



SICK Essentials

Core Product Selection

With this catalog we offer you an extract of our product portfolio.

List of product families					
Industrial sensors		LFH	D-4	M2000	H-8
IM Standard	B-2	LFV200	D-5	M4000	H-9
IMF	B-4	PBS	D-6	L2000	H-10
CM	B-5	PBT	D-7	L4000	H-11
MZT8	B-6	TCT	D-8	S300	H-12
RZT6	B-7	TSP	D-9	S3000	H-13
W4-3	B-8	Registration sensors		Safety switches	
W4S-3 Inox	B-9	KT3	E-2	i10 Lock	I-2
W8	B-10	KT5-2	E-3	i12S	I-2
W100	B-11	CS8	E-4	i16S	I-2
W9-3	B-12	UF	E-5	I17S	I-2
W11-2	B-13	WF	E-6	RE13/RE23	I-3
W12-3	B-14	WFM	E-7	IN4000 Direct	I-3
W280	B-15	Distance sensors		sens:Control	
V180-2	B-16	Dx50	F-2	Flexi Soft	J-2
MH15V	B-17	OD Value	F-3	UE10-2FG	J-3
Identification solutions		UM30	F-4	UE10-30S	J-4
CLV50x	C-2	UC4	F-6	UE23-3MF	J-5
CLV62x	C-3	UC12	F-7	UE43-2MF	J-6
CLV63x	C-4	Vision		UE48-20S	J-7
CLV65x	C-5	Inspector	G-2	Encoders	
LECTOR®62x	C-6	Opto-electronic protective devices		DFS60	K-2
IDM1xx	C-7	C4000 (Eco Package)	H-2	BCG	K-3
Fluid sensors		miniTwin	H-4	AFS60	K-4
LFP	D-2	C2000	H-6	AFM60	K-5
UP56	D-3	V300 Work Station Extended	H-7	DDS36	K-6

Work online at www.mysick.com

Fast results instead of tedious searching - with the SICK "Finders." Direct access for everyone, no registration necessary!

- Product search, products and information is linked
- Easy to understand illustrations of applications, connection diagrams and accessories
- Download of technical data, drawings and graphics



We will quickly guide you right to the appropriate device for your application.



Choose an application based on task, industry/market or product group.



Access all publications, e.g., operating instructions, technical information, customer magazines and other literature about SICK products.

Services Finder, Connection Diagram Finder, Spare Parts Finder and Accessories Finder also at www.mysick.com.

General Information

About SICK

A



Industrial sensors

B



Identification solutions

C



Fluid sensors

D



Registration sensors

E



Distance sensors

F

Portfolio



Vision

G



Opto-electronic protective devices

H



Safety switches

I



sens:Control – safe control solutions

J



Encoder

K

A

Sensor Intelligence is our promise

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

Approximately 5,000 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.



Innovation for the leading edge

SICK sensor systems simplify and optimize processes and allow for sustainable production. SICK operates thirteen 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 leader – sensor technology that is successful in the long term.



A

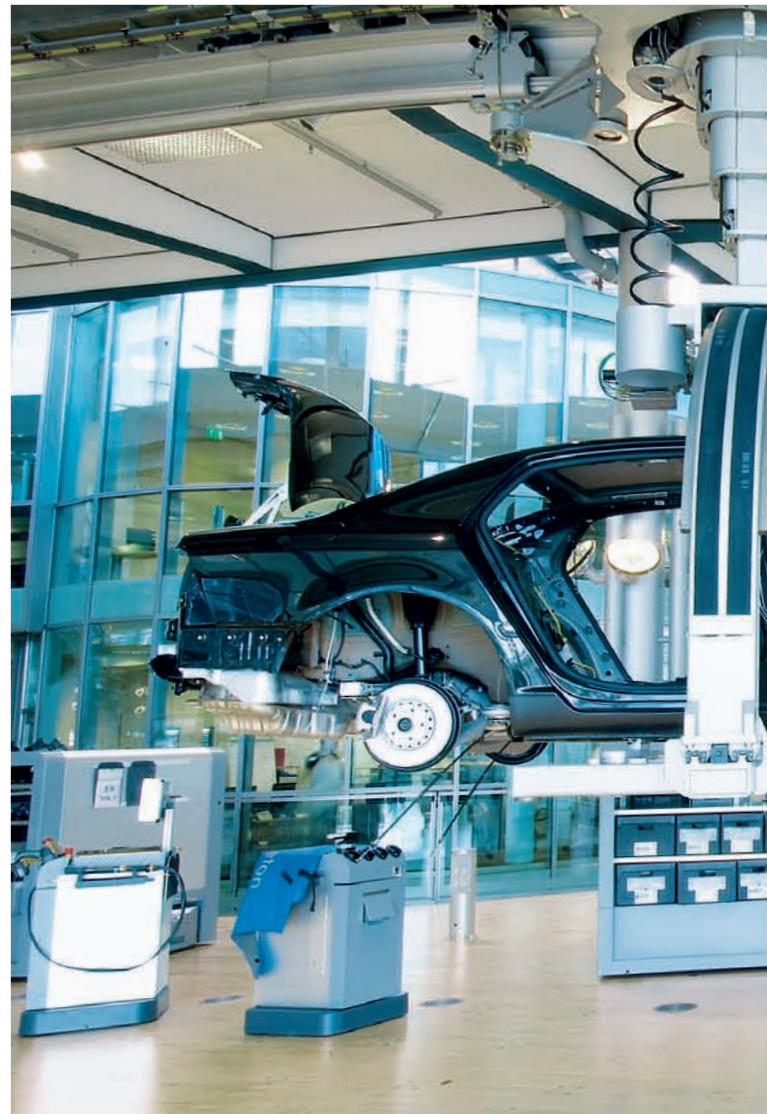
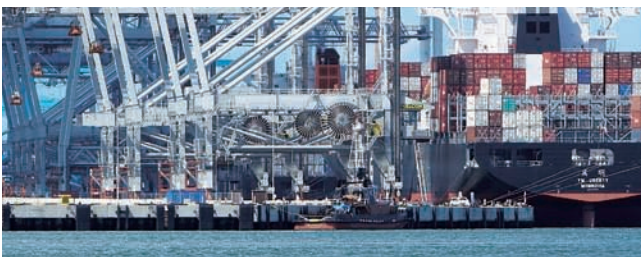
Sensor Intelligence for all requirements

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.



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 innovation to solve these tasks.



www.sick.com/Industries



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

Industrial sensors



- Photoelectric sensors
- Inductive proximity sensors
- Capacitive proximity sensors
- Magnetic proximity sensors
- Magnetic cylinder sensors

Identification solutions



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

Detection and ranging solutions



- Laser measurement technology
- Image-processing measurement technology

System solutions



- Volume measurement systems
- Code reading systems
- Dimension weighing scanning systems

Fluid sensors



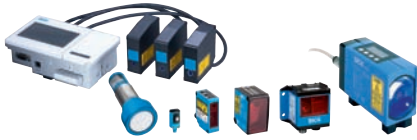
- Level sensors
- Pressure sensors
- Flow sensors
- Temperature sensors

Registration sensors



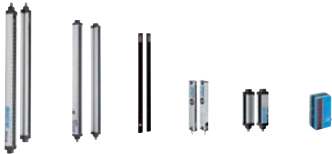
- Contrast sensors
- Color sensors
- Luminescence sensors
- Fork sensors
- Array sensors

Distance sensors



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

Automation light grids



- High end automation light grids
- Standard automation light grids
- Smart light grids

Vision



- Vision sensors
- Smart cameras
- 3D cameras
- Vision illuminations

Opto-electronic protective devices



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

Safety switches



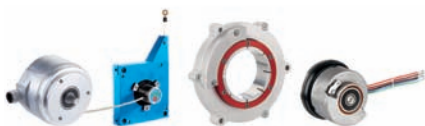
- Electro-mechanical safety switches
- Non-contact safety switches
- Safety command devices

sens:Control – safe control solutions



- Safety relays
- Safety controllers
- Network solutions

Motion control sensors



- Motor feedback systems
- Encoders

Industrial sensors – reliable detection with Sensor Intelligence



Industrial sensors









Industrial sensors reliably detect various objects on the basis of optical, magnetic, inductive and capacitive principles of operation.








Sensor intelligence – by using the latest ASIC and LED technologies, these sensors offer the highest level of operational safety regardless of any conceivable interference factors. Additional sensor information can be used to simplify modern production processes.

The extensive range of sensors is used effectively and efficiently in many automation applications around the world.

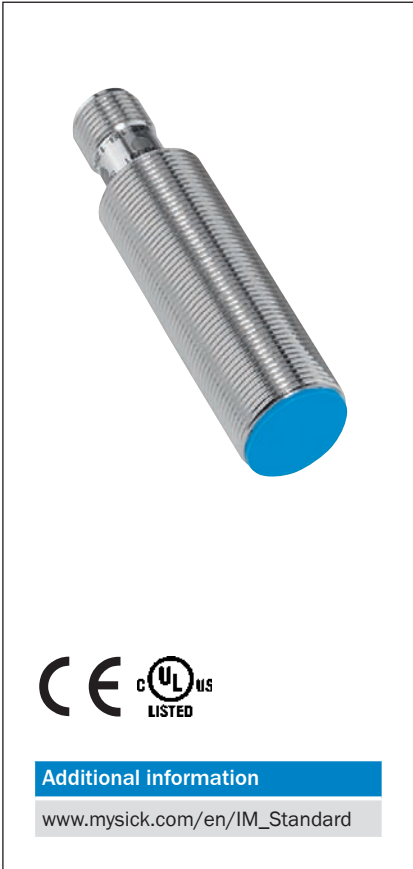


Industrial sensors

	IM Standard B-2 The classic series for industrial use
	IMF B-4 Sensors for hygienic and wet zones
	CM B-5 Sensors in cylindrical housing
	MZT8 B-6 MZT8 – compact, flush installation in T-slots
	RZT6 B-7 Magnetic cylinder sensor for pneumatic cylinders with T-slots
	W4-3 B-8 Entire product family with best-in-class performance
	W4S-3 Inox B-9 Best in class – minimum size for the toughest requirements
	W8 B-10 Small, fast, and reliable at close range

	W100 B-11 Miniature photoelectric sensor family for standard applications
	W9-3 B-12 Performance in VISTAL™-housing
	W11-2 B-13 Focus on your application
	W12-3 B-14 Universal product platform for demanding applications
	W280 B-15 Sensor kit with mounting bracket and reflector
	V180-2 B-16 All-round performance
	MH15V B-17 A well-rounded package

B



At a glance

- Precise operating distances due to ASIC technology
- Extra tough thanks to high tightening torque and hot melt adhesive filling
- Enclosure rating IP 67
- Operating temperature from -25 to +75 °C
- Operating distance from 1.5 mm to 20 mm
- Sizes M8 to M30 available
- DC, AC and AC/DC versions available
- Customer-specific models available

Your benefits

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

Ordering information

Other models available at www.mysick.com/en/IM_Standard

- **Output function:** normally open

Housing	Installation type	Switching output	Sensing range Sn (mm)	Connection	Model name	Part no.
M8 x 1	Flush	NPN	1.5 mm	Connector M8, 3-pin	IME08-1B5NSZTOS	1040846
		PNP	1.5 mm	Connector M8, 3-pin	IME08-1B5PSZTOS	1040838
	Non-flush	NPN	2.5 mm	Connector M8, 3-pin	IME08-2N5NSZTOS	1040862
		PNP	2.5 mm	Connector M8, 3-pin	IME08-2N5PSZTOS	1040854
	Flush	PNP	1.5 mm	Connector M8, 3-pin	IME08-1B5PSZTOK	1040837
		PNP	2.5 mm	Connector M8, 3-pin	IME08-2N5PSZTOK	1040853
	Flush	NPN	2 mm	Connector M8, 3-pin	IME08-02BNSZTOS	1040878
		PNP	2 mm	Connector M8, 3-pin	IME08-02BPSZTOS	1040870
	Non-flush	NPN	4 mm	Connector M8, 3-pin	IME08-04NNSZTOS	1040894
		PNP	4 mm	Connector M8, 3-pin	IME08-04NPSZTOS	1040886
	Flush	PNP	2 mm	Connector M8, 3-pin	IME08-02BPSZTOK	1040869
		PNP	4 mm	Connector M8, 3-pin	IME08-04NPSZTOK	1040885
M12 x 1	Flush	NPN	2 mm	Connector M12, 4-pin	IME12-02BNSZC0S	1040740
		PNP	2 mm	Connector M12, 4-pin	IME12-02BPSZC0S	1040732
	Non-flush	NPN	4 mm	Connector M12, 4-pin	IME12-04NNSZC0S	1040756
		PNP	4 mm	Connector M12, 4-pin	IME12-04NPSZC0S	1040748
	Flush	NPN	2 mm	Connector M12, 4-pin	IME12-02BNSZC0K	1040739
		PNP	2 mm	Connector M12, 4-pin	IME12-02BPSZC0K	1040731
	Non-flush	NPN	4 mm	Connector M12, 4-pin	IME12-04NNSZC0K	1040755
		PNP	4 mm	Connector M12, 4-pin	IME12-04NPSZC0K	1040747

Housing	Installation type	Switching output	Sensing range Sn (mm)	Connection	Model name	Part no.
M18 x 1	Flush	NPN	4 mm	Connector M12, 4-pin	IME12-04BNSZC0S	1040772
		PNP	4 mm	Connector M12, 4-pin	IME12-04BPSZC0S	1040764
	Non-flush	NPN	8 mm	Connector M12, 4-pin	IME12-08NNSZC0S	1040788
		PNP	8 mm	Connector M12, 4-pin	IME12-08NPSZC0S	1040780
	Flush	NPN	4 mm	Connector M12, 4-pin	IME12-04BNSZC0K	1040771
		PNP	4 mm	Connector M12, 4-pin	IME12-04BPSZC0K	1040763
	Non-flush	NPN	8 mm	Connector M12, 4-pin	IME12-08NNSZC0K	1040787
		PNP	8 mm	Connector M12, 4-pin	IME12-08NPSZC0K	1040779
	Flush	NPN	5 mm	Connector M12, 4-pin	IME18-05BNSZC0S	1040942
		PNP	5 mm	Connector M12, 4-pin	IME18-05BPSZC0S	1040934
	Non-flush	NPN	8 mm	Connector M12, 4-pin	IME18-08NNSZC0S	1040958
		PNP	8 mm	Connector M12, 4-pin	IME18-08NPSZC0S	1040950
	Flush	NPN	5 mm	Connector M12, 4-pin	IME18-05BNSZC0K	1040941
		PNP	5 mm	Connector M12, 4-pin	IME18-05BPSZC0K	1040933
	Non-flush	NPN	8 mm	Connector M12, 4-pin	IME18-08NNSZC0K	1040957
		PNP	8 mm	Connector M12, 4-pin	IME18-08NPSZC0K	1040949
	Flush	NPN	8 mm	Connector M12, 4-pin	IME18-08BNSZC0S	1040974
		PNP	8 mm	Connector M12, 4-pin	IME18-08BPSZC0S	1040966
	Non-flush	NPN	12 mm	Connector M12, 4-pin	IME18-12NNSZC0S	1040990
		PNP	12 mm	Connector M12, 4-pin	IME18-12NPSZC0S	1040982
Flush	NPN	8 mm	Connector M12, 4-pin	IME18-08BNSZC0K	1040973	
	PNP	8 mm	Connector M12, 4-pin	IME18-08BPSZC0K	1040965	
Non-flush	NPN	12 mm	Connector M12, 4-pin	IME18-12NNSZC0K	1040989	
	PNP	12 mm	Connector M12, 4-pin	IME18-12NPSZC0K	1040981	
M30 x 1.5	Flush	NPN	10 mm	Connector M12, 4-pin	IME30-10BNSZC0S	1041006
		PNP	10 mm	Connector M12, 4-pin	IME30-10BPSZC0S	1040998
	Non-flush	NPN	15 mm	Connector M12, 4-pin	IME30-15NNSZC0S	1041022
		PNP	15 mm	Connector M12, 4-pin	IME30-15NPSZC0S	1041014
	Flush	PNP	10 mm	Connector M12, 4-pin	IME30-10BPSZC0K	1040997
		PNP	15 mm	Connector M12, 4-pin	IME30-15NPSZC0K	1041013
	Flush	NPN	15 mm	Connector M12, 4-pin	IME30-15BNSZC0S	1041038
		PNP	15 mm	Connector M12, 4-pin	IME30-15BPSZC0S	1041030
	Non-flush	NPN	20 mm	Connector M12, 4-pin	IME30-20NNSZC0S	1041054
		PNP	20 mm	Connector M12, 4-pin	IME30-20NPSZC0S	1041046
	Flush	PNP	15 mm	Connector M12, 4-pin	IME30-15BPSZC0K	1041029
		PNP	20 mm	Connector M12, 4-pin	IME30-20NPSZC0K	1041045

Recommended accessories

Name	Material	Model name	Part no.
Mounting bracket	Zinc plated steel	BEF-WG-M12	5321869
		BEF-WG-M18	5321870
		BEF-WG-M30	5321871
		BEF-WN-M12	5308447
		BEF-WN-M18	5308446
		BEF-WN-M30	5308445

B


ECOLAB
Additional information
www.mysick.com/en/IMF

At a glance

- Extremely watertight (IP 68/IP 69K)
- Stainless steel housing (316L/1.4404)
- Extended temperature range (-40 to +80 °C)
- Tolerates short-term spikes up to 100 °C
- Resistant to industrial cleaning agents, ECOLAB and Diversey certified

Your benefits

- Less machine downtime due to reliable sensor system
- Suitable for hygienic processes due to suitable sensor housing material and design
- No sensor failure from aggressive cleaning cycles
- No restrictions on cleaning agents or processes

Ordering information

 Other models available at www.mysick.com/en/IMF

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

Housing	Installation type	Output function	Switching output	Sensing range Sn (mm)	Model name	Part no.
M12	Flush	Normally open	PNP	4 mm	IMF12-04BPSVCOS	6035460
		Complementary	PNP	4 mm	IMF12-04BPPVCOS	6035219
		Normally open	NPN	4 mm	IMF12-04BNSVCOS	6035461
	Non-flush	Normally open	PNP	4 mm	IMF12-04NPSVCOS	6035456
		Complementary	PNP	4 mm	IMF12-04NPPVCOS	6035217
		Normally open	PNP	8 mm	IMF18-08BPSVCOS	6035476
M18	Flush	Normally open	NPN	8 mm	IMF18-08BNSVCOS	6035477
		Complementary	PNP	8 mm	IMF18-08BPPVCOS	6035227
		Normally open	PNP	12 mm	IMF18-12NPSVCOS	6035480
	Non-flush	Complementary	PNP	12 mm	IMF18-12NPPVCOS	6035229

Recommended accessories

Name	Description	Material	Model name	Part no.
Mounting bracket	For IMF12	Stainless steel	BEF-WG-M12N	5320950
	For IMF18	Stainless steel	BEF-WG-M18N	5320948
	For IMF12, IM Inox 12	Stainless steel	BEF-WN-M12N	5320949
	For IMF18, IM Inox 18	Stainless steel	BEF-WN-M18N	5320947



At a glance

- Cylindrical housing
- Detects liquids and solids
- Extremely high electromagnetic immunity
- Electrical design: DC 4-wire
- Supply voltage: DC 10 ... 40 V
- Short-circuit protection (pulsed)

Your benefits

- Non-contact level measurement possible even through walls
- Tough and reliable in harsh industrial applications
- Quick and easy adjustment of the switching point
- Can be used for a very wide range of media

Ordering information

Other models available at www.mysick.com/en/CM

- **Output function:** Complementary

Housing	Installation type	Sensing range Sn (mm)	Switching output	Connection	Model name	Part no.
M18 x 1	Flush	8 mm	PNP	Connector M12, 4-pin	CM18-08BPP-KC1	6020388
				Cable, 4-wire	CM18-08BPP-KW1	6020136
	Non-flush	12 mm	PNP	Connector M12, 4-pin	CM18-12NPP-KC1	6020410
				NPN	Connector M12, 4-pin	CM18-12NPP-KC1
M30 x 1.5	Flush	16 mm	PNP	Connector M12, 4-pin	CM30-16BPP-KC1	6020475
				Cable, 4-wire	CM30-16BPP-KW1	6020473
			NPN	Connector M12, 4-pin	CM30-16BNP-KC1	6021460
	Non-flush	25 mm	PNP	Connector M12, 4-pin	CM30-25NPP-KC1	6020477
				NPN	Connector M12, 4-pin	CM30-25NPP-KC1
			PNP	Cable, 4-wire	CM30-25NPP-KW1	6020476

Recommended accessories

Name	Material	Model name	Part no.
Mounting bracket	Zinc plated steel	BEF-WN-M18	5308446
	Stainless steel	BEF-WN-M18N	5320947
	Zinc plated steel	BEF-WN-M30	5308445

B



At a glance

- Magnetic cylinder sensor for all conventional pneumatic cylinders with T-slots
- Housing length 24 mm
- Sensor element at the tip of the housing
- GMR-ASIC technology by SICK: Precise switching point and low hysteresis
- Enclosure rating: IP 68 / IP 69K
- Captive screw
- LED function indicator

Your benefits

- Shortest sensor on the market – allows applications with short-stroke cylinders
- Sensor element at the tip of the sensor – piston detection possible without stroke loss
- Captive fixing screw – enables reliable and optimized commissioning
- Easy handling – “single-handed mounting” possible using hex key; can be fixed in place with 1/4 turn
- Mounting with hex key or slotted screwdriver
- Extremely robust housing concept

Ordering information

Other models available at www.mysick.com/en/MZT8

- **Output function:** normally open

Switching output	Overrun distance, typical	Connection	Model name	Part no.
PNP	3 mm	Cable with plug, M8, 3-pin	MZT8-03VPS-KP0	1044458
		Cable with plug, M8, 3-pin, with knurled screws	MZT8-03VPS-KR0	1044459
		Cable, 3-wire	MZT8-03VPS-KU0	1044469
		Cable with plug, M12, 3-pin	MZT8-03VPS-KQ0	1044460
	9 mm	Cable with plug, M8, 3-pin	MZT8-28VPS-KP0	1048048
		Cable, 3-wire	MZT8-28VPS-KU0	1048049
		Cable with plug, M8, 3-pin, with knurled screws	MZT8-28VPS-KR0	1048050
		Cable with plug, M12, 3-pin	MZT8-28VPS-KQ0	1048051
NPN	3 mm	Cable with plug, M8, 3-pin	MZT8-03VNS-KP0	1044932
		Cable, 3-wire	MZT8-03VNS-KU0	1044934

Recommended accessories

Name	Cylinder type	Model name	Part no.
Mounting bracket	Integrated profile cylinder/tie-rod cylinder	BEF-KHZ-PT1	2022702
	Round body cylinders	BEF-KHZ-RT1-25	5311171
		BEF-KHZ-RT1-63	5311172
	Cylinder with dovetail slot	BEF-KHZ-ST1	2022703



At a glance

- Compact housing design
- For all commonly used cylinders with T-slots, e.g. Festo or SMC
- Enclosure rating: IP 68 / IP 69K
- Combined fixing screw
- LED function indicator
- 2- and 3-conductor reed sensors

Your benefits

- High resilience to shock and vibration, high resistance to liquids and highly leak-proof
- Can be mounted by simply being dropped in
- Combination mounting system: hex socket/slot screw
- Highly resistant to shock and vibrations

B

Ordering information

Other models available at www.mysick.com/en/RZT6

- **Output type:** reed
- **Output function:** normally open

Connection	Model name	Part no.
Cable with plug, M8, 3-pin	RZT6-03ZRS-KP0	1023973
Cable with plug, M12, 3-pin	RZT6-03ZRS-KQ0	1025549
Cable, 3-wire	RZT6-03ZRS-KW0	1023974
Cable, 2-wire	RZT6-03ZUS-KW0	1025522
Cable with plug, M8, 3-pin, with knurled screws	RZT6-03ZRS-KR0	1023975

Recommended accessories

Name	Cylinder type	Model name	Part no.
Mounting bracket	Integrated profile cylinder/tie-rod cylinder	BEF-KHZ-PT1	2022702
		BEF-KHZ-RT1-25	5311171
	Round body cylinder	BEF-KHZ-RT1-63	5311172
		Cylinder with dovetail slot	BEF-KHZ-ST1



Additional information

www.mysick.com/en/W4-3

At a glance

- Best-in-class performance for background suppression, detection of critical objects and suppression of extraneous light
- Simple commissioning using a precise 5-speed potentiometer, control wire or simple teach function
- Best background suppression in its class
- PinPoint LED for brightest light spot in its class
- IO-Link (depending on type)

Your benefits

- Low-cost integration in a machine since, unlike other types, the W4-3 can be integrated optimally in cramped installation conditions enabling it to be closer to the process
- Sensors are designed with future product changes in mind. Regardless of what is produced on the machine in the future - reflective, transparent or jet-black - W4 family sensors will provide a high level of reliability
- IO-Link or teach-in buttons enable sensors to be commissioned with the correct setting, which saves time and inconvenience later on
- Robust mounting due to M3 threaded metal sockets for a long service life

Ordering information

Other models available at www.mysick.com/en/W4-3

- **Housing material:** plastic
- **Connection:** Connector M8, 3-pin

Sensor type	Sensing technology	Sensing range max.	Output type	Operating mode	Adjustment	Model name	Part no.
Photoelectric proximity sensor	Background suppression	4 mm ... 150 mm ¹⁾	PNP	Light	Adjustable potentiometer 5 revolutions	WTB4-3P2161	1028099
			NPN	Light	Adjustable potentiometer 5 revolutions	WTB4-3N2161	1028104
Photoelectric retro-reflective sensor	Standard	0.01 m ... 4 m ²⁾	PNP	Dark	None/fixed	WL4-3F2130	1028155
			NPN	Dark	None/fixed	WL4-3E2130	1028158
Through-beam photoelectric sensor	-	0 m ... 6 m	PNP	Light	None/fixed	WSE4-3P2130	1028163
			NPN	Dark	None/fixed	WSE4-3E2130	1028175

¹⁾ Objects to be detected with 90% remission (based on DIN 5033 Standard White).

²⁾ PL80A.

Recommended accessories

Name	Model name	Part no.
Reflector	PL40A	1012720



At a glance

- Can be used in conditions above and beyond IP 69K
- Stainless steel housing (316L/1.4404)
- Can be cleaned with steam cleaners up to 80 °C
- Resistant to all well known cleaning agents
- All models with PinPoint technology
- Extremely quick and easy set-up with teach-in membrane or external teach-in

Your benefits

- No restrictions in choice of cleaning procedures
- Reliable detection of all objects
- Lower operating costs as the sensor lasts longer in harsh conditions, leading to less downtime and costs for spare parts.
- Simple and fast alignment due to highly visible PinPoint light spot
- Adjustment via a new revolutionary teach-in button consisting of a shrink-wrapped stainless steel membrane
- Monitoring via IO-Link (type-dependent)

Ordering information

Other models available at www.mysick.com/en/W4S-3_Inox

Sensor type	Sensing technology	Sensing range max.	Output type	Operating mode	Connection	Model name	Part no.
Photoelectric proximity sensor	Background suppression	3 mm ... 500 mm ¹⁾	PNP	Light/dark-switching	Connector M8, 4-pin	WTB4S-3P2262V	1046383
			NPN	Light	Cable, 3-wire	WTB4S-3N1362V	1046393
Photoelectric retro-reflective sensor	Autocollimation	0 m ... 4 m ²⁾	PNP	Light/dark-switching	Connector M8, 4-pin	WL4S-3P2230V	1045095
			NPN	Light/dark-switching	Cable, 4-wire	WL4S-3N1130V	1046418
Through-beam photoelectric sensor	-	0 m ... 5 m	PNP	Light	Connector M8, 3-pin	WSE4S-3P2130V	1046439
			NPN	Light	Connector M8, 3-pin	WSE4S-3N2130V	1047629

¹⁾ Objects to be detected with 90% remission (based on DIN 5033 Standard White).

²⁾ PL80A.

Recommended accessories

Name	Description	Enclosure rating	Material	Model name	Part no.
Universal clamp	Plate N02N for universal clamp	-	Plate: stainless steel (1.4571), clamp: stainless steel (1.4408)	BEF-KHS-N02N	2051618
Reflector	Chemically resistant	IP 67: EN 60529, IP 69K: EN 40050	-	PL10F CHEM	5321636



Additional information

www.mysick.com/en/W8

At a glance

- Standardized miniature housing with integrated M3 threaded mounting holes
- Red PinPoint LED
- Switching frequency up to 2 kHz
- Stainless steel mounting bracket (1.4301/304) BEF-W100-A included in delivery

Your benefits

- Detection of objects regardless of color or surface qualities
- Reliable object detection even at the shortest distances (no blind spot) or through narrow gaps
- Highly visible light spot with sharp edges
- Detection of small objects
- Suitable for rapid applications
- Everything you need is at the installation site, as the mounting bracket BEF-W100-A for all types and the reflector P250 for all WL8 are included in delivery
- Everything from one family – a wide variety of principles of operation, brought together, reduces the documentation effort

Ordering information

Other models available at www.mysick.com/en/W8

- **Connection:** connector M8, 4-pin
- **Operating mode:** light/dark-switching

Sensor type	Sensing technology	Sensing range max.	Output type	Model name	Part no.
Photoelectric proximity sensor	Background suppression	30 mm ... 300 mm ¹⁾	PNP	WTB8-P2231	6033209
			NPN	WTB8-N2231	6033208
Photoelectric retro-reflective sensor	Autocollimation	0 m ... 4 m ²⁾	PNP	WL8-P2231	6033182
			NPN	WL8-N2231	6033181
Through-beam photoelectric sensor	–	0 m ... 10 m	PNP	WSE8-P2231	6035583
			NPN	WSE8-N2231	6035580

¹⁾ Objects to be detected with 90% remission (based on DIN 5033 Standard White).

²⁾ PL80A.

Accessories included in delivery

Name	Material	Model name	Part no.
Mounting bracket ¹⁾	Stainless steel	BEF-W100-A	5311520
Reflector ²⁾	–	P250	5304812

¹⁾ Included in the delivery for all specified devices.

²⁾ Also included with the photoelectric retro-reflective sensors.



At a glance

- Standardized miniature housing with integrated M3 threaded inserts
- Optics with standardized red LED or bright light LED
- Connector and cable versions
- Light/dark selectable
- Complete product family
- Wide variety of accessories

Your benefits

- Highly visible light spot (bright light models)
- Detection of reflective plastic surfaces at close range with WL100 bright light models
- High optical operating reserve
- Simple, standardized mounting
- Everything complete at the installation site – the stainless steel mounting bracket is included in the delivery
- Everything from one family – a wide variety of principles of operation, brought together, reduces the documentation effort

Ordering information

Other models available at www.mysick.com/en/W100

- **Operating mode:** light/dark-switching
- **Connection:** connector M8, 4-pin

Sensor type	Sensing technology	Sensing range max.	Output type	Model name	Part no.
Photoelectric proximity sensor	Energetic	0 mm ... 1,000 mm ¹⁾	PNP	WT100-P4409	6036506
			NPN	WT100-N4409	6036503
Photoelectric retro-reflective sensor	Standard	0.1 m ... 7.5 m ²⁾	PNP	WL100-P4409	6036512
			NPN	WL100-N4409	6036509
Through-beam photoelectric sensor	-	0 m ... 30 m	PNP	WS/WE100-P4409	6036518
			NPN	WS/WE100-N4409	6036515

¹⁾ Objects to be detected with 90% remission (based on DIN 5033 Standard White).

²⁾ PL80A.

Accessories included in delivery

Name	Material	Model name	Part no.
Mounting bracket ¹⁾	Stainless steel	BEF-W100-A	5311520
Reflector ²⁾	-	P250	5304812

¹⁾ Included in the delivery for all specified devices.

²⁾ Also included with the photoelectric retro-reflective sensors.

B



Additional information

www.mysick.com/en/W9-3

At a glance

- Performance in ultra-robust 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 facilities for connecting

Your benefits

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

Ordering information

Other models available at www.mysick.com/en/W9-3

- **Operating mode:** light/dark-switching
- **Connection:** connector M12, 4-pin

Sensor type	Sensing technology	Sensing range max.	Output type	Adjustment	Model name	Part no.
Photoelectric proximity sensor	Background suppression	20 mm ... 350 mm ¹⁾	PNP	Adjustable potentiometer 5 revolutions	WTB9-3P2461	1049049
			NPN	Adjustable potentiometer 5 revolutions	WTB9-3N2461	1049053
Photoelectric retro-reflective sensor	Autocollimation	0 m ... 4 m ²⁾	PNP	None/fixed	WL9-3P2430	1049062
			NPN	None/fixed	WL9-3N2430	1049073
Through-beam photoelectric sensor	-	0 m ... 6 m	PNP	None/fixed	WSE9-3P2430	1049077
			NPN	None/fixed	WSE9-3N2430	1049080

¹⁾ Objects to be detected with 90% remission (based on DIN 5033 Standard White).

²⁾ PL80A.

Recommended accessories

Name	Material	Model name	Part no.
Mounting bracket	Zinc plated steel	BEF-WN-W9-2	2022855
Reflector	-	PL40A	1012720



At a glance

- Product family with uniform housing, mounting and connection systems
- Robust sensors for industrial use
- PinPoint technology is precise and fast-reacting for optimal detection of a very wide range of objects
- Space-saving plastic housing in chemically, thermally or mechanically-resistant designs
- Dovetail mounting – mounting holes and oblong holes for a very wide range of securing options
- All-round, easily visible status LEDs

Your benefits

- Reliable detection thanks to superior chip technology and high resistance to disruptive influences to optics from the industrial environment
- PinPoint technology for bright, small and precise light spot enabling fast and simple sensor alignment
- Precision switching characteristics and high standard of detection quality guaranteeing universal detection of objects
- User-friendly sensors, simple commissioning and installation and easily visible status LEDs
- Robust housing houses a very wide range of products enabling universal application possibilities - specially designed for industrial usage
- Entire sensor product family with a single uniform design: Uniform housing, mounting and connection systems regardless of sensor principle
- Maximum sensor versatility ensuring minimal time spent on mounting or installation
- Easily installed with SICK accessories

Ordering information

Other models available at www.mysick.com/en/W11-2

- **Operating mode:** light/dark-switching
- **Connection:** connector M12, 4-pin

Sensor type	Sensing technology	Sensing range max.	Output type	Adjustment	Model name	Part no.
Photoelectric proximity sensor	Background suppression	30 mm ... 1,100 mm ¹⁾	PNP	Adjustable potentiometer 5 revolutions	WTB11-2P2461	1044442
			NPN	Adjustable potentiometer 5 revolutions	WTB11-2N2461	1051818
Photoelectric retro-reflective sensor	Standard	0.15 m ... 10 m ²⁾	PNP	None/fixed	WL11-2P2430	1041385
			NPN	None/fixed	WL11-2N2430	1041387
Through-beam photoelectric sensor	-	0 m ... 20 m	PNP	None/fixed	WSE11-2P2430	1041394
			NPN	None/fixed	WSE11-2N2430	1041396

¹⁾ Objects to be detected with 90% remission (based on DIN 5033 Standard White).

²⁾ PL80A.

Recommended accessories

Name	Material	Model name	Part no.
Mounting bracket	Stainless steel (1.4301)	BEF-WG-W12	2013942
Reflector	-	PL40A	1012720

B



ECOLAB

Additional information

www.mysick.com/en/W12-3

At a glance

- Best-in-class optical performance due to superior OES technology
- Autocollimation with retro-reflectives
- Background and foreground suppression with second emitter LED on proximities
- Easily visible, precise light spot and high-energy IR transmitters
- Sturdy metal housing, optional Teflon coating
- Connection via cable or sturdy rotatable connector
- Mounting options with through holes, blind holes, oblong hole and dovetail
- IO link communication available

Your benefits

- Reliable detection thanks to superior chip technology and high resistance to optical interference factors from the industrial environment
- PinPoint technology for bright, small and precise light spot enabling fast and simple sensor alignment
- Precision switching characteristics and high standard of detection quality guaranteeing universal detection of objects
- Wide range of products in a robust metal housing enabling universal application possibilities and designed for industrial use
- Remote diagnosis and remote maintenance with IO link - enables you to see the application through the eyes of the sensor
- Maximum sensor versatility ensuring minimal time spent on mounting or installation
- Easily installed with SICK accessories

Ordering information

Other models available at www.mysick.com/en/W12-3

- **Operating mode:** light/dark-switching
- **Adjustment:** adjustable potentiometer 5 revolutions
- **Connection:** connector M12, 4-pin

Sensor type	Sensing technology	Sensing range max.	Output type	Model name	Part no.
Photoelectric proximity sensor	Background suppression	20 mm ... 350 mm ¹⁾	PNP	WTB12-3P2431	1041411
			NPN	WTB12-3N2431	1041416
Photoelectric retro-reflective sensor	Autocollimation	0 m ... 7 m ²⁾	PNP	WL12-3P2431	1041436
			NPN	WL12-3N2431	1041440
Through-beam photoelectric sensor	-	0 m ... 20 m	PNP	WSE12-3P2431	1041459
			NPN	WSE12-3N2431	1041462

¹⁾ Objects to be detected with 90% remission (based on DIN 5033 Standard White).

²⁾ PL80A.

Recommended accessories

Name	Material	Model name	Part no.
Mounting bracket	Stainless steel (1.4301)	BEF-WG-W12	2013942
Reflector	-	PL40A	1012720



Additional information

www.mysick.com/en/W280

At a glance

- Visible red light
- Light/dark switching (DC devices only)
- Rotatable connector, cable connection or terminal connection
- Versions for 10 – 30 V DC or 24 – 240 V DC/AC voltage supply
- DC/AC devices are compliant with EN61000-6-3 (electromagnetic interference for “residential, commercial and light-industrial environments”)
- BEF-W280 mounting bracket made from stainless steel (1.4301) and P250 reflector for WL280 are also included in delivery scope
- UL approval

Your benefits

- Visible red light for simpler alignment of the sensors
- DC variant devices with light/dark switching ensure flexibility of application, reducing multiplicity of devices and therefore storage
- Flexibility at installation location thanks to rotatable connector
- Everything you will need at the installation site since mounting bracket (stainless steel 1.4301) and reflector with the WL280 are included in delivery scope
- Mounting compatibility - DC devices and DC/AC devices available in same design
- Everything from one family – a wide variety of principles of operation, brought together, reduces the documentation effort

Ordering information

Other models available at www.mysick.com/en/W280

- **Operating mode:** light/dark-switching
- **Connection:** connector M12, 4-pin

Sensor type	Sensing technology	Sensing range max.	Output type	Adjustment	Model name	Part no.
Photoelectric proximity sensor	Energetic	10 mm ... 1,700 mm ¹⁾	PNP	-	WT280-P430	6028280
			NPN		WT280-N430	6028281
Photoelectric retro-reflective sensor	-	0.01 m ... 15 m ²⁾	PNP	Adjustable, sensitivity control	WL280-P430	6028286
			NPN		WL280-N430	6028287
Through-beam photoelectric sensor	-	0 m ... 45 m	PNP		WS/WE280-P430	6028293
			NPN		WS/WE280-N430	6028294

¹⁾ Objects to be detected with 90% remission (based on DIN 5033 Standard White).

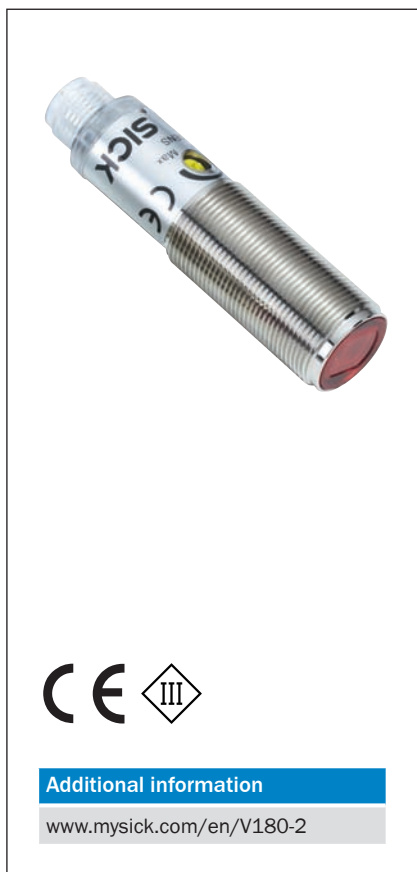
²⁾ PL80A.

Accessories included in delivery

Name	Material	Model name	Part no.
Mounting bracket ¹⁾	Stainless steel 1.4301	BEF-W280	5313885
Reflector ²⁾	-	P250	5304812

¹⁾ Included in the delivery for all specified devices.

²⁾ Also included with the photoelectric retro-reflective sensors.



At a glance

- Very large scanning ranges and distances
- Visible red light with homogenous and extremely bright light spot for easier alignment
- High switching frequencies of 1,000 Hz
- 2 LEDs with 360° display visibility together with sensitivity control for quick commissioning
- Standardized connection system with cable or M12 device connector
- Compact M18 metal or plastic housing

Your benefits

- Short reaction time enables reliable detection including in dynamic processes and with high-speed objects
- Quick and easy project management and commissioning thanks to a complete family of sensors
- High operating reserves and access to new solutions due to large scanning ranges and homogeneous system specifications for all variants
- The answer to economic challenges thanks to simple mounting, standardized connection technology and universal use.
- Convenient, fast, compatible thanks to optimum visibility emitter LED, two status indicator LEDs with 360° all-round visibility, extra short housing...
- Visible red light plus sensitivity control enables quick and easy commissioning and adjustment
- 2 indicator LEDs with 360° all-round visibility for easily-recognizable reporting about operating status

Ordering information

Other models available at www.mysick.com/en/V180-2

- **Operating mode:** light/dark-switching
- **Adjustment:** adjustable potentiometer, 270°
- **Connection:** connector M12, 4-pin

Sensor type	Sensing technology	Housing material	Sensing range max.	Output type	Model name	Part no.
Photoelectric proximity sensor	Background suppression	Plastic	1 mm ... 140 mm ¹⁾	PNP	VTF180-2P42417	6037480
				NPN	VTF180-2N42417	6037478
		Metal		PNP	VTF180-2P42412	6041803
				NPN	VTF180-2N42412	6041801
Photoelectric retro-reflective sensor	-	Plastic	0.05 m ... 7 m ²⁾	PNP	VL180-2P42436	6037496
				NPN	VL180-2N42436	6037494
		Metal		PNP	VL180-2P42431	6041819
				NPN	VL180-2N42431	6041817
Through-beam photoelectric sensor	-	Plastic	0 m ... 28 m	PNP	VSE180-2P42437	6037500
				NPN	VSE180-2N42437	6037498
		Metal		PNP	VSE180-2P42432	6041823
				NPN	VSE180-2N42432	6041821

¹⁾ Objects to be detected with 90% remission (based on DIN 5033 Standard White).

²⁾ PL80A.

Recommended accessories

Name	Model name	Part no.
Reflector	PL40A	1012720



Additional information

www.mysick.com/en/MH15V

At a glance

- Corrosion-resistant due to solid metal stainless steel housing 316L
- Resistant to cleaning agents - confirmed by certificates awarded by the independent ECOLAB und Diversey institutes
- Enhanced impermeability to water due to IP 69K enclosure rating as per DIN 40050
- Extensive, complete product range in M18 housing: Reliable detection of objects
- Extra short stainless steel housing for minimum installation depth and simple handling for space-saving solutions
- Innovative assembly accessories for flush, fast and low-cost assembly with no corners or edges

Your benefits

- Higher machine availability due to reliable sensors
- Robust and resistant to damp, cleaning processes and conventional cleaning agents – with enclosure rating IP 69K as certified by ECOLAB
- Suitable for hygienic process due to solid metal stainless steel housing and housing design
- Shortest M18 housing due to flush mounting for space conservation
- Application-oriented, complete family of simple solutions for detection positioning of parts
- Project management clarity due to homogenous and consistent product family performance

Ordering information

Other models available at www.mysick.com/en/MH15V

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

Sensor type	Sensing technology	Sensing range max.	Output type	Operating mode	Adjustment	Model name	Part no.
Photoelectric proximity sensor	Energetic	10 mm ... 100 mm ¹⁾	PNP	Light	Potentiometer, 270°	MHT15-P3317V	1043806
			NPN	Light	Potentiometer, 270°	MHT15-N3317V	1043804
Photoelectric retro-reflective sensor	-	0.035 m ... 5 m ²⁾	PNP	Dark	-	MHL15-P3236V	1043814
			NPN	Dark	-	MHL15-N3236V	1043812
Through-beam photoelectric sensor	-	0 m ... 5 m	PNP	Dark	-	MHSE15-P3236V	1043818
			NPN	Dark	-	MHSE15-N3236V	1043816

¹⁾ Objects to be detected with 90% remission (based on DIN 5033 Standard White).

²⁾ PL80A.

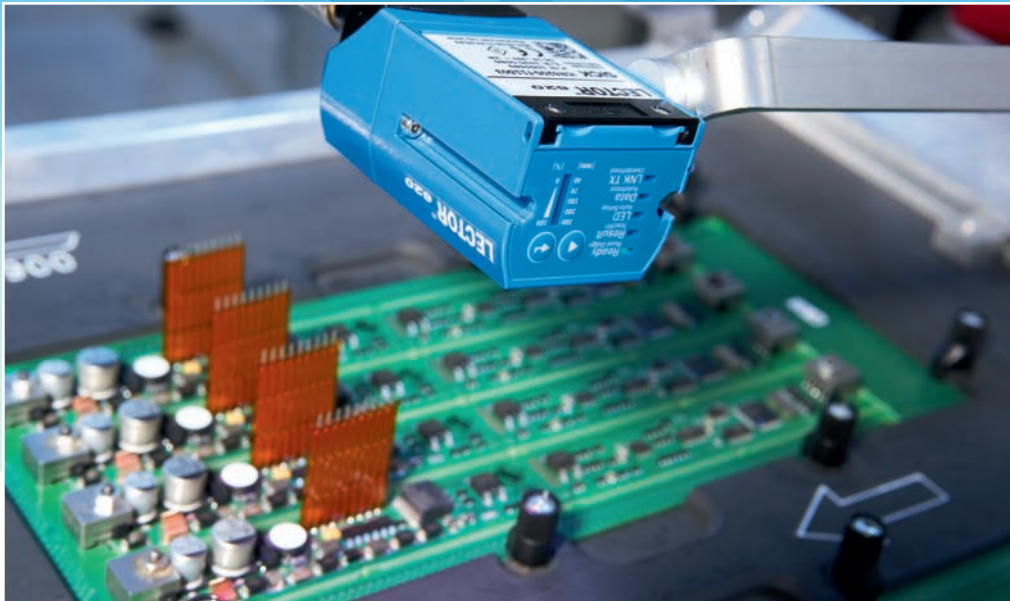
Recommended accessories

Name	Enclosure rating	Material	Model name	Part no.
Mounting bracket	-	Stainless steel	BEF-WN-M18N	5320947
Reflector	IP 67: EN 60529, IP 69K: EN 40050	-	P250 CHEM	5321097

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



C



Identification solutions







The basis for product traceability and product anti-counterfeiting is a reliable automatic identification.

SICK offers for the 3 most popular identification technologies industrial readers: laser scanners for 1D-codes, camera based 1D and 2D-codes readers and RFID readers.

Integrated interfaces enable the readers to communicate inside all relevant industrial networks, and clever functionalities make commissioning and operation easy.



Identification solutions

	CLV50x The mini line – small, simple, reliable	C-2
	CLV62x Powerful scanner – flexible use	C-3
	CLV63x Intelligent scanning solution for logistics and automation	C-4
	CLV65x Always in auto focus	C-5
	LECTOR®62x Clever. Simple. Industrial.	C-6
	IDM1xx Reliable identification of bar codes for a wide range of general purpose applications	C-7



At a glance

- Extremely compact
- Lightweight
- Easy commissioning
- Fast and reliable decoding even on poorly printed or partly damaged codes
- Available in RS-232 version with flying leads and USB version
- Pushbutton trigger
- Discrete trigger input and good read/no read outputs (flying lead variant only)
- CLV505 available in raster version

Your benefits

- Small size and simple setup enables fast installation, even in compact machines
- Fast and easy commissioning using configuration bar codes (shipped with each scanner) and the online tool
- Excellent reading performance – even with poorly printed codes – ensures high throughput
- Pushbutton trigger, onboard LED, and audible beep simplify setup and troubleshooting

Ordering information

- **Focus:** fixed focus
- **Reading field:** front

Type	Connection type	Scanner design	Model name	Part no.
CLV503 Standard Range	Standard	Line scanner	CLV503-0000	1046315
	USB	Line scanner	CLV503-0110	1046316
CLV505 Standard Range	Standard	Line scanner	CLV505-0000	1046317
	USB	Line scanner	CLV505-0110	1046318
	Standard	Raster scanner	CLV505-1000	1046319
	USB	Raster scanner	CLV505-1110	1046320

Recommended accessories

Brief description	Model name	Part no.
Mounting bracket for CLV503	Mounting bracket	2050021
Mounting bracket for CLV505	Mounting bracket	2050022










Additional information

www.mysick.com/en/CLV62x

At a glance

- CAN, Ethernet TCP/IP, 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 rated

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

Ordering information

Other models available at www.mysick.com/en/CLV62x

- **Focus:** fixed focus

Type	Connection type	Reading field	Scanner design	Model name	Part no.
CLV620 Mid Range	Standard	Front	Line scanner	CLV620-0000	1040288
			Raster scanner	CLV620-1000	1041548
	Ethernet	Sidel (105 °)	Line scanner	CLV620-2000	1041550
			Raster scanner	CLV620-3000	1041552
CLV621 Long Range	Standard	Front	Line scanner	CLV621-0000	1041784
	Ethernet	Front	Line scanner	CLV621-0120	1041785
CLV622 Short Range	Standard	Front	Line scanner	CLV622-0000	1041792

Recommended accessories

Brief description	Model name	Part no.
Bracket with adapter board	Mounting bracket	2042902
Small connection module for one sensor, 4 cable glands, base for CMC600	CDB620-001	1042256
Data connection cable (RS-232) for CLV/ICR/LECTOR/RFH/CDB/CDM to PC, 3 m, 3-wired, with 2 x 9-pin D-sub receptacle	Data connection cable (RS-232)	2014054
Cable, M12 4-pin, Ethernet to Host RJ45, 2 m (plug/plug)	SSL-2J04-G02ME	6034414
Cable, M12 12-pin, to CDB620/CDM420/CDM425/CDF600 15-pin D-sub, 2 m (socket/plug)	Connection cable (plug-socket)	2041834



At a glance

- Integrated pushbuttons for auto setup and reading diagnostics
- Integrated LED bar graph
- CAN, Ethernet TCP/IP, 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
- Teach-in of match code possible via the pushbuttons
- Easily execute firmware updates using the SD 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
- Increased reading reliability due to high-performance computing power and a high scanning frequency

Ordering information

Other models available at www.mysick.com/en/CLV63x

- **Focus:** fixed focus
- **Scanner design:** line scanner
- **Heating:** optional

Type	Connection type	Reading field	Model name	Part no.
CLV630 Long Range	Standard	Front	CLV630-0000	1040706
		Sidel (105°)	CLV630-2000	1041972
		Oscillating mirror	CLV630-6000	1041976
CLV631 Mid Range	Ethernet	Front	CLV630-0120	1041969
		Oscillating mirror	CLV630-6120	1041977
CLV631 Mid Range	Standard	Front	CLV631-0000	1041978
		Oscillating mirror	CLV631-6000	1041986
CLV631 Mid Range	Ethernet	Front	CLV631-0120	1041979
		Standard	CLV632-2000	1041992
CLV632 Short Range	Standard	Sidel (105°)	CLV632-2000	1041992

Recommended accessories

Brief description	Model name	Part no.
Mounting bracket, including installation material	Mounting bracket	2042800
Small connection module for one sensor, 4 cable glands, base for CMC600	CDB620-001	1042256
Data connection cable (RS-232) for CLV/ICR/LECTOR/RFH/CDB/CDM to PC, 3 m, 3-wired, with 2 x 9-pin D-sub receptacle	Data connection cable (RS-232)	2014054
Cable, M12 4-pin, Ethernet to Host RJ45, 2 m (plug/plug)	SSL-2J04-G02ME	6034414
Cable, M12 12-pin, to CDB620/CDM420/CDM425/CDM600 15-pin D-sub, 2 m (socket/plug)	Connection cable (plug/socket)	2041834



At a glance

- Huge depth of field due to auto focus
- Integrated pushbuttons for auto setup and reading diagnostics
- CAN, Ethernet TCP/IP, 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
- Teach-in of match code possible via the pushbuttons
- Easily execute firmware updates using the SD 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
- Integrated web server provides remote diagnostics and monitoring, no additional software required



Ordering information

- **Focus:** auto focus
- **Scanner design:** line scanner
- **Heating:** optional

Type	Connection type	Reading field	Model name	Part no.
CLV650 Standard Density	Standard	Front	CLV650-0000	1041290
		Oscillating mirror	CLV650-6000	1042124
	Ethernet	Front	CLV650-0120	1042121
		Oscillating mirror	CLV650-6120	1042125
CLV651 Low Density	Standard	Front	CLV651-0000	1046557
		Oscillating mirror	CLV651-6000	1046559
	Ethernet	Front	CLV651-0120	1046558
		Oscillating mirror	CLV651-6120	1046560

Recommended accessories

Brief description	Model name	Part no.
Mounting bracket, including installation material	Mounting bracket	2042800
Small connection module for one sensor, 4 cable glands, base for CMC600	CDB620-001	1042256
Data connection cable (RS-232) for CLV/ICR/LECTOR/RFH/CDB/CDM to PC, 3 m, 3-wired, with 2 x 9-pin D-sub receptacle	Data connection cable (RS-232)	2014054
Cable, M12 4-pin, Ethernet to Host RJ45, 2 m (plug/plug)	SSL-2J04-G02ME	6034414
Cable, M12 12-pin, to CDB620/CDM420/CDM425/CDF600 15-pin D-sub, 2 m (socket/plug)	Connection cable (plug/socket)	2041834



Additional information

www.mysick.com/en/LECTOR62x

At a glance

- Decoding of most popular code types: 1D, 2D, direct part marking
- Automatic focus teach-in for quick setup
- Easy integration with industrial networks: serial, Ethernet, PROFINET, PROFIBUS and CAN
- Auto setup with function button and aiming laser – does not require PC
- Compact design and industrial housing with swivel connector
- Analysis tools include live image capturing, code verification and read rate view

Your benefits

- Intelligent decoding algorithms provide reliable reading performance for improved read rates and throughput
- IDpro facilitates integration with most popular industrial networks
- Intuitive setup with function button, auto setup and aiming laser reduces training and installation time and costs
- Compact design and flexible swivel-mount make it easy to install in reduced spaces
- Quick analysis of read rate performance and code quality allows for efficient control
- Cloning back-up systems ensure low machine downtime in the event of unexpected incidents
- SICK LifeTime Services gives you peace of mind

Ordering information

Type	Reading field	Model name	Part no.
LECTOR®620	Lateral	ICR620S-T11503	1050589

Recommended accessories

Brief description	Model name	Part no.
Mounting bracket with 2 self-locking M5 x 8 screws	Mounting bracket with two screws (M5 x 8)	2020410
Small connection module for one sensor, 4 cable glands, base for CMC600	CDB620-001	1042256
Cable, M12 4-pin, Ethernet to Host RJ45, 2 m (plug/plug)	SSL-2J04-G02ME	6034414
Cable, M12 17-pin, to CDB620/CDM420/CDM425/CDF600 15-pin D-sub, 2 m (socket/plug)	Connection cable (plug/socket)	2055419



At a glance

- Identification of all popular 1D codes, with PDF version also stacked codes
- Scan rate up to 500 scans/second
- Identification of codes with 0.076 mm module width

Your benefits

- Increased productivity thanks to high scan rate
- Reliable identification reduces the need to manually input data
- Lightweight, ergonomic design ensures user comfort
- Cordless version provides flexibility

C

Ordering information

Other models available at www.mysick.com/en/IDM1xx

Variant	Field of Application	Type	Items supplied	Model name	Part no.
IDM120	General purpose	Short range	PS/2 kit: contains hand-held scanner, 2 m straight PS/2 keyboard wedge cable and quick start guide	IDM120-2 PS/2 Kit	6040978
			USB keyboard kit: contains hand-held scanner, 1.8 m straight USB cable and quick start guide	IDM120-2 USB Kit	6040979
			RS-232 power supply kit: contains hand-held scanner, 1.8 m straight RS-232 TTL cable, power supply and quick start guide	IDM120 RS-232 Power Supply Kit	1046549
IDM140-2	General purpose	Mid range	PS/2 kit: contains hand-held scanner, 2 m straight PS/2 keyboard wedge cable and quick start guide	IDM140-2 PS/2 Kit	6040982
			RS-232 power supply kit: contains hand-held scanner, 1.8 m straight RS-232 TTL cable, power supply and quick start guide	IDM140-2 RS232 Kit	6041017
			USB keyboard kit: contains hand-held scanner, 1.8 m straight USB cable and quick start guide	IDM140-2 USB Kit	6040983
IDM140-2 Bluetooth	General purpose, cordless	Mid range	Kit contains cordless scanner, battery, base station, interface cable, power supply and quick start guide	IDM140-2BT PS/2 Kit	6040990
				IDM140-2BT RS232 Kit	6040992
				IDM140-2BT USB Kit	6040991

Recommended accessories

Brief description	Model name	Part no.
Countertop, for IDM140-2	Countertop stand	6036724
Desk holder	Desk holder	6036723

Efficient instrumentation solutions for factory automation

D



Fluid sensors









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 overflow and dry run. SICK devices are rugged and easy to use. Innovative sensor technology enables accurate, universal measurement independent of material type.



Fluid sensors

	LFP D-2 LFP – the clean solution
	UP56-2 D-3 Ultrasonic level sensor: tough, non-contact, pressure-resistant
	LFH D-4 At a high level
	LFV200 D-5 LFV200 tuning forks – the point level sensor for all kinds of liquids
	PBS D-6 Universal pressure switch
	PBT D-7 All-around pressure transmitter
	TCT D-8 Compact, rugged tough, precise temperature measurement
	TSP D-9 Efficient and space saving temperature measurement



At a glance

- Level monitoring in hygienic applications
- Manually cuttable monoprobe up to 2,000 mm long with $Ra \leq 0.8 \mu\text{m}$
- 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 cuttable 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

Ordering information

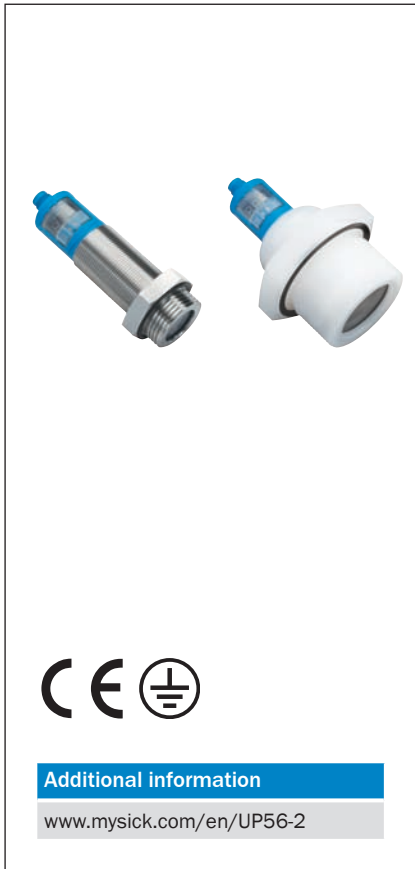
Other models available at www.mysick.com/en/LFP

- **Output signal:** 1x PNP + 1x PNP/NPN + 4 ... 20 mA / 0 ... 10 V
- **Process temperature:** -20 °C ... +150 °C

Process connection	Process pressure	Housing material	Electrical connection	Enclosure rating	Probe length	Model name	Part no.
G 3/4 A	-1 bar ... 16 bar	1.4305	M12x1, 5-pin	IP 67: EN 60529, IP 69K: EN 40050	500 mm	LFP0500-G1NMB	1052070
					600 mm	LFP0600-G1NMB	1052071
					800 mm	LFP0800-G1NMB	1052073
					1,000 mm	LFP1000-G1NMB	1052075
					1,200 mm	LFP1200-G1NMB	1052077
					1,400 mm	LFP1400-G1NMB	1052079
					1,600 mm	LFP1600-G1NMB	1052081
					1,800 mm	LFP1800-G1NMB	1052083
					2,000 mm	LFP2000-G1NMB	1052085

Recommended accessories

Brief description	Model name	Part no.
Hygienic process connection adapter for LFP, coupling (DIN 11864-2) DN 25 form A, stainless steel 316L ($Ra \leq 0,8 \mu\text{m}$)	BEF-HA-642D25-LFP1	2058823
Hygienic process connection adapter for LFP, conical coupling (DIN 11851) DN 25 with union nut, stainless steel 316L ($Ra \leq 0,8 \mu\text{m}$)	BEF-HA-851D25-LFP1	2058138
Hygienic process connection adapter for LFP, conical coupling (DIN 11851) DN 40 with union nut, stainless steel 316L ($Ra \leq 0,8 \mu\text{m}$)	BEF-HA-851D40-LFP1	2058139
Hygienic process connection adapter for LFP, Tri-Clamp 1"- 11/2", stainless steel 316L ($Ra \leq 0,8 \mu\text{m}$)	BEF-HA-TCL110-LFP1	2058808
Hygienic process connection adapter for LFP, Tri-Clamp 2", stainless steel 316L ($Ra \leq 0,8 \mu\text{m}$)	BEF-HA-TCL120-LFP1	2058824



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

D

Ordering information

Other models available at www.mysick.com/en/UP56-2

- **Output signal:** 1x PNP + 4 ... 20 mA / 0 ... 10 V
- **Process temperature:** -25 °C ... +70 °C
- **Process pressure:** 0 bar ... 6 bar
- **Electrical connection:** M12x1, 5-pin
- **Enclosure rating:** IP 67

Process connection	Housing material	Operating distance	Limiting scanning distance ¹⁾	Model name	Part no.
G 1 A PN 6	Stainless steel 1.4571, PBT, TPU	30 mm ... 250 mm	30 mm ... 990 mm	UP56-211118	6041658
		85 mm ... 350 mm	85 mm ... 1,500 mm	UP56-212118	6041659
		200 mm ... 1,300 mm	200 mm ... 5,000 mm	UP56-213118	6041660
G 2 A PN 6	Stainless steel 1.4571, PBT, TPU	350 mm ... 3,400 mm	350 mm ... 8,000 mm	UP56-214118	6041693
	PVDF, PBT, TPU	350 mm ... 3,400 mm	350 mm ... 8,000 mm	UP56-214178	6039866

¹⁾ At 6 bar, gauge pressure.

Recommended accessories

Brief description	Model name	Part no.
Weld-in flange G1 made from 316L for ultrasonic sensors UP56-211, UP56-212 and UP56-213	BEF-FL-316G10-UP56	4064295
Weld-in flange G2 in 316L for ultrasonic sensors UP56-214	BEF-FL-316G20-UP56	4063263
CPA Connect+ software	CPA Connect+	6037782



At a glance

- Immersion depth up to 100 m
- Available with various cable lengths
- Measuring ranges from 0...0.1 bar up to 0...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 Pt 100-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

Ordering information

Other models available at www.mysick.com/en/LFH

- **Output signal:** 4 mA ... 20 mA
- **Process temperature:** -10 °C ... +50 °C
- **Wetted parts:** housing: CrNi steel, pressure connection / diaphragm: CrNi steel, protective cap: PA
- **Electrical connection:** PUR cable
- **Enclosure rating:** IP 68

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
0 bar ... 0.6 bar	5 m	LFH-SBX60G1AS05SZ0	6040946
	10 m	LFH-SBX60G1AS10SZ0	6040947
	15 m	LFH-SBX60G1AS15SZ0	6040948
0 bar ... 1 bar	10 m	LFH-SB1X0G1AS10SZ0	6040950
	15 m	LFH-SB1X0G1AS15SZ0	6040951
	20 m	LFH-SB1X0G1AS20SZ0	6040952
	25 m	LFH-SB1X0G1AS25SZ0	6040953
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



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



Ordering information

Other models available at www.mysick.com/en/LFV200

- **Wetted parts:** 1.4404 (optional Ra < 0.8 µm)
- **Housing material:** stainless steel 1.4404, PEI

Output signal	Process connection	Process temperature	Electrical connection	Probe length	Model name	Part no.
1x PNP	G 3/4 A PN 64	-40 °C ... +100 °C	M12x1 plug connector, 4-pin	40 mm	LFV200-XXSGBTPM	6036351
	3/4" NPT PN 64				LFV200-XXSNBTPM	6036352
	G 1 A PN 64				LFV200-XXSGATPM	6036353
	G 3/4 A PN 64	-40 °C ... +150 °C	Valve connector DIN 43650		LFV200-XXSGATPV	6037759
	G 1 A PN 64		M12x1 plug connector, 4-pin		LFV200-XTGBTPM	6036355
	G 3/4 A PN 64	-40 °C ... +100 °C	Valve connector DIN 43650		LFV200-XTGATPM	6036357
					LFV200-XASGBTPM ¹⁾	6036359
	1" tri-clamp (PN 16, L, Ra <0.8µm)	-40 °C ... +150 °C	M12x1 plug connector, 4-pin		LFV200-XATGBTPV ¹⁾	6041094
	Conical adapter DN 25 in accordance with DIN 11851 with cap nut (PN 40, 316L, Ra <0.8 µm)				LFV200-XATGBTPM ¹⁾	6036363
					LFV200-XXHCLTPM	6036533
Non-contact switch	G 3/4 A PN 64	-40 °C ... +100 °C	Valve connector DIN 43650	LFV200-XXSGBCPV	6036367	
	G 1 A PN 64			LFV200-XXSGACPV	6036369	
	G 3/4 A PN 64	-40 °C ... +150 °C		LFV200-XTGBCPV	6036371	
1x PNP	G 3/4 A PN 64	-40 °C ... +100 °C	M12x1 plug connector, 4-pin	1,000 mm	LFV230-XXSGBTPM1000	6041669
		-40 °C ... +150 °C			LFV230-XTGBTPM1000	6041673

¹⁾ With WHG approval

D



At a glance

- Measurement ranges from 0 bar ... 1 bar up to 0 bar ... 600 bar
- Gauge, absolute, and compound measurement ranges
- No moving parts: No mechanical wear, fatigue-proof, maintenance-free
- Stainless steel membrane
- Various programmable switching functions
- Digital outputs PNP or NPN, analog output signal 4 mA ... 20 mA or 0 V ... 10 V
- Min/max pressure memory
- Password protection
- Selection of different pressure units for the display
- IO-Link optional

Your benefits

- Compact size takes up less space
- Dual rotatable housing ensures flexible installation
- Quick and easy setup and operation due to three large buttons and bright display
- Wide range of applications
- Resistant against corrosive media due to circularly welded, hermetically sealed stainless steel membrane
- Available in a wide selection of configurations, enabling a perfect match to individual customer requirements
- IO-Link technology provides time and cost savings by enabling parameter adjustments, for example, upon product changeover to be performed remotely

Ordering information

Other models available at www.mysick.com/en/PBS

- **Pressure type:** gauge pressure
- **Accuracy of sensor element:** $\leq \pm 1\%$ of span
- **Process temperature:** $-20\text{ °C} \dots +85\text{ °C}$

Process connection	Electrical connection	Output signal	Sealing	Measuring range	Model name	Part no.	
G 1/4 A in accordance with DIN 3852-E	Plug M12 x 1, 4-pin, IP 67	2 x PNP	NBR	0 bar ... 10 bar	PBS-RB010SG1SSNAMA0Z	6038862	
				0 bar ... 100 bar	PBS-RB100SG1SSNAMA0Z	6038865	
				0 bar ... 250 bar	PBS-RB250SG1SSNAMA0Z	6038866	
				0 bar ... 400 bar	PBS-RB400SG1SSNAMA0Z	6041099	
		1 x PNP + 4 ... 20 mA		0 bar ... 10 bar	PBS-RB010SG1SSNBMA0Z	6038888	
				0 bar ... 100 bar	PBS-RB100SG1SSNBMA0Z	6038891	
				0 bar ... 250 bar	PBS-RB250SG1SSNBMA0Z	6038892	
				0 bar ... 400 bar	PBS-RB400SG1SSNBMA0Z	6041724	
G 1/4 inside	Plug M12 x 1, 4-pin, IP 67	2 x PNP	Without sealing	0 bar ... 10 bar	PBS-RB010SG2SSOAMA0Z	6039110	
				0 bar ... 100 bar	PBS-RB100SG2SSOAMA0Z	6039614	
				0 bar ... 250 bar	PBS-RB250SG2SSOAMA0Z	6039615	
		1 x PNP + 4 ... 20 mA		0 bar ... 400 bar	PBS-RB400SG2SSOAMA0Z	6039495	
				0 bar ... 10 bar	PBS-RB010SG2SSOBMA0Z	6039121	
				0 bar ... 100 bar	PBS-RB100SG2SSOBMA0Z	6041615	
G 1/4 A in accordance with DIN 3852-E	Plug M12 x 1, 5-pin, IP 67	2 x PNP + 4 ... 20 mA	NBR	0 bar ... 10 bar	PBS-RB010SG1SSND5A0Z	6038678	
				Without sealing	0 bar ... 10 bar	PBS-RB010SG2SS0D5A0Z	6039123
					0 bar ... 100 bar	PBS-RB100SG2SS0D5A0Z	6042526
G 1/4 inside				0 bar ... 250 bar	PBS-RB250SG2SS0D5A0Z	6041527	



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



Ordering information

Other models available at www.mysick.com/en/PBT

- **Electrical connection:** M12 x 1, 4-pin, IP 67
- **Pressure type:** gauge pressure
- **Accuracy of sensor element:** $\pm 1\%$ of span
- **Process temperature:** 0 °C ... +80 °C
- **Pressure port:** standard

Process connection	Output signal	Sealing	Measuring range	Model name	Part no.
G 1/4 A according to DIN 3852-E	4 ... 20 mA	NBR	0 bar ... 10 bar	PBT-RB010SG1SSNAMA0Z	6038615
			0 bar ... 100 bar	PBT-RB100SG1SSNAMA0Z	6038648
			0 bar ... 250 bar	PBT-RB250SG1SSNAMA0Z	6038652
			0 bar ... 400 bar	PBT-RB400SG1SSNAMA0Z	6038656
G 1/4 female		Without sealing	0 bar ... 10 bar	PBT-RB010SG2SS0AMA0Z	6038637
			0 bar ... 100 bar	PBT-RB100SG2SS0AMA0Z	6038649
			0 bar ... 250 bar	PBT-RB250SG2SS0AMA0Z	6038653
			0 bar ... 400 bar	PBT-RB400SG2SS0AMA0Z	6038657
1/4" NPT			0 bar ... 10 bar	PBT-RB010SN1SS0AMA0Z	6039256
			0 bar ... 100 bar	PBT-RB100SN1SS0AMA0Z	6042006
G 1/4 A according to DIN 3852-E	0 ... 10 V, 3-wire	NBR	0 bar ... 10 bar	PBT-RB010SG1SSNVMC0Z	6038638
			0 bar ... 100 bar	PBT-RB100SG1SSNVMC0Z	6038650
			0 bar ... 250 bar	PBT-RB250SG1SSNVMC0Z	6038654
			0 bar ... 400 bar	PBT-RB400SG1SSNVMC0Z	6038658
G 1/4 female		Without sealing	0 bar ... 10 bar	PBT-RB010SG2SS0VMC0Z	6038639
			0 bar ... 100 bar	PBT-RB100SG2SS0VMC0Z	6038651
			0 bar ... 250 bar	PBT-RB250SG2SS0VMC0Z	6038655
			0 bar ... 400 bar	PBT-RB400SG2SS0VMC0Z	6038659



At a glance

- Pt100 element, accuracy class A according to IEC 60751
- Measuring ranges $-50\text{ °C} \dots +150\text{ °C}$ and $-50\text{ °C} \dots +250\text{ °C}$
- Wetted parts made from corrosion resistant stainless steel 1.4571
- Various mechanical adaptations and insertion lengths, also available with thermo-well
- Pt100 (4-wire) or 4 mA ... 20 mA (2-wire)
- Circular connector M12 x 1 (IP 67) or L-connector according to DIN EN 175301-803 A (IP 65)

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 through compact dimensions and industry-standard output signals
- Optimal solutions for individual requirements

Ordering information

Other models available at www.mysick.com/en/TCT

- Measuring range: $-50\text{ °C} \dots +150\text{ °C}$
- Connection type/enclosure rating: plug M12 x 1, 4-pin, IP 67

Output signal	Process connection	Insertion length/diameter of probe	Model name	Part no.		
Pt100, 4-wire	Compression fitting G 1/4 B, CrNi stainless steel ferrule	25 mm / 3 mm	TCT-1PAS10253MZ	6043177		
		50 mm / 3 mm	TCT-1PAS10503MZ	6043178		
		100 mm / 6 mm	TCT-1PAS11006MZ	6043179		
		150 mm / 6 mm	TCT-1PAS11506MZ	6043180		
		250 mm / 6 mm	TCT-1PAS12506MZ	6043181		
		350 mm / 6 mm	TCT-1PAS13506MZ	6043183		
	Thread G 1/4 B	25 mm / 3 mm	TCT-1PAG10253MZ	6043164		
		50 mm / 3 mm	TCT-1PAG10503MZ	6043165		
		100 mm / 6 mm	TCT-1PAG11006MZ	6043166		
		150 mm / 6 mm	TCT-1PAG11506MZ	6043167		
		250 mm / 6 mm	TCT-1PAG12506MZ	6043168		
		350 mm / 6 mm	TCT-1PAG13506MZ	6043169		
		4 mA ... 20 mA, 2-wire (RA ≤ (L ⁺ - 9 V) / 0.023 A [Ohm])	Thread G 1/4 B	25 mm / 3 mm	TCT-1AAG10253MZ	6043210
				50 mm / 3 mm	TCT-1AAG10503MZ	6043211
100 mm / 6 mm	TCT-1AAG11006MZ			6043212		
150 mm / 6 mm	TCT-1AAG11506MZ			6043213		
250 mm / 6 mm	TCT-1AAG12506MZ			6043214		
350 mm / 6 mm	TCT-1AAG13506MZ			6043215		



At a glance

- Platinum element (Pt100 or Pt1000, 2-wire), accuracy class B according to IEC 60751
- Measuring range -30 °C ... +130 °C
- Various connection threads and insertion lengths
- Wetted parts made from stainless steel 1.4305
- Circular connector M12 x 1 (IP 67)

Your benefits

- Reliable operation through rugged design and high-quality materials
- Good long-term stability
- Easy installation
- Convenient system integration through very compact dimensions



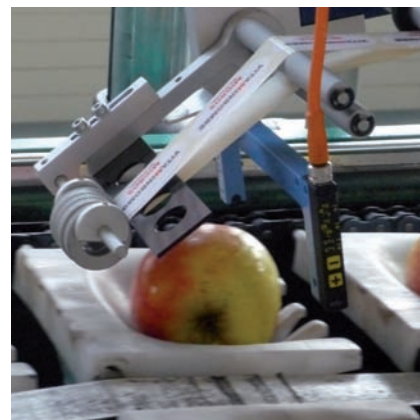
Ordering information

Other models available at www.mysick.com/en/TSP

Output signal	Process connection	Installation length/diameter of measurement probe	Model name	Part no.
Pt100, 2-conductor	G 1/4 B thread	30 mm / 5 mm	TSP-1PAG10305MZ	6042938
		40 mm / 5 mm	TSP-1PAG10405MZ	6042939
		50 mm / 6 mm	TSP-1PAG10506MZ	6042940
		60 mm / 6 mm	TSP-1PAG10606MZ	6042941
	G 3/8 B thread	30 mm / 5 mm	TSP-1PAG30305MZ	6042942
		40 mm / 5 mm	TSP-1PAG30405MZ	6042943
		50 mm / 6 mm	TSP-1PAG30506MZ	6042944
		60 mm / 6 mm	TSP-1PAG30606MZ	6042945
	M14 x 1.5 thread	30 mm / 5 mm	TSP-1PAM10305MZ	6042946
		40 mm / 5 mm	TSP-1PAM10405MZ	6042947
		50 mm / 6 mm	TSP-1PAM10506MZ	6042948
		60 mm / 6 mm	TSP-1PAM10606MZ	6042949
	1/4" NPT thread	30 mm / 5 mm	TSP-1PAN40305MZ	6042950
		40 mm / 5 mm	TSP-1PAN40405MZ	6042951
		50 mm / 6 mm	TSP-1PAN40506MZ	6042952
		60 mm / 6 mm	TSP-1PAN40606MZ	6042953
Pt1000, 2-conductor	G 1/4 B thread	30 mm / 5 mm	TSP-1MAG10305MZ	6042954
		40 mm / 5 mm	TSP-1MAG10405MZ	6042955

SICK registration sensors – enhancing performance through precision and speed

E



Registration sensors







The variety of tasks in automated production processes today, e.g. in packaging and printing machines, require the highest performance standards from sensors.

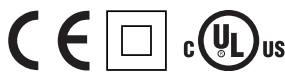
The detection of visible and non-visible marks, labels and colors at highest speeds as well as the detection of small parts and precise positioning are applications that need to be solved.

SICK offers a wide range of products of contrast, color, luminescence, fork and array sensors to solve this wide spectrum of demanding tasks.



Registration sensors

	KT3. E-2 High-performance contrast sensors in a compact housing
	KT5. E-3 Contrast sensor in standard metal housing
	CS8. E-4 High-performance color sensing
	UF E-5 UF – The clear choice for detecting transparent labels
	WF E-6 SICK fork sensors: more models, more functionality
	WFM E-7 WFM fork sensors – connect and get started



Additional information

www.mysick.com/en/KT3

At a glance

- Very small housing
- 3-color RGB technology or white LED
- Simple teach-in (when machine is stopped or during operation)
- Integrated switching threshold adjustment for high-gloss objects
- Reliable operation for jittering materials
- Switching frequency of 10 kHz

Your benefits

- Compact design fits in applications with limited space
- 3-color RGB technology enables universal operation with an extremely wide range of weak contrast combinations
- White LED model detects several different marks
- Simple teach-in to optimally set transmission color, switching point and surface shine
- Very good contrast resolution for detecting print marks, even where the variation between the mark and the background is minimal
- Automatic adaptation for high-gloss objects ensures high throughput
- Reliable operation for jittering materials
- Accurate positioning in rapid production processes

Ordering information

Other models available at www.mysick.com/en/KT3

- **Light spot direction:** vertical (In relation to long side of housing)
- **Adjustment:** static 2-point teach-in

Light source ¹⁾	Light spot size	Switching output	Model name	Part no.
LED red, green, blue ²⁾	1.5 mm x 6.5 mm	PNP	KT3W-P1116	1019338
		NPN	KT3W-N1116	1019337
LED white ³⁾	1.5 mm x 3.5 mm	PNP	KT3M-P1116	1044235
		NPN	KT3M-N1116	1044593
LED green ⁴⁾		PNP	KT3G-P1116	1019446
		NPN	KT3G-N1116	1019445

¹⁾ Average service life: 100,000 h at $T_u = +25\text{ °C}$.

²⁾ Wave length: 470 nm, 525 nm, 640 nm.

³⁾ Wave length: 400 nm ... 700 nm.

⁴⁾ Wave length: 520 nm.

Recommended accessories

Name	Connector type	Enclosure rating	Flying leads	Sheath material	Material	Cable length	Model name	Part no.
Mounting bracket	-	-	-	-	Zinc plated steel	-	BEF-WN-W9-2	2022855
Connector M12, 4-pin	Cable socket	IP 67	Straight	PVC	-	2 m	DOL-1204-G02M	6009382
			Angled				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



Ordering information

Other models available at www.mysick.com/en/KT5

- **Sensing distance:** 10 mm (from front edge of lens)
- **Sensing distance tolerance:** ± 3 mm
- **Light spot size:** 1.2 mm x 4.2 mm
- **Light spot direction:** vertical (In relation to long side of housing)

Light source ¹⁾	Connection type	Adjustment	Display	Switching output	Model name	Part no.
LED red, green, blue ²⁾	Connector M12, 5-pin	Static 2-point teach-in with manual fine adjustment	✓	PNP	KT5W-2P1116D	1026538
				NPN	KT5W-2N1116D	1026540
		Dynamic teach-in	-	PNP	KT5W-2P1113	1016629
				NPN	KT5W-2N1113	1016630
LED green ³⁾	Connector M12, 4-pin	Static 2-point teach-in	-	PNP	KT5W-2P1116	1018044
				NPN	KT5W-2N1116	1018045
		Manual adjustment, potentiometer	-	PNP	KT5G-2P1111	1015993
				NPN	KT5G-2N1111	1015981

¹⁾ Average service life: 100,000 h at T_U = +25 °C.

²⁾ Wave length: 470 nm, 525 nm, 640 nm.

³⁾ Wave length: 520 nm.

Recommended accessories

Name	Connector type	Enclosure rating	Flying leads	Sheath material	Cable length	Model name	Part no.
Connector M12, 4-pin	Cable socket	IP 67	Straight	PVC	2 m	DOL-1204-G02M	6009382
			Angled			DOL-1204-W02M	6009383
Connector M12, 5-pin			Straight			DOL-1205-G02M	6008899
			Angled			DOL-1205-W02M	6008900



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

Ordering information

Other models available at www.mysick.com/en/CS8

- **Output (channel):** 4 colors
- **Switching frequency:** 0.5 kHz / 1 kHz / 3.5 kHz, adjustable (with light/dark ratio 1:1)
- **Response time:** 1,000 µs / 500 µs / 145 µs (Signal transit time with resistive load)
- **Connection type:** Connector M12, 8-pin

Sensing distance ¹⁾	Sensing distance tolerance	Light spot size	Light spot direction	Switching output	Model name	Part no.
12.5 mm	± 3 mm	2 mm x 4 mm	Lengthwise	NPN	CS84-N1112	1028230
				PNP	CS84-P1112	1028226
60 mm	± 9 mm	13 mm x 13 mm	-	NPN	CS84-N3612	1028231
				PNP	CS84-P3612	1028227

¹⁾ From front edge of lens.

Recommended accessories

Name	Connector type	Enclosure rating	Flying leads	Sheath material	Cable length	Model name	Part no.
Connector M12, 8-pin	Cable socket	IP 67	Straight	PVC	2 m	DOL-1208-G02MA	6020633
			Angled			DOL-1208-W02MA	6020992



Additional information

www.mysick.com/en/UF

At a glance

- Detection of transparent, opaque or printed labels
- Unaffected by metallic foils and labels
- Fast response time of 300 μ s
- Small, industry-standard housing
- 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
- Compact housing ensures space-saving installation
- The aluminum housing meets all requirements for use in harsh industrial conditions
- Ultrasonic technology prevents false detection, which may be caused by ambient light or shiny surfaces

E

Ordering information

Fork width	Fork depth	Switching output	Connection type	Model name	Part no.
3 mm	69 mm	PNP/NPN	Connector M8, 4-pin	UF3-70B410	6034888

Recommended accessories

Name	Connector type	Enclosure rating	Flying leads	Sheath material	Cable length	Model name	Part no.
Connector M8, 4-pin	Cable socket	IP 67	Straight	PVC	2 m	DOL-0804-G02M	6009870
			Angled			DOL-0804-W02M	6009871



Additional information

www.mysick.com/en/WF

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

E

Ordering information

Other models available at www.mysick.com/en/WF

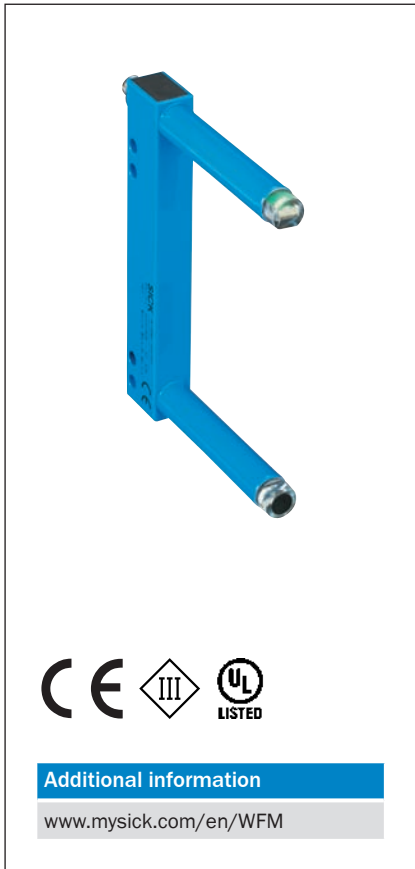
- **Switching output:** PNP/NPN
- **MDO**¹⁾: 0.2 mm

Fork width	Fork depth	Adjustment	Model name	Part no.
2 mm	42 mm	Manual (“+”/“-” button)	WF2-40B410	6028428
		Teach-in	WF2-40B416	6028450
	59 mm	Manual (“+”/“-” button)	WF2-60B410	6028436
		Teach-in	WF2-60B416	6028457
5 mm	42 mm	Manual (“+”/“-” button)	WF5-40B410	6028429
		Teach-in	WF5-40B416	6028451
30 mm	42 mm	Manual (“+”/“-” button)	WF30-40B410	6028431
		Teach-in	WF30-40B416	6028453
	59 mm	Manual (“+”/“-” button)	WF30-60B410	6028439
		Teach-in	WF30-60B416	6028460
80 mm	42 mm	Manual (“+”/“-” button)	WF80-40B410	6028433
		Teach-in	WF80-40B416	6028455

¹⁾ Minimum detectable object.

Recommended accessories

Name	Connector type	Enclosure rating	Flying leads	Sheath material	Cable length	Model name	Part no.
Connector M8, 4-pin	Female connector	IP 67	Straight	PVC	2 m	DOL-0804-G02M	6009870
			Angled			DOL-0804-W02M	6009871



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

E

Ordering information

Other models available at www.mysick.com/en/WFM

- **MDO** ¹⁾: 0.8 mm
- **Connection type**: Connector M8, 3-pin

Fork width	Fork depth	Switching output	Switching function	Model name	Part no.
30 mm	42 mm	PNP	Dark-switching	WFM30-40P321	6037819
			Light-switching	WFM30-40P311	6037820
50 mm	60 mm	NPN	Dark-switching	WFM30-40N321	6037821
			Light-switching	WFM50-60P321	6037824
80 mm	60 mm	PNP	Dark-switching	WFM50-60P311	6037825
			Light-switching	WFM50-60N321	6037826
120 mm	124 mm	NPN	Dark-switching	WFM80-60P321	6037828
			Light-switching	WFM80-60P311	6037829
120 mm	124 mm	PNP	Dark-switching	WFM80-60N321	6037830
			Light-switching	WFM120-120P321	6037832
120 mm	124 mm	NPN	Dark-switching	WFM120-120P311	6037833
			Light-switching	WFM120-120N321	6037834

¹⁾ Minimum detectable object.

Recommended accessories

Name	Connector type	Enclosure rating	Flying leads	Sheath material	Cable length	Model name	Part no.
Connector M8, 3-pin	Female connector	IP 67	Straight	PVC	2 m	DOL-0803-G02M	6010785
			Angled			DOL-0803-W02M	6008489

The most distance measurement solutions for measuring, detecting and positioning



F



Distance sensors






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.



Distance sensors

	Dx50 F-2 Measuring distances – reliable, precise and versatile
	OD Value. F-3 Simply accurate measurement
	UM30 F-4 UM30 – the universal application solver
	UC4 F-6 UC4 – small, precise, ultrasonic
	UC12. F-7 New technology housed in an industry-proven design



Additional information

www.mysick.com/en/Dx50

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 $-30\text{ }^{\circ}\text{C}$ to $+65\text{ }^{\circ}\text{C}$

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 $-30\text{ }^{\circ}\text{C}$ to $+65\text{ }^{\circ}\text{C}$ allows for outdoor use without additional cooling or heating
- Up to 40 klx ambient light immunity – allows for use in optically challenging environments
- Low to reasonable investment costs and high to very high performance levels ensure short return on investment

Ordering information

Other models available at www.mysick.com/en/Dx50

Measuring range	Repeatability ¹⁾	Response time ¹⁾	Laser protection class	Switching outputs (max. output current) ²⁾	Model name	Part no.
200 m ... 10,000 mm (90% remission)	5 mm / 2.5 mm	20 ms / 30 ms	2 (EN 60 825-1)	1 x PNP (100 mA) ³⁾	DT50-P1113	1044369
				1 x NPN (100 mA) ⁴⁾	DT50-N1113	1047396
			1 (EN 60 825-1)	1 x PNP (100 mA) ³⁾	DT50-P1123	1047118
			1 x NPN (100 mA) ⁴⁾	DT50-N1123	1047397	
		10 ms / 50 ms	2 (EN 60 825-1)	2 x PNP (100 mA) ³⁾	DS50-P1112	1047402
				2 x NPN (100 mA) ⁴⁾	DS50-N1112	1047404
		20 ms / 100 ms	1 (EN 60 825-1)	2 x PNP (100 mA) ³⁾	DS50-P1122	1047405
				2 x NPN (100 mA) ⁴⁾	DS50-N1122	1047406
200 mm ... 50,000 mm (on Diamond Grade)	3 mm / 2 mm	15 ms / 30 ms	1 (EN 60 825-1)	1 x PNP (100 mA) ³⁾	DL50-P1123	1047361
				1 x NPN (100 mA) ⁴⁾	DL50-N1123	1047401

¹⁾ Dependent on the set averaging: fast/slow. ²⁾ Output Q short-circuit protected.

³⁾ PNP: High = $V_s - (< 2.5\text{ V})$; Low = 0 V. ⁴⁾ NPN: High = $< 2.5\text{ V}$; Low = V_s .

Recommended accessories

Name	Material	Model name	Part no.
Weather hood	-	OBW-KHS-M02	2050205
Dx50 mounting bracket	Steel, zinc coated	BEF-WN-DX50	2048370
Mounting bracket for weather hood		BEF-WN-OBW	2023251
Reflector	-	PL240DG	1017910



Additional information

www.mysick.com/en/OD_Value

At a glance

- Several measurement ranges from 26 mm ... 34 mm to 100 mm ... 400 mm
- CMOS receiving element for measurement independent of surface, brightness or color
- Fast setup, LED-based user interface
- Wide range of models and four different output styles
- Safe, Class II 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 cost-effective
- Minimal space requirements and less wiring due to its compact, stand-alone design
- Many measurement ranges and output interfaces make it ideal for cost-effective integration into any production environment – ideal for OEMs
- 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 without the need for recalibration
- Wear and damage-free inspection, due to non-contact measurement

Ordering information

 Other models available at www.mysick.com/en/OD_Value

Measuring range 6% ... 90% remission	Reproducibility 6% ... 90% remission ¹⁾	Inputs and outputs	Data interfaces	Model name	Part no.
26 mm ... 34 mm	6 µm	PNP	-	OD2-P30W04I0	6036580
		NPN		OD2-N30W04I0	6036572
40 mm ... 60 mm	15 µm	PNP		OD2-P50W10I0	6036597
		NPN		OD2-N50W10I0	6036588
65 mm ... 105 mm	30 µm	PNP		OD2-P85W20I0	6036613
		NPN		OD2-N85W20I0	6036605
60 mm ... 180 mm	90 µm	PNP		OD2-P120W60I0	6036629
		NPN		OD2-N120W60I0	6036621
100 mm ... 400 mm	225 µm	PNP		OD2-P250W150I0	6036645
		NPN		OD2-N250W150I0	6036637
		PNP		RS-422 OD2-P250W150A2	6036644

¹⁾ At set averaging medium and constant conditions. When calibrated the application regularly.

Recommended accessories

Name	Connector type	Enclosure rating	Flying leads	Sheath material	Cable length	Model name	Part no.
Connector M12, 8-pin	Female connector	IP 67	Straight	PVC	2 m	DOL-1208-G02MF	6020663
					5 m	DOL-1208-G05MF	6020664
				CuZn	-	DOS-1208-GA	6028369



At a glance

- Integrated time-of-flight technology detects objects such as glass, liquids and transparent foils, independent of color
- Display enables fast and flexible sensor adjustment
- Immune to dust, dirt and fog
- Available with combined analog and digital outputs
- Operating range up to 6,000 mm
- Synchronization and multiplexing
- Adjustable range and detection area
- 3 operation modes: energetic, window, reflection

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
- Reflection mode enables detection of any object between the sensor and a taught background

F

Ordering information

Other models available at www.mysick.com/en/UM30

- **Repeatability:** ± 0.15 % (Referring to current measurement value.)

Limiting range	Response time	Analog current outputs (max. load)	Analog voltage outputs (min. load)	Switching outputs (max. output current)	Model name	Part no.
350 mm	50 ms	- / 1 x 4 mA ... 20 mA (≤ 500 Ω) ^{1) 2)}	1 x 0 V ... 10 V (≥ 100 kΩ) / - ²⁾	-	UM30-211113	6036916
				1 x PNP (200 mA) ³⁾⁴⁾	UM30-211118	6036921
		-	-	2 x PNP (200 mA) ³⁾⁴⁾	UM30-211112	6037664
				2 x NPN (200 mA) ³⁾⁵⁾	UM30-211114	6037674
600 mm	70 ms	- / 1 x 4 mA ... 20 mA (≤ 500 Ω) ^{1) 2)}	1 x 0 V ... 10 V (≥ 100 kΩ) / - ²⁾	-	UM30-212113	6036917
				1 x PNP (200 mA) ³⁾⁴⁾	UM30-212118	6036922
		-	-	2 x PNP (200 mA) ³⁾⁴⁾	UM30-212112	6037665
				2 x NPN (200 mA) ³⁾⁵⁾	UM30-212114	6037675
2,000 mm	110 ms	- / 1 x 4 mA ... 20 mA (≤ 500 Ω) ^{1) 2)}	1 x 0 V ... 10 V (≥ 100 kΩ) / - ²⁾	-	UM30-213113	6036918
				1 x PNP (200 mA) ³⁾⁴⁾	UM30-213118	6036923
		-	-	2 x PNP (200 mA) ³⁾⁴⁾	UM30-213112	6037666
				2 x NPN (200 mA) ³⁾⁵⁾	UM30-213114	6037676

¹⁾ For Vs ≤ 20 V max. load = 100 Ω.

²⁾ Automatic selection of analog current or voltage output dependent on load.

³⁾ Output Q short-circuit protected.

⁴⁾ PNP: HIGH = Vs - (< 2 V), LOW = 0 V.

⁵⁾ NPN: HIGH = < 2 V, LOW = Vs.

Limiting range	Response time	Analog current outputs (max. load)	Analog voltage outputs (min. load)	Switching outputs (max. output current)	Model name	Part no.
5,000 mm	180 ms	- / 1 x 4 mA ... 20 mA (≤ 500 Ω) ^{1) 2)}	1 x 0 V ... 10 V (≥ 100 kΩ) / - ²⁾	-	UM30-214113	6036919
				1 x PNP (200 mA) ³⁾⁴⁾	UM30-214118	6036924
		-	-	2 x PNP (200 mA) ³⁾⁴⁾	UM30-214112	6037667
				2 x NPN (200 mA) ³⁾⁵⁾	UM30-214114	6037677
8,000 mm	240 ms	- / 1 x 4 mA ... 20 mA (≤ 500 Ω) ^{1) 2)}	1 x 0 V ... 10 V (≥ 100 kΩ) / - ²⁾	-	UM30-215113	6036920
				1 x PNP (200 mA) ³⁾⁴⁾	UM30-215118	6036925
		-	-	2 x PNP (200 mA) ³⁾⁴⁾	UM30-215112	6037668
				2 x NPN (200 mA) ³⁾⁵⁾	UM30-215114	6037678

¹⁾ For Vs ≤ 20 V max. load = 100 Ω.

²⁾ Automatic selection of analog current or voltage output dependent on load.

³⁾ Output Q short-circuit protected.

⁴⁾ PNP: HIGH = Vs - (< 2 V), LOW = 0 V.

⁵⁾ NPN: HIGH = < 2 V, LOW = Vs.

Recommended accessories

Name	Connector type	Enclosure rating	Flying leads	Sheath material	Material	Cable length	Model name	Part no.		
Clamp, rotatable	-	-	-	-	-	-	BEF-HA-M30A	5311527		
							BEF-HA-M30R	5311528		
Mounting bracket			-	-	-	-	Steel, zinc coated	-	BEF-WG-M30	5321871
							Steel, zinc coated	-	BEF-WN-M30	5308445
Installation adapter, G 1.5 inches	-	-	-	-	Plastic (POM)	-	BEF-EA-CM30	2043770		
Connector M12, 5-pin	Female connector	IP 67	Straight	PVC	-	2 m	DOL-1205-G02M	6008899		
		IP 68		PUR halogen free	-	2 m	DOL-1205-G02MC	6025906		
		IP 67		PVC	-	5 m	DOL-1205-G05M	6009868		
		IP 68		PUR halogen free	-	5 m	DOL-1205-G05MC	6025907		





Additional information

www.mysick.com/en/UC4

At a glance

- Integrated time-of-flight technology detects objects such as glass, liquids and transparent foils, independent of color
- Proximity, window and reflector modes
- 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

F

Ordering information

Other models available at www.mysick.com/en/UC4

- **Repeatability:** $\pm 0.15\%$ (Referring to current measurement value)
- **Response time:** 30 ms

Limiting range	Switching outputs (max. output current)	Model name	Part no.
150 mm	1 x PNP (200 mA) ¹⁾²⁾	UC4-11341	6034667
	1 x NPN (200 mA) ¹⁾³⁾	UC4-11345	6034668
250 mm	1 x PNP (200 mA) ¹⁾²⁾	UC4-13341	6034669
	1 x NPN (200 mA) ¹⁾³⁾	UC4-13345	6034670

¹⁾ Output Q short-circuit protected. ²⁾ PNP: HIGH = Vs - (< 2 V), LOW = 0 V. ³⁾ NPN: HIGH = < 2 V, LOW = Vs.

Recommended accessories

Name	Description	Connector type	Enclosure rating	Flying leads	Sheath material	Material	Cable length	Model name	Part no.
Articulated mounting	-	-	-	-	-	Plastic	-	BEF-GH-MINI01	2023160
Universal clamp	Plate H for universal clamp	-	-	-	-	Steel, zinc coated	-	BEF-KHS-H01	2022465
Connector M8, 3-pin	-	Female connector	IP 67	Straight	PVC	-	2 m	DOL-0803-G02M	6010785
					PUR halogen free	-	2 m	DOL-0803-G02MC	6025888
					PVC	-	5 m	DOL-0803-G05M	6022009
					PUR halogen free	-	5 m	DOL-0803-G05MC	6025889



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
- One PNP/NPN switching output
- Excellent background suppression
- Standard proximity, window and reflection mode

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 sensor failure, reducing faulty production results

Ordering information

Other models available at www.mysick.com/en/UC12

- **Repeatability:** ± 0.15 % (Referring to current measurement value)
- **Response time:** 30 ms

Limiting range	Switching outputs (max. output current)	Model name	Part no.
250 mm	2 x PNP (500 mA) ¹⁾²⁾³⁾	UC12-11231	6029831
	2 x NPN (500 mA) ¹⁾²⁾⁴⁾	UC12-11235	6029833
350 mm	2 x PNP (500 mA) ¹⁾²⁾³⁾	UC12-12231	6029832
	2 x NPN (500 mA) ¹⁾²⁾⁴⁾	UC12-12235	6029834

¹⁾ Output Q short-circuit protected. ²⁾ Complementary switching outputs (Q, /Q).

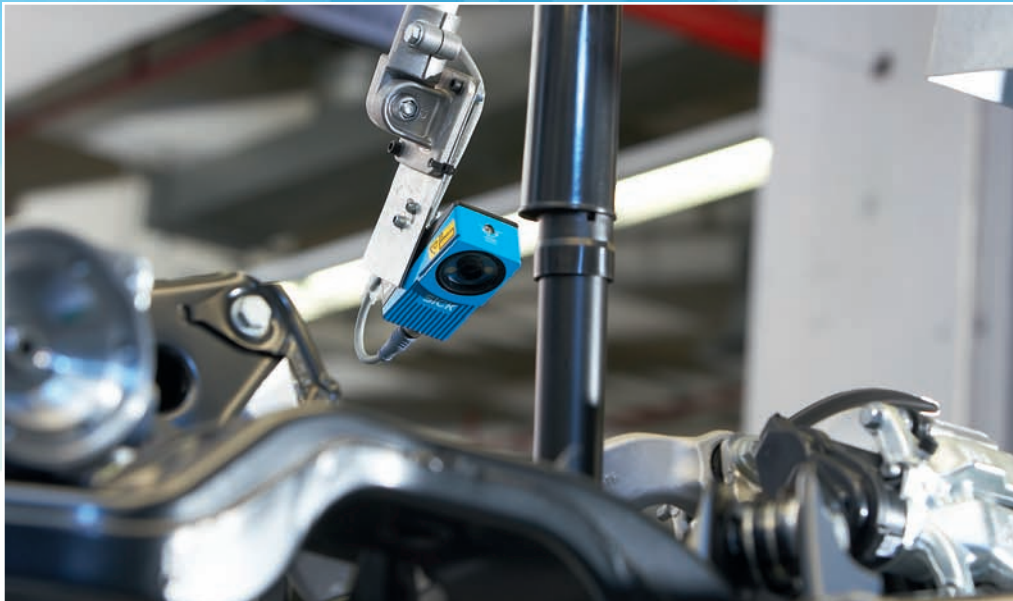
³⁾ PNP: HIGH = Vs - (< 2 V), LOW = 0 V. ⁴⁾ NPN: HIGH = < 2 V, LOW = Vs.

Recommended accessories

Name	Description	Connector type	Enclosure rating	Flying leads	Sheath material	Material	Cable length	Model name	Part no.
Double clamp	-	-	-	-	-	Steel, zinc coated	-	BEF-DKH-W12	2013947
Universal clamp	Plate D for universal clamp	-	-	-	-	Steel, zinc coated	-	BEF-KHS-D01	2022461
Connector M12, 4-pin	-	Cable socket	IP 67	Straight	PVC	-	2 m	DOL-1204-G02M	6009382
			IP 68		Halogen-free PUR			DOL-1204-G02MC	6025900
			IP 67		PVC		5 m	DOL-1204-G05M	6009866
			IP 68		Halogen-free PUR			DOL-1204-G05MC	6025901



A new dimension in vision



G



Vision

Vision replaces or complements manual inspection and measurement tasks. Our vision cameras can be used to solve a wide range of applications where there is a need to measure, locate, inspect and identify.

We provide a full range of vision products from easy-to-use vision sensors, flexible stand-alone smart cameras to high speed 3D cameras including accessories.

Our vision products are built for industrial environment, carefully designed with SICK's experience of industrial sensors.



Vision



Inspector. **G-2**
An intelligent vision solution in an easy-to-use sensor package!





At a glance

- High-speed part inspection
- Robust pattern match to locate part independent of position, rotation and scale
- Multi-reference object teaching and multi-feature inspections
- Unique, homogeneous dome illumination or high power ring light
- Easy-to-use step-by-step configuration in PC including emulator
- Log, statistics and record
- Industrial Ethernet
- Large selection of adjustments and accessories

Your benefits

- The high-speed part inspection ensures you quality assurance without production overhead
- The robust pattern match algorithm guarantees high quality result even at your toughest production conditions
- The unique, homogenous dome illumination performs perfect result even for glossy objects which give you a compact solution
- The easy-to-use configuration in SOPAS, including emulator for offline configuration and testing, will reduce downtimes in production to a minimum
- The included Industrial Ethernet for configuring and monitoring over network will reduce installation complexity and enhance flexibility in the production line
- The large selection of adjustments and accessories makes the Inspector the excellent choice for your production plant with needs for a variety of application tasks

Ordering information

Other models available at www.mysick.com/en/Inspector

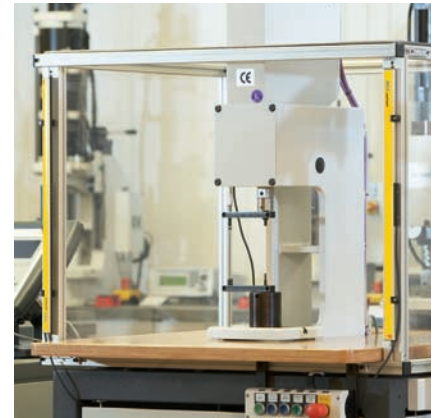
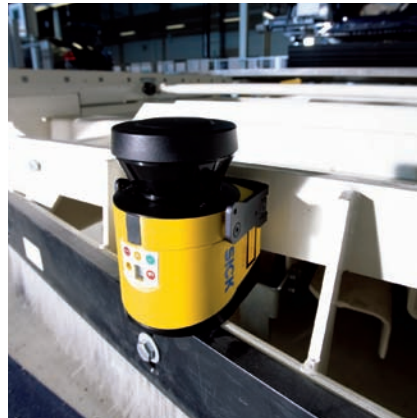
Product name	Field of view internal illumination	Light source	Task	Optics	Model name	Part no.
Inspector I10 Standard	20 x 20 mm ² ... 72 x 72 mm ²	White ring light	Inspect, locate	Fixed	VSPI-1R111	1042779
Inspector I40 Flex	22 x 15 mm ² ... 79 x 58 mm ²				VSPI-4F2111	1047913
Inspector I40-LUT Flex		UV ring light	Position	Exchangeable	VSPI-4F2311	1050694
Inspector P30 Flex	20 x 20 mm ² ... 72 x 72 mm ²	White ring light			VSPP-3F1122	1051982

Recommended accessories

Brief description	Model name	Part no.
LCD, back light MTBF 30,000 h, display images, batch switching, display statistics	VSPV-22222	2057556
Cable for power supply and I/O, M12, 12-pin, 5 m	DOL-1212-G05MAS01	6036556
Dome accessories for Inspector Flex house. Replaces the front screen on Inspector Flex and creates even and homogeneous illumination.	Inspector Flex Dome	2050678
Color filter for Inspector Flex house. Color = blue (468 ± 62 nm)	Inspector Flex blue color filter	2050676
Color filter for Inspector Flex house. Color = green (544 ± 53 nm)	Inspector Flex green color filter	2050677
Color filter for Inspector Flex house. Color = red (> 548 nm)	Inspector Flex red color filter	2050675
5 m connection cable, straight, Ethernet patch cable, M12, 4-pin plug on RJ45 plug	SSL-2J04-G05ME	6035389
Exchangeable lens f 10 mm	Exchangeable lens	2049415
Exchangeable lens f 16 mm	Exchangeable lens	2049418
Exchangeable lens f 6 mm	Exchangeable lens	2049668



Optical protection – remove the barrier to greater productivity



Opto-electronic protective devices






Opto-electronic protective devices from SICK are the first choice for maximum machine and system productivity.






Unlike fences and doors, they are not limiting during handling or material transport and allow a better view into the machine room.

SICK's broad portfolio comprehensively covers the requirements of hazardous point protection, access protection, and hazardous area protection. The SICK-specific interface (EFI) offers additional process optimization.

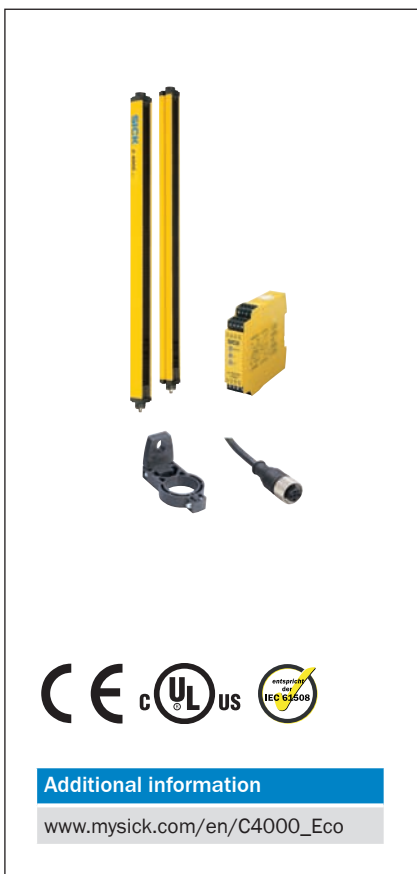


Opto-electronic protective devices

	C4000 Eco H-2 Economically, cost effective point-of-operation protection
	miniTwin H-4 Minivation: The smallest light curtain in the world!
	C2000 H-6 Cost-effective, compact and versatile
	V300 Work Station Extended H-7 Perfect protection with minimal space requirements
	M2000 H-8 Economy and multisided in a modular concept

	M4000 H-9 Economy and efficiency without compromising function and design
	L2000 H-10 Easy to integrate into a machine and controller even under extreme application conditions
	L4000 H-11 Easy to integrate into a machine and controller even under extreme application conditions
	S300 H-12 Compact, economic and flexible
	S3000 H-13 Powerful, reliable and vigilant in any case





At a glance

- Set of safety light curtain: a sender and a receiver unit, including connecting cables, mounting kit and UE48 safety relay
- PL e (EN ISO 13849-1) for complete set
- Light curtain resolution of 14 or 30 mm
- Available for protective field heights of 300 to 1800 mm
- Suitable for applications with or without restart interlock/external device monitoring

Your benefits

- Maximum availability due to interference resistant and robust safety light curtain – even under harsh industrial conditions
- Time-saving alignment and diagnostics by means of 7-segment display
- Cost-effective: pre-assembled M12 x 5 cables
- Optimized cabling due to smart accessories, e.g. T-distributor with just one cable to the control cabinet

Ordering information

Other models available at www.mysick.com/en/C4000_Eco

- Type: Type 4 (according to IEC 61496)

Resolution	Scanning range	Protective field height	Model name	Part no.
14 mm	0 ... 2.5 m	300 mm	C4000 Compact package 01	1040333
		450 mm	C4000 Compact package 02	1040334
		600 mm	C4000 Compact package 03	1040335
		750 mm	C4000 Compact package 04	1040336
		900 mm	C4000 Compact package 05	1040337
		1,050 mm	C4000 Compact package 06	1040338
		1,200 mm	C4000 Compact package 07	1040339
		1,350 mm	C4000 Compact package 08	1040340
		1,500 mm	C4000 Compact package 09	1040341
		1,650 mm	C4000 Compact package 10	1040342
		1,800 mm	C4000 Compact package 11	1040343



Resolution	Scanning range	Protective field height	Model name	Part no.
14 mm	1 ... 5 m	300 mm	C4000 Compact package 12	1040344
		450 mm	C4000 Compact package 13	1040345
		600 mm	C4000 Compact package 14	1040346
		750 mm	C4000 Compact package 15	1040347
		900 mm	C4000 Compact package 16	1040348
		1,050 mm	C4000 Compact package 17	1040349
		1,200 mm	C4000 Compact package 18	1040350
		1,350 mm	C4000 Compact package 19	1040351
		1,500 mm	C4000 Compact package 20	1040352
		1,650 mm	C4000 Compact package 21	1040353
		1,800 mm	C4000 Compact package 22	1040354
30 mm	0 ... 6 m	300 mm	C4000 Compact package 23	1040355
		450 mm	C4000 Compact package 24	1040356
		600 mm	C4000 Compact package 25	1040357
		750 mm	C4000 Compact package 26	1040358
		900 mm	C4000 Compact package 27	1040359
		1,050 mm	C4000 Compact package 28	1040360
		1,200 mm	C4000 Compact package 29	1040361
		1,350 mm	C4000 Compact package 30	1040362
		1,500 mm	C4000 Compact package 31	1040363
		1,650 mm	C4000 Compact package 32	1040364
		1,800 mm	C4000 Compact package 33	1040365

Accessories included in delivery

Description	Connection type	Direction of cable outlet	Cable length	Comment	Packing unit	Model name	Part no.
Connecting cable	Socket M12 x 5	Straight	5 m	-	2	DOL-1205-G05M	6009868
Mounting kit 2, rotatable, swivel mount	-	-	-	For all protective field heights of C4000 in the large housing	1	BEF-2SMMEAKU4	2019659
Safety switching device	-	-	-	-	1	UE48-20S2D2	6024915



At a glance

- Compact device with no dead zones
- Cascadable twin stick design- sender and receiver in a single housing
- Alignment and diagnostics via color LEDs
- Automatic beam coding
- External device monitoring (EDM) and reset function (RES)
- Intelligent, software-free configuration
- M12, 5-pin connection device

Your benefits

- It's 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 guided by a LED-display
- 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

Ordering information

Other models available at www.mysick.com/products

miniTwin4

- **Type:** Type 4 (according to IEC 61496)

Resolution	Scanning range	Protective field height	Cable length	Model name	Part no.
14 mm	0 ... 4 m	120 mm	160 mm	C4MT-01214ABB03BB0	1206951
		180 mm	160 mm	C4MT-01814ABB03BB0	1206945
		240 mm	350 mm	C4MT-02414ABB03DB0	1206954
		300 mm	350 mm	C4MT-03014ABB03DB0	1206953
		360 mm	350 mm	C4MT-03614ABB03DB0	1206955
		480 mm	350 mm	C4MT-04814ABB03DB0	1206957
34 mm		600 mm	700 mm	C4MT-06014ABB03FB0	1206959
		300 mm	350 mm	C4MT-03034ABB03DB0	1207337
		420 mm	350 mm	C4MT-04234ABB03DB0	1207339
		600 mm	700 mm	C4MT-06034ABB03FB0	1207342
		900 mm	700 mm	C4MT-09034ABB03FB0	1207347
		1,200 mm	700 mm	C4MT-12034ABB03FB0	1207169

H

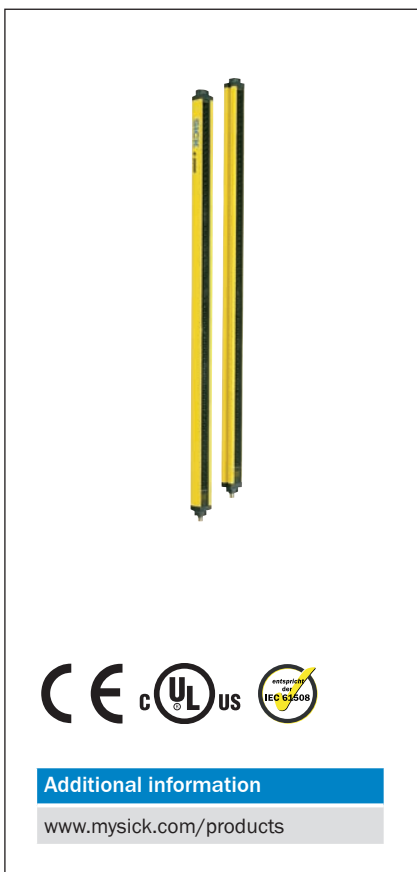
miniTwin2

- **Type:** Type 2 (according to IEC 61496)

Resolution	Scanning range	Protective field height	Cable length	Model name	Part no.
14 mm	0 ... 6 m	120 mm	160 mm	C2MT-01214BBC03BB0	1207923
		180 mm	160 mm	C2MT-01814BBC03BB0	1207924
		240 mm	350 mm	C2MT-02414BBC03DB0	1207925
		300 mm	350 mm	C2MT-03014BBC03DB0	1207926
		360 mm	350 mm	C2MT-03614BBC03DB0	1207927
		420 mm	350 mm	C2MT-04214BBC03DB0	1207928
		480 mm	350 mm	C2MT-04814BBC03DB0	1207929
		540 mm	350 mm	C2MT-05414BBC03DB0	1207930
		600 mm	700 mm	C2MT-06014BBC03FB0	1207931
34 mm		300 mm	350 mm	C2MT-03034BBC03DB0	1207964
		360 mm	350 mm	C2MT-03634BBC03DB0	1207965
		420 mm	350 mm	C2MT-04234BBC03DB0	1207966
		480 mm	350 mm	C2MT-04834BBC03DB0	1207967
		600 mm	700 mm	C2MT-06034BBC03FB0	1207969
		720 mm	700 mm	C2MT-07234BBC03FB0	1207971
		900 mm	700 mm	C2MT-09034BBC03FB0	1207974
		1,020 mm	700 mm	C2MT-10234BBC03FB0	1207976
		1,200 mm	700 mm	C2MT-12034BBC03FB0	1207979

Recommended accessories

Description	Connection type	Direction of cable outlet	Cable length	Model name	Part no.
Connecting cable	Socket M12 x 5	Straight	5 m	DOL-1205-G05M	6009868
			10 m	DOL-1205-G10M	6010544



At a glance

- Approved 7-segment display for diagnostics
- Robust housing with an industrial design
- Impact and scratch-resistant front screen
- Standardized and a wide range of connection and mounting accessories
- Cascadable up to three systems
- External device monitoring (EDM) and restart interlock (RES)
- Special variants for wet areas available
- Beam coding for correct system allocation

Your benefits

- Customer-friendly interfaces and status display facilitate commissioning and maintenance
- High-quality industrial design for reliable and durable continuous operation
- 7-segment display saves time during alignment and diagnostics
- High level of resistance and robust design for high machine availability, even under special ambient conditions
- A multitude of intelligent mounting adapters enables flexible installation
- Increased flexibility and minimized wiring costs by cascading the devices
- Integrated additional functions: Reset and EDM for short cable distances to connect with cost-optimized, positively guided relays

Ordering information

Other models available at www.mysick.com/products

- Type: Type 2 (according to IEC 61496)

Resolution	Scanning range	Protective field height	Receiver		Sender	
			Model name	Part no.	Model name	Part no.
20 mm	0 ... 6 m	300 mm	C20E-030302A11	1016449	C20S-030102A11	1016448
		450 mm	C20E-045302A11	1016459	C20S-045102A11	1016573
		600 mm	C20E-060302A11	1016575	C20S-060102A11	1016574
30 mm		300 mm	C20E-030303A11	1016569	C20S-030103A11	1016568
		450 mm	C20E-045303A11	1016455	C20S-045103A11	1016454
		600 mm	C20E-060303A11	1016478	C20S-060103A11	1016477
		750 mm	C20E-075303A11	1016480	C20S-075103A11	1016479
40 mm		900 mm	C20E-090303A11	1016482	C20S-090103A11	1016481
		600 mm	C20E-060304A11	1016577	C20S-060104A11	1016576
	750 mm	C20E-075304A11	1016582	C20S-075104A11	1016581	
		900 mm	C20E-090304A11	1016587	C20S-090104A11	1016586

Recommended accessories

Description	Connection type	Direction of cable outlet	Cable length	Packing unit	Model name	Part no.
Connecting cable	M12 x 7 + FE	Straight	5 m	1	DOL-127SG05ME25KM0	6020354
			10 m	1	DOL-127SG10ME25KM0	6020352
Mounting systems	-	-	-	4	BEF-2SMKEAKU4	2019649



At a glance

- 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
- SIL2 (IEC 61508, EN 62061) and PL d (EN ISO 13849)

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
- Universal and flexible: increased machine design flexibility
- Reduced storage, logistics and commissioning costs
- No expert knowledge for commissioning required
- High machine availability and simple maintenance

Ordering information

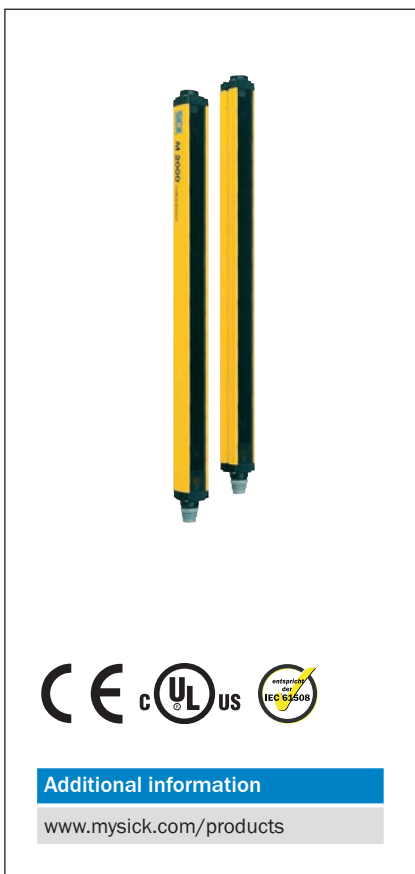
Other models available at www.mysick.com/en/V300_Work_Station_Extended

Model name	Part no.
V30W-0101000	1041542

Recommended accessories

Description	Connection type	Direction of cable outlet	Cable length	Model name	Part no.
Connecting cable	M12 x 7 + FE	Straight	5 m	DOL-127SG05ME25KM0	6020354
			2.5 m	DOL-127SG2M5E25KM0	6020537
			7.5 m	DOL-127SG7M5E25KM0	6020353
Resolution sets, reflective tape 2 x 1.0 m with test rod, 20 mm diameter	-	-	-	Resolution set 20 mm	2051336
Resolution sets, reflective tape 2 x 1.2 m with test rod, 24 mm diameter	-	-	-	Resolution set 24 mm	2051338
Resolution sets, reflective tape 2 x 1.5 m with test rod, 30 mm diameter	-	-	-	Resolution set 30 mm	2051339
Mounting systems	-	-	-	Mounting kit	2045375





At a glance

- Wide scanning range up to 70 m
- External device monitoring (EDM) and restart interlock (RES)
- Robust housing with an industrial design
- Internal self-testing configurable without PC
- Approved 7-segment display for diagnostics
- Beam coding for correct system allocation
- Active/passive variants for minimized wiring costs
- Special IP-69K variants for wet areas

Your benefits

- High-quality industrial design for reliable and durable continuous operation
- High level of resistance and robust design for high machine availability, even under special ambient conditions
- Customized protection field adaption with deflection mirror for reduced installation costs
- The wide scanning range spectrum allows the device to be standardized for the relevant application
- Customer-friendly interfaces and status display facilitate commissioning and maintenance
- Integrated additional functions: Reset and EDM for short cable distances to connect with cost-optimized, positively guided relays
- Economical active/passive variants minimize the wiring costs and required installation
- Special variants for wet areas available

Ordering information

Other models available at www.mysick.com/products

M2000 Standard

- **Type:** Type 2 (according to IEC 61496)

Number of beams	Beam separation or resolution	Scanning range	External device monitoring	Receiver		Sender	
				Model name	Part no.	Model name	Part no.
2	500 mm	0 ... 25 m	✓	M20E-02150A122	1018187	M20S-02150A122	1018186
3	400 mm			M20E-03140A122	1018189	M20S-03140A122	1018188
4	300 mm			M20E-04130A122	1018191	M20S-04130A122	1018190
2	500 mm			M20E-02250A122	1018175	M20S-02250A122	1018174
3	400 mm			M20E-03240A122	1018179	M20S-03240A122	1018178

M2000 A/P Standard

- **Type:** Type 2 (according to IEC 61496)

Number of beams	Beam separation or resolution	Scanning range	External device monitoring	Sender/receiver in a single housing		Mirror	
				Model name	Part no.	Model name	Part no.
1	500 mm	0 ... 6 m	✓	M20Z-02550A122	1018361	PSR01-1501	1016677

Recommended accessories

Description	Connection type	Cable length	Model name	Part no.
Mounting kit 2, rotatable, swivel mount	-	-	BEF-2SMMEAKU4	2019659
Connecting cable	M12 x 7 + FE	10 m	DOL-127SG10ME25KM0	6020352
Connecting cable		15 m	DOL-127SG15ME25KM0	6020872
Robust device column with two external mounting grooves	-	-	PU3H13-00000000	2045642
Laser alignment aid	-	-	AR60	1015741



At a glance

- Wide scanning range up to 70 m
- External device monitoring (EDM), restart interlock (RES) and application diagnostic output (ADO)
- Robust housing with three mounting grooves
- Simple device configuration and quick diagnostics
- Approved 7-segment display for diagnostics
- Beam coding for correct system allocation
- Laser alignment aid and LED optional integrated
- Active/passive variants for minimized wiring costs

Your benefits

- Wide scanning range spectrum provides standardizing one device for the relevant applications
- High level of resistance and robust design for high machine availability, even under special ambient conditions
- Mounting grooves on three housing sides ensure more flexibility during mounting and facilitate integration into the machine
- Customer-friendly interfaces and status display facilitate commissioning and maintenance
- Advanced variant: For 2- and 4-sensor muting, the on-site connection of the muting signals significantly minimizes wiring costs and simplifies commissioning and maintenance
- Economical active/passive variants minimize the wiring costs and required installation

Ordering information

Other models available at www.mysick.com/products

M4000 Standard

- **Type:** Type 4 (according to IEC 61496)

Number of beams	Beam separation	Scanning range	Receiver		Sender	
			Model name	Part no.	Model name	Part no.
2	500 mm	70 m	M40E-025000RR0	1200017	M40S-025000AR0	1200000
3	400 mm		M40E-034000RR0	1200020	M40S-034000AR0	1200003
4	300 mm		M40E-043000RR0	1200023	M40S-043000AR0	1200006

M4000 Standard A/P

- **Type:** Type 4 (according to IEC 61496)

Number of beams	Beam separation	Scanning range	Sender/receiver in a single housing		Mirror	
			Model name	Part no.	Model name	Part no.
2	500 mm	7.5 m	M40Z-025000RR0	1200120	PSD01-1501	1027906
4	300 mm	4.5 m	M40Z-043000TR0	1200123	PSD02-2301	1027908

Recommended accessories

Description	Connection type	Cable length	Model name	Part no.
Connecting cable	M12 x 7 + FE	5 m	DOL-127SG05ME25KM0	6020354
		10 m	DOL-127SG10ME25KM0	6020352
		15 m	DOL-127SG15ME25KM0	6020872
Mounting kit 12, rotatable, swivel mount (packing unit, 4 x)	-	-	BEF-2SMGEAKU4	2030510
Laser alignment aid	-	-	AR60	1015741
Device columns, robust device column with two external mounting grooves	-	-	PU3H13-00000000	2045642



At a glance

- Compact, different types
- Scanning ranges up to 60 m
- Universal use up to type 2, with safe control solutions from SICK
- Temperature range from -40 °C ... + 55 °C
- Enclosure rating IP 67
- 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

Ordering information

Other models available at www.mysick.com/en/L2000

- **Type:** Type 2 (according to EN 61496) ¹⁾

Scanning range	Optical axis	Housing material	Type of output	System part	Model name	Part no.
0 m ... 5 m	Radial	Metal	PNP, Q	Receiver	L21E-11MA1A	6034877
			–	Sender	L21S-11MA1A	6034876
0 m ... 16 m	Axial	Metal	PNP, Q	Receiver	L21E-21MA1A	6034875
			–	Sender	L21S-21MA1A	6034874

¹⁾ Only in combination with an appropriate test device, e.g. Flexi Classic, DeviceNet Safety.

Recommended accessories

Description	Model name	Part no.
Safety relay	UE10-30S3D0	6024918
Safety controller Flexi Classic main unit	UE410-MU3T5	6026136



Additional information

www.mysick.com/en/L4000

At a glance

- Small M18 sensors with ranges up to 10 m
- Compact M30 sensors with ranges up to 60 m
- Universal use up to Type 4, with safety control solutions from SICK
- Up to 8 sensors can be cascaded
- Narrow evaluation device (22.5 mm) with external device monitoring and restart interlock (EDM/RES)
- Temperature range from $-40\text{ }^{\circ}\text{C}$... $+55\text{ }^{\circ}\text{C}$
- Enclosure rating IP 67

Your benefits

- Easy integration due to small, compact versions with maximum range
- 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
- Directly connect to a safety controller – without a separate evaluation unit, reducing costs
- Straightforward configuration without a computer, only with the help of jumpers

Ordering information

Other models available at www.mysick.com/en/L4000

- **Type:** Type 4 (according to IEC 61496)

Scanning range	Optical axis	Housing material	Type of output	System part	Model name	Part no.
0 m ... 60 m	Axial	Metal	PNP, Q	Receiver	L40E-33MA2A	6027336
			-	Sender	L40S-33MA2A	6027335
-	-	-	-	Evaluation unit	UE401-A0010	6027343

Recommended accessories

Description	Model name	Part no.
Safety relay	UE10-30S3D0	6024918
Safety controller Flexi Classic main unit	UE410-MU3T5	6026136

H



At a glance

- Extremely compact design
- 1 freely configurable protective/warning field
- 2 m protective field range
- 270° scan angle
- Configuration memory in the system plug
- Vertical and horizontal safeguarding
- Selectable resolutions

Your benefits

- Compact design for easy integration
- Flexible safety solution for individual application integration
- Economical unbeatable, thanks to superior 270° scan angle
- A configuration memory ensures less downtime fast commissioning after devices are replaced
- Unbeatable flexibility when combined with safety controllers from SICK

Ordering information

Other models available at www.mysick.com/en/S300

Type	Protective field range	Model name	Part no.
S300 Standard	2 m	S30B-2011BA	1026820

Recommended accessories

Description	Connection type	Cable length	Assembly	Remark	Model name	Part no.
Connecting cable	-	By the meter	-	-	Connecting cable	6030795
Mounting brackets	-	-	-	-	Mounting kit 1a	2034324
			-	-	Mounting kit 1b	2034325
			Cross-wise adjustment possible	Only in conjunction with mounting kit 1a or 1b	Mounting kit 2	2039302
Mounting plate	-	-	Longitudinal adjustment possible	Only in conjunction with mounting kit 2	Mounting kit 3	2039303
System plug	Without cable	-	-	-	SX0B-A0000G	2032807
	Pre-assembled	5 m	-	-	SX0B-B1105G	2032859
		10 m	-	-	SX0B-B1110G	2032860
		20 m	-	-	SX0B-B1120G	2032861
Configuration connection cable	M8 × 4, SUB-D 9-pin	2 m	-	For the connection of the configuration connection to the serial interface of the PC	DSL-8D04G02M025KM1	6021195



At a glance

- Modular, exchangeable components
- Protective field range of 4 m, 5.5 m or 7 m
- Configuration memory
- Selectable resolutions
- Vertical and horizontal safeguarding
- 7-segment display
- External device monitoring (EDM) is integrated

Your benefits

- Easy installation and commissioning in a wide range of stationary and mobile applications
- Largest protective field range on the market increases application opportunities
- Fast commissioning after device replacement due to configuration memory stored in system plug
- Integration of safety laser scanners and control systems provides complete vehicle safeguarding – all from one source
- Safety laser scanner does not affect production throughput
- Decades of proven safety technology ensures maximum reliability and machine availability – even in harsh environments

Ordering information

Other models available at www.mysick.com/en/S3000

Type	System part	Protective field range	Model name	Part no.
S3000 Standard	Sensor head with I/O module	4 m	S30A-4011BA	1028934

Recommended accessories

Description	Connection type	Direction of cable outlet	Cable length	Assembly	Remark	Model name	Part no.
Mounting bracket	-	-	-	Non-adjustable	-	Mounting kit 1	2015623
				Longitudinal and cross-wise adjustment possible	Only in conjunction with mounting kit 1	Mounting kit 2	2015624
					Only in conjunction with mounting kit 1 and 2	Mounting kit 3	2015625
System plug	Without cable	Upwards	-	-	-	SX0A-A0000B	2023797
	Pre-assembled		5 m			SX0A-B0905B	2027170
			10 m			SX0A-B0910B	2027171
			20 m			SX0A-B0920B	2027814
Configuration connection cable	M8 × 4, SUB-D 9-pin	-	2 m	-	For the connection of the configuration connection to the serial interface of the PC	DSL-8D04G02M025KM1	6021195



Three product groups for reliable and intelligent safety solutions



Safety switches

Safety switches are encountered at many locations where safety is demanded for people and machinery. They are used for safeguarding 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.



Safety switches

	Electro-mechanical safety switches I-2 Proven monitoring – economical and reliable
	Non-contact safety switches I-3 Intelligent solutions – low wastage and low maintenance





At a glance

- Either plastic or metal housing
- Different actuators
- With cable entry glands or AS-Interface M12 connection (depending on variant)
- Slow action switching element or snap-action switch with up to four contacts

Your benefits

- Reliable and economical due to tailor-made designs
- Time saving by rapid mounting and simple operability
- Improved diagnostics due to additional signaling contacts
- Flexibly connectable due to variants with three cable entry glands
- High locking force offers machine reliability even when exposed to shock and vibration

Ordering information

Other models available at www.mysick.com/products

Electro-mechanical safety switches

System part	Locking type	Number of positive action N/C solenoid monitoring contacts	Number of N/O solenoid monitoring contacts	Door monitoring			Model name	Part no.
				Number of positive action N/C door monitoring contacts	Number of N/O door monitoring contacts	Number of N/C door monitoring contacts		
i10 Lock safety locking device	Electrical	2	1	0	0	1	i10-E0233 Lock	6022585
i12S safety switch with separate actuator	-	2	1	-	-	-	i12-SB213	6025059
i16S safety switch with separate actuator	-	1	1	-	-	-	i16-SA113	6025065
i17S safety switch with separate actuator	-	2	1	-	-	-	i17-SA213	6025067

Actuator

System part	Design	Actuation option	Actuator property	Min. door radius	Suitable for	Model name	Part no.
Actuator	Radial	Semiflexible	Door hinged on left/right	100 mm	i10 Lock	iE10-R2	5306529
	Straight	Rigid	-	1000 mm	i10 Lock	iE10-S1	5306527
	Radial	Semiflexible	-	60 mm	i12S	iE12-F1	5308842
	Straight	Rubber-mounted	-	150 mm	i12S	iE12-S1	5311131
	Straight	Rigid	-	175 mm	i16S	iE16-S1	5311128
	Straight	Rigid	Self ejecting against simple manipulation	175 mm	i17S	iE17-S1	5311130



At a glance

- Up to performance level PL e (EN ISO 13849)
- Three principles of operation for sensors: magnetic, inductive or transponder
- Block-shaped or cylindrical housing
- Direct connection to safe control solution (depending on variant).
- Response range of up to 19 mm
- Series connection (depending on variant)

Your benefits

- The right solution for each application due to a wide range of variants
- High level of tamper-proofing due to individually coded actuator (depending on type)
- High level of machine availability due to large door offset tolerances
- High level of machine availability due to resistance to shocks and vibrations
- No additional wiring - direct connection to the control
- Economical solution due to series connection of sensors
- Long service life due to low-wastage and low-maintenance design

Ordering information

Other models available at www.mysick.com/products

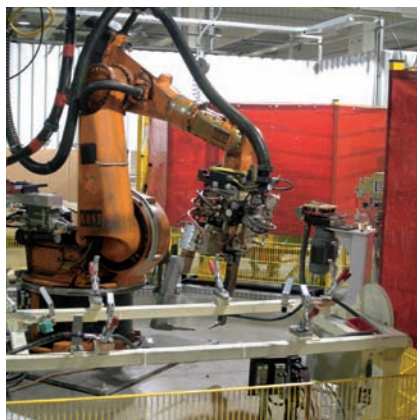
RE13/RE23

System part	Design	Connection type	Cable length	Safe switch-on distance S_{ao}	Model name	Part no.
Sensor and actuator	Cuboid	Cable	3 m	7 mm	RE13-DA03	6034333
		M8 plug connector, 4-pin	-	7 mm	RE13-DAC	6036769
				9 mm	RE23-DAC	6036927

IN4000 Direct

System part	Design	Connection type	Model name	Part no.
Evaluation unit and sensor	Cuboid	Connector	IN40-E0101K	6027388

Safe control solutions for intelligent machine designs



sens:Control – safe control solutions

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 man and machine.

J



sens:Control – safe control solutions



Flexi Soft J-2
Software programmable safety controller



UE10-2FG J-3
The ideal solution to integrate relay outputs



UE10-30S J-4
The extensive contact expansion



UE23-3MF J-5
Solution of connection for tactile safety switches and emergency stop pushbuttons



UE43-2MF J-6
The perfect monitoring of safety switches and emergency stop pushbuttons



UE48-20S J-7
The generalist with diagnostics





At a glance

- Modularly expandable (12 ... 144 inputs/outputs)
- Intuitive configuration software: easy operation, simulation mode, wiring diagrams, freely downloadable
- Configuration memory in the system plug
- Safely link up to four Flexi Soft safety controllers via EFI
- Integration into all common fieldbus systems
- Enhanced sensor functionalities via EFI interface
- 38 TÜV certified function blocks

Your benefits

- Prevention of redundant inputs and outputs saves money
- Fast commissioning via a system plug that saves and stores system configurations
- Less downtimes due to gateways, e.g., PROFINet I/O, PROFIBUS-DP, EtherCAT, CANopen, Modbus TCP, Ethernet (TCP/IP)
- Safe communication without additional hardware saves time, space and money
- Standard RS-232 diagnosis via the main module enables real-time diagnostics for quick commissioning, faster troubleshooting and reduced downtime
- Fast electronic installation via complete wiring diagram
- Simulation mode allows a user to verify the safety functions before installation
- Fast hardware selection by drag and drop from a list of simple to understand element icons

Ordering information

Other models available at www.mysick.com/en/Flexi_Soft

Number of EFI interfaces	Number of inputs	Connection type	Fieldbus	Model name	Part no.	
-	-	-	-	FX3-CPU000000	1043783	
2	-	-	-	FX3-CPU130002	1043784	
-	8 single-channel	Dual-level spring clamp terminals	-	FX3-XTI084002	1044125	
			-	FX3-XTDI80002	1044124	
	-	-	-	PROFIBUS DP	FX0-GPRO00000	1044075
				Modbus TCP	FX0-GMOD00000	1044073
				EtherNet/IP	FX0-GENT00000	1044072
				PROFINET IO	FX0-GPNT00000	1044074
				CANopen	FX0-GCAN04002	1044076
				EtherCAT	FX0-GETC00000	1051432

Recommended accessories

Description	Connection type	Cable length	Remark	Model name	Part no.
Connecting cable	-	By the meter	-	EFI connection cable	6029448
System plug	Screw terminals	-	-	FX3-MPL000001	1043700
Configuration connection cable	M8 x 4, SUB-D 9-pin	2 m	For the connection of the configuration connection to the serial interface of the PC	DSL-8D04G02M-025KM1	6021195
	Connector RS-232, USB	35 cm	-	Converter RS-232 to USB	6035396



Additional information

www.mysick.com/en/UE10-2FG

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 signal for external device monitoring (EDM)
- Screw type terminals or removable terminals

Your benefits

- Short safety distance for quick response time
- Minimizes required space in the control cabinet, solved by the small overall width
- Minimizes wiring effort for a fast and easy commissioning

Ordering information

Other models available at www.mysick.com/en/UE10-2FG

Connection type	Model name	Part no.
Screw-type terminals	UE10-2FG2D0	1043915
Plug-in terminals	UE10-2FG3D0	1043916



At a glance

- Ideal for applications with opto-electronic protective devices and safety controllers with OSSD outputs
- Evaluation unit for a safe processing of OSSD output signals
- 3 safety outputs, 1 application diagnostic output
- Fast tool-free mounting/disassembly thanks to removable terminals
- Feedback signal for external device monitoring (EDM)

Your benefits

- Offers all needed contact paths in a compact form
- Possibility of fast diagnostic via the status information
- Connects the advantages of classic relays and easy circuitry

Ordering information

Other models available at www.mysick.com/en/UE10-30S

Connection type	Model name	Part no.
Screw-type terminals	UE10-30S2D0	6024917
Plug-in terminals	UE10-30S3D0	6024918



Additional information

www.mysick.com/en/UE23-3MF

At a glance

- Ideal for the connection of emergency stop pushbuttons and safety switches
- 3 safety outputs, 1 application diagnostic output
- Combines the advantages of classic relays and easy circuitry
- Manual or automatic reset
- Coded version for all plug-in positions

Your benefits

- Offers all needed contact paths in a compact form
- Cost saving solution by an application orientated assembly of the module
- Possibility of fast diagnostic via the status information
- Fast tool-free exchange via coded removable terminals

Ordering information

Other models available at www.mysick.com/en/UE23-3MF

- Supply voltage: 24 V DC

Connection type	Model name	Part no.
Screw-type terminals	UE23-3MF2D2	6034595
Plug-in terminals	UE23-3MF2D2	6034598



At a glance

- Evaluation unit for emergency stop pushbuttons and safety switches
- Cross circuit detection and sequence monitoring for the dual-channel input signal
- Possibility of monitoring the discrepancy time
- 2 safety outputs, 1 application diagnostic output
- Combines the advantages of classic relays and easy circuitry
- Manual or automatic reset
- Coded version for all plug-in positions

Your benefits

- Complete monitoring and analysis of sensors
- The sequence monitoring facilitates the monitoring of non-contact safety switches
- Possibility of fast diagnostic via the status information
- Fast tool-free exchange via coded removable terminals

Ordering information

Other models available at www.mysick.com/en/UE43-2MF

- Supply voltage: 24 V AC, 24 V DC

Connection type	Model name	Part no.
Screw-type terminals	UE43-2MF2D2	6024893
Plug-in terminals	UE43-2MF3D2	6024894



At a glance

- Ideal for the evaluation of emergency stop pushbuttons, safety switches, safety light curtains, safety laser scanners and pressure sensitive mats
- Cross circuit detection and sequence monitoring at the dual-channel input signal
- 2 safety outputs, 1 application diagnostic output
- Manual or automatic reset
- Coded version for all plug-in positions

Your benefits

- One module for all common applications
- Complete monitoring and analysis of sensors
- The sequence monitoring takes over the evaluation of non-contact safety switches
- Possibility of fast diagnostic via the status information
- Fast tool-free exchange via coded removable terminals
- Combines the advantages of classic relays and easy circuitry

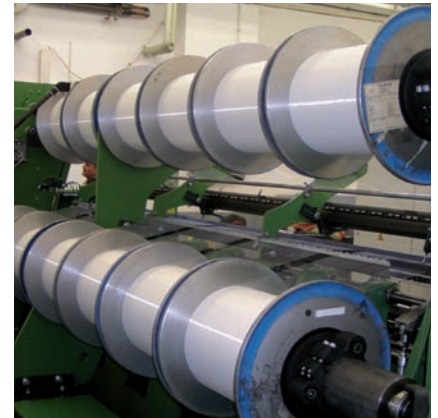
Ordering information

Other models available at www.mysick.com/en/UE48-20S

- Supply voltage: 24 V AC, 24 V DC

Connection type	Model name	Part no.
Screw-type terminals	UE48-20S2D2	6024915
Plug-in terminals	UE48-20S3D2	6024916

Perfect rotary and linear path measurement



Encoders

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 rpm, 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.



Encoders



DFS60 **K-2**
 Incremental encoder DFS60 – High-resolution, programmable encoder for heavy-duty application



BCG **K-3**
 Teach-in analogue wire draw encoder in the smallest design



AFS60 **K-4**
 Absolute encoder singleturn AFS60 - Precise, flexible, versatile



AFM60 **K-5**
 Absolute encoder multiturn AFM60 - Precise, flexible, versatile



DDS36 **K-6**
 Small-size incremental encoder





At a glance

- Programmable to accommodate 1 to 65,536 pulses per revolution (PPR), zero-pulse width and level of output signals
- Compact housing with 60 mm diameter
- 16 bit high resolution encoder family
- Universal pluggable cable outlet for radial or axial use
- Connector outlets M23 and M12 available
- Face mount and servo flange
- Hollow shaft up to 15 mm, 3/8" or isolated variants available
- Zero pulse teach possible

Your benefits

- Customer programmability reduces stocking costs and system downtime
- Pluggable cable outlet in radial or axial direction enables customized solutions with various cable lengths and cable-end connectors
- Excellent runout also at high operating speed
- Capable of meeting the requirements of applications needing a high resolution

Ordering information

Other models available at www.mysick.com/en/DFS60

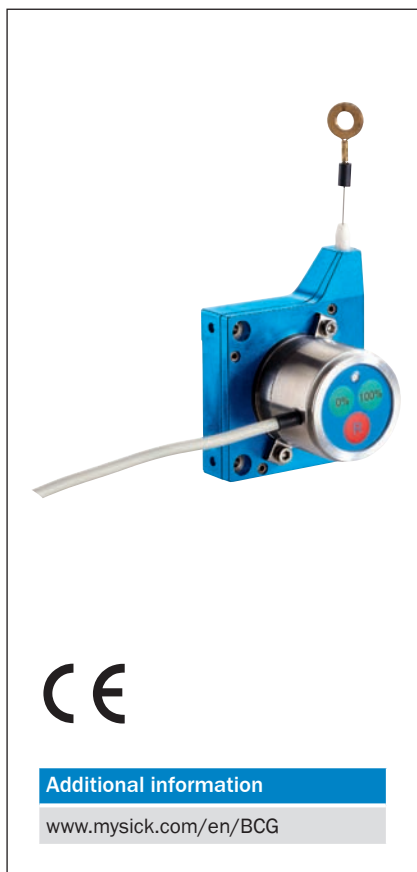
Mechanical interface	Connection type	Number of lines ¹⁾	Electrical interface ²⁾	Shaft diameter	Model name ³⁾	Part no.
Solid shaft, servo flange	Connector, M12, 8-pin, radial	1 ... 10,000	5 V ... 32 V, TTL/HTL programmable	6 mm x 10 mm	DFS60B-S1PC10000	1036756
Solid shaft, face mount flange				10 mm x 19 mm	DFS60B-S4PC10000	1036721
Blind hollow shaft				10 mm	DFS60B-BDPC10000	1036775
				12 mm	DFS60B-BEPC10000	1036776
				15 mm	DFS60B-BHPC10000	1036779
Through hollow shaft				10 mm	DFS60B-TDPC10000	1036915
				12 mm	DFS60B-TEPC10000	1036916
				15 mm	DFS60B-THPC10000	1036919

¹⁾ Factory setting: number of lines: 10,000. ²⁾ Factory setting: TTL output level.

³⁾ Please include the programming tool (part no. 1036616) and adapter cable (part no. 2046579) in the programming order.

Recommended accessories

Name	Description	Flying leads	Sheath material	Cable length	Model name	Part no.
Programming tool	-	-	-	-	PGT-08-S	1036616
Adapter cable for PGT-08-S Incremental programming tool	SUB-D 9-pin male and cable connector M12, 8-pin female, ready-made with cable 8-core	-	-	0.5 m	DSL-2D08-G0M5AC3	2046579
Bellows coupling	6 mm ... 10 mm	-	-	-	KUP-0610-B	5312982
Cable connector M12 female, 8-pin	Screened, for field assembly	Straight	-	-	DOS-1208-GA	6028369
Female connector M12, 8-pin	Screened, capable of being dragged (adapter side), pre-wired with cable 8-wire	Straight	PUR	2 m	DOL-1208-G02MAC1	6032866
				5 m	DOL-1208-G05MAC1	6032867



At a glance

- Measuring lengths 1.25 m, 3 m, 5 m
- Very small dimensions (from 55 to 130 mm)
- Modular concept
- Analog interface 4 ... 20 mA / 0 ... 10 V available
- Lightweight but durable plastic housing
- Space- and cost-saving design

Your benefits

- No reference traverse necessary thanks to the absolute measuring principle
- Space- and cost-saving design
- Inexpensive interface card usable thanks to analog interface
- Time saved in commissioning thanks to the teach-in function
- Selection options for interface/encoder and measured length
- Low service requirement – relevant parameters can be programmed directly on the product
- Also suitable for cramped installation conditions – small housing (55 to 130 mm)
- Reduction in variants thanks to programming capability

CE

Additional information

www.mysick.com/en/BCG

Ordering information

Other models available at www.mysick.com/en/BCG

Measuring range	Power output	Voltage output	Model name	Part no.
0 m ... 1.25 m ¹⁾	4 mA ... 20 mA ²⁾	–	BCG05-K1KM01PP	6039745
	–	0 V ... 10 V ³⁾	BCG05-L1KM01PP	6039746
0 m ... 3 m ¹⁾	4 mA ... 20 mA ²⁾	–	BCG08-K1KM03PP	6039747
	–	0 V ... 10 V ³⁾	BCG08-L1KM03PP	6039748
0 m ... 5 m ¹⁾	4 mA ... 20 mA ²⁾	–	BCG13-K1KM05PP	6039749
	–	0 V ... 10 V ³⁾	BCG13-L1KM05PP	6039750

¹⁾ Measurement area factory- programmed.

²⁾ RL ≤ 600 Ω, 3-wire connection, no galvanic isolation.

³⁾ RL ≥ 10 kΩ, 3-wire connection, no galvanic isolation.

Recommended accessories

Name	Measured length	Model name	Part no.
Wire draw mechanism	1.25 m	MRA-G055-101D4	5324019
Wire draw mechanism	3 m	MRA-G080-103D3	5322778
Wire draw mechanism	5 m	MRA-G130-105D3	5322779



At a glance

- High resolution absolute encoder 18 bit singleturn
- Face mount flange, servo flange, blind hollow- and through hollow shaft version
- SSI interface
- Resolution and off set free programmable
- Connection technology: Connector M12, M23 or universal pluggable cable outlet
- Protection class: IP 67 (housing), IP 65 (shaft)
- Working temperature range: -30 to +100 °C
- Precise optical scanning system

Your benefits

- Reduced stockkeeping “One Encoder fits all”
- Very high product and machine availability
- Easy setup – setting of the relevant parameters on site
- Saves maintenance time, because it can be used like a plug version (cable remains installed)
- Suitable for applications with cramped space requirement (installation depth only 30 mm)
- Maximum mechanical flexibility for the choice of an encoder
- Very good rotation characteristics due to high distance of ball bearings (30 mm)
- One programming tool and software with automatic detection of the encoder type for AFS60/AFM60/DFS60

Additional information

www.mysick.com/en/AFS60

Ordering information

Other models available at www.mysick.com/en/AFS60

Mechanical interface	Connection type	Number of steps ¹⁾	Electrical interface	Shaft diameter	Model name ²⁾	Part no.
Solid shaft, servo flange	Connector, M12, 8-pin, radial	2 ... 32,768 (to be programmed by the customer)	4.5 V ... 32 V, SSI/Gray, programmable	6 mm x 10 mm	AFS60B-S1PC032768	1037494
Solid shaft, face mount flange				10 mm x 19 mm	AFS60B-S4PC032768	1037484
Blind hollow shaft				10 mm	AFS60B-BDPC032768	1051052
				12 mm	AFS60B-BEPC032768	1037927
				15 mm	AFS60B-BHPC032768	1039024
Through hollow shaft				10 mm	AFS60B-TDPC032768	1051069
				12 mm	AFS60B-TEPC032768	1037856
				15 mm	AFS60B-THPC032768	1051522

¹⁾ Factory setting: 32,768 steps.

²⁾ Please include the programming tool (part no. 1036616) and adapter cable (part no. 2048439) in the programming order.

Recommended accessories

Name	Description	Flying leads	Sheath material	Cable length	Model name	Part no.
Programming tool	-	-	-	-	PGT-08-S	1036616
Adapter cable for PGT-08-S Absolute SSI programming tool	SUB-D 9-pin male and cable connector M12, 8-pin female, ready-made with cable 8-core	-	-	0.5 m	DSL-2D08-G0M5AC2	2048439
Bellows coupling	6 mm ... 10 mm	-	-	-	KUP-0610-B	5312982
Cable connector M12 female, 8-pin	Screened, for field assembly	Straight	-	-	DOS-1208-GA	6028369
Female connector M12, 8-pin	Screened, capable of being dragged (adapter side), pre-wired with cable 8-wire	Straight	PUR	2 m	DOL-1208-G02MAC1	6032866
				5 m	DOL-1208-G05MAC1	6032867





Additional information

www.mysick.com/en/AFM60

At a glance

- High resolution absolute multiturn encoder 30 bit (18 bit singleturn and 12 bit multiturn)
- Face mount flange, servo flange, blind hollow and through hollow shaft version
- SSI interface
- Resolution and offset programmable
- Connection technology: Connector M12, M23 or universal pluggable cable outlet
- Protection class: IP 67 (housing), IP 65 (shaft)
- Working temperature range: -30 ... +100 °C
- Precise optical scanning system, mechanical gearbox

Your benefits

- Reduced stockkeeping "One Encoder fits all"
- Very high product and machine availability
- Easy setup – setting of the relevant parameters on site
- Saves maintenance time, because it can be used like a plug version (cable remains installed)
- Suitable for applications with cramped space requirement (installation depth only 30 mm)
- Maximum mechanical flexibility for the choice of an encoder
- Very good rotation characteristics due to high distance of ball bearings (30 mm)
- One programming tool and software with automatic detection of the encoder type for AFS60/AFM60/DFS60

Ordering information

Other models available at www.mysick.com/en/AFM60

Mechanical interface	Connection type	Number of steps ¹⁾	Electrical interface	Shaft diameter	Model name ²⁾	Part no.
Solid shaft, servo flange	Connector M12, 8-pin, radial	256 ... 32768 (to be programmed by the customer x 4,096 revolutions)	4.5 V ... 32 V, SSI/Gray, programmable	6 mm x 10 mm	AFM60B-S1PC032768	1037514
Solid shaft, face mount flange				10 mm x 19 mm	AFM60B-S4PC032768	1037504
Blind hollow shaft				10 mm	AFM60B-BDPC032768	1051111
				12 mm	AFM60B-BEPC032768	1051112
				15 mm	AFM60B-BHPC032768	1053813
Through hollow shaft				10 mm	AFM60B-TDPC032768	1051096
				12 mm	AFM60B-TEPC032768	1038903
				15 mm	AFM60B-THPC032768	1053067

¹⁾ Factory setting: 32,768 steps.

²⁾ Please include the programming tool (part no. 1036616) and adapter cable (part no. 2048439) in the programming order.

Recommended accessories

Name	Description	Flying leads	Sheath material	Cable length	Model name	Part no.
Programming tool	-	-	-	-	PGT-08-S	1036616
Adapter cable for PGT-08-S Absolute SSI programming tool	SUB-D 9-pin male and cable connector M12, 8-pin female, ready-made with cable 8-core	-	-	0.5 m	DSL-2D08-G0M5AC2	2048439
Bellows coupling	6 mm ... 10 mm	-	-	-	KUP-0610-B	5312982
Cable connector M12 female, 8-pin	Screened, for field assembly	Straight	-	-	DOS-1208-GA	6028369
Female connector M12, 8-pin	Screened, capable of being dragged (adapter side), pre-wired with cable 8-wire	Straight	PUR	2 m	DOL-1208-G02MAC1	6032866
				5 m	DOL-1208-G05MAC1	6032867



At a glance

- Incremental Encoder Ø 36 mm
- Electrical Interface: 4,5 ... 5,5 V, TTL/RS-422; 7 ... 24 V, TTL /RS-422; 7 ... 24 V, HTL/push pull; 4,5 ... 5,5 V, open collector NPN
- Blind hollow shaft Ø 8 mm
- Face mounting flange, solid shaft 6 x 11 mm
- Connection type: Cable 1,5 m, 3 m and 5 m; axial
- Number of lines: 100 ... 2,500
- Working temperature range -10 °C ... 70 °C
- IP 65 enclosure rating

Your benefits

- Easy and direct mounting onto the motor shaft without using a coupling
- Use in applications with limited installation conditions
- Implementation of low-cost/low-performance applications
- Selection from a complete incremental encoder product portfolio

Ordering information

Other models available at www.mysick.com/en/DDS36

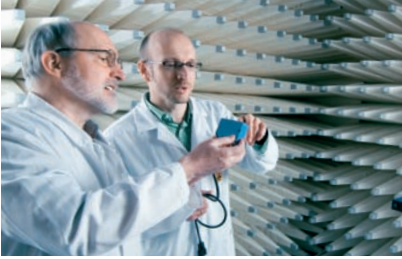
Mechanical interface	Connection type	Electrical interface	Shaft diameter	Number of lines	Model name	Part no.
Solid shaft, face mount flange	Cable, axial, 1.5 m	4.5 V ... 5.5 V, TTL/RS-422	6 mm x 11 mm	100	DDS36E-S4AR00100	1038316
				256	DDS36E-S4AR00256	1038318
				360	DDS36E-S4AR00360	1038320
				500	DDS36E-S4AR00500	1038322
				1.000	DDS36E-S4AR01000	1038324
				1.024	DDS36E-S4AR01024	1038325
		2.048		DDS36E-S4AR02048	1038328	
		100		DDS36E-S4GR00100	1038400	
		256		DDS36E-S4GR00256	1038402	
		360		DDS36E-S4GR00360	1038404	
		500		DDS36E-S4GR00500	1038406	
		1.000		DDS36E-S4GR01000	1038408	
		1.024		DDS36E-S4GR01024	1038409	
		2.048		DDS36E-S4GR02048	1038412	

Mechanical interface	Connection type	Electrical interface	Shaft diameter	Number of lines	Model name	Part no.
Blind hollow shaft	Cable, axial, 1.5 m	4.5 V ... 5.5 V, TTL/RS-422	8 mm	100	DDS36E-BBAR00100	1038484
				256	DDS36E-BBAR00256	1038486
				360	DDS36E-BBAR00360	1038488
				500	DDS36E-BBAR00500	1038490
				1.000	DDS36E-BBAR01000	1038492
				1.024	DDS36E-BBAR01024	1038493
				2.048	DDS36E-BBAR02048	1038496
				100	DDS36E-BBGR00100	1038568
		256		DDS36E-BBGR00256	1038570	
		360		DDS36E-BBGR00360	1038572	
		500		DDS36E-BBGR00500	1038574	
		1.000		DDS36E-BBGR01000	1038576	
		1.024		DDS36E-BBGR01024	1038577	
		2.048		DDS36E-BBGR02048	1038580	
		7 V ... 24 V, HTL/push pull				

Recommended accessories

Name	Shaft diameter	Description	Model name	Part no.
Coupling bar	6 mm/8 mm	Max. shaft offset: radial ± 0.3 mm, axial ± 0.2 mm, angle: ± 3 degrees, torsion spring stiffness: 38 Nm/rad; body: glass-fiber reinforced polyamide, hubs of aluminium	KUP-0608-S	5314179
	8 mm/8 mm		KUP-0808-S	5314177
	8 mm/10 mm		KUP-0810-S	5314178
	6 mm/6 mm		KUP-0606-S	2056406
	6 mm/10 mm		KUP-0610-S	2056407
	10 mm/10 mm		KUP-1010-S	2056408
Collet	-	6 mm collet	SPZ-006-DD36-A	2056390

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