

SAFETY LIGHT CURTAINS



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Ordering information

Resolution	Scanning range	Protective field height	System part	Туре	Part no.
30 mm	3.8 m	1,350 mm	Receiver	C4C- EV13530B10000	1107661

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

Illustration may differ



Detailed technical data

Features	
Sub product family	deTec4 Core Vibes
Application	Machines with strong shock or vibration loads
System part	Receiver
Resolution	30 mm
Scanning range	3.8 m
Protective field height	1,350 mm
Response time	12 ms
No blind zones	Yes
Synchronization	Optical synchronisation
Items supplied	Receiver Test rod with diameter corresponding to the resolution of the safety light curtain Safety instruction Mounting instructions Operating instructions for download
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)
$\ensuremath{PFH}\xspace_D$ (mean probability of a dangerous failure per hour)	3.7 x 10 ^{.9}
T _M (mission time)	20 years (ISO 13849-1)
Safe state in the event of a fault	At least one OSSD is in the OFF state.

Functions

Functions	
Protective operation	1
Interfaces	
System connection	Male connector M12, 5-pin

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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 _S	24 V DC (19.2 V 28.8 V)	
Ripple	≤ 10 %	
Power consumption typical	2.3 W (DC)	
Output signal switching devices (OSSDs)		
Type of output	2 PNP semiconductors, short-circuit protected, cross-circuit monitored $^{1)}$	
ON state, switching voltage HIGH	24 V DC (V_S – 2.25 V DC V_S)	
OFF state, switching voltage LOW	≤ 2 V DC	
Current-carrying capacity per OSSD	≤ 300 mA	

 $^{1)}$ Applies to the voltage range between –30 V and +30 V.

Mechanical data

Dimensions	See dimensional drawing	
Housing material	Aluminum extruded profile	
Ambient data		
Enclosure rating	IP65 (IEC 60529)	

	IP67 (IEC 60529)
Ambient operating temperature	-30 °C +55 °C
Storage temperature	-30 °C +70 °C
Air humidity	15 % 95 %, Non-condensing
Vibration resistance	20 g, 10 Hz 200 Hz (In each axis) 15 g, 200 Hz 400 Hz (In each axis)
Shock resistance	10 g, 16 ms (IEC 60068-2-27)

Classifications

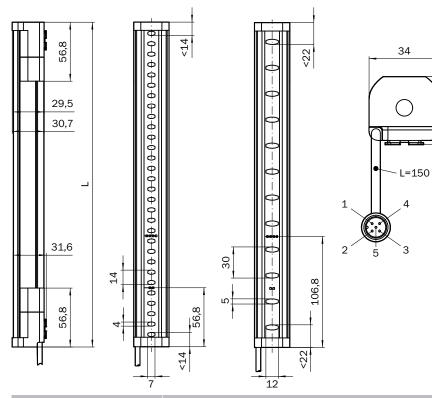
ECLASS 5.0	27272704
ECLASS 5.1.4	27272704
ECLASS 6.0	27272704
ECLASS 6.2	27272704
ECLASS 7.0	27272704
ECLASS 8.0	27272704
ECLASS 8.1	27272704
ECLASS 9.0	27272704
ECLASS 10.0	27272704
ECLASS 11.0	27272704
ECLASS 12.0	27272704

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ETIM 5.0	EC002549
ETIM 6.0	EC002549
ETIM 7.0	EC002549
ETIM 8.0	EC002549
UNSPSC 16.0901	46171620

30,7 32,8

Dimensional drawing (Dimensions in mm (inch))



Protective field height	L
300 (11.81)	313 (12.32)
450 (17.72)	463 (18.23)
600 (23.62)	613 (24.13)
750 (29.53)	763 (30.04)
900 (35.43)	913 (35.94)
1,050 (41.34)	1,063 (41.85)
1,200 (47.24)	1,213 (47.76)
1,350 (53.15)	1,362 (53.62)
1,500 (59.06)	1,512 (59.53)
1,650 (64.96)	1,662 (65.43)
1,800 (70.87)	1,812 (71.34)
1,950 (76.77)	1,962 (77.24)
2,100 (82.68)	2,112 (83.15)

Recommended accessories

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

	Brief description	Туре	Part no.
Distributors			
Se.	 Connection type head A: Female connector, M12, 5-pin, A-coded Connection type head B: Male connector, M12, 5-pin, A-coded Connection type head C: Female connector, M12, 5-pin, A-coded Description: T-piece for simultaneous connection to sender and receiver, splits the cable from the control cabinet to the sender and receiver Note: 5-pin 	DSC-1205T000025KM0	6030664
Terminal and	alignment brackets		
	4 pieces, QuickFix bracket for 2 devices (e.g. sender and receiver), plastic	BEF-3SHABPKU4	2098710
Others			
¥.	 Connection type head A: Female connector, M12, 5-pin, straight, A-coded Connection type head B: Flying leads Signal type: Sensor/actuator cable Cable: 2 m, 5-wire, PUR, halogen-free Description: Sensor/actuator cable, unshielded Application: Zones with oils and lubricants, Drag chain operation, Robot 	YF2A15-020UB5XLEAX	2095617
N.	 Connection type head A: Female connector, M12, 5-pin, straight, A-coded Connection type head B: Flying leads 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 	YF2A15-050UB5XLEAX	2095618
×.	 Connection type head A: Female connector, M12, 5-pin, straight, A-coded Connection type head B: Flying leads 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 	YF2A15-100UB5XLEAX	2095619
E E	 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: 2 m, 5-wire, PUR, halogen-free Description: Sensor/actuator cable, unshielded Application: Zones with oils and lubricants, Drag chain operation, Robot 	YF2A15-020UB5M2A15	2096009
10 10	 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 	YF2A15-050UB5M2A15	2096010
10 No.	 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: 10 m, 5-wire, PUR, halogen-free Description: Sensor/actuator cable, unshielded Application: Zones with oils and lubricants, Drag chain operation, Robot 	YF2A15-100UB5M2A15	2096011

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	Brief description	Туре	Part no.		
Safety switcl	Safety switching amplifier				
	 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 	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: 3 enabling current paths (safe), 2 application diagnostic outputs (not safe), 1 test pulse output (not safe) Housing width: 18 mm 	RLY3-OSSD300	1099969		

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