



DATA SHEET

deTec4 Core Set 30/1950

deTec
Safety light curtains



Illustration may differ

SAFETY LIGHT CURTAINS

deTec4 Core Set
30/1950

ORDERING INFORMATION

Type	part no.
deTec4 Core Set 30/1950	1062920

Further device versions and accessories at www.sick.com/deTec

DETAILED TECHNICAL DATA

FEATURES

Product version	deTec4 Core
Application	Normal industrial environment
System part	Set
Resolution	30 mm
Scanning range	15 m
Protective field height	1,950 mm
No blind zones	Yes
Synchronization	Optical synchronization
Items supplied	Sender Receiver 4 FlexFix brackets 4 QuickFix brackets 2 connecting cables, 5 m Test rod with diameter corresponding to the resolution of the safety light curtain RLY3-OSSD2 safety relay Safety instruction Mounting instructions Operating instructions for download

SAFETY-RELATED PARAMETERS

Type	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)
PFH _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.

INTERFACES

System connection	Length of cable	Plug, M12, 5-pin
	Cable diameter	150 mm
		4.3 mm
Cable bend radius	Stationary position	> 12 x cable diameter
	Flexible use	> 15 x cable diameter
Display elements		LEDs

ELECTRONICS

Protection class	III (IEC 61140)
Supply voltage V_s	24 V DC (19.2 V ... 28.8 V)
Ripple	$\leq 10 \%$
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 ($V_s - 2.25 \text{ V DC} \dots V_s$)
OFF state, switching voltage LOW	$\leq 2 \text{ V DC}$
Current-carrying capacity per OSSD	$\leq 300 \text{ mA}$

¹⁾ Applies to the voltage range between -30 V and +30 V.

MECHANICS

Dimensions	See dimensional drawing
Housing material	Aluminum extruded profile

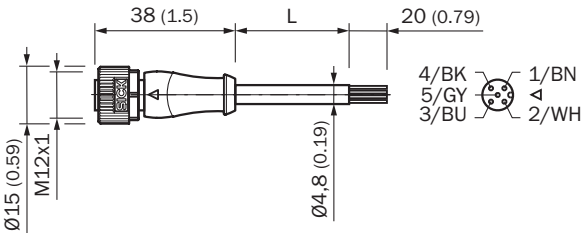
AMBIENT DATA

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	5 ... 150 Hz, 3,5 mm / 1 g (EN 60068-2-6)
Shock resistance	15 g / 6 ms (EN 60068-2-27)
Class	3M4 (IEC TR 60721-4-3)

OTHER INFORMATION

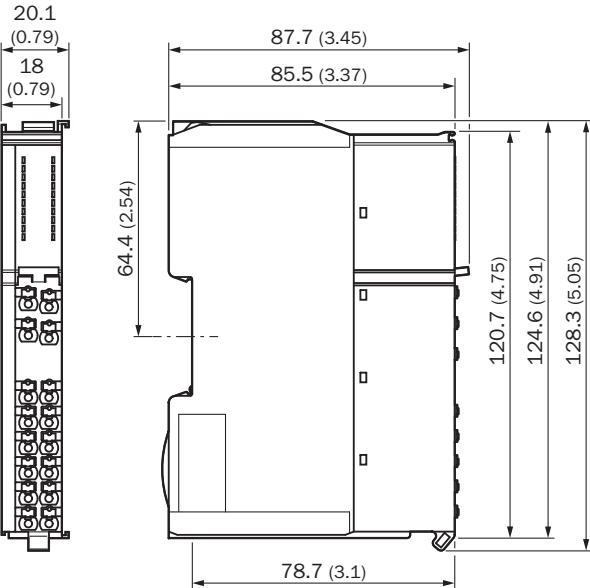
Wave length	850 nm
Type of light	Near-infrared (NIR), invisible

DIMENSIONAL DRAWING



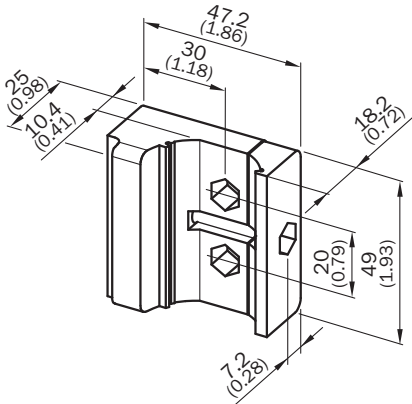
Dimensions in mm (inch)

DIMENSIONAL DRAWING EMSS1, HAND1, OSSD1, OSSD2, TIME1



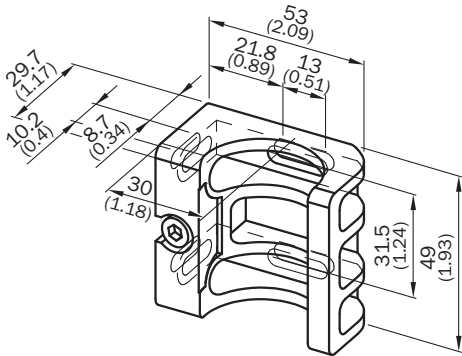
Dimensions in mm (inch)

DIMENSIONAL DRAWING



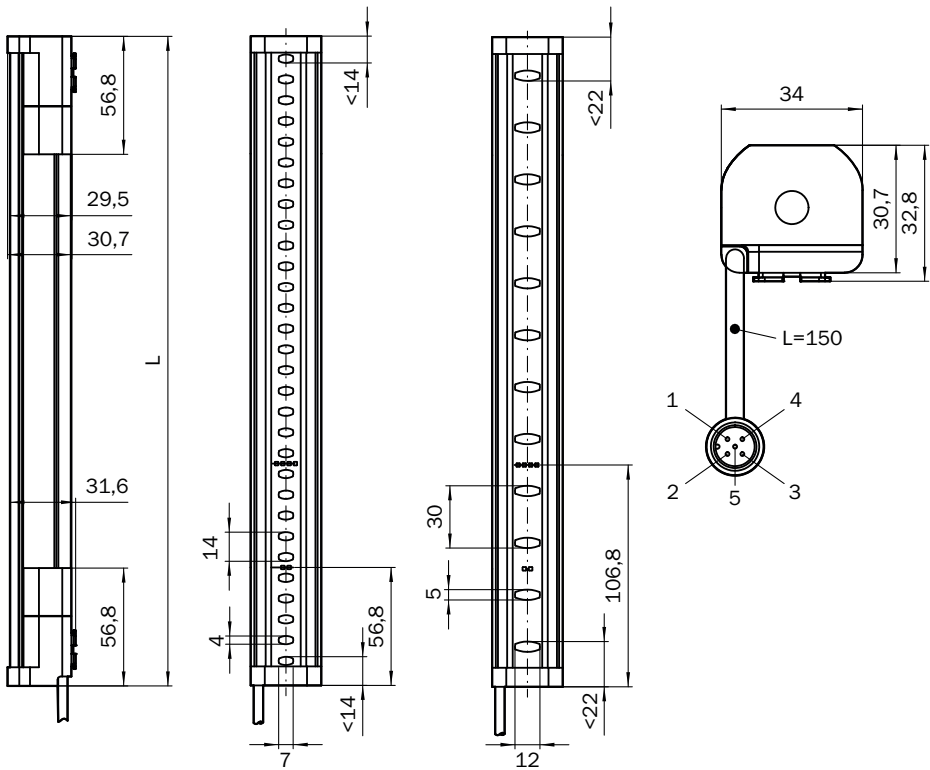
Dimensions in mm (inch)

DIMENSIONAL DRAWING FLEXFIX



Dimensions in mm (inch)

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)

Further information as well as suitable accessories, example applications and downloads such as CAD dimensional models, operating instructions and software can be found at www.sick.com/1062920



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SICK AT A GLANCE

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