

SICK Sensor Intelligence.

**SAFETY LIGHT CURTAINS** 

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## Ordering information

deTec4 Core Ex II 3GD

Resolution	Scanning range	Protective field height	System part	Туре	Part no.
30 mm	15 m	1,350 mm	Sender	C4C- SX13530A10000	1220346

Other models and accessories -> www.sick.com/deTec

Illustration may differ



## Detailed technical data

#### Features

Sub product family	deTec4 Core Ex II 3GD	
Application	Explosive areas	
Ex-approvals	ATEX for gas: II 3G Ex ec op is IIC T4 Gc ATEX for dust: II 3D Ex tc IIIC T135°C Dc	
System part	Sender	
Compatible receiver	1220359	
Resolution	30 mm	
Scanning range	15 m	
Protective field height	1,350 mm	
No blind zones	Yes	
Synchronization	Optical synchronisation	
Items supplied	Sender	

#### Safety-related parameters

Туре	Type 4 (IEC 61496-1)
Safety integrity level	SIL 3 (IEC 61508)
Category	Category 4 (ISO 13849-1)
Performance level	PL e (ISO 13849-1)
$\ensuremath{PFH}_{\ensuremath{D}}$ (mean probability of a dangerous failure per hour)	3.7 x 10 <sup>.9</sup>
T <sub>M</sub> (mission time)	20 years (ISO 13849-1)
Safe state in the event of a fault	At least one OSSD is in the OFF state.

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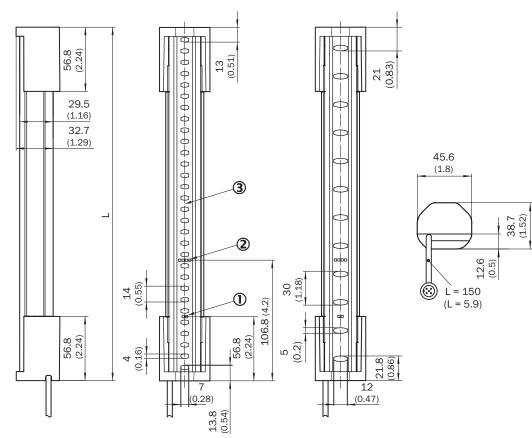
## Functions

Functions	
Protective operation	✓
Automatic calibration of the protective field width	1
Interfaces	
System connection	Male connector M12, 5-pin
Length of cable	150 mm
Cable diameter	4.3 mm
Cable bend radius	
Stationary position	> 12 x cable diameter
Flexible use	> 15 x cable diameter
Display elements	LEDs
Electrical data	
Protection class	III (IEC 61140)
Supply voltage V <sub>S</sub>	24 V DC (19.2 V 28.8 V)
Ripple	≤ 10 %
Power consumption typical	1.15 W (DC)
Mechanical data	
Dimensions	See dimensional drawing
Housing material	Aluminum extruded profile
Ambient data	
Enclosure rating	IP65 (IEC 60529) IP67 (IEC 60529)
Ambient operating temperature	0 °C +55 °C
Storage temperature	-30 °C +70 °C
Air humidity	15 % 95 %, Non-condensing
Vibration resistance	5 g, 10 Hz 55 Hz (IEC 60068-2-6)
Shock resistance	10 g, 16 ms (IEC 60068-2-27)
Other information	
Wave length	850 nm
Type of light	Near-infrared (NIR), invisible
Classifications	
ECLASS 5.0	27272704
ECLASS 5.1.4	27272704
ECLASS 6.0	27272704
ECLASS 6.2	27272704
ECLASS 7.0	27272704
ECLASS 8.0	27272704
ECLASS 8.1	27272704
ECLASS 9.0	27272704
ECLASS 10.0	27272704

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ECLASS 11.0	27272704
ECLASS 12.0	27272704
ETIM 5.0	EC002549
ETIM 6.0	EC002549
ETIM 7.0	EC002549
ETIM 8.0	EC002549
UNSPSC 16.0901	46171620

## Dimensional drawing (Dimensions in mm (inch))



① Operating indicator

② Alignment indicator

③ Optical axis

	L
300	313
450	463
600	613
750	763
900	913
1,050	1,063
1,200	1,213
1,350	1,362

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	L	
1,500	1,512	
1,650	1,662	
1,800	1,812	
1,950	1,962	
2,100	2,112	

## **Recommended accessories**

Other models and accessories -> www.sick.com/deTec

	Brief description	Туре	Part no.		
Test and mon	Test and monitoring tools				
	30 mm diameter, 250 mm length	Test rod 30 mm	2022602		
Distributors					
ð.,	<ul> <li>Connection type head A: Female connector, M12, 5-pin, A-coded</li> <li>Connection type head B: Male connector, M12, 5-pin, A-coded</li> <li>Connection type head C: Female connector, M12, 5-pin, A-coded</li> <li>Description: T-piece for simultaneous connection to sender and receiver, splits the cable from the control cabinet to the sender and receiver</li> <li>Note: 5-pin</li> </ul>	DSC-1205T000025KM0	6030664		
Plug connecto	ors and cables				
	<ul> <li>Connection type head A: Female connector, M12, 5-pin, straight, A-coded</li> <li>Connection type head B: Flying leads</li> <li>Signal type: Sensor/actuator cable</li> <li>Cable: 2 m, 5-wire, PUR, halogen-free</li> <li>Description: Sensor/actuator cable, unshielded</li> <li>Application: Zones with oils and lubricants, Drag chain operation, Robot</li> </ul>	YF2A15-020UB5XLEAX	2095617		
	<ul> <li>Connection type head A: Female connector, M12, 5-pin, straight, A-coded</li> <li>Connection type head B: Flying leads</li> <li>Signal type: Sensor/actuator cable</li> <li>Cable: 5 m, 5-wire, PUR, halogen-free</li> <li>Description: Sensor/actuator cable, unshielded</li> <li>Application: Zones with oils and lubricants, Drag chain operation, Robot</li> </ul>	YF2A15-050UB5XLEAX	2095618		
	<ul> <li>Connection type head A: Female connector, M12, 5-pin, straight, A-coded</li> <li>Connection type head B: Flying leads</li> <li>Signal type: Sensor/actuator cable</li> <li>Cable: 10 m, 5-wire, PUR, halogen-free</li> <li>Description: Sensor/actuator cable, unshielded</li> <li>Application: Zones with oils and lubricants, Drag chain operation, Robot</li> </ul>	YF2A15-100UB5XLEAX	2095619		
10 10	<ul> <li>Connection type head A: Female connector, M12, 5-pin, straight, A-coded</li> <li>Connection type head B: Male connector, M12, 5-pin, straight, A-coded</li> <li>Signal type: Sensor/actuator cable</li> <li>Cable: 2 m, 5-wire, PUR, halogen-free</li> <li>Description: Sensor/actuator cable, unshielded</li> <li>Application: Zones with oils and lubricants, Drag chain operation, Robot</li> </ul>	YF2A15-020UB5M2A15	2096009		

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#### **Brief description** Туре Part no. 2096010 YF2A15-050UB5M2A15 • Connection type head A: Female connector, M12, 5-pin, straight, A-coded • Connection type head B: Male connector, M12, 5-pin, straight, A-coded • Signal type: Sensor/actuator cable • Cable: 5 m, 5-wire, PUR, halogen-free · Description: Sensor/actuator cable, unshielded • Application: Zones with oils and lubricants, Drag chain operation, Robot • Connection type head A: Female connector, M12, 5-pin, straight, A-coded YF2A15-100UB5M2A15 2096011 • Connection type head B: Male connector, M12, 5-pin, straight, A-coded • Signal type: Sensor/actuator cable • Cable: 10 m, 5-wire, PUR, halogen-free • Description: Sensor/actuator cable, unshielded · Application: Zones with oils and lubricants, Drag chain operation, Robot Terminal and alignment brackets 4 pieces, FlexFix bracket for 2 devices (e.g. sender and receiver), can be aligned **BEF-1SHABPKU4** 2066614 ± 15°, including M5 screw, plastic **BEF-3SHABPKU4** 2098710 4 pieces, QuickFix bracket for 2 devices (e.g. sender and receiver), plastic Safety switching amplifier RLY3-OSSD200 1085344 • Applications: Evaluation unit • Compatible sensor types: Safety sensors with OSSDs • Connection type: Front connector with spring terminals · Restart interlock: yes • External device monitoring (EDM): Integrated • Outputs: 2 enabling current paths (safe), 2 application diagnostic outputs (not safe), 1 test pulse output (not safe) • Housing width: 18 mm · Applications: Evaluation unit RLY3-OSSD300 1099969 • Compatible sensor types: Safety sensors with OSSDs · Connection type: Front connector with spring terminals · Restart interlock: yes • External device monitoring (EDM): Integrated • Outputs: 3 enabling current paths (safe), 2 application diagnostic outputs (not safe), 1 test pulse output (not safe)

• Housing width: 18 mm

# SICK AT A GLANCE

SICK is one of the leading manufacturers of intelligent sensors and sensor solutions for industrial applications. A unique range of products and services creates the perfect basis for controlling processes securely and efficiently, protecting individuals from accidents and preventing damage to the environment.

We have extensive experience in a wide range of industries and understand their processes and requirements. With intelligent sensors, we can deliver exactly what our customers need. In application centers in Europe, Asia and North America, system solutions are tested and optimized in accordance with customer specifications. All this makes us a reliable supplier and development partner.

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

For us, that is "Sensor Intelligence."

# WORLDWIDE PRESENCE:

Contacts and other locations -www.sick.com



Online data sheet

