



DATA SHEET

C2C-SG18010A10000

deTec  
Safety light curtains

**SICK** Sensor Intelligence



Illustration may differ

# SAFETY LIGHT CURTAINS

## C2C-SG18010A10000

### ORDERING INFORMATION

| Type              | part no.                |
|-------------------|-------------------------|
| C2C-SG18010A10000 | <a href="#">1220499</a> |

Further device versions and accessories at [www.sick.com/deTec](http://www.sick.com/deTec)



### DETAILED TECHNICAL DATA

#### FEATURES

|                         |                                                               |
|-------------------------|---------------------------------------------------------------|
| Product version         | deTec2 Core HG                                                |
| Application             | Areas where coolants, lubricants and cleaning agents are used |
| System part             | Sender                                                        |
| Compatible receiver     | 1220510                                                       |
| Resolution              | 14 mm                                                         |
| Scanning range          | 10 m                                                          |
| Protective field height | 1,800 mm                                                      |
| No blind zones          | Yes                                                           |
| Synchronization         | Optical synchronization                                       |
| Items supplied          | Sender                                                        |

#### SAFETY-RELATED PARAMETERS

|                                                                     |                                        |
|---------------------------------------------------------------------|----------------------------------------|
| Type                                                                | Type 2 (IEC 61496-1)                   |
| Safety integrity level                                              | SIL 1 (IEC 61508)                      |
| Category                                                            | Category 2 (ISO 13849-1)               |
| Performance level                                                   | PL c (ISO 13849-1)                     |
| PFH <sub>d</sub> (mean probability of a dangerous failure per hour) | 31 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. |

#### INTERFACES

|                   |                  |
|-------------------|------------------|
| System connection | Plug, 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                  |

## ELECTRONICS

|                           |                             |
|---------------------------|-----------------------------|
| Protection class          | III (IEC 61140)             |
| Supply voltage $V_s$      | 24 V DC (19.2 V ... 28.8 V) |
| Ripple                    | ≤ 10 %                      |
| Power consumption typical | 2.16 W (DC)                 |

## MECHANICS

|                       |                                    |
|-----------------------|------------------------------------|
| Dimensions            | See dimensional drawing            |
| Housing material      | Aluminum extruded profile          |
| Front screen material | Chemically prestressed float glass |

## AMBIENT DATA

|                               |                                           |
|-------------------------------|-------------------------------------------|
| Enclosure rating              | IP65 (IEC 60529)<br>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 |

## CERTIFICATES

|                                                                       |   |
|-----------------------------------------------------------------------|---|
| EU declaration of conformity                                          | ✓ |
| UK declaration of conformity                                          | ✓ |
| ACMA declaration of conformity                                        | ✓ |
| Moroccan declaration of conformity                                    | ✓ |
| China RoHS                                                            | ✓ |
| ULus approval                                                         | ✓ |
| cUL approval                                                          | ✓ |
| Taiwan OSHA certificate                                               | ✓ |
| EC-Type-Examination approval                                          | ✓ |
| China GB/T certificate                                                | ✓ |
| Information according to Art. 3 of Data Act (Regulation EU 2023/2854) | ✓ |

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 di-  
mensional models, operating instructions and software can be found at [www.sick.com/1220499](http://www.sick.com/1220499)



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