKU2	2066048
Adapters and distributors			
	T-connector plugs directly into receiver, splits the single home run from control cabinet between sender and receiver	DSC-1205T000025KM0	6030664
Plug connectors and cables			
	Head A: Female connector, M12, 5-pin, straight Head B: cable Cable: TPU, halogen-free, unshielded, 5 m	DOL-1205-G05MC	6025907
	Head A: Female connector, M12, 5-pin, straight Head B: cable Cable: TPU, halogen-free, unshielded, 10 m	DOL-1205-G10MC	6025908
	Head A: Female connector, M12, 5-pin, straight Head B: cable Cable: TPU, halogen-free, unshielded, 20 m	DOL-1205-G20MC	6050247

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Subject to change without notice

At a glance

- Type 3 (IEC 61496), SIL2 (IEC 61508), PL d (EN ISO 13849)
- Protective field size from 0.4 m x 0.4 m to 1.5 m x 1.5 m
- Resolution 20 mm, 24 mm, and 30 mm
- One device only: integrated sender and receiver
- Intuitive one-button operation
- Automatic alignment
- Synchronization of 2 systems
- Restart/Reset, EDM integrated

Your benefits

- Flexible and individual definition of protective fields
- Quick commissioning without additional software
- Intuitive, time-saving operation
- No variants: one-device concept for all aperture sizes
- Reduced storage, logistics and commissioning costs
- No expert knowledge for commissioning required
- High machine availability and simple maintenance

→ www.mysick.com/en/V300_Work_Station_Extended

For more information, just 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.

Ordering information

Other models and accessories → www.mysick.com/en/V300_Work_Station_Extended

Description	Model name	Part no.
V300 Work Station Extended	V30W-0101000	1041542

Recommended accessories

	Brief description	Model name	Part no.
Terminal and alignment brackets			
	Mounting kit for mounting the sensor on the profile frame	Mounting kit	2045375
Plug connectors and cables			
	Head A: Female connector, M12, 8-pin, straight Head B: cable Cable: TPU, halogen-free, shielded, 5 m	DOL-127SG05ME25KM0	6020354
	Head A: Female connector, M12, 8-pin, straight Head B: cable Cable: TPU, halogen-free, shielded, 2.5 m	DOL-127SG2M5E25KM0	6020537
	Head A: Female connector, M12, 8-pin, straight Head B: cable Cable: TPU, halogen-free, shielded, 7.5 m	DOL-127SG7M5E25KM0	6020353
Sets and kits			
Illustration may differ	Resolution set for 20 mm resolution and protective field size from 0.4 x 0.4 m to 1.0 m x 1.0 m	Resolution set 20 mm	2051336
	Resolution set for 24 mm resolution and protective field size from 0.4 x 0.4 m to 1.2 m x 1.2 m	Resolution set 24 mm	2051338
	Resolution set for 30 mm resolution and protective field size from 0.6 x 0.6 m to 1.5 m x 1.5 m	Resolution set 30 mm	2051339

At a glance

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

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.mysick.com/en/M4000_Standard

For more information, just 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.

Ordering information

Other models and accessories ➜ www.mysick.com/en/M4000_Standard

M4000 Standard

- **Scanning range:** 0.5 m ... 70 m

Number of beams	Beam separation	Sender		Receiver	
		Model name	Part no.	Model name	Part no.
2	500 mm	M40S-025000AR0	1200000	M40E-025000RR0	1200017
4	300 mm	M40S-043000AR0	1200006	M40E-043000RR0	1200023

M4000 Standard with integrated alignment aid and end cap with integrated LED

- **Scanning range:** 0.5 m ... 70 m

Number of beams	Beam separation	Sender		Receiver	
		Model name	Part no.	Model name	Part no.
2	500 mm	M40S-025010AR0	1200011	M40E-025030RR0	1200038
3	400 mm	M40S-034010AR0	1200013	M40E-034030RR0	1200040
	450 mm	M40S-034510AR0	1200014	M40E-034530RR0	1200041
4	300 mm	M40S-043010AR0	1200015	M40E-043030RR0	1200042

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M4000 Standard A/P

Scanning range	Number of beams	Beam separation	Sender/receiver in one housing		Mirror	
			Model name	Part no.	Model name	Part no.
≤ 4.5 m	2	500 mm	M40Z-025000TR0	1200122	PSD01-2501	1027907
	4	300 mm	M40Z-043000TR0	1200123	PSD02-2301	1027908
≤ 7.5 m	2	500 mm	M40Z-025000RR0	1200120	PSD01-1501	1027906

Recommended accessories

	Brief description	Model name	Part no.
Mounting brackets and mounting plates			
	4 pieces, Mounting kit 1, mounting bracket, rigid, L-shaped, including fixing screws and washers	BEF-3WNGBAST4	7021352
Terminal and alignment brackets			
	4 pieces, Mounting kit 6, side bracket, rotatable, Zinc diecast	BEF-1SHABAZN4	2019506
	4 pieces, Mounting kit 12, rotatable, swivel mount	BEF-2SMGEAKU4	2030510
Plug connectors and cables			
	Head A: Female connector, M12, 8-pin, straight Head B: cable Cable: TPU, halogen-free, shielded, 5 m	DOL-127SG05ME25KM0	6020354
	Head A: Female connector, M12, 8-pin, straight Head B: cable Cable: TPU, halogen-free, shielded, 10 m	DOL-127SG10ME25KM0	6020352
	Head A: Female connector, M12, 8-pin, straight Head B: cable Cable: TPU, halogen-free, shielded, 15 m	DOL-127SG15ME25KM0	6020872
Device columns			
	Robust device column with two external mounting slots, maximum installation length 1,165 mm, column height 1,185 mm	PU3H11-00000000	2045641
	Robust device column with two external mounting slots, maximum installation length 1,265 mm, column height 1,285 mm	PU3H13-00000000	2045642
	Robust device column with two external mounting slots, maximum installation length 965 mm, column height 985 mm	PU3H96-00000000	2045490

At a glance

- Type 4 (IEC 61496), SIL3 (IEC 61508), PL e (EN ISO 13849)
- IP 69K, IP 67, IP 66 and IP 65 enclosure ratings incl. cable
- Withstands wash-down pressure up to 100 bar and water temperature up to 80 °C
- ECOLAB and Diversey certified
- Resistant steel materials
- Ventilation valve prevents fogging of the front screen
- Smooth surfaces prevent accumulation of bacteria
- Unique A/P version for comfortable integration

Your benefits

- High resistance reduces risk of contamination and increases the production quality
- Cost reduction through long-lasting products, enclosure rating IP 69K for all materials including cable
- Replacement for mechanical guards, with the following advantages:
- Fast access for personnel and service increases productivity
- Saving potential for cleaning time and use of detergents

→ www.mysick.com/en/M4000_Standard_in_IP69K_Housing

For more information, just 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.

Ordering information

Other models and accessories → www.mysick.com/en/M4000_Standard_in_IP69K_Housing

M4000 Standard in IP69K Housing, including 15 m IP69K-rated cable

Scanning range	Number of beams	Beam separation	Sender		Receiver	
			Model name	Part no.	Model name	Part no.
0.5 m ... 15.5 m	3	400 mm	M45S-034000EL0	1057664	M45E-034000EL0	1057665
9 m ... 53 m	3	400 mm	M45S-034000EL0	1057664	M45E-034000FL0	1057666

M4000 Standard A/P in IP69K Housing, including 15 m IP69K-rated cable

Scanning range	Number of beams	Beam separation	Sender/receiver in one housing		Mirror	
			Model name	Part no.	Model name	Part no.
0.5 m ... 4 m	4	300 mm	M45Z-043000FL0	1057667	PSI02-2302	1057668

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Subject to change without notice

Recommended accessories

	Brief description	Model name	Part no.
Device protection (mechanical)			
	Bidirectional ventilation membrane made from Gore-Tex	Bidirectional ventilation membrane	5309082
Other mounting accessories			
	1 piece, Mounting tool for M12 cable socket, large housing	Mounting key	4067618
Terminal and alignment brackets			
	2 pieces, Stainless steel support bracket, Stainless steel	BEF-2AAAAOES2	2060164
	4 pieces, Reinforced stainless steel bracket, rotatable, Stainless steel	BEF-2SMGVAES4	2060165

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At a glance

- Type 4 (IEC 61496), SIL3 (IEC 61508), PL e (EN ISO 13849)
- Robust housing with three mounting grooves
- 7-segment display
- Wide scanning range, up to 70 m
- External device monitoring (EDM), restart interlock (RES), application diagnostic output (ADO), SDL interface
- Muting in combination with the UE403 switching amplifier
- Laser alignment aid and LED optional integrated
- Configuration and diagnostics via PC

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 switching amplifier

➜ www.mysick.com/en/M4000_Advanced

For more information, just 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.

Ordering information

Other models and accessories ➜ www.mysick.com/en/M4000_Advanced

M4000 Advanced

- **Scanning range:** 0.5 m ... 70 m

Number of beams	Beam separation	Sender		Receiver	
		Model name	Part no.	Model name	Part no.
2	500 mm	M40S-025003AA0	1200060	M40E-025003RB0	1200065
	600 mm	M40S-026003AA0	1200070	M40E-026003RB0	1200096
3	220 mm	M40S-032203AA0	1200063	M40E-032203RB0	1200097
	400 mm	M40S-034003AA0	1200061	M40E-034003RB0	1200064
	450 mm	M40S-034503AA0	1200071	M40E-034503RB0	1200098
4	220 mm	M40S-042203AA0	1200072	M40E-042203RB0	1200099
	300 mm	M40S-043003AA0	1200073	M40E-043003RB0	1200100
5	220 mm	M40S-052203AA0	1200074	M40E-052203RB0	1200101
6	220 mm	M40S-062203AA0	1200075	M40E-062203RB0	1200102
7	220 mm	M40S-072203AA0	1200076	M40E-072203RB0	1200103
8	220 mm	M40S-082203AA0	1200077	M40E-082203RB0	1200104

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Subject to change without notice

M4000 Advanced, with integrated alignment aid

- **Scanning range:** 0.5 m ... 70 m

Number of beams	Beam separation	Sender		Receiver	
		Model name	Part no.	Model name	Part no.
2	500 mm	M40S-025013AA0	1200057	M40E-025013RB0	1200058
	600 mm	M40S-026013AA0	1200078	M40E-026013RB0	1200105
3	400 mm	M40S-034013AA0	1200069	M40E-034013RB0	1200106
	450 mm	M40S-034513AA0	1200082	M40E-034513RB0	1200107
4	300 mm	M40S-043013AA0	1200080	M40E-043013RB0	1200108

M4000 Advanced A/P

Scanning range	Number of beams	Beam separation	Sender/receiver in one housing		Mirror	
			Model name	Part no.	Model name	Part no.
≤ 4.5 m	2	500 mm	M40Z-025003TB0	1200128	PSD01-2501	1027907
	4	300 mm	M40Z-043003TB0	1200127	PSD02-2301	1027908
≤ 7.5 m	2	500 mm	M40Z-025003RB0	1200115	PSD01-1501	1027906

M4000 Advanced A/P, includes end cap with integrated LED

Scanning range	Number of beams	Beam separation	Sender/receiver in one housing		Mirror	
			Model name	Part no.	Model name	Part no.
≤ 4.5 m	2	500 mm	M40Z-025023TB0	1200125	PSD01-2501	1027907
	4	300 mm	M40Z-043023TB0	1200131	PSD02-2301	1027908
≤ 7.5 m	2	500 mm	M40Z-025023RB0	1200126	PSD01-1501	1027906

UE403 muting switching amplifier

Description	Model name	Part no.
UE403 muting switching amplifier	UE403-A0930	1026287

Recommended accessories

	Brief description	Model name	Part no.
Terminal and alignment brackets			
	4 pieces, Mounting kit 6, side bracket, rotatable, Zinc diecast	BEF-1SHABAZN4	2019506
	4 pieces, Mounting kit 12, rotatable, swivel mount	BEF-2SMGEAKU4	2030510
Plug connectors and cables			
	Head A: Female connector, M26, 12-pin, straight Head B: cable Cable: PVC, unshielded, 5 m Without EFI: Pin 9 and 10 not connected	DOL-0610G05M075KM1	2046888
	Head A: Female connector, M26, 12-pin, straight Head B: cable Cable: PVC, unshielded, 10 m Without EFI: Pin 9 and 10 not connected	DOL-0610G10M075KM1	2046889
	Head A: male connector, M12, 5-pin, straight Head B: Female connector, M12, 5-pin, straight Cable: drag chain use, TPU, halogen-free, unshielded, 2 m	DSL-1205-G02MC	6025931

	Brief description	Model name	Part no.
Device columns			
	Robust device column with two external mounting slots, maximum installation length 1,720 mm, column height 1,740 mm	PU3H17-00000000	2045643
Muting accessories			
	Parallel muting (4 sensors), muting sensor brackets for mounting on M4000 housing profile or device columns with external mounting grooves	M4000 muting arm-kit with four parallel-muting sensors	2046170
	Cross muting (2 sensors), muting sensor brackets for mounting on M4000 housing profile or device columns with external mounting grooves	M4000 muting arm-kit with two crossed-muting sensors	2046171
	Parallel muting (2 sensors), muting sensor brackets for mounting on M4000 housing profile or device columns with external mounting grooves	M4000 muting arm-kit with two parallel-muting sensors	2060156

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8011993/2014-07-24
Subject to change without notice

At a glance

- Type 2 (IEC 61496), SIL2 (IEC 61508), PL d (EN ISO 13849)
- Robust, industrial housing
- 7-segment display
- Wide scanning range, up to 70 m
- External device monitoring (EDM) and internal self-testing configurable without PC
- Beam coding for correct system allocation
- Standardized M12 connectivity

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
- Reduced downtime due to diagnostics displays located directly on the device
- Fast start-up times due to easy alignment using the optional laser alignment aid (separate accessories)

➜ www.mysick.com/en/M2000_Standard

For more information, just 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.

Ordering information

Other models and accessories ➜ www.mysick.com/en/M2000_Standard

M2000 Standard

- **Scanning range:** 0 m ... 25 m
- **System connection:** male connector, M12 x 8
- **External device monitoring (EDM):** ✔

Number of beams	Beam separation or resolution	Sender		Receiver	
		Model name	Part no.	Model name	Part no.
2	500 mm	M20S-02150A122	1018186	M20E-02150A122	1018187
3	400 mm	M20S-03140A122	1018188	M20E-03140A122	1018189
4	300 mm	M20S-04130A122	1018190	M20E-04130A122	1018191

- **Scanning range:** 0 m ... 70 m
- **System connection:** male connector, M12 x 8
- **External device monitoring (EDM):** ✔

Number of beams	Beam separation or resolution	Sender		Receiver	
		Model name	Part no.	Model name	Part no.
2	500 mm	M20S-02250A122	1018174	M20E-02250A122	1018175
3	400 mm	M20S-03240A122	1018178	M20E-03240A122	1018179

M2000 Standard A/P

- **Scanning range:** 0 m ... 6 m
- **System connection:** male connector, M12 x 8
- **External device monitoring (EDM):** ✔

Number of beams	Beam separation or resolution	Sender/receiver in one housing		Mirror	
		Model name	Part no.	Model name	Part no.
1	500 mm	M20Z-02550A122	1018361	PSR01-1501	1016677

Recommended accessories

	Brief description	Model name	Part no.
Terminal and alignment brackets			
	4 pieces, Mounting kit 6, side bracket, rotatable, Zinc diecast	BEF-1SHABAZN4	2019506
	4 pieces, Mounting kit 2, rotatable, swivel mount, Polyamide PA6	BEF-2SMMEAKU4	2019659
Plug connectors and cables			
	Head A: Female connector, M12, 8-pin, straight Head B: cable Cable: TPU, halogen-free, shielded, 10 m	DOL-127SG10ME25KM0	6020352
	Head A: Female connector, M12, 8-pin, straight Head B: cable Cable: TPU, halogen-free, shielded, 15 m	DOL-127SG15ME25KM0	6020872
Alignment aids			
	Laser alignment aid for various sensors, laser class 2 (IEC 60825): Never look into the beam.	AR60	1015741
	Adapter AR60 for devices with housing cross-section 48 mm x 40 mm (C4000, M2000)	Adapter AR60, 48x40	4032461
Device columns			
	Robust device column with two external mounting slots, maximum installation length 1,165 mm, column height 1,185 mm	PU3H11-00000000	2045641
	Robust device column with two external mounting slots, maximum installation length 1,265 mm, column height 1,285 mm	PU3H13-00000000	2045642
	Robust device column with two external mounting slots, maximum installation length 965 mm, column height 985 mm	PU3H96-00000000	2045490

At a glance

- Type 4 (IEC 61496), SIL3 (IEC 61508, EN 62061), PL e (EN ISO 13849), only in conjunction with UE401
- 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 –20 °C ... 55 °C
- Narrow evaluation device (22.5 mm) with external device monitoring (EDM) and restart interlock (RES)
- Fast response time of max. 30 ms
- Up to 8 sensors can be cascaded

Your benefits

- Easy integration due to small, compact versions with maximum range
- Flexible device integration makes it possible to set up individual protective fields
- Fast response times reduces safety distance and saves production area
- Extremely well suited for extreme ambient conditions such as heat, cold or moisture
- Straightforward configuration without a computer, only with the help of jumpers

➜ www.mysick.com/en/L4000_Systems

For more information, just 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.

Ordering information

Other models and accessories ➜ www.mysick.com/en/L4000_Systems

L40 sensors

Scanning range	Model	Housing material	Sender		Receiver	
			Model name	Part no.	Model name	Part no.
0 m ... 5 m	M18 radial	Nickel-plated brass	L40S-11MA1A	6027341	L40E-11MA1A	6027342
0 m ... 10 m	M18 axial	Plastic	L40S-21KA1A	6027337	L40E-21KA1A	6027338
		Nickel-plated brass	L40S-21MA1A	6027339	L40E-21MA1A	6027340
0 m ... 60 m	M30 axial	Nickel-plated brass	L40S-33MA2A	6027335	L40E-33MA2A	6027336

UE401 evaluation unit

Description	Model name	Part no.
UE401 evaluation unit	UE401-A0010	6027343

Recommended accessories

	Brief description	Model name	Part no.
Mounting brackets and mounting plates			
	Mounting bracket, M18 thread, steel, zinc coated, without mounting hardware	BEF-WN-M18	5308446
	Mounting bracket, M30 thread, steel, zinc coated, without mounting hardware	BEF-WN-M30	5308445

	Brief description	Model name	Part no.
Plug connectors and cables			
Illustration may differ	Head A: Female connector, M12, 4-pin, straight Head B: cable Cable: PVC, unshielded, 5 m	DOL-1204-G05M	6009866
Illustration may differ	Head A: Female connector, M12, 4-pin, angled Head B: cable Cable: PVC, unshielded, 5 m	DOL-1204-W05M	6009867
	Head A: Female connector, M12, 4-pin, straight Head B: - Cable: unshielded	DOS-1204-G	6007302
	Head A: Female connector, M12, 4-pin, angled Head B: - Cable: unshielded	DOS-1204-W	6007303

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Subject to change without notice

At a glance

- Type 4 (IEC 61496), SIL3 (IEC 61508), PL e (EN ISO 13849), only in conjunction with 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

Your benefits

- Easy integration due to small, compact versions with maximum range
- Directly connect to a safey controller – without a separate test box, reducing costs
- Flexible device integration makes it possible to set up individual protective fields
- Well suited to withstand extreme ambient conditions such as heat, cold or moisture

➜ www.mysick.com/en/L41

For more information, just 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.

Ordering information

Other models and accessories ➜ www.mysick.com/en/L41

Scanning range	Model	Housing material	Sender		Receiver	
			Model name	Part no.	Model name	Part no.
0 m ... 5 m	M18 radial	Nickel-plated brass	L41S-11MA1A	6034868	L41E-11MA1A	6034869
0 m ... 10 m	M18 axial	Nickel-plated brass	L41S-21MA1A	6034866	L41E-21MA1A	6034867
		Plastic	L41S-21KA1A	6034864	L41E-21KA1A	6034865
0 m ... 60 m	M30 axial	Nickel-plated brass	L41S-33MA2A	6034863	L41E-33MA2A	6034862

Recommended accessories

	Brief description	Model name	Part no.
Mounting brackets and mounting plates			
	Mounting bracket, M18 thread, steel, zinc coated, without mounting hardware	BEF-WN-M18	5308446
	Mounting bracket, M30 thread, steel, zinc coated, without mounting hardware	BEF-WN-M30	5308445

	Brief description	Model name	Part no.
Plug connectors and cables			
Illustration may differ	Head A: Female connector, M12, 4-pin, straight Head B: cable Cable: PVC, unshielded, 5 m	DOL-1204-G05M	6009866
Illustration may differ	Head A: Female connector, M12, 4-pin, angled Head B: cable Cable: PVC, unshielded, 5 m	DOL-1204-W05M	6009867
	Head A: Female connector, M12, 4-pin, straight Head B: - Cable: unshielded	DOS-1204-G	6007302
	Head A: Female connector, M12, 4-pin, angled Head B: - Cable: unshielded	DOS-1204-W	6007303

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Subject to change without notice

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 – without a separate evaluation unit, reducing costs
- Flexible device integration makes it possible to set up individual protective fields
- Well suited to withstand extreme ambient conditions such as heat, cold or moisture

➜ www.mysick.com/en/L21

For more information, just 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.

Ordering information

Other models and accessories ➜ www.mysick.com/en/L21

Scanning range	Model	Housing material	Sender		Receiver	
			Model name	Part no.	Model name	Part no.
0 m ... 5 m	M18 radial	Nickel-plated brass	L21S-11MA1A	6034876	L21E-11MA1A	6034877
0 m ... 10 m	M18 axial	Nickel-plated brass	L21S-21MA1A	6034874	L21E-21MA1A	6034875
		Plastic	L21S-21KA1A	6034872	L21E-21KA1A	6034873
0 m ... 60 m	M30 axial	Nickel-plated brass	L21S-33MA2A	6034870	L21E-33MA2A	6034871

Recommended accessories

	Brief description	Model name	Part no.
Mounting brackets and mounting plates			
	Mounting bracket, M18 thread, steel, zinc coated, without mounting hardware	BEF-WN-M18	5308446
	Mounting bracket, M30 thread, steel, zinc coated, without mounting hardware	BEF-WN-M30	5308445

	Brief description	Model name	Part no.
Plug connectors and cables			
Illustration may differ	Head A: Female connector, M12, 4-pin, straight Head B: cable Cable: PVC, unshielded, 5 m	DOL-1204-G05M	6009866
Illustration may differ	Head A: Female connector, M12, 4-pin, angled Head B: cable Cable: PVC, unshielded, 5 m	DOL-1204-W05M	6009867
	Head A: Female connector, M12, 4-pin, straight Head B: - Cable: unshielded	DOS-1204-G	6007302
	Head A: Female connector, M12, 4-pin, angled Head B: - Cable: unshielded	DOS-1204-W	6007303

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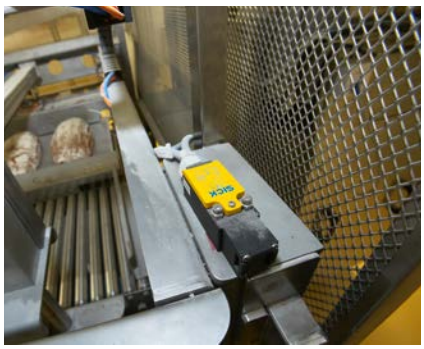
SAFETY SWITCHES



Three product groups for tried and tested, intelligent safety solutions

Safety switches are encountered at many locations where safety is demanded for people and machinery. They are used for protecting mobile separative protective devices, the position determination of dangerous movements and the safe stop function. The portfolio is divided into three groups: electro-mechanical and non-contact safety switches and safety command devices.

In conjunction with sens:Control – safe control solutions, SICK offers ideal complete solutions from a single source.

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Selection guide safety switches **M-446**

Electro-mechanical safety switches

i12S M-448
i16S M-449
i17S M-450
i110S M-451
i10 Lock M-452
i14 Lock M-454
i200 Lock M-455
i10P M-456
i110R M-457

Non-contact safety switches

RE1. . . . . M-458
RE2. . . . . M-460
TR4 Direct M-462
IN3000 Direct M-465
IN4000 Direct M-466

Safety command devices

ES11 . . . . . M-467
ES21 . . . . . M-468
ER12 . . . . . M-469
i110RP M-470
E100 . . . . . M-472

M

SELECTION GUIDE SAFETY SWITCHES

Product		Recommended safety application						Features							Page
		Interlocking of physical guards without locking	Interlocking of physical guards with locking	Safe position monitoring of machine parameters	Emergency stop	Reset	Manual approval for safe maintenance and setup mode	Housing material: Plastic	Housing material: Metal	Enclosure rating IP 65	Enclosure rating IP 66	Enclosure rating IP 67	Enclosure rating IP 69K	Flexi Loop-compatible plug connector	
Electro-mechanical safety switches															
	i12S	■						■				■		■	→ M-448
	i16S	■						■				■		■	→ M-449
	i17S	■						■				■			→ M-450
	i110S	■							■			■		■	→ M-451
	i10 Lock		■					■				■		■	→ M-452
	i14 Lock		■					■		■					→ M-454
	i200 Lock		■					■		■					→ M-455
	i10P			■				■			■				→ M-456
	i110R			■					■		■				→ M-457
Non-contact safety switches															
	RE1				■			■				■		■	→ M-458
	RE2				■			■				■		■	→ M-460
	TR4 Direct				■			■					■	■	→ M-462
	IN3000 Direct			■				■	■	■		■		■	→ M-465
	IN4000 Direct			■				■	■			■		■	→ M-466
Safety command devices															
	ES11				■	■		■		■				■	→ M-467
	ES21				■			■		■					→ M-468
	ER12					■		■		■					→ M-469
	i110RP				■				■		■			■	→ M-470
	E100						■	■				■			→ M-472

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At a glance

- Narrow plastic housing
- Rigid and mobile actuators
- Available with M16 X 1.5 cable entry gland or Flexi Loop-compatible M12 plug connector (depending on variant)
- Slow-action switching element with up to three contacts
- IP 67 enclosure rating

Your benefits

- Cost-effective solution for all standard safety applications
- Small design simplifies installation and makes it easy to mount directly on the guard door frame
- High reliability and safety due to the cone shaped metal alignment aid
- Flexi Loop now enables a safe series connection with enhanced diagnostics capabilities and minimal wiring effort.

➜ **www.mysick.com/en/i12S**

For more information, just 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.

Ordering information

Other models and accessories ➜ **www.mysick.com/en/i12S**

Number of positive action N/C contacts	Number of N/O contacts	Connection type	Locking force	Model name	Part no.
1	1	Cable gland, 1 x M16	6 N	i12-SA113	6025057
2	0	Cable gland, 1 x M16	6 N	i12-SA203	6025100
		Plug connector, M12, 4-pin	6 N	i12-SA205	1064506
			15 N	i12-SB215	1064507
	1	Cable gland, 1 x M16	15 N	i12-SB213	6025059

Recommended accessories

	Brief description	Model name	Part no.
Actuators			
	Angled, rigid	iE12-A1	5311132
	Rigid, semiflexible	iE12-F1	5308842
	Straight, rubber-mounted	iE12-S1	5311131

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At a glance

- Compact plastic housing
- Rigid and mobile actuators
- Available with M20 X 1.5 cable entry glands or Flexi Loop-compatible M12 plug connector (depending on variant)
- Slow-action switching elements with two contacts
- High retaining force
- IP 67 enclosure rating

Your benefits

- High availability and safety due to the cone shaped alignment aid
- High locking force offers machine reliability, even when exposed to shock and vibration
- Flexible electrical connectivity due to three cable entry glands
- Flexi Loop now enables a safe series connection with enhanced diagnostics capabilities and minimal wiring effort.

→ www.mysick.com/en/i16S

For more information, just 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.

Ordering information

Other models and accessories → www.mysick.com/en/i16S

- **Locking force:** 30 N

Number of positive action N/C contacts	Number of N/O contacts	Connection type	Model name	Part no.
1	1	Cable gland, 3 x M20	i16-SA113	6025065
2	0	Cable gland, 3 x M20	i16-SA203	6025063
		Plug connector, M12, 4-pin	i16-SA205	1064508

Recommended accessories

	Brief description	Model name	Part no.
Actuators			
	Rigid, fully flexible	iE16-F1	5311129
	Rigid, semiflexible	iE16-F2	5311278
	Straight, rigid	iE16-S1	5311128
	Catch and retainer kit	iE16-SCR	5310780

At a glance

- Compact plastic housing
- Rigid or mobile actuators
- 3 M20 x 1.5 cable entry glands
- Slow-action switching elements with three contacts
- IP 67 enclosure rating

Your benefits

- High availability and safety due to the cone shaped alignment aid
- Improved diagnostics due to additional signaling contacts
- Flexible electrical connectivity due to three cable entry glands
- Simple electrical connection due to large terminal compartment

➜ **www.mysick.com/en/i17S**

For more information, just 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.

Ordering information

Other models and accessories ➜ **www.mysick.com/en/i17S**

Number of positive action N/C contacts	Number of N/O contacts	Connection type	Locking force	Model name	Part no.
2	1	Cable gland, 3 x M20	12 N	i17-SA213	6025067

Recommended accessories

	Brief description	Model name	Part no.
Actuators			
	Rigid, fully flexible	iE16-F1	5311129
	Rigid, semiflexible	iE16-F2	5311278
	Catch and retainer kit	iE16-SCR	5310780
	Straight, rigid, self ejecting against simple manipulation	iE17-S1	5311130

At a glance

- Standardized metal housing
- Either rigid, fully mobile or bolt actuators available
- Available with M20 X 1.5 cable entry gland or Flexi Loop-compatible M12 plug connector (depending on variant)
- Slow-action switching elements with four contacts
- IP 67 enclosure rating

Your benefits

- Standard device design provides quick and easy mounting
- Rugged metal housing provides increased machine reliability, even when the guard has a mechanical offset
- High availability and safety due to the cone shaped alignment aid
- Improved diagnostics due to additional signaling contacts
- Flexi Loop now enables a safe series connection with enhanced diagnostics capabilities and minimal wiring effort.

→ www.mysick.com/en/i110S

For more information, just 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.

Ordering information

Other models and accessories → www.mysick.com/en/i110S

- **Locking force:** 12 N

Number of positive action N/C contacts	Number of N/O contacts	Connection type	Model name	Part no.
2	0	Plug connector, M12, 4-pin	i110-SA225	1064509
	2	Cable gland, 1 x M20	i110-SA223	6025074
3	1	Cable gland, 1 x M20	i110-SA313	6025073

Recommended accessories

	Brief description	Model name	Part no.
Actuators			
	Rigid, fully flexible	iE200-F1	5308759
	Straight, rigid	iE200-S1	5308758

At a glance

- Narrow plastic housing
- Rigid or mobile actuators
- Available with M20 X 1.5 cable entry glands or Flexi Loop-compatible M12 plug connector (depending on variant)
- Locked by spring force and magnetic force
- Lock and door monitoring
- IP 67 enclosure rating

Your benefits

- Small design simplifies installation and makes it easy to mount directly on the guard door frame
- Flexible electrical connectivity due to three cable entry glands
- Improved diagnostics due to additional signaling contacts
- Practical, simple adjustment due to various actuators that are suitable for any door
- Different switching elements offer the appropriate solution for electrical installation
- Flexi Loop now enables a safe series connection with enhanced diagnostics capabilities and minimal wiring effort.

➜ www.mysick.com/en/i10_Lock

For more information, just 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.

Ordering information

Other models and accessories ➜ www.mysick.com/en/i10_Lock

- **Locking type:** electrical

Number of positive action N/C solenoid monitoring contacts	Number of N/O solenoid monitoring contacts	Number of positive action N/C door monitoring contacts	Number of N/O door monitoring contacts	Number of N/C door monitoring contacts	Connection type	Model name	Part no.
2	1	0	0	1	Cable gland, 3 x M20	i10-E0233 Lock	6022585
	0	0	1	1	Cable gland, 3 x M20	i10-E0253 Lock	6020536
		1	0	0	Plug connector, M12, 8-pin	i10-E0454 Lock	6045056
			1	0	Cable gland, 3 x M20	i10-E0313S02 Lock	6011368
		2	0	0	Cable gland, 3 x M20	i10-E0453 Lock	6020598

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- **Locking type:** mechanical

Number of positive action N/C solenoid monitoring contacts	Number of N/O solenoid monitoring contacts	Number of positive action N/C door monitoring contacts	Number of N/O door monitoring contacts	Number of N/C door monitoring contacts	Connection type	Model name	Part no.
2	1	0	0	1	Cable gland, 3 x M20	i10-M0233 Lock	6022580
	0	0	1	1	Cable gland, 3 x M20	i10-M0253 Lock	6027397
		1	0	0	Plug connector, M12, 8-pin	i10-M0454 Lock	6045055
		2	0	0	Cable gland, 3 x M20	i10-M0453 Lock	6029934

Recommended accessories

	Brief description	Model name	Part no.
Actuators			
	Angled, rigid	iE10-A1	5306535
	Angled, rigid, with overrun	iE10-A4	5308497
	Rigid, semiflexible, door hinged at top/bottom	iE10-R1	5306528
	Rigid, semiflexible, door hinged on left/right	iE10-R2	5306529
	Straight, rigid	iE10-S1	5306527
	Straight, rubber-mounted	iE10-S2	5306530
	Straight, rigid, with overrun	iE10-S4	5308383

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At a glance

- Compact plastic housing
- M20 x 1.5 cable entry gland
- Locked with spring force
- Lock monitoring
- LED locking indicator
- Mechanical unlocking mechanism on three sides

Your benefits

- Cost-effective solution for all standard safety applications
- LED status indicator offers improved diagnostics
- Easy access to wiring for installation and maintenance due to a hinged cover – access to the unlocking mechanism from three sides
- Small housing saves space and can be mounted in tight areas

➜ www.mysick.com/en/i14_Lock

For more information, just 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.

Ordering information

Other models and accessories ➜ www.mysick.com/en/i14_Lock

- **Locking type:** mechanical

Number of positive action N/C solenoid monitoring contacts	Number of N/O solenoid monitoring contacts	Number of positive action N/C door monitoring contacts	Number of N/O door monitoring contacts	Number of N/C door monitoring contacts	Connection type	Model name	Part no.
2	1	0	0	0	Cable gland, 1 x M20	i14-M0213 Lock	6025060
3	0	0	0	0	Cable gland, 1 x M20	i14-M0303 Lock	6025062

Recommended accessories

	Brief description	Model name	Part no.
Actuators			
	Straight, rigid, catch and retainer set for increased retaining force	iE14-S1	5311133
Locks and keys			
	Key	iE14-E01	5311282

At a glance

- Compact plastic housing
- Stainless steel entry for actuator
- Either rigid, mobile or bolt actuators available
- 3 M20 x 1.5 cable entry glands
- Locked by spring force and magnetic force
- Lock and door monitoring
- LED locking indicator

Your benefits

- High reliability due to rugged metal actuator head, even when the guard has a mechanical offset
- Flexible electrical connectivity due to three cable entry glands
- Improved diagnostics due to additional contacts for door monitoring and LED lock monitoring
- Different switching elements offer the appropriate solution for electrical installation
- Bolt actuator offers personal protection in the hazardous area and prevents an undesirable restart of the machine

→ www.mysick.com/en/i200_Lock

For more information, just 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.

Ordering information

Other models and accessories → www.mysick.com/en/i200_Lock

- **Locking type:** electrical

Number of positive action N/C solenoid monitoring contacts	Number of N/O solenoid monitoring contacts	Number of positive action N/C door monitoring contacts	Number of N/O door monitoring contacts	Number of N/C door monitoring contacts	Connection type	Model name	Part no.
1	1	2	1	0	Cable gland, 3 x M20	i200-E0323 Lock	6026140

- **Locking type:** mechanical

Number of positive action N/C solenoid monitoring contacts	Number of N/O solenoid monitoring contacts	Number of positive action N/C door monitoring contacts	Number of N/O door monitoring contacts	Number of N/C door monitoring contacts	Connection type	Model name	Part no.
1	1	2	1	0	Cable gland, 3 x M20	i200-M0323 Lock	6025113
2	0	2	1	0	Cable gland, 3 x M20	i200-M0413 Lock	6025115

Recommended accessories

	Brief description	Model name	Part no.
Actuators			
	Rigid, fully flexible	iE200-F1	5308759
	Straight, rigid	iE200-S1	5308758

At a glance

- Standardized plastic housing
- Roller plunger with plastic roller
- 1 M20 x 1.5 cable entry gland
- Slow-action switching elements with three contacts

Your benefits

- Standard device design provides quick and easy mounting
- Cost-effective solution for all standard safety applications

➜ www.mysick.com/en/i10P

For more information, just 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.

Ordering information

Other models and accessories ➜ www.mysick.com/en/i10P

Switching principle	Number of positive action N/C contacts	Number of N/O contacts	Model name	Part no.
Slow action switching element	2	1	i10-PA213	6025088

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At a glance

- Standardized metal housing
- Metal turning lever with plastic roller
- 1 M20 x 1.5 cable entry gland
- Slow-action or snap-action switching element with up to four contacts

Your benefits

- Standard device design provides quick and easy mounting
- High availability due to rugged metal housing
- Different switching elements offer the appropriate solution for electrical installation
- Improved diagnostics due to additional signaling contacts

→ www.mysick.com/en/i110R

For more information, just 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.

Ordering information

Other models and accessories → www.mysick.com/en/i110R

Switching principle	Number of positive action N/C contacts	Number of N/O contacts	Model name	Part no.
Snap action switching element	1	1	i110-RA123	6025109
Slow action switching element	2	2	i110-RA223	6025108
	3	1	i110-RA313	6025107

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At a glance

- Response range of up to 7 mm
- 1 NO/1 NC or 2 NO contacts
- Up to performance level PL e / Cat. 4 (EN ISO 13849)
- Sensors with plug connector or connected cable
- Flexi Loop-compatible M12 plug connector (depending on variant)

Your benefits

- Long service life due to durable and low-maintenance design
- Space-saving mounting due to compact housing design
- Just one safety switch in conjunction with a suitable safety module makes it possible to solve applications up to PL e and Cat. 4 (EN ISO 13849)
- High level of machine availability due to high tolerances for door misalignment
- The devices are easy to clean, making them suitable for contaminated areas or environments with strict hygiene standards
- Flexi Loop now enables a safe series connection with enhanced diagnostics capabilities and minimal wiring effort.

➜ www.mysick.com/en/RE1

For more information, just 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.

Ordering information

Other models and accessories ➜ www.mysick.com/en/RE1

- **System part:** sensor & actuator
- **Design:** rectangular

Connection type	Flexi Loop-compatible M12 plug connector	Cable length	Safe switch on distance S_{ao}	Model name	Part no.
Plug connector, M8, 4-pin	–	–	3 mm	RE11-SAC	1059410
Cable	–	3 m	3 mm	RE11-SA03	1059411
		5 m	3 mm	RE11-SA05	1059501
Plug connector, M8, 4-pin	–	–	7 mm	RE13-SAC	1059503
Cable	–	3 m	7 mm	RE13-SA03	1059504
		5 m	7 mm	RE13-SA05	1062011
Cable with connector M12, 4-pin	✔	0.2 m	7 mm	RE13-SA64	1062540
Cable with connector M8, 4-pin	–	0.2 m	7 mm	RE13-SA84	1062539

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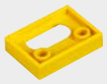
Recommended accessories

	Brief description	Model name	Part no.
Other mounting accessories			
	10 pieces, spacer for RE1	RE10-SP	1060290
Actuators			
	Replacement actuator for RE11-Sxx, RE11-Sxxx	RE11-SK	1062121
	Replacement actuator for RE13-Sxx, RE13-Sxxx	RE13-SK	1060292

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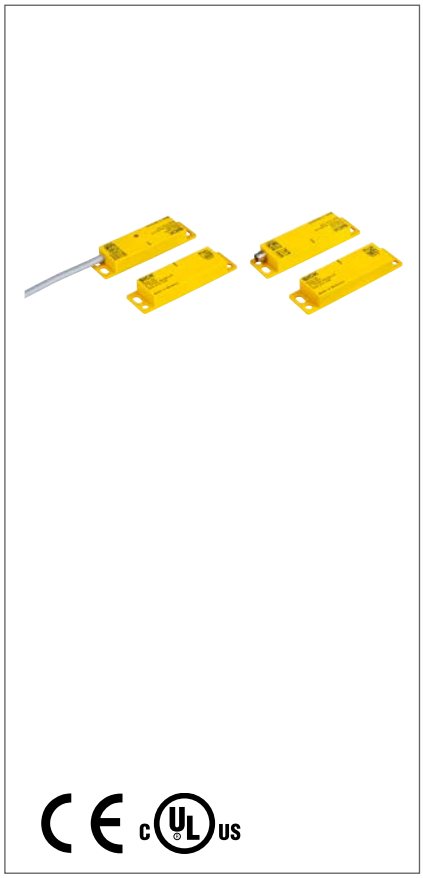

At a glance

- Response range of up to 9 mm
- 1 NO/1 NC, 2 NO contacts or 3 NO contacts
- Up to performance level PL e / Cat. 4 (EN ISO 13849)
- Sensors with plug connector or connected cable
- LED status indicator (RE27)
- Flexi Loop-compatible M12 plug connector (depending on variant)

Your benefits

- Long service life due to durable and low-maintenance design
- Just one safety switch in conjunction with a suitable safety module makes it possible to solve applications up to PL e and Cat. 4 (EN ISO 13849)
- High level of machine availability due to high tolerances for door misalignment
- The devices are easy to clean, making them suitable for contaminated areas or environments with strict hygiene standards
- Fast diagnostics via LED status indicator (RE27)
- Flexi Loop now enables a safe series connection with enhanced diagnostics capabilities and minimal wiring effort.

➜ www.mysick.com/en/RE2

For more information, just 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.

Ordering information

Other models and accessories ➜ www.mysick.com/en/RE2

- **System part:** sensor & actuator
- **Design:** rectangular

Status display	Connection type	Flexi Loop-compatible M12 plug connector	Cable length	Safe switch on distance S_{ao}	Model name	Part no.
–	Plug connector, M8, 4-pin	–	–	6 mm	RE21-SAC	1059505
	Cable	–	3 m	6 mm	RE21-SA03	1059506
			5 m	6 mm	RE21-SA05	1059507
	Plug connector, M8, 4-pin	–	–	9 mm	RE23-SAC	1059508
	Cable	–	3 m	9 mm	RE23-SA03	1061725
			5 m	9 mm	RE23-SA05	1061726
	Cable with connector M12, 4-pin	✔	0.2 m	9 mm	RE23-SA64	1062542
	Cable with connector M8, 4-pin	–	0.2 m	9 mm	RE23-SA84	1062541
✔	Cable	–	5 m	9 mm	RE27-SA05L	1059510
			10 m	9 mm	RE27-SA10L	1059511
			20 m	9 mm	RE27-SA20L	1059512
	Cable with plug M12, 8-pin	–	0.2 m	9 mm	RE27-SA68L	1059509
		✔	0.2 m	9 mm	RE27-SA68LS04	1065233

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Recommended accessories

	Brief description	Model name	Part no.
Other mounting accessories			
	10 pieces, spacer for RE2	RE20-SP	1060291
Actuators			
	Replacement actuator for RE21-Sxx, RE21-Sxxx	RE21-SK	1060293
	Replacement actuator for RE23-Sxx, RE23-Sxxx	RE23-SK	1060294
	Replacement actuator for RE27-SxxxL	RE27-SK	1060295

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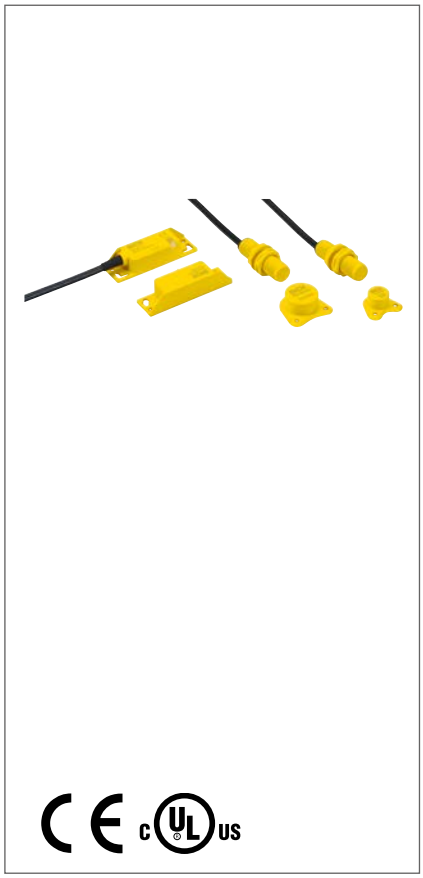

At a glance

- Response range of up to 25 mm
- Multicoded and unique coded sensors up to enclosure rating IP 69K
- Up to performance level PL e (EN ISO 13849)
- Two OSSD safety outputs
- Safe series connection of up to 30 sensors possible
- LED status indicator
- Boundary area indication and magnetic retaining force (optional)
- Flexi Loop-compatible M12 plug connector (depending on variant)

Your benefits

- High level of prevention against tampering due to individually coded actuator (depending on type)
- High level of machine availability due to high tolerances for door misalignment and boundary area indication
- High level of machine reliability due to resistance to shocks and vibrations
- Cascadability of up to 30 sensors saves costs
- Long service life due to durable and low-maintenance design
- Fast diagnostics via LED status indicator
- The devices are easy to clean, making them suitable for contaminated areas or environments with strict hygiene standards
- Flexi Loop now enables a safe series connection with enhanced diagnostics capabilities and minimal wiring effort.

➜ www.mysick.com/en/TR4_Direct

For more information, just 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.

Ordering information

Other models and accessories ➜ www.mysick.com/en/TR4_Direct

- **Design:** cylindrical
- **System part:** sensor & actuator

Housing diameter (sensor/actuator)	Safe switch on distance S_{ao}	Safe switch off distance S_{ar}	Coding	Connection type	Cable length	Model name	Part no.
M18 / M18	15 mm	25 mm	Multicoded	Cable with plug M12, 8-pin	0.2 m	TR4-SAM01C	6034588
				Cable	3 m	TR4-SAM03P	6034586
					10 m	TR4-SAM10P	6034587
			Unique coded	Cable with plug M12, 8-pin	0.2 m	TR4-SAU01C	6022319
				Cable	3 m	TR4-SAU03P	6022317
					10 m	TR4-SAU10P	6022318
M18 / M30	25 mm	35 mm	Multicoded	Cable with plug M12, 8-pin	0.2 m	TR4-SBM01C	6035190
				Cable	3 m	TR4-SBM03P	6025090
					10 m	TR4-SBM10P	6035189
			Unique coded	Cable with plug M12, 8-pin	0.2 m	TR4-SBU01C	6044628
				Cable	3 m	TR4-SBU03P	6044626
					10 m	TR4-SBU10P	6044627

- **Design:** rectangular
- **System part:** sensor & actuator
- **Dimensions:** 25 mm x 88 mm x 20 mm
- **Safe switch on distance S_{ao}:** 15 mm
- **Safe switch off distance S_{ar}:** 35 mm

Boundary area indication	Magnetic retaining force	Coding	Connection type	Cable length	Model name	Part no.
–	–	Multicoded	Cable with plug M12, 8-pin	0.2 m	TR4-SDM01C	6044638
			Cable	3 m	TR4-SDM03P	6044636
				10 m	TR4-SDM10P	6044637
		Unique coded	Cable with plug M12, 8-pin	0.2 m	TR4-SDU01C	6044641
			Cable	3 m	TR4-SDU03P	6044639
				10 m	TR4-SDU10P	6044640
✔	–	Multicoded	Cable with plug M12, 8-pin	0.2 m	TR4-SEM01C	6044644
			Cable	3 m	TR4-SEM03P	6044642
				10 m	TR4-SEM10P	6044643
		Unique coded	Cable with plug M12, 8-pin	0.2 m	TR4-SEU01C	6044647
			Cable	3 m	TR4-SEU03P	6044645
				10 m	TR4-SEU10P	6044646
	✔	Multicoded	Cable with plug M12, 8-pin	0.2 m	TR4-SFM01C	6044650
			Cable	3 m	TR4-SFM03P	6044648
				10 m	TR4-SFM10P	6044649
		Unique coded	Cable with plug M12, 8-pin	0.2 m	TR4-SFU01C	6044653
			Cable	3 m	TR4-SFU03P	6044651
				10 m	TR4-SFU10P	6044652

Recommended accessories

	Brief description	Model name	Part no.
Adapters and distributors			
	T-junction for serial connection of TR4 Direct	TR4-AK004C	5325889
	End connector for serial connection in combination with TR4-AK004C T-junction	TR4-AL002C	5325890

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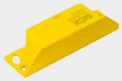
	Brief description	Model name	Part no.
Actuators			
	Cylindrical, replacement actuator, M18, for TR4-SAMxxx	TR4-RAM000	5321030
	Cylindrical, replacement actuator, M18, for TR4-SAUxxx	TR4-RAU000	5321031
	Cylindrical, replacement actuator, M30, for TR4-SBMxxx	TR4-RBM000	5321032
	Cylindrical, replacement actuator, M30, for TR4-SBUxxx	TR4-RBU000	5321033
	Rectangular, replacement actuator for TR4-SDMxxx	TR4-RDM000	5325631
	Rectangular, replacement actuator for TR4-SDUxxx	TR4-RDU000	5325632
	Rectangular, replacement actuator for TR4-SEMxxx and TR4-SFMxxx	TR4-RFM000	5325633
	Rectangular, replacement actuator for TR4-SEUxxx and TR4-SFUxxx	TR4-RFU000	5325634

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At a glance

- Response range of up to 15 mm
- LED status indicator
- Up to performance level PL d (EN ISO 13849), SILCL2 (EN 62061), SIL2 (IEC 61508)
- Flexi Loop-compatible M12 plug connector

Your benefits

- Cost-effective solution for applications up to PL d / SILCL2
- Space-saving mounting due to compact housing design
- Fast diagnostics via LED status indicator
- Long service life due to durable and low-maintenance design
- The devices are easy to clean, making them suitable for contaminated areas or environments with strict hygiene standards
- Flexi Loop now enables a safe series connection with enhanced diagnostics capabilities and minimal wiring effort.

→ www.mysick.com/en/IN3000_Direct

For more information, just 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.

Ordering information

Other models and accessories → www.mysick.com/en/IN3000_Direct

Design	Housing diameter	Installation type	Model name	Part no.
Cylindrical	M30	Non-flush	IN30-E0208K	6044655
	M18	Non-flush	IN30-E0305K	6034576
		Flush	IN30-E0306K	6034581
	M12	Non-flush	IN30-E0407K	6034582

Recommended accessories

	Brief description	Model name	Part no.
Mounting brackets and mounting plates			
	Mounting bracket, M12 thread, steel, zinc coated, without mounting hardware	BEF-WN-M12	5308447
	Mounting bracket, M18 thread, steel, zinc coated, without mounting hardware	BEF-WN-M18	5308446
	Mounting bracket, M30 thread, steel, zinc coated, without mounting hardware	BEF-WN-M30	5308445
Terminal and alignment brackets			
	Clamping block for round sensors M12, without fixed stop, plastic (PA12), glass-fiber reinforced, mounting hardware included	BEF-KH-M12	2051479
	Clamping block for round sensors M18, without fixed stop, plastic (PA12), glass-fiber reinforced, mounting hardware included	BEF-KH-M18	2051481

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At a glance

- Two OSSD safety outputs for direct connection of sensors to a single safety controller
- Response range of up to 20 mm
- LED status indicator
- Up to performance level PL e / Cat. 4 (EN ISO 13849)
- Flexi Loop-compatible M12 plug connector

Your benefits

- Direct connection to the safe control solution eliminates any additional wiring and reduces installation time
- Fast diagnostics via LED status indicator
- Long service life due to durable and low-maintenance design
- Just one safety switch in conjunction with a suitable safety module makes it possible to solve applications up to PL e and Cat. 4 (EN ISO 13849)
- The devices are easy to clean, making them suitable for contaminated areas or environments with strict hygiene standards
- Flexi Loop now enables a safe series connection with enhanced diagnostics capabilities and minimal wiring effort.

➜ www.mysick.com/en/IN4000_Direct

For more information, just 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.

Ordering information

Other models and accessories ➜ www.mysick.com/en/IN4000_Direct

Design	Installation type	Model name	Part no.
Rectangular	Non-flush	IN40-E0109K	6050281

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At a glance

- Slim plastic housing with quick disconnect mounting clip
- Available as an emergency stop pushbutton or as a combined emergency stop/reset unit
- Emergency stop pushbutton with optional LED illumination
- Illuminated reset pushbutton
- Flexi Loop-compatible M12 plug connector

Your benefits

- Easy installation with quick disconnect mounting clip
- Quick commissioning and easy replacement with an M12 plug connector
- User-friendly status indication
- Flexi Loop now enables a safe series connection with enhanced diagnostics capabilities and minimal wiring effort.

➜ **www.mysick.com/en/ES11**

For more information, just 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.

Ordering information

Other models and accessories ➜ **www.mysick.com/en/ES11**

Number of positive action N/C contacts	Number of N/O contacts	Emergency stop button (illuminable)	Reset button (illuminable)	Model name	Part no.
2	0	–	–	ES11-SA1A4	6051327
		✔	–	ES11-SA2B8	6051328
	1	–	✔	ES11-SC4D8	6051329

Recommended accessories

	Brief description	Model name	Part no.
Terminal and alignment brackets			
	10 pieces, steel, zinc coated, included in scope of delivery of the pushbutton	Holding clamp	5326274

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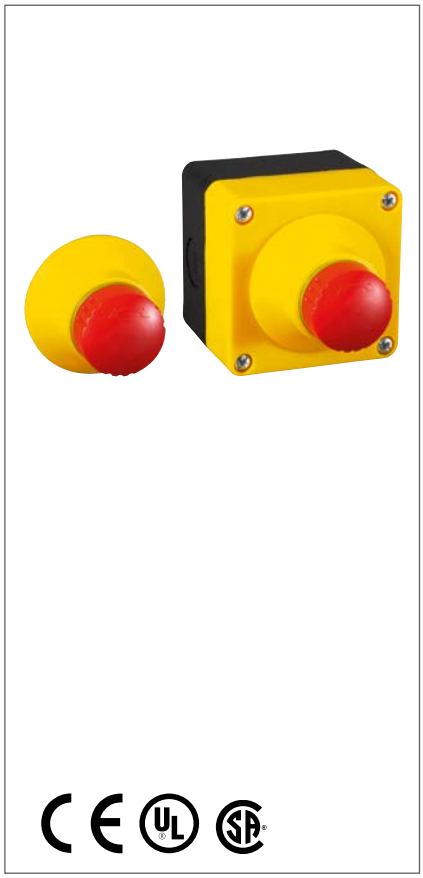

At a glance

- Either as surface-mounted version with housing or as built-in version (Ø 22 mm)
- Built-in version for machine control panels with self-monitoring contacts between the pushbutton and switching element
- Surface-mounted version for direct mounting on different machines and systems
- Rotational or key unlocking
- Variants with LED ring lighting
- Available with protective collar to prevent inadvertent actuation

Your benefits

- Increased safety due to self-monitoring contacts
- Reduction in accidental faults due to variants with a protective collar
- User-friendly status indicator identified by a colored mark or LED ring around the pushbutton simplifies diagnostics
- Successful down to the last detail: award-winning and appealing design

➜ www.mysick.com/en/ES21

For more information, just 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.

Ordering information

Other models and accessories ➜ www.mysick.com/en/ES21

Complete devices

Mounting version	Number of positive action N/C contacts	Number of N/O contacts	Contact module for panel mount version	Obstruction protection	Release type	Model name	Part no.
Panel mount version	2	1	✔ [1]	✔	Rotary release	ES21-SB10G1	6036492

[1] Additional contact (N/O) monitors the correct assembly of the pushbutton with the switching element.

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At a glance

- Slim plastic housing with quick disconnect mounting clip
- Illuminated reset pushbutton
- 1 NO
- 4-pin M12 plug connector

Your benefits

- Easy installation with quick disconnect mounting clip
- Quick commissioning and easy replacement with an M12 plug connector
- User-friendly status indication

→ www.mysick.com/en/ER12

For more information, just 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.

Ordering information

Other models and accessories → www.mysick.com/en/ER12

- **Number of N/O contacts:** 1
- **Reset button (illuminable):** ✔

Suitable for muting applications (with UE403)	Model name	Part no.
–	ER12-SB3C4	6051330
✔	ER12-SB3C4S01	6034585

Recommended accessories

	Brief description	Model name	Part no.
Terminal and alignment brackets			
	10 pieces, steel, zinc coated, included in scope of delivery of the pushbutton	Holding clamp	5326274

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At a glance

- Rope lengths up to 30 m, with rope break and rope pull function
- Metal housing with integrated rotary unlocking lever and fault display
- Available with M20 X 1.5 cable entry gland or Flexi Loop-compatible M12 plug connector (depending on variant)
- Slow-action switching elements with four contacts
- Complies to the standards EN ISO 13850 and IEC/EN 60947-5-5

Your benefits

- The emergency stop function can be triggered at any point along the rope
- Simple adjustment of the rope tension
- Rugged metal housing offers a high level of protection for the rope pull switch
- User-friendly systems available with many rope lengths
- Additional contacts provide quick and easy diagnostics
- Flexi Loop now enables a safe series connection with enhanced diagnostics capabilities and minimal wiring effort.

➜ www.mysick.com/en/i110RP

For more information, just 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.

Ordering information

Other models and accessories ➜ www.mysick.com/en/i110RP

Number of positive action N/C contacts	Number of N/O contacts	Connection type	Model name	Part no.
2	0	Plug connector, M12, 4-pin	i110-RP224	1064510
	2	Cable gland, 1 x M20	i110-RP223	6025077
3	1	Cable gland, 1 x M20	i110-RP313	6025076

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Recommended accessories

	Brief description	Model name	Part no.
Ropes and rope accessories			
	Rope accessory set, rope length 5 m	iE110-P05	5311136
	Rope accessory set, rope length 10 m	iE110-P10	5311137
	Rope accessory set, rope length 20 m	iE110-P20	5311138
	Rope accessory set, rope length 30 m	iE110-P30	5311139
	Corner pulley inside	iE110-PCPI	5325887
	Corner pulley outside	iE110-PCPO	5325888
	Rope, length 100 m	iE110-PL100	5310814
	Rope, length 30 m	iE110-PL30	5310813
	Rope grippers	iE110-PRG	5314230
	Tensioner	iE110-PTR	5309034

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At a glance

- Plastic housing with connected cable
- 3-stage functional structure (off-on-off)
- Slow-action switching elements with four contacts
- Variant with additional plus/minus buttons
- Complies to the standard IEC/EN 60947-5-8

Your benefits

- Personal protection with enabling switches: increased safety in setup mode when protective devices are deactivated
- Plus/minus buttons for additional control of direction of movement
- Different cable lengths available to meet customer application requirements

➜ www.mysick.com/en/E100

For more information, just 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.

Ordering information

Other models and accessories ➜ www.mysick.com/en/E100

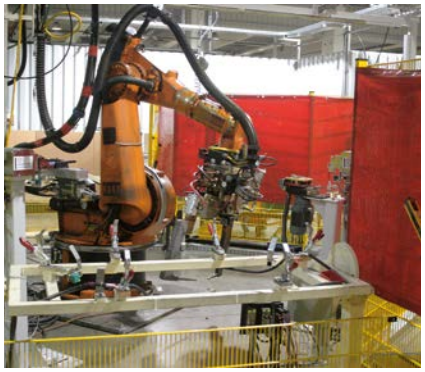
- **Number of positive action N/C contacts:** 2
- **Number of N/O contacts:** 2
- **Type of connection cable:** straight

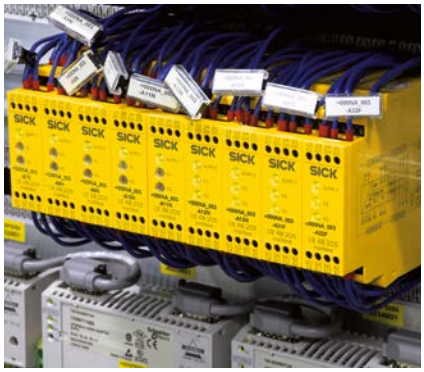
Cable length	Plus/minus buttons	Model name	Part no.
5 m	–	E100-A2A22S05A	6012141
10 m	–	E100-A2A22S10A	6021916
5 m	✔	E100-B2A22S05A	6022879
10 m	✔	E100-B2A22S10A	6022880
25 m	✔	E100-B2A22S25A	6033234

Recommended accessories

	Brief description	Model name	Part no.
Terminal and alignment brackets			
	Bracket for E100	Bracket	5308209

SENS:CONTROL – SAFE CONTROL SOLUTIONS





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Safe control solutions for intelligent machine designs

Intelligent machine design focuses on increasing productivity on one hand, but also offering the highest level of quality and safety. sens:Control – safe control solutions embody this principle.

The product portfolio includes safety relays, safety controllers and network solutions and is characterized by easy commissioning, modularity and an optimal integration into the automation process. The goal of sens:Control is to optimize interaction between people and machinery.

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Selection guide sens:Control – safe control solutions N-476

Flexi Loop N-478
Cost-saving, safe sensor cascade with diagnostic function

Flexi Classic N-480
Efficient and easy-to-use safety controller

Flexi Soft N-482
The software-programmable safety controller

Flexi Soft Drive Monitor N-484
Flexible, high-performance drive monitoring

Speed Monitor N-486
Optimal safety protection in maintenance mode

Standstill Monitor. N-487
Standstill monitoring without additional sensors

UE10-2FG N-488
The ideal solution to integrate relay outputs

UE10-3OS N-489
The universal output expansion module

UE23-3MF N-490
Connection solution for safety switches and emergency stop pushbuttons

UE43-3MF N-491
Complete monitoring of safety switches and emergency stop pushbuttons

UE48-2OS N-492
Safety relay for all common safety applications

UE48-3OS N-493
Safety relay with three safety outputs for all common safety applications

UE11-4DX N-494
Time-delayed contact expansion for all safety relays

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SELECTION GUIDE SENS:CONTROL – SAFE CONTROL SOLUTIONS

Product		Application							Features						
		Cascading of safety switches	Cascading of safety sensors with OSSD outputs	Safety command devices	Safety switches	Pressure sensitive mats in 4 wire technology	Opto-electronic protective devices	Contact expansion	Simple logic	Medium logic	Complex logic	Can be configured using a screwdriver	Software based	Modular system	
Safe sensor cascade															
	Flexi Loop	■	■		■		■	■						■	
Safety controllers															
	Flexi Classic			■	■		■		■	■		■		■	
	Flexi Soft			■	■	■	■	■		■	■		■	■	
	Flexi Soft Drive Monitor												■	■	
	Speed Monitor											■			
	Standstill Monitor											■			
Safety relays															
	UE10-2FG						■		■						
	UE10-3OS						■		■						
	UE23-3MF			■	■				■						
	UE43-3MF			■	■				■						
	UE48-2OS			■	■	■	■		■						
	UE48-3OS			■	■	■	■		■						
	UE11-4DX							■	■						

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	Functions						Drive safety functions								Enable current paths	Signalling current paths	Page
	Safe device communication via EFI	Linking of stations via EFI	External device monitoring (EDM)	Path for external device monitoring	Manual reset (monitored)	Automatic reset	Standstill monitoring	Safe stop 1 (SS1)	Safe stop 2 (SS2)	Safe operating stop (SOS)	Safe speed monitoring (SSM)	Safe limited speed (SLS)	Safe direction of motion (SDI)	Safe brake control (SBC)			
																	→ N-478
			■	■	■	■									≤ 52	0	→ N-480
	■	■	■	■	■	■									≤ 48	≤ 90	→ N-482
			■	■	■	■	■	■	■	■	■	■	■	■	0	0	→ N-484
			■	■	■	■	■				■	■			2	2	→ N-486
			■	■	■	■	■								3	3	→ N-487
				■		■									2	0	→ N-488
				■		■									3	1	→ N-489
			■		■	■									3	1	→ N-490
			■		■	■									3	1	→ N-491
			■		■	■									2	1	→ N-492
			■		■	■									3	0	→ N-493
				■											4	2	→ N-494

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At a glance

- Ability to cascade 32 sensors with up to 30 m per segment in compliance with performance level e
- Compatible with sensors from all manufacturers
- Transfer of detailed diagnostic information
- Integrated standard inputs and outputs
- Power supply for sensors is included
- Connection of the sensors via unscreened standard cable with M12 plug
- IP 65 and IP 67 enclosure rating

Your benefits

- Cascading of safety switches and safety sensors with OSSD outputs minimizes the wiring effort and the inputs of the safety controller, which saves costs
- Easy retrofitting of existing machines
- Simple calculation of the performance level saves time since the Flexi Loop node monitors each sensor individually
- User-friendly due to quick and easy configuration
- Ability to be used over long distances increases application flexibility
- Detailed diagnostic information minimizes system downtime
- Seamless system integration and communication with other SICK safety controllers

➜ www.mysick.com/en/Flexi_Loop

For more information, just 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.

Ordering information

Other models and accessories ➜ www.mysick.com/en/Flexi_Loop

Flexi Loop node for safety sensors with dual-channel OSSD outputs

Connection type	Number of non-safe inputs	Number of non-safe outputs	Model name	Part no.
Female connector M12, 5-pin	1	0	FLN-OSSD1000105	1061709
Female connector M12, 8-pin	1	1	FLN-OSSD1100108	1061710

Flexi Loop node for dual-channel equivalent electro-mechanical safety switches

Connection type	Number of non-safe inputs	Number of non-safe outputs	Model name	Part no.
Female connector M12, 5-pin	0	0	FLN-EMSS0000105	1061711
Female connector M12, 8-pin	1	1	FLN-EMSS1100108	1061712

Flexi Loop power supply module

Description	Model name	Part no.
The power supply module is used to connect a power supply with 24 V DC, for the electrical isolation and for overcurrent shutdown.	FLA-PWRI00001	1061715

Flexi Loop terminator module

Description	Model name	Part no.
The terminator is used to terminate the safe sensor cascade on the last Flexi Loop node.	FLT-TERM00001	1061716

Flexi Loop Y-adapters

Description	Model name	Part no.
The Flexi Loop Y-adapter (EMMS) splits the 8-pin connection of the FLN-EMSS1100108 in two 5-pin connections: One for dual-channel equivalent electro-mechanical safety switches and one for non-safe I/O signals.	FLA-YCON00001	2074733
The Flexi Loop Y-adapter (OSSD) splits the 8-pin connection of the FLN-OSSD1100108 in two 5-pin connections: One for safety sensors with dual-channel OSSD outputs and one for non-safe I/O signals.	FLA-YCON00002	2074734

Recommended accessories

	Brief description	Model name	Part no.
Mounting brackets and mounting plates			
	1 piece, Flexi Loop fixing clip	C-Fix bracket	2068830
Plug connectors and cables			
	Head A: female connector, M12, 5-pin, straight Head B: cable Cable: TPU, halogen-free, unshielded, 5 m	DOL-1205-G05MC	6025907
	Head A: female connector, M12, 5-pin, straight Head B: cable Cable: TPU, halogen-free, unshielded, 10 m	DOL-1205-G10MC	6025908
	Head A: female connector, M12, 5-pin, straight Head B: cable Cable: TPU, halogen-free, unshielded, 20 m	DOL-1205-G20MC	6050247
	Head A: female connector, M12, 5-pin, straight Head B: cable Cable: TPU, halogen-free, unshielded, 30 m	DOL-1205-G30MC	6050248
	Head A: male connector, M12, 5-pin, straight Head B: female connector, M12, 5-pin, straight Cable: drag chain use, TPU, halogen-free, unshielded, 1 m	DSL-1205-G01MC	6029280
	Head A: male connector, M12, 5-pin, straight Head B: female connector, M12, 5-pin, straight Cable: drag chain use, TPU, halogen-free, unshielded, 5 m	DSL-1205-G05MC	6029282
	Head A: male connector, M12, 5-pin, straight Head B: female connector, M12, 5-pin, straight Cable: drag chain use, TPU, halogen-free, unshielded, 10 m	DSL-1205-G10MC	6038954
	Head A: male connector, M12, 5-pin, straight Head B: female connector, M12, 5-pin, straight Cable: drag chain use, TPU, halogen-free, unshielded, 20 m	DSL-1205-G20MC	6038957
	Head A: male connector, M12, 5-pin, straight Head B: female connector, M12, 5-pin, straight Cable: drag chain use, TPU, halogen-free, unshielded, 30 m	DSL-1205-G30MC	6051945
	Head A: male connector, M12, 8-pin, straight Head B: female connector, M12, 8-pin, straight Cable: 1 m	DSL-1208-G01MC	6051940
	Head A: male connector, M12, 8-pin, straight Head B: female connector, M12, 8-pin, straight Cable: 5 m	DSL-1208-G05MC	6051943
	Head A: male connector, M12, 8-pin, straight Head B: female connector, M12, 8-pin, straight Cable: 10 m	DSL-1208-G10MC	6051944

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At a glance

- Rotary DIP switch for easy adjustment
- Modularly expandable
- Direct wiring for all types of sensors
- Logic functions (AND/OR/Muting/Bypass/Reset/EDM)
- Integration into all common networks (PROFIBUS-DP, DeviceNet, CANopen, Modbus TCP, Ethernet (TCP/IP), EtherNet/IP and PROFINET IO)

Your benefits

- Optimal scalability prevents extra inputs and outputs, reducing unnecessary hardware
- Configuration via rotary DIP switch reduces wiring and simplifies logic configuration
- The Flexi Classic Configurator tool offers easy logic configuration and wiring help
- Complete diagnostics of the system reduces downtime
- Its compact design makes it possible to save space in the control cabinet

➜ **www.mysick.com/en/Flexi_Classic**

For more information, just 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.

Ordering information

Other models and accessories ➜ **www.mysick.com/en/Flexi_Classic**

Main modules

- **Connection type:** plug-in spring terminals

Number of inputs	Number of outputs	Delay time (outputs Q3/Q4)	Model name	Part no.
2 dual-channel or 1 dual-channel and 2 single-channel for muting sensors	2 dual-channel or 4 single-channel	–	UE410-MU4T0	6035243
		0 s ... 5 s	UE410-MU4T5	6032669
		0 s ... 50 s	UE410-MU4T50	6032670
		0 s ... 300 s	UE410-MU4T300	6032671
1 dual-channel and up to 4 single-channel for muting sensors	1 dual-channel and 2 single-channel	–	UE410-MM4	6034645

Gateways

Fieldbus, industrial network	Model name	Part no.
CANopen	UE410-CAN4	6033112
DeviceNet	UE410-DEV4	6032679
EtherNet/IP	UE410-EN1	1042964
Modbus TCP	UE410-EN3	1042193
PROFIBUS DP	UE410-PRO4	6032678
PROFINET	UE410-EN4	1044078

I/O modules

- **Connection type:** plug-in spring terminals

Number of inputs	Number of outputs	Delay time (outputs Q3/Q4)	Model name	Part no.
2 dual-channel or 1 dual-channel and 2 single-channel for muting sensors	2 dual-channel or 4 single-channel	–	UE410-XU4T0	6035245
		0 s ... 5 s	UE410-XU4T5	6032672
		0 s ... 50 s	UE410-XU4T50	6032673
		0 s ... 300 s	UE410-XU4T300	6032674
4 dual-channel or 2 dual-channel and 4 single-channel or 8 single-channel	–	–	UE410-8DI4	6032675

Relay modules

Number of enable current contacts	Number of signalling current contacts	Number of contactor monitoring contacts	Model name	Part no.
2	1	1	UE410-2RO4	6032677
4	2	2	UE410-4RO4	6032676

Recommended accessories

	Brief description	Model name	Part no.
Muting accessories			
Illustration may differ	LED muting lamp	Indicator lamp	2019909

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At a glance

- Expansion modules, Motion Control modules, and gateways for all common fieldbuses
- Configuration data stored in the system plug
- Safe networking of up to 32 Flexi Soft stations
- Integration of sensor cascade
- Multi-language, license-free configuration software: exceptionally simple operation, plausibility check, simulation mode, wiring diagram, parts list, documentation, and data recorder

Your benefits

- Scalable for an efficient and cost-optimized safety application solution
- Cost savings: Flexi Soft offers a modular structure that is in line with your requirements, and thus offers an ideal level of granularity
- Intuitive configuration software featuring comprehensive functions enables continuous monitoring of the configuration
- Rapid verification of the safety application: The configuration software provides documentation and a wiring diagram
- Safety logic is easy to create thanks to ready-made, TÜV-certified function blocks
- The main module's diagnostics interfaces and the configuration storage facility in the system plug enable rapid commissioning, component replacement, and troubleshooting, resulting in minimum downtimes

➜ **www.mysick.com/en/Flexi_Soft**

For more information, just 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.

Ordering information

Other models and accessories ➜ **www.mysick.com/en/Flexi_Soft**

Main modules

Number of EFI interfaces	Flexi Link	Automatic Configuration Recovery (ACR)	Flexi Line	Model name	Part no.
0	–	–	–	FX3-CPU000000	1043783
2	✔	–	–	FX3-CPU130002	1043784
		✔	–	FX3-CPU230002	1058999
			✔	FX3-CPU320002	1059305

N

Gateways

Fieldbus, industrial network	Model name	Part no.
EtherNet/IP	FX0-GENT00000	1044072
Modbus TCP	FX0-GMOD00000	1044073
PROFINET	FX0-GPNT00000	1044074
EtherCAT	FX0-GETC00000	1051432
PROFIBUS DP	FX0-GPRO00000	1044075
CANopen	FX0-GCAN00000	1044076
DeviceNet	FX0-GDEV00000	1044077

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I/O modules

Flexi Loop-compatible	Number of safety inputs	Number of non-safe inputs	Number of test signal outputs	Number of safe outputs	Number of non-safe outputs	Model name	Part no.
✔	8	0	2	4	0	FX3-XTIO84002	1044125
			8	0	0	FX3-XTDI80002	1044124
			2	0	4 ... 6	FX3-XTDS84002	1061777
–	0	6 ... 8	0	0	6 ... 8	FX0-STIO68002	1061778

Relay modules

Number of enable current contacts	Number of signalling current contacts	Number of contactor monitoring contacts	Model name	Part no.
2	1	1	UE410-2RO4	6032677
4	2	2	UE410-4RO4	6032676
2	0	1	UE10-2FG3D0	1043916
			UE12-2FG3D0	1043918

Recommended accessories

	Brief description	Model name	Part no.
Plug connectors and cables			
	For FX3-CPU0 and FX3-CPU1, Storing the system configuration, without EFI-compatible devices	FX3-MPL000001	1043700
	For FX3-CPU2 and FX3-CPU3, Storing the system configuration, including EFI-compatible devices via Automatic Configuration Recovery (ACR)	FX3-MPL100001	1047162
	Head A: male connector, M8, 4-pin, straight Head B: female connector, D-Sub, 9-pin, straight Cable: PVC, unshielded, 2 m For connecting the configuration connection to the serial interface of a PC	DSL-8D04G02M025KM1	6021195
	Head A: male connector, M8, 4-pin, straight Head B: male connector, USB-A, straight Cable: PVC, unshielded, 2 m For connecting the configuration connection to the USB interface on the PC	DSL-8U04G02M025KM1	6034574
	Head A: male connector, M8, 4-pin, angled Head B: cable Cable: TPU, halogen-free, unshielded, 3 m For connecting the configuration connection of a PLC	Connection cable	6036342
	Head A: male connector, USB-A, straight Head B: male connector, Mini-USB, straight Cable: USB, shielded, 3 m	Connection cable (male connector-male connector)	6042517
	Head A: cable Head B: cable Cable: PVC, shielded Fitting for EFI connections	EFI connecting cable	6029448
	Head A: open conductor heads Head B: cable Cable: Flexi Link, shielded	Flexi link cable	6034249

N

At a glance

- 7 drive safety functions: SS1, SS2, SOS, SSM, SLS, SDI, and SBC
- For all common encoder interfaces
- Programmable logic
- Monitoring of up to 10 speed levels and 4 brake ramps
- Possible to monitor multiple axes

Your benefits

- Integration into a Flexi Soft system with one software tool and one project file allows quick project planning and commissioning
- Easy logic development using predefined, modifiable, freely configurable applications
- Maximum level of integration into higher-level controllers via all common fieldbus systems using gateways
- Documentation of the entire safety application simplifies machine acceptance and validation
- Monitoring movements instead of shutting down increases machine productivity
- Flexibility due to a wide range of drive safety functions

➜ **www.mysick.com/en/Flexi_Soft_Drive_Monitor**

For more information, just 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.

Ordering information

Other models and accessories ➜ **www.mysick.com/en/Flexi_Soft_Drive_Monitor**

Description	Model name	Part no.
Motion Control module, Flexi Soft Drive Monitor	FX3-MOC00000	1062344

Recommended accessories

	Brief description	Model name	Part no.
Modules and gateways			
	Facility for connecting two encoders. Connection to Drive Monitor FX3-MOC: Female connector, D-Sub HD, 15-pin.	Dual encoder connection box	2068729
	Facility for connecting one encoder (normally used in conjunction with a motor feedback encoder). Connection to Drive Monitor FX3-MOC: Female connector, D-Sub HD, 15-pin. Connection to a second motor feedback splitter box: Female connector, D-Sub, 9-pin.	Motor feedback splitter box	2068728

N

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	Brief description	Model name	Part no.
Plug connectors and cables			
	Head A: female connector, Micro D-Sub, 15-pin, straight Head B: cable Cable: shielded, 2 m For direct encoder connection	Connecting cable	2067893
	Head A: male connector, D-Sub-HD, 15-pin, straight Head B: female connector, Micro D-Sub, 15-pin, straight Cable: shielded, 2 m To connect Drive Monitor FX3-MOC with motor feedback splitter box or dual encoder connection box	Connection cable	2067798
	Head A: male connector, D-Sub-HD, 15-pin, straight Head B: female connector, Micro D-Sub, 15-pin, straight Cable: shielded, 10 m To connect Drive Monitor FX3-MOC with motor feedback splitter box or dual encoder connection box	Connection cable	2067799
	Head A: male connector, D-Sub-HD, 15-pin, straight Head B: male connector, D-Sub, 9-pin, straight Cable: shielded, 2 m To connect two motor feedback splitter boxes	Connection cable	2067800
	Head A: male connector, D-Sub-HD, 15-pin, straight Head B: male connector, D-Sub, 9-pin, straight Cable: shielded, 10 m To connect two motor feedback splitter boxes	Connection cable	2067801

At a glance

- Zero-speed and drive monitoring
- 4 safe semiconductor outputs
- PL e (EN ISO 13849), SIL3 (IEC 61508), SILCL3 (EN 62061)
- Maximum input frequency of 2 kHz
- Adjustable monitoring limit/monitoring frequency from 0.1 to 9.9 Hz or 0.5 to 99 Hz
- 2 application diagnostic outputs for failure and status display
- Diagnostic LEDs

Your benefits

- Easy commissioning – using only a screwdriver – reduces installation time
- Tool backup using the Flexi Soft Designer and the Flexi Classic Configurator
- Additional HTL encoder evaluation
- Cascading of units is possible

➜ **www.mysick.com/en/Speed_Monitor**

For more information, just 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.

Ordering information

Other models and accessories ➜ **www.mysick.com/en/Speed_Monitor**

Selectable speed limit	Connection type	Model name	Part no.
0.1 Hz ... 9.9 Hz	Screw-type terminals	MOC3SA-AAB43D31	6034245
	Spring terminals	MOC3SA-AAB44D31	6034246
0.5 Hz ... 99 Hz	Screw-type terminals	MOC3SA-BAB43D31	6034247
	Spring terminals	MOC3SA-BAB44D31	6034248

N

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At a glance

- Standstill monitoring by means of residual voltage measurement
- 3 normally open and 1 normally closed positively guided safety contacts
- 2 application diagnostic outputs for semiconductors
- 1 application diagnostic output normally open
- PL e (EN ISO 13849), SIL3 (IEC 61508), SILCL 3 (EN 62061)
- Maximum motor supply voltage 690 V
- Adjustable voltage threshold and stand-still period

Your benefits

- Quick mounting and installation thanks to the lack of additional wiring requirements
- Simple commissioning with a screwdriver
- Easy to retrofit as the subsequent mounting of sensors is not necessary

→ www.mysick.com/en/Standstill_Monitor

For more information, just 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.

Ordering information

Other models and accessories → www.mysick.com/en/Standstill_Monitor

Supply voltage	Connection type	Model name	Part no.
24 V DC	Screw-type terminals	MOC3ZA-KAZ33D3	6044981
	Spring terminals	MOC3ZA-KAZ34D3	6047866
230 V AC	Screw-type terminals	MOC3ZA-KAZ33A3	6044982
	Spring terminals	MOC3ZA-KAZ34A3	6047865
400 V AC	Screw-type terminals	MOC3ZA-KAZ33A6	6044983
	Spring terminals	MOC3ZA-KAZ34A6	6047864

N

At a glance

- Ideal for applications with opto-electronic protective devices and safety controllers with OSSD outputs
- Fast response time of 10 ms
- Compact design
- 2 contact outputs
- Feedback path for external device monitoring (EDM)
- Screw-type terminals or plug-in screw-type terminals
- Coded plugs for all slots

Your benefits

- Faster response times provide short safety distances
- Saves space in the control cabinet thanks to its compact design
- Reduced wiring effort for fast and easy system commissioning

➜ www.mysick.com/en/UE10-2FG

For more information, just 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.

Ordering information

Other models and accessories ➜ www.mysick.com/en/UE10-2FG

Connection type	Model name	Part no.
Screw-type terminals	UE10-2FG2D0	1043915
Plug-in screw-type terminals	UE10-2FG3D0	1043916

N

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At a glance

- Ideal for applications with opto-electronic protective devices and safety controllers with OSSD outputs
- Output expansion for a safe processing of OSSD output signals
- 3 safety outputs, 1 application diagnostic output
- Feedback path for external device monitoring (EDM)
- Coded plugs for all slots

Your benefits

- Offers all needed contact paths in a compact form
- Fast diagnostics via status information reduces downtime
- Fast, tool-free exchange via coded, plug-in screw-type terminals
- Combines the advantages of classic relays and easy circuitry

→ www.mysick.com/en/UE10-3OS

For more information, just 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.

Ordering information

Other models and accessories → www.mysick.com/en/UE10-3OS

Connection type	Model name	Part no.
Screw-type terminals	UE10-3OS2D0	6024917
Plug-in screw-type terminals	UE10-3OS3D0	6024918

N

At a glance

- Ideal for the connection of emergency stop pushbuttons and safety switches
- 3 safety outputs, 1 application diagnostic output
- Manual or automatic reset
- External device monitoring (EDM)
- Coded plugs for all slots

Your benefits

- Saves space in the control cabinet thanks to its compact design
- Saves costs thanks to its application-oriented construction
- Fast diagnostics via status information reduces downtime
- Fast, tool-free exchange via coded, plug-in screw-type terminals
- Combines the advantages of classic relays and easy circuitry

➜ www.mysick.com/en/UE23-3MF

For more information, just 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.

Ordering information

Other models and accessories ➜ www.mysick.com/en/UE23-3MF

Supply voltage	Model name	Part no.
24 V DC	UE23-3MF2D2	6034595
230 V AC	UE23-3MF2A3	6034597

N

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Subject to change without notice

At a glance

- Evaluation unit for emergency stop push-buttons and safety switches
- Cross circuit detection and sequence monitoring for dual-channel actuation
- Supports discrepancy monitoring
- 3 safety outputs, 1 application diagnostic output
- Manual or automatic reset
- External device monitoring (EDM)

Your benefits

- Complete monitoring and evaluation of sensors
- Offers all needed contact paths in a compact form
- Fast diagnostics via status information reduces downtime
- Fast, tool-free exchange via coded, plug-in screw-type terminals
- Combines the advantages of classic relays and easy circuitry

→ www.mysick.com/en/UE43-3MF

For more information, just 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.

Ordering information

Other models and accessories → www.mysick.com/en/UE43-3MF

Supply voltage	Model name	Part no.
24 V AC	UE43-3MF2A0	6024898
115 V AC	UE43-3MF2A1	6024899
120 V AC	UE43-3MF2A2	6024900
230 V AC	UE43-3MF2A3	6024901
24 V DC	UE43-3MF2D3	6024897

N

At a glance

- Ideal for the evaluation of emergency stop pushbuttons, safety switches, safety light curtains, safety laser scanners and safety pressure sensitive mats
- Cross circuit detection and sequence monitoring for dual-channel actuation
- 2 safety outputs, 1 application diagnostic output
- Manual or automatic reset
- External device monitoring (EDM)
- Coded plugs for all slots

Your benefits

- One module for all common applications simplifies machine integration
- Complete monitoring and evaluation of sensors
- The sequence monitoring takes over the evaluation of non-contact safety switches
- Fast diagnostics via status information reduces downtime
- Fast, tool-free exchange via coded, plug-in screw-type terminals
- Combines the advantages of classic relays and easy circuitry

➜ www.mysick.com/en/UE48-20S

For more information, just 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.

Ordering information

Other models and accessories ➜ www.mysick.com/en/UE48-20S

Connection type	Model name	Part no.
Screw-type terminals	UE48-20S2D2	6024915
Plug-in screw-type terminals	UE48-20S3D2	6024916

N

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Subject to change without notice

At a glance

- Ideal for the evaluation of emergency stop pushbuttons, safety switches, safety light curtains, safety laser scanners and safety pressure sensitive mats
- Cross circuit detection and sequence monitoring for dual-channel actuation
- 3 safety outputs
- Manual or automatic reset
- External device monitoring (EDM)
- Coded plugs for all slots

Your benefits

- One module for all common applications simplifies machine integration
- Complete monitoring and evaluation of sensors
- The sequence monitoring takes over the evaluation of non-contact safety switches
- Fast, tool-free exchange via coded, plug-in screw-type terminals
- Combines the advantages of classic relays and easy circuitry

→ www.mysick.com/en/UE48-3OS

For more information, just 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.

Ordering information

Other models and accessories → www.mysick.com/en/UE48-3OS

Connection type	Model name	Part no.
Screw-type terminals	UE48-3OS2D2	6025089
Plug-in screw-type terminals	UE48-3OS3D2	6025097

N

At a glance

- Contact expansions enable four additional safety outputs for evaluation units in the safety relays product family group
- 4 safety outputs, 2 application diagnostic outputs
- Pre-set time delay
- Feedback path for external device monitoring (EDM)
- Coded plugs for all slots

Your benefits

- Offers all needed contact paths in a compact form
- Time delay for optimal protection of brake applications
- Fast diagnostics via status information reduces downtime
- Fast, tool-free exchange via coded, plug-in screw-type terminals
- Combines the advantages of classic relays and easy circuitry

➜ www.mysick.com/en/UE11-4DX

For more information, just 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.

Ordering information

Other models and accessories ➜ www.mysick.com/en/UE11-4DX

- **Connection type:** plug-in screw-type terminals

Off-delay time	Model name	Part no.
0.5 s	UE11-4DX3D30.5	6024925
1 s	UE11-4DX3D31	6024926
2 s	UE11-4DX3D32	6024927
3 s	UE11-4DX3D33	6024928

N

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MOTOR FEEDBACK SYSTEMS

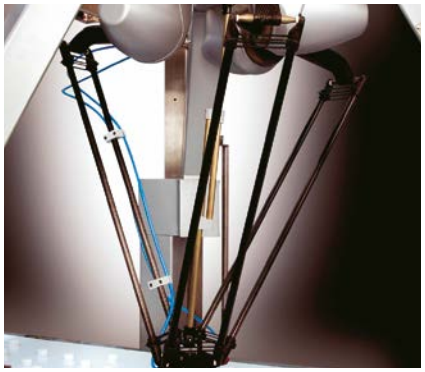


Photo: Wieland Werke AG

Measuring the speed and position with the greatest possible precision

Commutation, position and speed measurement with the corresponding number of interfaces used to require three sensors. Today SICK motor feedback systems offer these functions in one single device. A consistent mechanical interface allows for a high level of flexibility. SICK motor feedback systems have also set the standards for electrical interfaces such as HIPERFACE® and HIPERFACE DSL®. SICK motor feedback systems meet important requirements such as temperature resistance, high resolution, multiturn design with a mechanical gear box and a high level of electromagnetic immunity. The motor feedback systems certified according to SIL2 permit implementation of the machine directive as per EN ISO 13849.

Solutions for electrical drive engineering 0-498

Speed and position measurement with ultimate precision 0-500

SOLUTIONS FOR ELECTRICAL DRIVE ENGINEERING

Innovation & partnership

Progress means innovation and innovations lead to the development of new products
and technologies.
This has been demonstrated by SICK for decades with its range of motor feedback systems and interfaces.

It goes without saying for us that close partnerships are essential for success. The mutual development of solutions for creating successful projects and offering you the best possible service are equally important to us. This forms the basis for long-term and sustainable partnerships

Flexibility

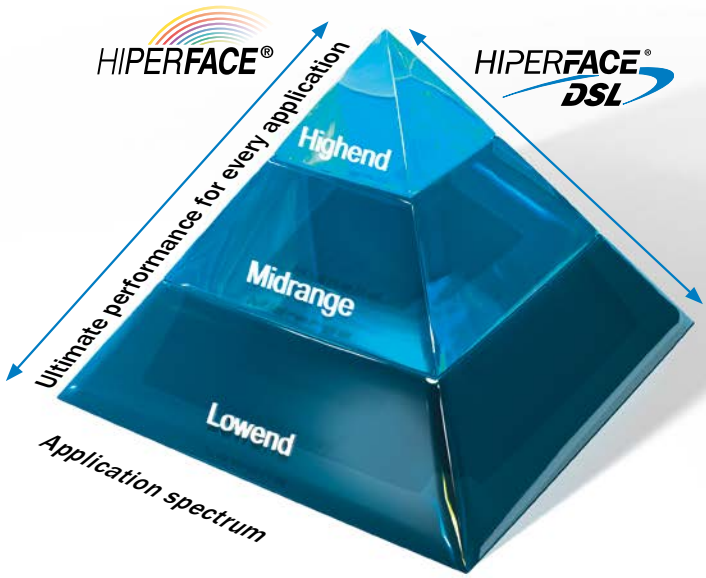
SICK offers you a product portfolio which combines various technologies into a minimum of mechanisms. Do you require various performance levels? We can deliver!

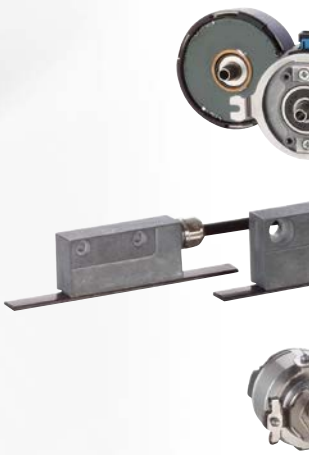
SICK‘s motor feedback systems additionally optimize your products, reduce system costs and offer you the flexibility you need to succeed in todays marketplace.

Safety

SICK‘s certified safety motor feedback systems are available in a broad range of performance levels, enabling individual selection in order to fulfill market requirements.

These safety components represent the state-of-the-art and facilitate easier certification of systems compared to non-certified products.
With SICK you always have a competent partner at your side.





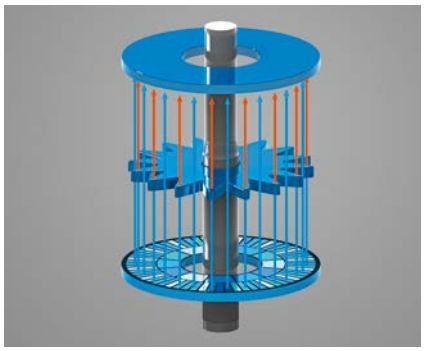
The wide range of available technologies covering everything from compact servo drives through to powerful direct drives are ideal for creating bespoke solutions. A mechanical interface to the customer's equipment serves to minimize variances on-site across a broad spectrum of technologies.

In addition to its comprehensive product portfolio, technology leader SICK also ensures for continuous development in the field of drive engineering. Building on SSI and HIPERFACE®, HIPERFACE® DSL represents the next stage of evolution in terms of drive engineering.

SPEED AND POSITION MEASUREMENT WITH ULTIMATE PRECISION

Motor feedback systems from SICK fulfill important requirements such as temperature resistance, high resolution, electronic type labeling, multi-turn designs with mechanical gear mechanisms, high stability and last but not least, small dimensions enabling short motor lengths.

Capacitive technologies ...



... for low-end applications

- Bearingless encoder systems
- Rugged technology

Example uses:
SEK/SEL34
SEK/SEL37
SEK90 to 260

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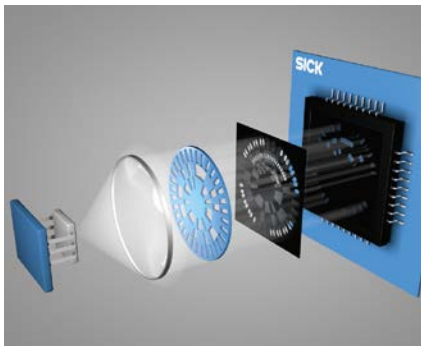
Optical technologies ...

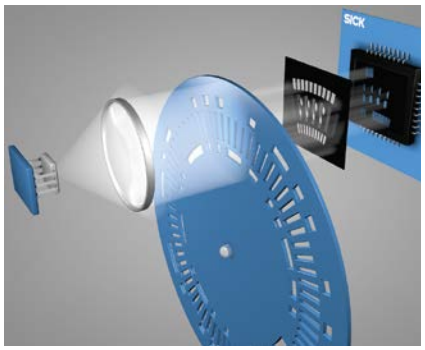


... for midrange applications

- Sensing centrally to rotary axis
- High resolution combined with compact housing design

Example uses:
SKS/SKM36
EKS/EKM36

Optical technologies ...



... for high-end applications

- Ultimate resolution
- Rugged, metal code disk

Example uses:
SRS/SRM50
SFS/SFM60

Multi-turn technologies ...

... for all performance classes

- Maximum reliability through geared technology

Used for all multi-turns

ENCODERS

Perfect rotary and linear path measurement

Paths, position, angle – an encoder is the first choice when it comes to precise position detection in industrial automation. The same goes for revolutions and revolutions per minute, speed and acceleration. High-resolution optical systems and very robust magnetic systems complement one another perfectly and permit exact position detection in all kinds of applications. Rotary encoders are divided into incremental and absolute encoders. Wire draw encoders and linear encoders with material measure are available in the area of linear measuring technology.

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Selection guide encoders P-504

DFS60 . . . . . .P-506
High-resolution, programmable

DBS36 . . . . . .P-508
EASIMA®: the MultiFit incremental encoder

DFV60 measuring wheel encoder P-510
High-resolution, programmable

AHS/AHM36 SSI P-512
Flexible, smart, compact

AHS/AHM36 CANopen P-514
Flexible, smart, compact

ATM60 PROFIBUS P-516
Reliable, established and modular

ATM60 CANopen P-518
Reliable, established and modular

ATM60 DeviceNet P-520
Reliable, established and modular

AFS/AFM60 SSI P-522
Precise, flexible, versatile

AFS/AFM60 EtherNet/IP P-524
Intelligent, powerful, precise

AFS/AFM60 EtherCAT® P-526
Intelligent, powerful, precise

AFS/AFM60 PROFINET P-528
Intelligent, powerful, precise

A3M60 PROFIBUS P-530
Compact, robust, powerful

EcoLine P-532
Modular wire draw encoder in miniature design

HighLine P-533
The heavy-duty wire draw encoder

KH53 . . . . . .P-535
The heavy-duty linear encoder

TTK70 . . . . . .P-537
Compact, with a high-resolution

P

SELECTION GUIDE ENCODERS

Product	Task		Interface										Number of revolution			Resolution						
	Incremental detection of position or speed	Absolute position detection	TTL/HTL	Analog	HIPERFACE®	SSI	PROFIBUS	CANopen	DeviceNet	EtherNet/IP	PROFINET	EtherCAT®	No absolute measurement	1 revolution absolute	≥ 2 revolutions absolute	1,024 periods	≤ 2,500 pulses/steps [1]	≤ 8,192 pulses/steps [1]	> 8,192 pulses/steps [1]	> 32,768 pulses/steps [1]	Programming by customer (line count/zero pulse)	
Incremental encoders																						
DBS36	■		■										■				■				■	
DFS60	■		■										■			■	■	■	■	■	■	
DFV60	■		■										■				■	■			■	
Absolute encoders singleturn																						
AFS60		■				■				■	■	■		■			■	■	■	■	■	
AHS36		■				■		■						■			■	■	■		■	
Absolute encoders multiturn																						
A3M60		■					■								■		■	■	■		■	
AFM60		■				■				■	■	■			■		■	■	■	■	■	
AHM36		■				■		■							■		■	■	■		■	
ATM60		■					■	■	■						■		■	■	■		■	
Wire draw encoders																						
EcoLine	■	■	■	■	■	■	■	■	■	■	■	■										
HighLine	■	■	■	■	■	■	■	■	■	■	■	■										
Linear encoders																						
KH53						■	■															
TTK70					■	■																

[1] Per revolution

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Space for installation					Flange/shaft type				Special requirements	Path measurement		Number of measuring cycles		Measurement length					Resolution			Installation size			Page
Ø ≤ 36 mm	Ø ≤ 40 mm	Ø ≤ 50 mm	Ø ≤ 60 mm	Ø ≤ 90 mm	Face mount flange	Servo flange	Blind hollow shaft	Through hollow shaft	Position above measuring wheel	Incremental	Absolute	≤ 1,000,000	Unlimited	≤ 5 m	≤ 10 m	≤ 50 m	≤ 548 m	≤ 1,700 m	≤ 1 µm	≤ 0.05 mm	≤ 0.1 mm	Small	Medium	Large	
■	■	■	■	■	■		■																		→ P-508
			■	■	■	■	■	■																	→ P-506
									■																→ P-510
			■	■	■	■	■	■																	→ P-522
■					■	■	■				■														→ P-512
			■	■	■	■	■	■																	→ P-530
			■	■	■	■	■	■																	→ P-522
■					■	■	■				■														→ P-512
			■	■	■	■	■	■																	→ P-516
										■	■	■		■	■					■	■	■			→ P-532
										■	■	■		■	■	■				■	■		■	■	→ P-533
											■		■	■	■	■	■	■			■			■	→ P-535
											■		■	■					■	■	■	■			→ P-537

P

At a glance

- Compact installation depth
- High resolution up to 16 bits
- Optionally programmable: Output voltage, zero pulse position, zero pulse width and number of pulses
- Connection: Radial or axial cable outlet, M23 or M12 connector, axial or radial
- Electrical interfaces: 5V & 24V TTL/RS-422, 24 V HTL/push pull
- Mechanical interfaces: face mount or servo flange, blind or through hollow shaft
- Remote zero set possible

Your benefits

- Reduced storage costs and downtime due to customer-specific programming
- Variety of different mechanical and electrical interfaces enable the encoder to be optimally adjusted to fit the installation situation
- Excellent concentricity even at high speeds
- High resolution of up to 16 bits ensures precise measurements
- Permanent and safe operation due to a high enclosure rating, temperature resistance and a long bearing lifetime
- Programmability via the PGT-08 programming software and the PGT-10-S display programming tool allow the encoder to be adapted flexibly and quickly according to customer needs
- Programmable zero pulse position simplifies installation

➜ www.mysick.com/en/DFS60

For more information, just 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.

Ordering information

Other models and accessories ➜ www.mysick.com/en/DFS60

- **Electrical interface:** TTL/HTL programmable
- **Connection type:** Connector M12, 8-pin, radial
- **Range of pulses per revolution:** 65,536

Mechanical interface	Shaft diameter	Model name	Part no.
Blind hollow shaft	10 mm	DFS60A-BDPC65536	1036815
	12 mm	DFS60A-BEPC65536	1036816
	15 mm	DFS60A-BHPC65536	1036819
	1/2"	DFS60A-BFPC65536	1036817
Through hollow shaft	10 mm	DFS60A-TDPC65536	1036955
	12 mm	DFS60A-TEPC65536	1036956
	15 mm	DFS60A-THPC65536	1036959
	1/2"	DFS60A-TFPC65536	1036957
Solid shaft, servo flange	6 mm	DFS60A-S1PC65536	1036761
Solid shaft, face mount flange	10 mm	DFS60A-S4PC65536	1036726

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Recommended accessories

	Brief description	Model name	Part no.
Mounting brackets and mounting plates			
	Mounting bracket for encoder with spigot 36 mm, mounting kit included	BEF-WF-36	2029164
Other mounting accessories			
	Measuring wheel with smooth plastic surface (Hytrel), for solid shaft 10 mm, circumference 200 mm, diameter 63.66 mm	BEF-MR-010020	5312988
	Servo clamps, large, for servo flange (clamping claws, mounting eccentric), (3 pcs), without mounting hardware	BEF-WK-SF	2029166
Shaft adaptation			
	Bellows coupling, shaft diameter 6 mm / 6 mm	KUP-0606-B	5312981
	Bellows coupling, shaft diameter 6 mm / 10 mm	KUP-0610-B	5312982
Plug connectors and cables			
	Head A: female connector, M12, 8-pin, straight Cable: shielded, 5 m	DOL-1208-G05MAC1	6032867
	Head A: female connector, M12, 8-pin, straight, A-coded Head B: - Cable: Incremental, SSI, shielded	DOS-1208-GA01	6045001
	Head A: male connector, D-Sub, 9-pin, straight Head B: female connector, M12, 8-pin, straight Cable: Incremental, shielded, 0.5 m	DSL-2D08-G0M5AC3	2046579
Programming and configuration tools			
	Programming Tool USB, for programmable SICK encoders AFS60, AFM60, DFS60, VFS60, DFV60 and wire draw encoders with programmable encoders.	PGT-08-S	1036616
	Display Programming Tool for programmable SICK incremental encoders DFS60, VFS60, DFV60 and wire draw encoders with DFS60. Compact dimensions, low weight and intuitive to use.	PGT-10-S	1052967

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At a glance

- Connection with universal cable outlet
- Versions with blind hollow shaft or face mount flange with solid shaft
- Face mount flange with 3 mounting hole patterns and servo groove
- Hollow shaft with universal stator coupling
- Compact diameter of 37 mm
- Electrical interfaces: TTL/RS-422, HTL/push pull and Open Collector NPN
- Available PPR: 100 to 2,500
- Temperature range: –20 °C ... +85 °C
- Enclosure rating: IP 65

Your benefits

- The universal cable outlet allows use in tight spaces and makes flexible cable routing possible
- Face mount flange with various mounting hole patterns provides flexibility when mounting in new or existing applications
- Face mount flange with servo groove makes mounting with servo clamps possible
- The DBS36E's universal stator coupling ensures easy device replacement without changing the application
- The high flexibility of the encoders' mechanical interface and the available accessories make it possible to use one design in many applications
- Compatibility with the DDS36E series makes it easy to replace this series in existing applications

➜ www.mysick.com/en/DBS36

For more information, just 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.

Ordering information

Other models and accessories ➜ www.mysick.com/en/DBS36

- **Connection type:** cable, 8-pin, universal, 1.5 m

Mechanical interface	Shaft diameter	Electrical interface	Range of pulses per revolution	Model name	Part no.
Solid shaft, face mount flange	6 mm	HTL/Push pull	2,048	DBS36E-S3EK02048	1059907
			1,024	DBS36E-S3EK01024	1060545
			1,000	DBS36E-S3EK01000	1060544
			500	DBS36E-S3EK00500	1060543
			360	DBS36E-S3EK00360	1060541
			100	DBS36E-S3EK00100	1060540
		TTL/RS422	2,048	DBS36E-S3AK02048	1058602
			1,024	DBS36E-S3AK01024	1060144
			1,000	DBS36E-S3AK01000	1060539
			500	DBS36E-S3AK00500	1060538
			360	DBS36E-S3AK00360	1060536
			100	DBS36E-S3AK00100	1060535

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Mechanical interface	Shaft diameter	Electrical interface	Range of pulses per revolution	Model name	Part no.
Blind hollow shaft	8 mm	HTL/Push pull	2,048	DBS36E-BBEK02048	1059910
			1,024	DBS36E-BBEK01024	1060534
			1,000	DBS36E-BBEK01000	1060533
			500	DBS36E-BBEK00500	1060532
			360	DBS36E-BBEK00360	1060530
			100	DBS36E-BBEK00100	1060529
		TTL/RS422	2,048	DBS36E-BBAK02048	1058603
			1,024	DBS36E-BBAK01024	1060147
			1,000	DBS36E-BBAK01000	1060528
			360	DBS36E-BBAK00360	1060525
			100	DBS36E-BBAK00100	1060524

Recommended accessories

	Brief description	Model name	Part no.
Other mounting accessories			
	Servo clamps, small, for servo flange (clamping claws, mounting eccentric), (3 pcs), without mounting hardware	BEF-WK-RESOL	2039082
Shaft adaptation			
	Beam coupling, shaft diameter 6mm/8mm	KUP-0606-MS	2066285
		KUP-0608-MS	2066130
		KUP-0610-MS	2066298
	Collet for blind hollow shaft, shaft diameter 6 mm, outer diameter 8 mm	SPZ-005-AD-A	2066991
		SPZ-006-DD36-A	2056390
Plug connectors and cables			
	Head A: female connector, M12, 8-pin, straight, A-coded Head B: - Cable: Incremental, SSI, shielded	DOS-1208-GA01	6045001
	Head A: cable Head B: cable Cable: SSI, SSI, drag chain use, TPU, halogen-free, shielded	LTG-2308-MWENC	6027529
	Head A: male connector, M12, 8-pin, straight, A-coded Head B: - Cable: Incremental, shielded	STE-1208-GA01	6044892

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At a glance

- Rotatable spring arm for universal use
- 300 mm wheel circumference with o-ring made from NBR70
- Mounting arm and measurement wheels made from aluminum
- Programmable output voltage, zero pulse position, zero pulse width and number of pulses
- Connection: radial M12 connector outlet or radial/axial cable outlet
- Electrical interfaces: 5V & 24V TTL/RS-422, 24 V HTL/push pull
- Remote zero setting possible

Your benefits

- Universal-use spring arm ensures fast and simple mounting
- The high level of spring tension enables use in harsh environmental conditions
- Reduced storage costs and downtime due to programmability
- Connector-in cable outlet in radial or axial direction enables customer-specific cable solutions
- Excellent concentricity even at high speeds
- Permanent and safe operation due to a high enclosure rating, temperature resistance and a long bearing lifetime
- Programmability via the PGT-08 programming software and the PGT-10-S display programming tool allow the encoder to be adapted flexibly and quickly according to customer needs
- Programmable zero pulse position simplifies installation

➜ www.mysick.com/en/DFV60_measuring_wheel_encoder

For more information, just 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.

Ordering information

Other models and accessories ➜ www.mysick.com/en/DFV60_measuring_wheel_encoder

- **Mechanical interface:** 2 measuring wheels, ‘O’ ring surface
- **Electrical interface:** TTL/HTL programmable
- **Range of pulses per revolution:** 65,536

Connection type	Model name	Part no.
Cable, universal, 1.5 m	DFV60A-22PK65536	1051331
Cable, universal, 3 m	DFV60A-22PL65536	1051334
Cable, universal, 5 m	DFV60A-22PM65536	1051337
Connector, M12, 8-pin, radial	DFV60A-22PC65536	1051309

Recommended accessories

	Brief description	Model name	Part no.
Mounting brackets and mounting plates			
	Spring arm/mounting arm	DFV60 spring arm	2056155
Other mounting accessories			
	Measuring wheel, O-ring for solid wheel 10 mm, diameter 95.7 mm, circumference 300 mm, contact surface 5 mm wide	BEF-MR-010030R	2049278

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	Brief description	Model name	Part no.
Plug connectors and cables			
	Head A: female connector, M12, 8-pin, straight Cable: shielded, 5 m	DOL-1208-G05MAC1	6032867
	Head A: female connector, M12, 8-pin, straight Head B: - Cable: shielded	DOS-1208-GA	6028369
	Head A: female connector, M23, 12-pin, straight Head B: - Cable: HIPERFACE®, SSI, Incremental, shielded	DOS-2312-G	6027538
	Head A: male connector, D-Sub, 9-pin, straight Head B: female connector, plug-in system, 8-pin, straight Cable: Incremental, PVC, shielded, 0.5 m	DSL-0D08-G0M5AC3	2061739
	Head A: male connector, D-Sub, 9-pin, straight Head B: female connector, M12, 8-pin, straight Cable: Incremental, shielded, 0.5 m	DSL-2D08-G0M5AC3	2046579
Programming and configuration tools			
	Programming Tool USB, for programmable SICK encoders AFS60, AFM60, DFS60, VFS60, DFV60 and wire draw encoders with programmable encoders.	PGT-08-S	1036616
	Display Programming Tool for programmable SICK incremental encoders DFS60, VFS60, DFV60 and wire draw encoders with DFS60. Compact dimensions, low weight and intuitive to use.	PGT-10-S	1052967

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At a glance

- Compact 36 mm absolute encoder with max. 26 bits (singleturn: 14 bits, multiturn: 12 bits)
- Face mount flange, servo flange, blind hollow shaft
- Rotatable M12 connector or rotatable cable outlet
- SSI interface
- Programmable SSI version: Resolution, preset value, etc. can be programmed (depending on the type)
- Protection class up to IP 67 (depending on the type)
- Operating temperature: –40 °C to +100 °C (depending on the type)

Your benefits

- Simple, time-saving mechanical installation due to a rotatable connector or rotatable cable outlet, various mounting hole patterns, and many different shafts
- Simple and flexible electrical installation with various configuration options and adjustable SSI protocol structure (programmable SSI version)
- Easy setup for various applications allowing binary, non-binary, and non-integer resolutions with the round axis functionality (programmable SSI version)
- Reliable operation in harsh environments thanks to the rugged, reliable, fully magnetic sensor system
- Space-efficient and cost-effective design that is suitable for applications where space is tight
- High performance at a cost-efficient price

➜ www.mysick.com/en/AHS_AHM36_SSI

For more information, just 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.

Ordering information

Other models and accessories ➜ www.mysick.com/en/AHS_AHM36_SSI

- **Electrical interface:** SSI

Mechanical interface	Shaft diameter	Connection type	Number of steps	Resolution	Programmable	Model name	Part no.
Blind hollow shaft	6 mm	Connector M12, 8-pin, universal	≤ 16,384	16,384 x 1	✔	AHS36A-BAPC016384	1066016
		Cable, 8-pin, universal, 1.5 m	≤ 16,384	16,384 x 1	✔	AHS36A-BAPK016384	1066015
		Connector M12, 8-pin, universal	≤ 16,384	16,384 x 4,096	✔	AHM36A-BAPC014x12	1066011
		Cable, 8-pin, universal, 1.5 m	≤ 16,384	16,384 x 4,096	✔	AHM36A-BAPK014x12	1066010
Solid shaft, Servo flange	6 mm, 12 mm	Connector M12, 8-pin, universal	≤ 4,096	4,096 x 1	–	AHS36B-S1AC004096	1066017
				4,096 x 4,096	–	AHM36B-S1AC012x12	1066012
			≤ 16,384	16,384 x 1	✔	AHS36A-S1PC016384	1066014
		Cable, 8-pin, universal, 1.5 m	≤ 16,384	16,384 x 1	✔	AHS36A-S1PK016384	1066013
		Connector M12, 8-pin, universal	≤ 16,384	16,384 x 4,096	✔	AHM36A-S1PC014x12	1066009
		Cable, 8-pin, universal, 1.5 m	≤ 16,384	16,384 x 4,096	✔	AHM36A-S1PK014x12	1066008
Solid shaft, Face mount flange	6 mm, 12 mm	Connector M12, 8-pin, universal	≤ 16,384	16,384 x 4,096	✔	AHM36A-S3PC014x12	1066007
		Cable, 8-pin, universal, 1.5 m	≤ 16,384	16,384 x 4,096	✔	AHM36A-S3PK014x12	1066006
	8 mm, 12 mm	Connector M12, 8-pin, universal	≤ 16,384	16,384 x 1	–	AHS36A-S5AC016384	1067269

Recommended accessories

	Brief description	Model name	Part no.
Mounting brackets and mounting plates			
	Angle bracket, mounting kit for face mount flange included	BEF-WF-20	2066393
Shaft adaptation			
	Bellows coupling, shaft diameter 6 mm / 6 mm	KUP-0606-B	5312981
	Bellows coupling, shaft diameter 6 mm / 10 mm	KUP-0610-B	5312982
Plug connectors and cables			
	Head A: female connector, M12, 8-pin, straight Cable: shielded, 2 m	DOL-1208-G02MAC1	6032866
	Head A: female connector, M12, 8-pin, straight Cable: shielded, 5 m	DOL-1208-G05MAC1	6032867
	Head A: female connector, M12, 8-pin, straight, A-coded Head B: - Cable: Incremental, SSI, shielded	DOS-1208-GA01	6045001
	Head A: male connector, D-Sub, 9-pin, straight Head B: female connector, M12, 8-pin, straight Cable: SSI, TPU, halogen-free, shielded, 0.5 m	DSL-2D08-G0M5AC2	2048439
	Head A: male connector, D-Sub, 9-pin, straight Head B: female connector, M23, 12-pin, straight Cable: SSI, drag chain use, TPU, halogen-free, shielded, 0.5 m	DSL-3D08-G0M5AC2	2048440
Programming and configuration tools			
	Programming Tool USB, for programmable SICK encoders AFS60, AFM60, DFS60, VFS60, DFV60 and wire draw encoders with programmable encoders.	PGT-08-S	1036616

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At a glance

- Compact 36 mm absolute encoder with max. 26 bits (singleturn: 14 bits, multiturn: 12 bits)
- Face mount flange, servo flange, blind hollow shaft
- Rotatable M12 connector or rotatable-cable outlet
- CANopen interface with programmable configuration
- Diagnostic functions: temperature, operating time, etc. (depending on the type)
- Protection class up to IP 67 (depending on the type)
- Operating temperature: –40 °C to +85 °C (depending on the type)

Your benefits

- Simple, time-saving mechanical installation due to a rotatable connector or rotatable cable outlet, various mounting hole patterns, and many different shafts
- Simple network installation with various configuration options
- Intelligent diagnostic functions evaluate maintenance intervals for the entire system, thereby increasing system reliability
- Customizable Easy setup for various applications allowing binary, non-binary, and non-integer resolutions with the round axis functionality (advanced version)
- Reliable operation in harsh environments thanks to the rugged, reliable, fully magnetic sensor system
- Space-efficient and cost-effective design that is suitable for applications where space is tight
- High performance at a cost-efficient price

➜ www.mysick.com/en/AHS_AHM36_CANopen

For more information, just 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.

Ordering information

Other models and accessories ➜ www.mysick.com/en/AHS_AHM36_CANopen

- **Electrical interface:** CANopen
- **Programmable:** ✔

Mechanical interface	Shaft diameter	Connection type	Number of steps	Resolution	Model name	Part no.
Blind hollow shaft	6 mm	Connector M12, 5-pin, universal	≤ 16,384	16,384 x 1	AHS36A-BACC016384	1066004
		Cable, 5-wire, universal, 1.5 m	≤ 16,384	16,384 x 1	AHS36A-BACK016384	1066003
		Connector M12, 5-pin, universal	≤ 16,384	16,384 x 4,096	AHM36A-BACC014x12	1065990
		Cable, 5-wire, universal, 1.5 m	≤ 16,384	16,384 x 4,096	AHM36A-BACK014x12	1065991
Solid shaft, Servo flange	6 mm, 12 mm	Connector M12, 5-pin, universal	≤ 4,096	4,096 x 1	AHS36B-S1CC004096	1066005
				4,096 x 4,096	AHM36B-S1CC012x12	1065992
			≤ 16,384	16,384 x 1	AHS36A-S1CC016384	1066002
		Cable, 5-wire, universal, 1.5 m	≤ 16,384	16,384 x 1	AHS36A-S1CK016384	1066001
		Connector M12, 5-pin, universal	≤ 16,384	16,384 x 4,096	AHM36A-S1CC014x12	1065993
		Cable, 5-wire, universal, 1.5 m	≤ 16,384	16,384 x 4,096	AHM36A-S1CK014x12	1065994
Solid shaft, Face mount flange	6 mm, 12 mm	Connector M12, 5-pin, universal	≤ 16,384	16,384 x 4,096	AHM36A-S3CC014x12	1065999
		Cable, 5-wire, universal, 1.5 m	≤ 16,384	16,384 x 4,096	AHM36A-S3CK014x12	1066000
	8 mm, 12 mm	Connector M12, 5-pin, universal	≤ 16,384	16,384 x 1	AHS36A-S5CC016384	1067268

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Recommended accessories

	Brief description	Model name	Part no.
Mounting brackets and mounting plates			
	Angle bracket, mounting kit for face mount flange included	BEF-WF-20	2066393
Shaft adaptation			
	Bellows coupling, shaft diameter 6 mm / 6 mm	KUP-0606-B	5312981
	Bellows coupling, shaft diameter 6 mm / 10 mm	KUP-0610-B	5312982
Adapters and distributors			
	CANopen, T-connector plugs directly into receiver, splits the single home run from control cabinet between sender and receiver	DSC-1205T000025KM0	6030664
Plug connectors and cables			
	Head A: female connector, M12, 5-pin, straight Head B: cable Cable: CANopen, DeviceNet, 5 m	DOL-1205-G05MY	6053042
	Head A: female connector, M12, 5-pin, straight Head B: - Cable: CANopen, DeviceNet, shielded	DOS-1205-GA	6027534

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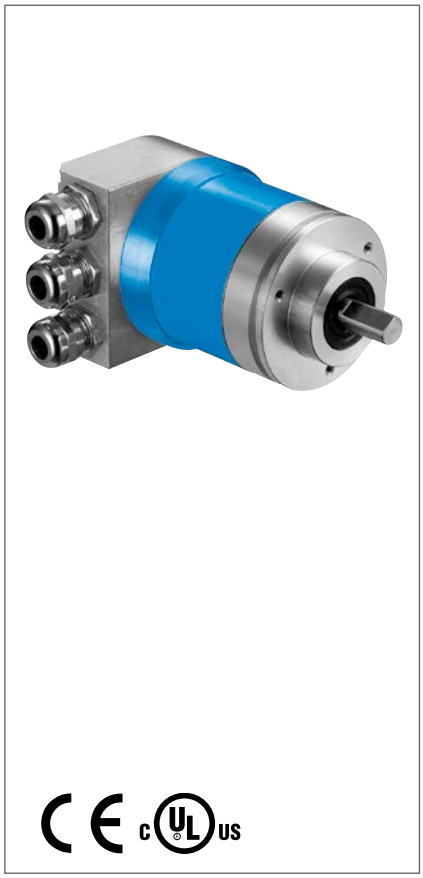

At a glance

- Extremely rugged, tried-and-tested absolute multiturn encoder with a resolution of up to 26 bits
- Mechanical interface: face mount flange, servo flange, blind hollow shaft and extensive adapter accessories
- Zero-set and preset functions via hardware or software
- No battery required
- Electrical interface: PROFIBUS DP as per IEC61158 / RS 485, electrically isolated
- Electronically adjustable, configurable resolution
- Magnetic scanning

Your benefits

- Fewer variants are required since one freely programmable encoder offers all singleturn and multiturn resolutions
- Easy setup due to various connectivity options (3x PG, 3x M12)
- Less maintenance and a long service life reduce overall costs
- Application flexibility due to easily interchangeable collets for the blind hollow shaft
- Quick commissioning using the zero set/preset function either at the press of the button on the device or via software
- Increased productivity due to highly reliable shock and vibration resistance
- Worldwide availability and service ensure quick and reliable customer service

➜ www.mysick.com/en/ATM60_PROFIBUS

For more information, just 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.

Ordering information

Other models and accessories ➜ www.mysick.com/en/ATM60_PROFIBUS

- **Electrical interface:** 10 V ... 32 V, Profibus
- **Connection type:** Bus adaptor with cable screw fixings or connector
- **Number of steps:** ≤ 8,192
- **Resolution:** 8,192 x 8,192

Mechanical interface	Shaft diameter	Model name	Part no.
Solid shaft, Servo flange	6 mm, 10 mm	ATM60-P1H13X13	1030014
Solid shaft, Face mount flange	10 mm, 19 mm	ATM60-P4H13X13	1030013
Blind hollow shaft	6 mm, 8 mm, 10 mm, 12 mm, 14 mm, 15 mm, 1/4", 3/8", 1/2" [1]	ATM60-PAH13X13	1030015

[1] Collets for 6, 8, 10, 12, 14 mm and 1/4", 3/8" and 1/2" as accessories, separate order item. For 15 mm shaft diameter collet is not needed.

Recommended accessories

	Brief description	Model name	Part no.
Mounting brackets and mounting plates			
	Mounting bracket for encoder with spigot 36 mm, mounting kit included	BEF-WF-36	2029164
Other mounting accessories			
	Servo clamps, large, for servo flange (clamping claws, mounting eccentric), (3 pcs), without mounting hardware	BEF-WK-SF	2029166

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	Brief description	Model name	Part no.
Shaft adaptation			
	Bellows coupling, shaft diameter 6 mm / 6 mm	KUP-0606-B	5312981
	Bellows coupling, shaft diameter 6 mm / 10 mm	KUP-0610-B	5312982
	Bellows coupling, shaft diameter 10 mm / 10 mm	KUP-1010-B	5312983
	Collet for blind hollow shaft, shaft diameter 6 mm, outer diameter 15 mm	SPZ-006-AD-A	2029174
	Collet for blind hollow shaft, shaft diameter 8 mm, outer diameter 15 mm	SPZ-008-AD-A	2029176
	Collet for blind hollow shaft, shaft diameter 10 mm, outer diameter 15 mm	SPZ-010-AD-A	2029178
	Collet for blind hollow shaft, shaft diameter 12 mm, outer diameter 15 mm	SPZ-012-AD-A	2029179
	Collet for blind hollow shaft, shaft diameter 10 mm, outer diameter 15 mm	SPZ-014-AD-A	2048863
	Collet for blind hollow shaft, shaft diameter 0.5”, outer diameter 15 mm	SPZ-1E2-AD-A	2029180
	Collet for blind hollow shaft, shaft diameter 0.25”, outer diameter 15 mm	SPZ-1E4-AD-A	2029175
	Collet for blind hollow shaft, shaft diameter 0.375”, outer diameter 15 mm	SPZ-3E8-AD-A	2029177
Adapters and distributors			
	PROFIBUS DP, bus adaptor KR3, 3 x PG	AD-ATM60-KA3PR	2029225
	PROFIBUS DP, bus adaptor SR3, 3 x M12, 5-pin	AD-ATM60-SR3PR	2031985
Plug connectors and cables			
Illustration may differ	Head A: female connector, M12, 4-pin, straight Head B: cable Cable: PVC, unshielded, 5 m	DOL-1204-G05M	6009866
	Head A: female connector, M12, 5-pin, straight Head B: cable Cable: PROFIBUS DP, PVC, shielded, 5 m	DOL-1205-G05MQ	6026006
	Head A: cable Head B: cable Cable: PROFIBUS DP, drag chain use, PUR, shielded	LTG-2102-MW	6021355
	Head A: male connector, M12, 5-pin, straight, B-coded Head B: cable Cable: PROFIBUS DP, drag chain use, TPU, halogen-free, shielded, 5 m Wire shield Al-Pt film, overall shield C-screen tin-plated	STL-1205-G05MQ	6026005

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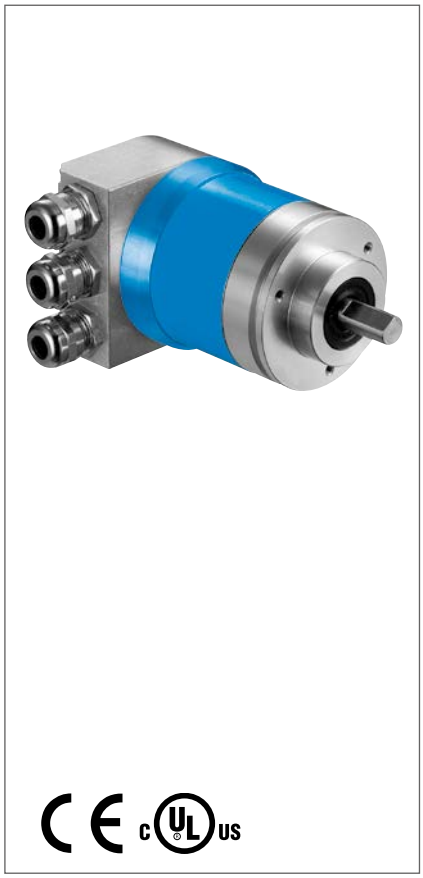

At a glance

- Extremely rugged, tried-and-tested absolute multiturn encoder with a resolution of up to 26 bits
- Mechanical interface: face mount, servo flange, blind hollow shaft, adapter accessories
- Zero-set and preset functions via hardware/software
- No battery
- Electrical interface: CAN specification 2.0B, electrically isolated; DS 301, V4.01, DSP 406, V2.0, Class 2
- Electronically adjustable, configurable resolution
- Network status info via duo LED
- Magnetic scanning

Your benefits

- Fewer variants are required since one freely programmable encoder offers all singleturn and multiturn resolutions
- Easy setup due to electrical connection adapters (1 to 3x PG, 2x M12)
- Less maintenance and a long service life reduce overall costs
- Application flexibility due to easily interchangeable collets for the blind hollow shaft
- Quick commissioning using the zero set/preset function either at the press of the button on the device or via software
- Increased productivity due to highly reliable shock and vibration resistance
- Worldwide availability and service ensure quick and reliable customer service

➜ www.mysick.com/en/ATM60_CANopen

For more information, just 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.

Ordering information

Other models and accessories ➜ www.mysick.com/en/ATM60_CANopen

- **Electrical interface:** 10 V ... 32 V, CANopen
- **Connection type:** Bus adaptor with cable screw fixings or connector
- **Number of steps:** ≤ 8,192
- **Resolution:** 8,192 x 8,192

Mechanical interface	Shaft diameter	Model name	Part no.
Solid shaft, Servo flange	6 mm, 10 mm	ATM60-C1H13X13	1030025
Solid shaft, Face mount flange	10 mm, 19 mm	ATM60-C4H13X13	1030024
Blind hollow shaft	6 mm, 8 mm, 10 mm, 12 mm, 14 mm, 15 mm, 1/4", 3/8", 1/2" [1]	ATM60-CAH13X13	1030026

[1] Collets for 6, 8, 10, 12, 14 mm and 1/4", 3/8" and 1/2" as accessories, separate order item. For 15 mm shaft diameter collet is not needed.

Recommended accessories

	Brief description	Model name	Part no.
Mounting brackets and mounting plates			
	Mounting bracket for encoder with spigot 36 mm, mounting kit included	BEF-WF-36	2029164
Other mounting accessories			
	Servo clamps, large, for servo flange (clamping claws, mounting eccentric), (3 pcs), without mounting hardware	BEF-WK-SF	2029166

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	Brief description	Model name	Part no.
Shaft adaptation			
	Bellows coupling, shaft diameter 6 mm / 6 mm	KUP-0606-B	5312981
	Bellows coupling, shaft diameter 6 mm / 10 mm	KUP-0610-B	5312982
	Bellows coupling, shaft diameter 10 mm / 10 mm	KUP-1010-B	5312983
	Collet for blind hollow shaft, shaft diameter 6 mm, outer diameter 15 mm	SPZ-006-AD-A	2029174
	Collet for blind hollow shaft, shaft diameter 8 mm, outer diameter 15 mm	SPZ-008-AD-A	2029176
	Collet for blind hollow shaft, shaft diameter 10 mm, outer diameter 15 mm	SPZ-010-AD-A	2029178
	Collet for blind hollow shaft, shaft diameter 12 mm, outer diameter 15 mm	SPZ-012-AD-A	2029179
	Collet for blind hollow shaft, shaft diameter 10 mm, outer diameter 15 mm	SPZ-014-AD-A	2048863
	Collet for blind hollow shaft, shaft diameter 0.5”, outer diameter 15 mm	SPZ-1E2-AD-A	2029180
	Collet for blind hollow shaft, shaft diameter 0.25”, outer diameter 15 mm	SPZ-1E4-AD-A	2029175
	Collet for blind hollow shaft, shaft diameter 0.375”, outer diameter 15 mm	SPZ-3E8-AD-A	2029177
Adapters and distributors			
	CANopen, bus adaptor KR1, 1 x PG	AD-ATM60-KR1CO	2029230
	CANopen, bus adaptor KR2, 2 x PG	AD-ATM60-KR2CO	2029231
	CANopen, bus adaptor KR3, 3 x PG	AD-ATM60-KR3CO	2029232
	CANopen, bus adaptor SR1, 1 x M12, 5-pin	AD-ATM60-SR1CO	2031686
	CANopen, bus adaptor SR2, 2 x M12, 5-pin	AD-ATM60-SR2CO	2020935
Plug connectors and cables			
	Head A: female connector, M12, 5-pin, straight Head B: - Cable: CANopen, DeviceNet, shielded	DOS-1205-GA	6027534
	Head A: male connector, M12, 5-pin, straight Head B: female connector, M12, 5-pin, straight Cable: CANopen, DeviceNet, DeviceNet Safety, dropcable, TPU, halogen-free, unshielded, 6 m	DSL-1205-G06MK	6028327
	Head A: cable Head B: cable Cable: CANopen, DeviceNet, drag chain use, shielded Wire shield Al-Pt film, overall shield C-screen tin-plated	LTG-2804-MW	6028328
	Head A: male connector, M12, 5-pin, straight, A-coded Head B: - Cable: CANopen, DeviceNet, shielded	STE-1205-GA	6027533

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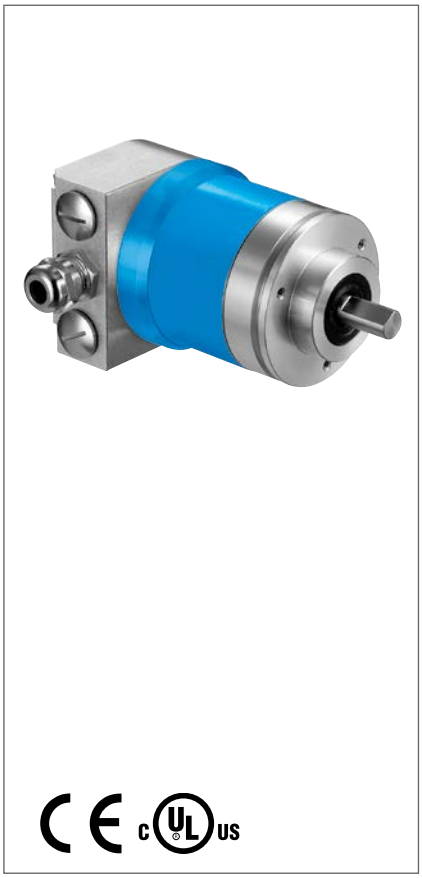

At a glance

- Extremely rugged, tried-and-tested absolute multiturn encoder with a resolution of up to 26 bits
- Mechanical interface: face mount, servo flange, blind hollow shaft and adapter accessories
- Zero set and preset functions via hardware/software
- No battery
- Electrical interface:CAN/DeviceNet specification 2.0B, electrically isolated; device profile: Generic [0]
- Electronically adjustable, configurable resolution
- Network status info via duo LED
- Magnetic scanning

Your benefits

- Fewer variants are required since one freely programmable encoder offers all singleturn and multiturn resolutions
- Easy setup due to electrical connection adapters (1 to 2x PG, 1 to 2x M12)
- Less maintenance and a long service life reduce overall costs
- Application flexibility due to easily interchangeable collets for the blind hollow shaft
- Quick commissioning using the zero set/preset function either at the press of the button on the device or via software
- Increased productivity due to highly reliable shock and vibration resistance
- Worldwide availability and service ensure quick and reliable customer service

➜ www.mysick.com/en/ATM60_DeviceNet

For more information, just 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.

Ordering information

Other models and accessories ➜ www.mysick.com/en/ATM60_DeviceNet

- **Electrical interface:** 10 V ... 32 V, DeviceNet
- **Connection type:** Bus adaptor with cable screw fixings or connector
- **Number of steps:** ≤ 8,192
- **Resolution:** 8,192 x 8,192

Mechanical interface	Shaft diameter	Model name	Part no.
Solid shaft, Servo flange	6 mm, 10 mm	ATM60-D1H13X13	1030018
Solid shaft, Face mount flange	10 mm, 19 mm	ATM60-D4H13X13	1030017
Blind hollow shaft	6 mm, 8 mm, 10 mm, 12 mm, 14 mm, 15 mm, 1/4", 3/8", 1/2" [1]	ATM60-DAH13X13	1030019

[1] Collets for 6, 8, 10, 12, 14 mm and 1/4", 3/8" and 1/2" as accessories, separate order item. For 15 mm shaft diameter collet is not needed.

Recommended accessories

	Brief description	Model name	Part no.
Mounting brackets and mounting plates			
	Mounting bracket for encoder with spigot 36 mm, mounting kit included	BEF-WF-36	2029164
Other mounting accessories			
	Servo clamps, large, for servo flange (clamping claws, mounting eccentric), (3 pcs), without mounting hardware	BEF-WK-SF	2029166

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	Brief description	Model name	Part no.
Shaft adaptation			
	Bellows coupling, shaft diameter 6 mm / 6 mm	KUP-0606-B	5312981
	Bellows coupling, shaft diameter 6 mm / 10 mm	KUP-0610-B	5312982
	Bellows coupling, shaft diameter 10 mm / 10 mm	KUP-1010-B	5312983
	Collet for blind hollow shaft, shaft diameter 6 mm, outer diameter 15 mm	SPZ-006-AD-A	2029174
	Collet for blind hollow shaft, shaft diameter 8 mm, outer diameter 15 mm	SPZ-008-AD-A	2029176
	Collet for blind hollow shaft, shaft diameter 10 mm, outer diameter 15 mm	SPZ-010-AD-A	2029178
	Collet for blind hollow shaft, shaft diameter 12 mm, outer diameter 15 mm	SPZ-012-AD-A	2029179
	Collet for blind hollow shaft, shaft diameter 10 mm, outer diameter 15 mm	SPZ-014-AD-A	2048863
	Collet for blind hollow shaft, shaft diameter 0.5”, outer diameter 15 mm	SPZ-1E2-AD-A	2029180
	Collet for blind hollow shaft, shaft diameter 0.25”, outer diameter 15 mm	SPZ-1E4-AD-A	2029175
	Collet for blind hollow shaft, shaft diameter 0.375”, outer diameter 15 mm	SPZ-3E8-AD-A	2029177
Adapters and distributors			
	DeviceNet, bus adaptor KR1, 1 x PG	AD-ATM60-KR1DN	2029228
	DeviceNet, bus adaptor KR2, 2 x PG	AD-ATM60-KR2DN	2029229
	DeviceNet, bus adaptor SR1, 1 x M12, 5-pin	AD-ATM60-SR1DN	2029226
	DeviceNet, bus adaptor SR2, 2 x M12, 5-pin	AD-ATM60-SR2DN	2029227
Plug connectors and cables			
	Head A: female connector, M12, 5-pin, straight Head B: - Cable: CANopen, DeviceNet, shielded	DOS-1205-GA	6027534
	Head A: male connector, M12, 5-pin, straight Head B: female connector, M12, 5-pin, straight Cable: CANopen, DeviceNet, DeviceNet Safety, dropcable, TPU, halogen-free, unshielded, 6 m	DSL-1205-G06MK	6028327
	Head A: cable Head B: cable Cable: CANopen, DeviceNet, drag chain use, shielded Wire shield Al-Pt film, overall shield C-screen tin-plated	LTG-2804-MW	6028328
	Head A: male connector, M12, 5-pin, straight, A-coded Head B: - Cable: CANopen, DeviceNet, shielded	STE-1205-GA	6027533

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At a glance

- High-resolution absolute encoders with up to 30 bits (AFM60) or up to 18 bits (AFS60)
- Face mount flange, servo flange, blind or through hollow shaft
- SSI, SSI + Incremental or SSI + Sin/Cos interface
- Programmable resolution and offset (dependent on type)
- Connection system: M12, M23 connector or cable outlet
- Enclosure rating: IP 67 (housing), IP 65 (shaft)
- Operating temperature: –30 °C to +100 °C (depends on type)

Your benefits

- Programmability of the encoders means less storage, greater machine availability and easy installation
- Precise positioning due to high resolutions
- Large selection of mechanical interfaces and electrical contacting possibilities: Suitable for all applications
- Suitable for applications with limited space requirements (extremely short installation depth of 30 mm)
- Very good rotation accuracy due to increased bearing distance
- One programming tool and software with automatic encoder detection for AFS60/AFM60/DFS60

→ www.mysick.com/en/AFS_AFM60_SSI

For more information, just 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.

Ordering information

Other models and accessories → www.mysick.com/en/AFS_AFM60_SSI

- **Electrical interface:** 4.5 V ... 32 V, SSI/Gray, programmable
- **Connection type:** Connector M12, 8-pin, radial
- **Number of steps:** ≤ 32,768
- **Programmable:** ✔

Mechanical interface	Shaft diameter	Resolution	Model name	Part no.
Blind hollow shaft	10 mm	32,768 x 4,096	AFM60B-BDPC032768	1051111
		32,768 x 1	AFS60B-BDPC032768	1051052
Through hollow shaft	10 mm	32,768 x 4,096	AFM60B-TDPC032768	1051096
		32,768 x 1	AFS60B-TDPC032768	1051069
Blind hollow shaft	12 mm	32,768 x 4,096	AFM60B-BEPC032768	1051112
		32,768 x 1	AFS60B-BEPC032768	1037927
Through hollow shaft	12 mm	32,768 x 4,096	AFM60B-TEPC032768	1038903
		32,768 x 1	AFS60B-TEPC032768	1037941
Blind hollow shaft	15 mm	32,768 x 4,096	AFM60B-BHPC032768	1053813
		32,768 x 1	AFS60B-BHPC032768	1039024
Through hollow shaft	15 mm	32,768 x 4,096	AFM60B-THPC032768	1053067
		32,768 x 1	AFS60B-THPC032768	1051522
Solid shaft, Servo flange	6 mm, 10 mm	32,768 x 4,096	AFM60B-S1PC032768	1037514
		32,768 x 1	AFS60B-S1PC032768	1037494
Solid shaft with flat, Face mount flange	10 mm, 19 mm	32,768 x 4,096	AFM60B-S4PC032768	1037504
		32,768 x 1	AFS60B-S4PC032768	1037484

Recommended accessories

	Brief description	Model name	Part no.
Mounting brackets and mounting plates			
	Mounting bracket for encoder with spigot 36 mm, mounting kit included	BEF-WF-36	2029164
Shaft adaptation			
	Bellows coupling, shaft diameter 6 mm / 6 mm	KUP-0606-B	5312981
	Bellows coupling, shaft diameter 6 mm / 10 mm	KUP-0610-B	5312982
Plug connectors and cables			
	Head A: female connector, JST, 8-pin, straight Head B: cable Cable: SSI, drag chain use, TPU, halogen-free, shielded, 3 m	DOL-0J08-G03MAA6	2048591
	Head A: female connector, M12, 8-pin, straight Cable: shielded, 2 m	DOL-1208-G02MAC1	6032866
	Head A: female connector, M12, 8-pin, straight Cable: shielded, 5 m	DOL-1208-G05MAC1	6032867
	Head A: female connector, M12, 8-pin, straight, A-coded Head B: - Cable: Incremental, SSI, shielded	DOS-1208-GA01	6045001
	Head A: male connector, D-Sub, 9-pin, straight Head B: female connector, M12, 8-pin, straight Cable: SSI, TPU, halogen-free, shielded, 0.5 m	DSL-2D08-G0M5AC2	2048439
Programming and configuration tools			
	Programming Tool USB, for programmable SICK encoders AFS60, AFM60, DFS60, VFS60, DFV60 and wire draw encoders with programmable encoders.	PGT-08-S	1036616

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At a glance

- High-resolution, 30-bit absolute encoder (18 bit singleturn and 12 bit multiturn)
- Device Level Ring (DLR functionality)
- Extensive diagnostics: Min/max values for temperature, position, speed. Operating hours counter, display of flags, alarms and warnings using e.g. a fault header (32 bit)
- Status display via 5 duo LEDs
- Rotary axis function
- IP address via DHCP / DEC switches
- Ethernet/IP interface (extended profile 0x22)
- Function block

Your benefits

- DLR functionality for reliability with simple maintenance and a simple adaptation to existing network topologies
- Lower installation costs due to fewer external switches
- High level of productivity thanks to superior diagnostics with 32-bit fault header, fast communication and high level of redundancy
- Optimal machine availability thanks to early warning and fault detection system
- Simple setting for various applications thanks to rotary axis function
- Simple installation due to user-friendly on-board configuration assembly
- Industrial-application design for use in particularly cramped space conditions

➜ www.mysick.com/en/AFS_AFM60_EtherNet_IP

For more information, just 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.

Ordering information

Other models and accessories ➜ www.mysick.com/en/AFS_AFM60_EtherNet_IP

- **Electrical interface:** EtherNet/IP
- **Connection type:** 3 x connector M12, 4-pin, axial
- **Number of steps:** ≤ 262,144
- **Programmable:** ✔

Mechanical interface	Shaft diameter	Resolution	Model name	Part no.
Blind hollow shaft	10 mm	262,144 x 4,096	AFM60A-BDIB018X12	1055325
		262,144 x 1	AFS60A-BDIB262144	1055356
	12 mm	262,144 x 4,096	AFM60A-BEIB018X12	1055326
		262,144 x 1	AFS60A-BEIB262144	1055358
	15 mm	262,144 x 4,096	AFM60A-BHIB018X12	1055328
		262,144 x 1	AFS60A-BHIB262144	1055360
Solid shaft, Servo flange	6 mm, 10 mm	262,144 x 4,096	AFM60A-S1IB018X12	1055331
		262,144 x 1	AFS60A-S1IB262144	1055362
Solid shaft with flat, Face mount flange	10 mm, 19 mm	262,144 x 4,096	AFM60A-S4IB018X12	1055334
		262,144 x 1	AFS60A-S4IB262144	1055364

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Recommended accessories

	Brief description	Model name	Part no.
Mounting brackets and mounting plates			
	Mounting bracket for encoder with spigot 36 mm, mounting kit included	BEF-WF-36	2029164
Other mounting accessories			
	Servo clamps, large, for servo flange (clamping claws, mounting eccentric), (3 pcs), without mounting hardware	BEF-WK-SF	2029166
Shaft adaptation			
	Bellows coupling, shaft diameter 6 mm / 6 mm	KUP-0606-B	5312981
	Bellows coupling, shaft diameter 6 mm / 10 mm	KUP-0610-B	5312982
	Bellows coupling, shaft diameter 10 mm / 10 mm	KUP-1010-B	5312983
Plug connectors and cables			
	Head A: female connector, M12, 4-pin, angled Head B: cable Cable: drag chain use, TPU, halogen-free, unshielded, 5 m	DOL-1204-W05MC	6025904
	Head A: female connector, M12, 4-pin, angled Head B: - Cable: unshielded	DOS-1204-W	6007303
	Head A: female connector, M12, 4-pin, D-coded Head B: female connector, RJ45, 8-pin Cable: Ethernet, shielded Cabinet through	Feedthrough female connector Ethernet RJ45	6048180
	Head A: male connector, M12, 4-pin, angled, D-coded Head B: - Cable: EtherNet/IP, EtherNet/IP, shielded	STE-1204-WE	6048152
	Head A: male connector, M12, 4-pin, angled, D-coded Head B: cable Cable: EtherNet/IP, TPU, halogen-free, shielded, 5 m	STL-1204-W05ME90	6047913

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At a glance

- High-resolution 30-bit absolute encoder (18-bit singleturn and 12-bit multiturn)
- Face mount flange, servo flange and blind hollow shaft
- Connection type: 3 x M12 axial connector
- Data tranfer speed " on the fly" in the range of µs
- EtherCAT® interface CoE (CiA DS-301) Device profile (CiA DS-406)
- Round axis functionality
- Alarms, warnings and diagnostics functions for speed, position, temperature, operating time, etc.
- Status display via 5 LEDs
- Up to 16 adjustable electronic cam switches

Your benefits

- Increased productivity as a result of intelligent diagnostics functions and rapid data transfer
- Increase in network reliability due to early error detection
- Simple installation with various configuration options
- Flexible, easy setup and high resolutions for various applications with binary, integer and "decimal point" values based on round axis functionality
- Maximum system availability through embedded switch technology
- Compact and cost-efficient design

➜ www.mysick.com/en/AFS_AFM60_EtherCAT

For more information, just 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.

Ordering information

Other models and accessories ➜ www.mysick.com/en/AFS_AFM60_EtherCAT

- **Electrical interface:** EtherCAT
- **Connection type:** 3 x connector M12, 4-pin, axial
- **Number of steps:** ≤ 262,144
- **Programmable:** ✔

Mechanical interface	Shaft diameter	Resolution	Model name	Part no.
Solid shaft, servo flange	6 mm	262,144 x 4,096	AFM60A-S1EB018X12	1059061
		262,144 x 1	AFS60A-S1EB262144	1059072
Solid shaft with flat	10 mm	262,144 x 4,096	AFM60A-S4EB018X12	1059060
		262,144 x 1	AFS60A-S4EB262144	1059071
Blind hollow shaft	10 mm	262,144 x 4,096	AFM60A-BDEB018X12	1059057
		262,144 x 1	AFS60A-BDEB262144	1059068
	12 mm	262,144 x 4,096	AFM60A-BEEB018X12	1059056
		262,144 x 1	AFS60A-BEEB262144	1059067
	15 mm	262,144 x 4,096	AFM60A-BHEB018X12	1059053
		262,144 x 1	AFS60A-BHEB262144	1059064

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Recommended accessories

	Brief description	Model name	Part no.
Mounting brackets and mounting plates			
	Mounting bracket for encoder with spigot 36 mm, mounting kit included	BEF-WF-36	2029164
Other mounting accessories			
	Servo clamps, large, for servo flange (clamping claws, mounting eccentric), (3 pcs), without mounting hardware	BEF-WK-SF	2029166
Shaft adaptation			
	Bellows coupling, shaft diameter 6 mm / 6 mm	KUP-0606-B	5312981
	Bellows coupling, shaft diameter 6 mm / 10 mm	KUP-0610-B	5312982
	Bellows coupling, shaft diameter 10 mm / 10 mm	KUP-1010-B	5312983
Plug connectors and cables			
	Head A: female connector, M12, 4-pin, angled Head B: cable Cable: drag chain use, TPU, halogen-free, unshielded, 5 m	DOL-1204-W05MC	6025904
	Head A: female connector, M12, 4-pin, angled Head B: - Cable: unshielded	DOS-1204-W	6007303
	Head A: female connector, M12, 4-pin, D-coded Head B: female connector, RJ45, 8-pin Cable: Ethernet, shielded Cabinet through	Feedthrough female connector Ethernet RJ45	6048180
	Head A: male connector, M12, 4-pin, angled, D-coded Cable: PROFINET, PROFINET, shielded	STE-1204-WZ	6048262
	Head A: male connector, M12, 4-pin, angled, D-coded Head B: cable Cable: PROFINET, PVC, shielded, 5 m	STL-1204-W05MZ90	6048257

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At a glance

- High-resolution 30-bit absolute encoder (18-bit singleturn and 12-bit multiturn)
- Face mount flange, servo flange and blind hollow shaft
- Connection type: 3 x M12 axial plug
- PROFINET-IO-RT interface
- Less than 5 ms data update time
- Round axis functionality
- Alarms, warnings and diagnostics functions for speed, position, temperature, operating time, etc.
- Status display via 5 LEDs

Your benefits

- Increased productivity as a result of intelligent diagnostics functions and rapid data transfer
- Increase in network reliability due to early error detection
- Simple installation with various configuration options
- Flexible, easy setup and high resolutions for various applications with binary, integer and “decimal point” values based on round axis functionality
- Maximum system availability through embedded switch technology
- Compact and cost-efficient design

➜ www.mysick.com/en/AFS_AFM60_PROFINET

For more information, just 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.

Ordering information

Other models and accessories ➜ www.mysick.com/en/AFS_AFM60_PROFINET

- **Electrical interface:** PROFINET
- **Connection type:** 3 x connector M12, 4-pin, axial
- **Number of steps:** ≤ 262,144
- **Programmable:** ✔

Mechanical interface	Shaft diameter	Resolution	Model name	Part no.
Solid shaft, servo flange	6 mm	262,144 x 4,096	AFM60A-S1NB018X12	1059040
		262,144 x 1	AFS60A-S1NB262144	1059051
Solid shaft with flat	10 mm	262,144 x 4,096	AFM60A-S4NB018X12	1059039
		262,144 x 1	AFS60A-S4NB262144	1059050
Blind hollow shaft	10 mm	262,144 x 4,096	AFM60A-BDNB018X12	1059035
		262,144 x 1	AFS60A-BDNB262144	1059047
	12 mm	262,144 x 4,096	AFM60A-BENB018X12	1059034
		262,144 x 1	AFS60A-BENB262144	1059046
	15 mm	262,144 x 4,096	AFM60A-BHNB01812	1059031
		262,144 x 1	AFS60A-BHNB262144	1059043

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Recommended accessories

	Brief description	Model name	Part no.
Mounting brackets and mounting plates			
	Mounting bracket for encoder with spigot 36 mm, mounting kit included	BEF-WF-36	2029164
Other mounting accessories			
	Servo clamps, large, for servo flange (clamping claws, mounting eccentric), (3 pcs), without mounting hardware	BEF-WK-SF	2029166
Shaft adaptation			
	Bellows coupling, shaft diameter 6 mm / 6 mm	KUP-0606-B	5312981
	Bellows coupling, shaft diameter 6 mm / 10 mm	KUP-0610-B	5312982
	Bellows coupling, shaft diameter 10 mm / 10 mm	KUP-1010-B	5312983
Plug connectors and cables			
	Head A: female connector, M12, 4-pin, angled Head B: cable Cable: drag chain use, TPU, halogen-free, unshielded, 5 m	DOL-1204-W05MC	6025904
	Head A: female connector, M12, 4-pin, angled Head B: - Cable: unshielded	DOS-1204-W	6007303
	Head A: female connector, M12, 4-pin, D-coded Head B: female connector, RJ45, 8-pin Cable: Ethernet, shielded Cabinet through	Feedthrough female connector Ethernet RJ45	6048180
	Head A: male connector, M12, 4-pin, angled, D-coded Cable: PROFINET, PROFINET, shielded	STE-1204-WZ	6048262
	Head A: male connector, M12, 4-pin, angled, D-coded Head B: cable Cable: PROFINET, PVC, shielded, 5 m	STL-1204-W05MZ90	6048257

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At a glance

- Robust absolute multiturn encoder with up to 31 bits (14 bits singleturn and 17 bits multiturn)
- Face mount flange, servo flange or blind hollow shaft
- Compact design (<70 mm)
- Integrated PROFIBUS interface with DP V0, V1 and V2 functionality (dependent on type)
- Connection system: 3x M12 connectors
- Protection class up to IP67
- Operating temperature: –30 °C to +80 °C (dependent on type)

Your benefits

- High level of system reliability even in extreme environmental conditions
- Lower maintenance costs due to non-contact single and multiturn magnetic scanning
- Space-saving, cost-efficient design ensures easy integration into applications with limited space
- High level of productivity due to quick communication and position calculation
- Immune to contamination and condensation, making it ideal for harsh environmental conditions
- Very good price-performance ratio

➜ www.mysick.com/en/A3M60_PROFIBUS

For more information, just 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.

Ordering information

Other models and accessories ➜ www.mysick.com/en/A3M60_PROFIBUS

- **Electrical interface:** PROFIBUS DP
- **Connection type:** 3 x M12, 5-pin, axial
- **Number of steps:** ≤ 8,192
- **Resolution:** 8,192 x 8,192
- **Programmable:** ✔

Mechanical interface	Shaft diameter	Model name	Part no.
Blind hollow shaft	8 mm	A3M60B-BBPB013X13	1051016
	10 mm	A3M60B-BDPB013X13	1038824
	12 mm	A3M60B-BEPB013X13	1038825
	14 mm	A3M60B-BGPB013X13	1051325
Solid shaft, Servo flange	6 mm, 10 mm	A3M60B-S1PB013X13	1051018
Solid shaft, Face mount flange	10 mm, 19 mm	A3M60B-S4PB013X13	1038826
Blind hollow shaft	15 mm	A3M60B-BHPB013X13	1051017
	3/8”	A3M60B-BCPB013X13	1053327
	1/2”	A3M60B-BFPB013X13	1053328
	5/8”	A3M60B-BJPB013X13	1053329

Recommended accessories

	Brief description	Model name	Part no.
Mounting brackets and mounting plates			
	Mounting bracket for encoder with spigot 36 mm, mounting kit included	BEF-WF-36	2029164
Other mounting accessories			
	Servo clamps, large, for servo flange (clamping claws, mounting eccentric), (3 pcs), without mounting hardware	BEF-WK-SF	2029166
Shaft adaptation			
	Bellows coupling, shaft diameter 6 mm / 6 mm	KUP-0606-B	5312981
	Bellows coupling, shaft diameter 6 mm / 10 mm	KUP-0610-B	5312982
	Bellows coupling, shaft diameter 10 mm / 10 mm	KUP-1010-B	5312983
Plug connectors and cables			
	Head A: female connector, M12, 5-pin, angled Head B: cable Cable: PROFIBUS DP, TPU, halogen-free, shielded, 5 m	DOL-1202-W05MC	6042067
	Head A: female connector, M12, 5-pin, angled, B-coded Head B: cable Cable: PROFIBUS DP, drag chain use, PUR, shielded, 5 m	DOL-1205-W05MQ	6041423
	Head A: cable Head B: cable Cable: PROFIBUS DP, drag chain use, PUR, shielded	LTG-2102-MW	6021355
	Head A: male connector, M12, 5-pin, angled, B-coded Head B: cable Cable: PROFIBUS DP, drag chain use, PUR, shielded, 5 m	STL-1205-W05MQ	6041426

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At a glance

- Measuring lengths: 1.25 m ... 10 m
- Modular measurement system with a wide range of interfaces / measuring lengths
- Analog interface with push-button teach
- Very small housing (55 ... 190 mm)
- Slim housing with spring integrated in the measuring drum
- Light yet shock-proof and temperature-resistant plastic housing

Your benefits

- Space- and cost-saving design thanks to slime mechanics
- The absolute analog output allows for the use of a cost-effective interface card
- Easy to install
- Numerous combinations of interfaces and measuring lengths
- Advanced programming options lead to a reduction in the amount of variants, save costs, and reduce storage

➜ www.mysick.com/en/EcoLine

For more information, just 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.

Ordering information

Other models and accessories ➜ www.mysick.com/en/EcoLine

Measuring range	Electrical interface	Connection type	Model name	Part no.
0 m ... 1.25 m	4 mA ... 20 mA, analog	Cable, 3-wire, radial, 1.5 m	BCG05-K1KM01PP	6039745
	0 V ... 10 V, analog	Cable, 3-wire, radial, 1.5 m	BCG05-L1KM01PP	6039746
0 m ... 3 m	4 mA ... 20 mA, analog	Cable, 3-wire, radial, 1.5 m	BCG08-K1KM03PP	6039747
	0 V ... 10 V, analog	Cable, 3-wire, radial, 1.5 m	BCG08-L1KM01PP	6039748
0 m ... 5 m	4 mA ... 20 mA, analog	Cable, 3-wire, radial, 1.5 m	BCG13-K1KM05PP	6039749
	0 V ... 10 V, Analog	Cable, 3-wire, radial, 1.5 m	BCG13-L1KM05PP	6039750
0 m ... 10 m	4 mA ... 20 mA, analog	Connector 1 x M12, 5-pin, radial	BCG19-K1EM10PP	6048294
	0 V ... 10 V, analog	Connector 1 x M12, 5-pin, radial	BCG19-L1EM10PP	6048295

Recommended accessories

	Brief description	Model name	Part no.
Plug connectors and cables			
	Head A: female connector, M12, 5-pin, straight Head B: - Cable: unshielded	DOS-1205-G	6009719
	Head A: male connector, M12, 5-pin, straight Head B: - Cable: unshielded For field bus technology	STE-1205-G	6022083

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Subject to change without notice

At a glance

- Modular measuring system with a wide selection of interfaces/measuring lengths
- Measuring lengths: 2 m ... 50 m
- Very rugged system (dirt scraper, integrated brushes)
- High-quality winding mechanism and wire input
- Interfaces: - TTL/HTL - ANALOG, SSI, PROFIBUS, CANopen, DeviceNet, HIPERFACE®, EtherNET/IP, EtherCAT, PROFINET
-
- High enclosure rating
- Highly resistant to shock and vibrations
- High resolution possible

Your benefits

- Reliable solution in harsh environments
- Long service life due to rugged industrial housing
- Quick and easy installation without the need for precise linear guidance
- Low integration and maintenance costs
- Customization option reduces storage costs
- Teach-in function enables fast installation

➜ **www.mysick.com/en/HighLine**

For more information, just 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.

Ordering information

Other models and accessories ➜ **www.mysick.com/en/HighLine**

Measuring range	Electrical interface	Connection type	Model name	Part no.
0 m ... 2 m	SSI	Connector M23, 12-pin, radial	BTF08-A1AM0240	1034299
0 m ... 5 m	SSI	Connector M23, 12-pin, radial	BTF13-A1AM0520	1034300
0 m ... 10 m	SSI	Connector M23, 12-pin, radial	BTF13-A1AM1020	1034301
0 m ... 5 m	CANopen®	Bus adaptor with cable screw fixings or connector, radial [1]	BTF13-C1HM0525	1034318
0 m ... 10 m	CANopen®	Bus adaptor with cable screw fixings or connector, radial [1]	BTF13-C1HM1025	1034319
0 m ... 5 m	DeviceNet	Bus adaptor with cable screw fixings or connector, radial [1]	BTF13-D1HM0525	1034312
0 m ... 10 m	DeviceNet	Bus adaptor with cable screw fixings or connector, radial [1]	BTF13-D1HM1025	1034313
0 m ... 5 m	PROFIBUS	Bus adaptor with cable screw fixings or connector, radial [1]	BTF13-P1HM0525	1034306
0 m ... 10 m	PROFIBUS	Bus adaptor with cable screw fixings or connector, radial [1]	BTF13-P1HM1025	1034307
0 m ... 20 m	PROFIBUS	Bus adaptor with cable screw fixings or connector, radial [1]	BTF13-P1HM2025	1034308
0 m ... 30 m	PROFIBUS	Bus adaptor with cable screw fixings or connector, radial [1]	BTF13-P1HM3025	1034309
0 m ... 50 m	PROFIBUS	Bus adaptor with cable screw fixings or connector, radial [1]	BTF19-P1HM5017	1034310
0 m ... 2 m	10 V ... 32 V, TTL/Push pull	Connector M23, 12-pin, radial	PRF08-C1AM0240	1034329
0 m ... 5 m	10 V ... 32 V, HTL/Push pull	Connector M23, 12-pin, radial	PRF13-E1AM0520	1034336

[1] Please order the bus adaptor seperately.

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Recommended accessories

	Brief description	Model name	Part no.
Terminal and alignment brackets			
	Holder for Item Profile	MRA-F080-R	6028632
		MRA-F180-R	6028631
Wire draw mechanism			
	Spare joint ball for insertion in wire end ring	Gelenkkugel	5318683
	Additional brush attachment for wire draw mechanism MRA-F080 (2 m and 3 m from HighLine series)	MRA-F080-B	6045341
	Additional brush attachment for wire draw mechanism MRA-F130 (5 m, 10 m, 20 m and 30 m from HighLine series)	MRA-F130-B	6038562

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8011993/2014-07-24
Subject to change without notice

At a glance

- Non-contact length measurement – maintenance-free, rugged, long lifetime
- High reproducibility (0.3 mm / 1 mm), high system resolution (0.1 mm)
- SSI and PROFIBUS interfaces
- Determination of absolute position
- Measuring lengths of up to 1,700 m possible
- Can be used in harsh environments
- High travel speeds of up to 6.6 m/s
- Distance tolerance between read head and measuring element: up to 55 mm ± 20 mm possible

Your benefits

- After installation, the system is immediately available and completely maintenance-free, which leads to time and cost savings.
- Reliable determination of position under harshest environmental conditions such as influences of dirt, dust, fog, shocks and vibrations
- High efficiency and productivity
- Savings on time – no reference run necessary on initial operation due to absolute position measurement
- accurate positioning even with high mounting tolerances

➜ **www.mysick.com/en/KH53**

For more information, just 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.

Ordering information

Other models and accessories ➜ **www.mysick.com/en/KH53**

Measurement range	Electrical interface	System part	Model name	Part no.
≤ 38 m	SSI	Read head 38	KHK53-AXB00038	1030052
≤ 54 m	SSI	Read head 54	KHK53-AXB00054	1035443
≤ 354 m	SSI	Read head 354	KHK53-AXB00354	1030072
≤ 107 m	PROFIBUS DP	Read head 107	KHK53-PXF00107	1036164
≤ 548 m	PROFIBUS DP	Read head 548	KHK53-PXF00548	1036168
≤ 1,700 m	PROFIBUS DP	Read head 1700	KHK53-PXF01700	1036166

System part	Model name	Part no.
Measuring element up to 38 m	KHT53-XXX00038	1030055
	KHU53-XXX00038	1030056
Measuring element up to 54 m	KHT53-XXX00054	1035445
	KHU53-XXX00054	1035446
Measuring element up to 107 m	KHT53-XXX00107	1030065
	KHU53-XXX00107	1030066
Measuring element up to 354 m	KHT53-XXX00354	1030075
	KHU53-XXX00354	1030076
Measuring element up to 548 m	KHT53-XXX00548	1035451
	KHU53-XXX00548	1035452
Measuring element up to 1700 m	KHT53-XXX01700	1030085
	KHU53-XXX01700	1030086

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System part	Model name	Part no.
Mounting gauge 38	KHM53-XXX00038	1030057
Mounting gauge 54	KHM53-XXX00054	1035447
Mounting gauge 107	KHM53-XXX00107	1030067
Mounting gauge 354	KHM53-XXX00354	1030077
Mounting gauge 548	KHM53-XXX00548	1035453
Mounting gauge 1700	KHM53-XXX01700	1030087

Recommended accessories

	Brief description	Model name	Part no.
Mounting brackets and mounting plates			
	Mounting bracket, without mounting hardware for the background	BEF-WK-KHT53	2029159
Terminal and alignment brackets			
	Clamps, without mounting hardware for the background	BEF-KHA-KHT53	2042468
Adapters and distributors			
	PROFIBUS DP, terminal resistor	PR-STE-END	6021156
Plug connectors and cables			
Illustration may differ	Head A: female connector, M12, 4-pin, straight Head B: cable Cable: PVC, unshielded, 5 m	DOL-1204-G05M	6009866
	Head A: female connector, M12, 5-pin, straight Head B: cable Cable: PROFIBUS DP, PVC, shielded, 10 m	DOL-1205-G10MQ	6026008
	Head A: female connector, M23, 12-pin, straight Head B: cable Cable: SSI, RS-422, drag chain use, PUR, shielded, 5 m	DOL-2312-G05MMA1	2029202
	Head A: female connector, M23, 12-pin, straight Head B: cable Cable: SSI, RS-422, drag chain use, PUR, shielded, 10 m	DOL-2312-G10MMA1	2029203
	Head A: male connector, M12, 5-pin, straight, B-coded Head B: - Cable: PROFIBUS DP, shielded For field bus technology	STE-1205-GQ	6021354
	Head A: male connector, M23, 12-pin, straight Head B: - Cable: HIPERFACE®, SSI, Incremental, RS-422, shielded	STE-2312-G	6027537
	Head A: male connector, M12, 5-pin, straight, B-coded Head B: cable Cable: PROFIBUS DP, drag chain use, TPU, halogen-free, shielded, 10 m Wire shield Al-Pt film, overall shield C-screen tin-plated	STL-1205-G10MQ	6026007
Programming and configuration tools			
	Programming tool for ATM60, ATM90 and KH53 SSI	PGT-01-S	1030111

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At a glance

- Non-contact determination of absolute position
- Small, compact read head
- Standard SSI interface, combined with SinCos output
- Measuring lengths of up to 4 m
- High level of accuracy (± 10 µm)
- High resolution (1 µm)
- High travel speed of up to 10 m/s

Your benefits

- Easy to integrate into existing systems
- Small size, light weight and high measurement speed make it ideal for a variety of applications
- After installation, the system is immediately available and completely maintenance-free, which leads to time and cost savings
- Immune to environmental factors like contamination and condensation, ensuring increased reliability
- Real-time speed determination plus absolute positioning due to SinCos and SSI output

→ www.mysick.com/en/TTK70

For more information, just 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.

Ordering information

Other models and accessories → www.mysick.com/en/TTK70

- **Measuring length** 4,000 mm

Electrical interface	Resolution	System part	Model name	Part no.
4.5 V DC ... 30 V DC, SSI	1 µm	Read head	TTK70-AXA0-K02	1038033

Description	Magnetic strip length	Model name	Part no.
Magnetic tape with adhesive tape and cover band incl. [1]	0.5 m	MVM-0M5-2MC-MKLB	6037415
	1 m	MVM-01M-2MC-MKLB	6037417
	1.5 m	MVM-1M5-2MC-MKLB	6037418
	2 m	MVM-02M-2MC-MKLB	6037419
	2.5 m	MVM-2M5-2MC-MKLB	6037420
	3 m	MVM-03M-2MC-MKLB	6037421
	3.5 m	MVM-3M5-2MC-MKLB	6037422
	4 m	MVM-04M-2MC-MKLB	6037423

[1] Working temperature range -20 ... + 70 °C, storage temperature -0 ... +80 °C.

Recommended accessories

	Brief description	Model name	Part no.
Plug connectors and cables			
	Head A: female connector, M12, 12-pin, angled Head B: cable Cable: SSI, PUR, shielded, 2 m	DOL-1212-W02MAC1	6039824
	Head A: female connector, M12, 12-pin, angled Head B: cable Cable: SSI, PUR, shielded, 5 m Drag chain use	DOL-1212-W05MAC1	6039825

GAS ANALYZERS

Optimum solutions for analyzing gases in process- or emission-related applications

SICK offers a broad range of gas analyzers based on a variety of powerful measurement principles. With its in-situ and extractive measurement technology for equipping complete facilities, SICK can also provide solutions for a variety of systems and complex measurement tasks.

Q

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TRANSIC100LP Q-540
The good nose for oxygen

GM32 . . . . . .Q-540
Measure aggressive gases directly and quickly – even in ATEX zones

GMS800 . . . . . .Q-541
Tailor-made gas analysis solutions for process and emission monitoring

MERCEM300Z Q-541
Innovative measurement of mercury in flue gases

Q

TRANSIC100LP – At a glance

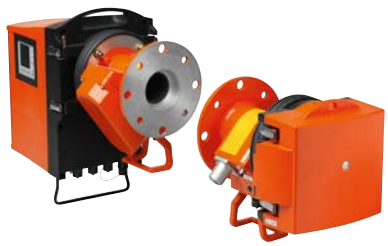
- O_2 transmitter based on high-performance laser spectroscopy (TDLS)
- For use in potentially explosive atmospheres (FM, ATEX and IECEx approvals)
- Measurement directly in-situ or extractive using a sample gas cell (option)
- Designed for heavy-duty industrial applications
- Compact design and easy to operate
- Long-term stability
- No moving parts

Your benefits

- Measures in real-time directly in the process
- Easy installation and operation
- Self-diagnostics with maintenance display
- Low requirements for gas conditioning
- Low operating costs: no consumables and no purging gas consumption
- Rugged: reliable measurement even in contaminated gases

➜ **www.mysick.com/en/TRANSIC100LP**

For more information, just 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.



GM32 – At a glance

- Direct, fast in-situ measurement
- No gas sampling, no gas transport, no gas conditioning
- Up to eight measuring components at the same time, plus process temperature and pressure
- DOAS and CDE evaluation process
- Numerous independent measuring ranges with consistent accuracy
- Automatic self-test function (QAL3) without test gases
- Overpressure encapsulated design for ATEX Zones 1 and 2

Your benefits

- Measured values in real time without altering the gas composition
- Short-term process deviations are detected
- Representative measurement byselection of cross-duct or measuring probe versions
- Fast on-site service due to modular design
- Long maintenance-free intervals
- Cost-effective in-situ gas analyzer — also in ATEX design
- Low cost of installation and operation, no test gases required
- Complete emissions measurement in Kraft pulp process by way of simultaneous measurement of TRS components plus SO_2, NO, NH_3

➜ **www.mysick.com/en/GM32**

For more information, just 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.

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GMS800 – At a glance

- 7 different analyzer modules: DEFOR (NDUV, UVRAS), FIDOR (FID), MULTOR (NDIR), OXOR-E (electrochemical O_2), OXOR-P (paramagnetic O_2), THERMOR (TC) and UNOR (NDIR)
- 4 different types of enclosures
- Gas module with sample gas pump and/ or control sensors
- New enclosure type for easy and quick integration in analyzer cabinets
- Remote diagnosis via Ethernet with software SOPAS ET

Your benefits

- Approved according to EN 15267-3 and EN 14181
- Installations in Non-Ex-areas and Ex-areas (Zone 1 and 2 according to ATEX) possible
- Minimum service and maintenance work as well as easy reconditioning of existing installations due to modular design
- Adjustment without test gases via optional adjustment unit
- Minimal influence of ambient temperature through thermostatic controlled modules
- System solutions with turn-key analyzer cabinets MAC800
- Reliable measuring results by proven measurement technology
- Easy maintenance and repair due to replacement of complete assemblies or modules

→ **www.mysick.com/en/GMS800**

For more information, just 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.

MERCEM300Z – At a glance

- Accurate measurement of “total mercury” directly in a thermal converter (patented)
- Measuring operation without using consumables
- Very low maintenance gas sampling using an ejector pump – no moving parts
- Integrated adjustment cell for automatic drift correction
- Automatic adjustment of the entire measuring system with a built-in test gas generator (optional)
- Modular design with the entire system

Your benefits

- Reliable results of the actual measuring values of elemental Hg and Hg compounds in gases
- Very low operating expenses
- Minimum maintenance expenditure
- Long-term stability minimizes technician time requirements due to self-adjusting measuring system
- Measuring certainty using the fully automated adjustment with test gas
- Convenient and fast access for easy service and user-friendly remote diagnosis

→ **www.mysick.com/en/MERCEM300Z**

For more information, just 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.

Q

DUST MEASURING DEVICES

Innovative solutions for measuring dust

SICK is setting new standards in dust measurement with its rugged and low-maintenance measuring devices for detecting and monitoring dust concentrations. All dust measuring devices are easy to integrate into existing applications – and offer straightforward installation and commissioning along with user-friendly operation.

R

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DUSTHUNTER SB100 . . . . . **R-544**
The approved dust monitor with scattered light backward measurement

DUSTHUNTER SP100 . . . . . **R-544**
The probe version for scattered light forward measurement

DUSTHUNTER T200 . . . . . **R-545**
The approved transmissiometer with self-alignment

FWE200 . . . . . **R-545**
Extractive dust measuring system for wet gases

R

DUSTHUNTER SB100 – At a glance

- For very low to medium dust concentrations
- One-side installation
- Contamination check
- Automatic check of zero and reference point
- Automatic compensation of background radiation, therefore no light absorber necessary
- For medium to large duct diameters

Your benefits

- Easy installation, commissioning, and operation
- Measurement independent of gas velocity, humidity and particle charge
- Approved according to EN 15267
- Low maintenance due to self-monitoring

→ www.mysick.com/en/DUSTHUNTER_SB100

For more information, just 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.

DUSTHUNTER SP100 – At a glance

- One-side installation
- For very low to medium dust concentrations
- Automatic check of zero and reference point
- Contamination check
- Hastelloy probe available for corrosive gas environments
- For small to medium duct diameters

Your benefits

- Ideal for thick- or double-walled ducts
- Approved according to EN 15267
- Low maintenance due to self-monitoring and contamination check

→ www.mysick.com/en/DUSTHUNTER_SP100

For more information, just 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.

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DUSTHUNTER T200 – At a glance

- Integrated contamination check for sender/receiver and reflector unit
- Automatic self-alignment of the optical assembly
- Automatic check of zero and reference point
- For medium to high dust concentrations
- For small to large measuring distances

Your benefits

- Easy installation, commissioning and operation
- Measurement independent of gas velocity, humidity and particle charge
- Low maintenance due to self-monitoring and contamination check
- Approved according to EN 15267

→ www.mysick.com/en/DUSTHUNTER_T200

For more information, just 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.

FWE200 – At a glance

- For very low to medium dust concentrations
- Gas sampling and return combined in one probe
- Contamination check
- Automatic check of zero and reference point

Your benefits

- Reliable dust measurement in wet gas
- No movable parts with contact to aggressive gas, therefore low maintenance efforts
- Installation directly at the duct due to compact design

→ www.mysick.com/en/FWE200

For more information, just 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.

R

TRAFFIC SENSORS

Solutions for active traffic safety

Added safety – fewer backups: These are the key requirements of traffic service providers. Intelligent traffic sensors are absolutely fundamental to ensuring state-of-the-art traffic guidance technology. With its sophisticated equipment for measuring visual range, visibility, and wind speed, as well as detecting overheight, SICK is helping to find solutions to these tasks.

8011993/2014-07-24
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VISIC100SF S-548
Modernizes measurement performance for tunnel air quality

VICOTEC320. . . . . .S-548
For the control of ventilation and for filter monitoring in road tunnels

VISIC620 . . . . . .S-549
Measurement of visual range for roads, tunnels, sea routes and in weather stations

HISIC450 . . . . . .S-549
Overheight detection of vehicles

S

VISIC100SF – At a glance

- Visibility (K value) measured according to the scattered light measurement principle
- CO and NO measurement using electrochemical cells in accordance with EN 50545
- Highly reliable (no moving parts)
- Combines visibility measurement with two different gas measurements
- IP6K9K enclosure rating thanks to rugged stainless steel housing
- Fog compensation thanks to integrated heating (option)

Your benefits

- One sensor for three measuring components
- High levels of availability and operational safety
- No protective measures required for tunnel washing
- No impairment of ventilator control when tunnel portal is shrouded in fog
- Flexible connection options and easy to extend, can be easily integrated into existing networks
- Visibility measurement can be easily verified wih checking tool
- Low level of effort required thanks to easy mounting and quick commissioning

➜ **www.mysick.com/en/VISIC100SF**

For more information, just 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.

VICOTEC320 – At a glance

- Very low detection limits for NO and NO_2
- Automatic function monitoring and self-adjustment
- Very sturdy design in stainless steel
- Automatic beam alignment between sender/receiver unit and reflector

Your benefits

- Energy and cost savings for ventilation control due to very low zero offset and accurate measurement
- Low operational costs because no air aspiration system, no test gases and no ambient air required
- Low maintenance requirements due to long maintenance interval (1 year)

➜ **www.mysick.com/en/VICOTEC320**

For more information, just 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.

VISIC620 – At a glance

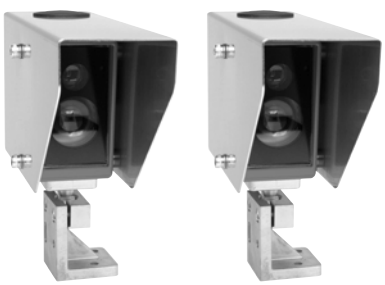
- Large measuring range for visual range
- Precipitation detector as an option
- Contamination check
- Minimum space requirements and low weight
- Self-sufficient design possible with solar panel and battery
- Rugged housing, also for salty air

Your benefits

- Reliable measured values
- Low operational costs
- Low maintenance requirements due to long maintenance intervals

→ www.mysick.com/en/VISIC620

For more information, just 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.



HISIC450 – At a glance

- Aluminum enclosure with anti-corrosion coating and high enclosure rating
- Built-in lens heaters to prevent condensation or icing
- Weather protection against snow, rain and dust clouds
- Accessories (weather hood and mounting bracket) made of stainless steel
- Sensitivity adjustment
- Insensitive to ambient light

Your benefits

- Reliable signals – even in nasty weather conditions

→ www.mysick.com/en/HISIC450

For more information, just 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.

ULTRASONIC GAS FLOW MEASURING DEVICES

Ultrasonic technology by SICK: gas flow measurement at the highest level

With diverse ultrasonic gas flow measuring devices SICK provides solutions for a wide variety of measuring tasks – from calculating volume flows in processes, custody transfer applications in natural gas industry, environmental monitoring of plants, on test stands in automotive industry and many others.

8011993/2014-07-24
Subject to change without notice

FLOWSIC100 . . . . . **T-552**
Volume flow measuring devices for continuous emission monitoring

FLOWSIC100 Flare **T-552**
Reliable gas flow measurement for flare gas applications

FLOWSIC500 . . . . . **T-553**
Custody transfer measurement in natural gas distribution

FLOWSIC600 . . . . . **T-553**
Gas flow meters for custody transfer traffic and process applications

FLOWSIC100 – At a glance

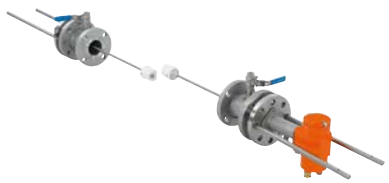
- Rugged titanium transducers for high durability
- Corrosion-resistant material for application in aggressive gases (option)
- Integral measurement over the duct diameter with types H, M and S
- Probe type PR for economic installation from one side of the duct
- Automatic function control with zero and span point check

Your benefits

- Reliable flow measurement for ducts with small up to very large diameters
- High durability of the device
- Minimum operating and maintenance costs
- Accurate measuring results under difficult measuring conditions
- Measurement without pressure loss, therefore no influences on the process
- User-friendly operation via SOPAS ET software
- Reliable function monitoring due to enhanced diagnosis
- No purge air required for applications with gas temperatures up to 260 °C

→ www.mysick.com/en/FLOWSIC100

For more information, just 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.



FLOWSIC100 Flare – At a glance

- Highest measurement resolution and short response time
- Innovative sensor design for very high gas velocities
- Optimal signal transmission also at atmospheric pressure
- Remote installation of control unit up to 1,000 m away
- Single and multipath meter configuration
- Field repeatable check procedure of factory zero flow test
- Check cycle for automatic self-diagnosis / signal optimization

Your benefits

- Reliable process control by accurate measurement near to zero flow readings
- High measurement availability also under emergency plant operation conditions with high gas velocities up to 120 m/s
- Cost saving by remote installation of control unit in safe area
- System solution to serve three different flare measurements with a single control unit
- Cost saving by minimized installation using single probe version FLOWSIC100 EX-PR
- Securing optimal meter performance by continuous monitoring of meter function and extended field diagnostic capabilities

→ www.mysick.com/en/FLOWSIC100_Flare

For more information, just 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.

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FLOWSIC500 – At a glance

- Cutting-edge technology: ultrasound
- Diagnostics and permanent operational check
- Durable and reliable without moving parts
- Replacable cartridge
- Straight inlet/outlet piping not required
- Overload-proof
- Optional integrated volume correction/ data registration
- Battery or intrinsically safe power supply

Your benefits

- Ultimate measurement certainty and safety of continuous gas supply
- Reduction of installation costs due to integrated volume correction
- Simple installation, compatible with conventional technologies (turbine and rotary displacement meters)
- Minimal operating costs due to being nearly maintenance-free
- Easy recalibration due to straightforward cartridge replacement
- Reliable under dynamic load changes
- Self-sufficient operation

→ **www.mysick.com/en/FLOWSIC500**

For more information, just 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.

FLOWSIC600 – At a glance

- High efficient ultrasonic transducers
- Direct path layout
- Intelligent self-diagnostics
- Compact, robust design
- Integrated log book and data logger
- Large measuring range 1:120
- Bidirectional measurement
- Low power consumption: <1 W

Your benefits

- Long-term stability, reliable measurement
- Low maintenance due to intelligent self-diagnostics
- Virtually immune to pressure regulator
- noise
- Ultrasonic transducers can be exchanged under operating pressure
- Wide application range

→ **www.mysick.com/en/FLOWSIC600**

For more information, just 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.

EASY INTEGRATION INTO YOUR AUTOMATION WORLD

Sensor integration with SICK is easy and fast for you: Our intelligent sensor solutions and safety controllers provide different integration technologies which allow easy access – from HMI, PLC, and engineering tools – to data from our sensors. In this way, we support you towards solving your application rapidly and easily and increase machine reliability with a continuous diagnostic concept.

PLC and engineering tool integration

Function Blocks	
IO-Link devices Level sensors Pressure sensors Presence detection sensors Distance sensors	**Bar code scanners, Image-based code readers** 1D and 2D
Vision sensors Inspectors	**RFID** RFH6xx RFU62x, RFU63x
Absolute encoders AFS60 AFM60	**Laser volume flowmeter** Bulkscan® LMS511

Function blocks

The SICK function blocks quickly allow you to establish acyclic communication to our sensors within your PLC program. Additionally, complex and variable process data can be parsed into their individual information contents without programmer effort.

DTM (Device Type Manager)

FDT/DTM is a cross-manufacturer concept, with which configuration and diagnosis of devices from different manufacturers can be done with just one engineering tool.

TCI (Tool Calling Interface)

The Tool Calling Interface (TCI) makes it possible to call up a tool used to carry out parameterization and diagnosis of a field device via the existing communication infrastructure.

HMI integration

OPC server

OPC technology is used to exchange data between field devices and Windows-based applications. The SOPAS OPC server from SICK follows the OPC DA specification and thus can be used on Windows operating systems.

Web server

The SOPAS web server from SICK can be used everywhere, where a web browser is available. The web server is distinguished by its ability to both carry out pure data exchange and also to provide visualizations for the devices, which is a big advantage, particularly for vision sensors.

Fieldbus Communication Interface

Modbus®TCP

Our fieldbus and network solutions allow SICK sensors and safety controllers to be connected to all conventional automation systems. This guarantees an easy and fast access to the available data.

→ www.sick.com/industrial-communication

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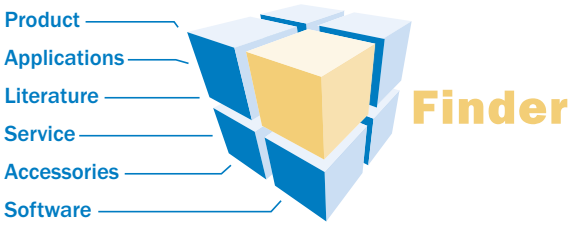
WWW.MYSICK.COM – SEARCH ONLINE AND ORDER

Search online quickly and safely – with the SICK "Finders"



Product Finder: We can help you to quickly target the product that best matches your application.

Applications Finder: Select the application description on the basis of the challenge posed, industrial sector, or product group.

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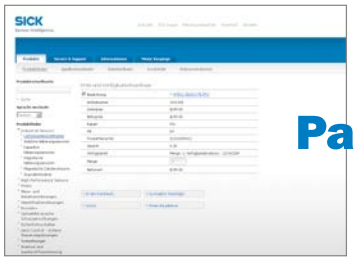
These and other "Finders" at ➜ www.mysick.com

Efficiency – with the e-commerce tools from SICK



Partner Portal
www.mysick.com

Find out prices and availability: Determine the price and possible delivery date of your desired product simply and quickly at any time.

Request or view a quote: You can have a quote generated online here. Every quote is confirmed to you via e-mail.

Order online: You can go through the ordering process in just a few steps.

SERVICES FOR MACHINES AND SYSTEMS: 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.

Consulting & Design
Safe and professional

Product & System Support
Reliable, fast and on-site

Verification & Optimization
Safe and regularly inspected

Upgrade & Retrofits
Easy, safe, economical

Training & Education
Practical, focused and professional

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SICK AT A GLANCE

SICK is a leading manufacturer of intelligent sensors and sensor solutions for industrial applications. With more than 6,500 employees and over 50 subsidiaries and equity investments as well as numerous representative offices worldwide, we are always close to our 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.

We have extensive experience in various 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 round out 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:

Australia, Austria, Belgium/Luxembourg, Brazil, Czech Republic, Canada, China, Denmark, Finland, France, Germany, Great Britain, Hungary, India, Israel, Italy, Japan, Mexico, Netherlands, Norway, Poland, Romania, Russia, Singapore, Slovenia, South Africa, South Korea, Spain, Sweden, Switzerland, Taiwan, Turkey, United Arab Emirates, USA

Detailed addresses and additional representatives → www.sick.com

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