

C4C-SX16530A10000

deTec

**SAFETY LIGHT CURTAINS** 





## Ordering information

### deTec4 Core Ex II 3GD

| Resolution | Scanning<br>range | Protective field height | System part | Туре                  | Part no. |
|------------|-------------------|-------------------------|-------------|-----------------------|----------|
| 30 mm      | 15 m              | 1,650 mm                | Sender      | C4C-<br>SX16530A10000 | 1220348  |

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<br>ATEX for dust: II 3D Ex tc IIIC T135°C Dc |
| System part             | Sender   |
| Compatible receiver     | 1220363  |
| Resolution              | 30 mm  |
| Scanning range          | 15 m   |
| Protective field height | 1,650 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)                     |
| $\ensuremath{PFH_D}$ (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. |

#### **Functions**

| Protective operation                                | ✓ |
|---|---|
| Automatic calibration of the protective field width | ✓ |

#### 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     | 1.25 W (DC)             |

#### Mechanical data

| Dimensions       | See dimensional drawing   |
|------------------|---------------------------|
| Housing material | Aluminum extruded profile |

#### Ambient data

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

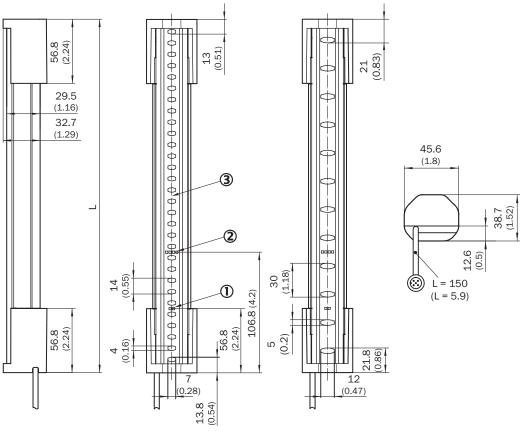
| Wave length   | 850 nm                         |
|---------------|--------------------------------|
| Type of light | Near-infrared (NIR), invisible |

## 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 |

| 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

| C Cption and | L     |
|--------------|-------|
| 300          | 313   |
| 450          | 463   |
| 600          | 613   |
| 750          | 763   |
| 900          | 913   |
| 1,050        | 1,063 |
| 1,200        | 1,213 |
| 1,350        | 1,362 |

|       | 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 monitoring tools |   |                    |          |  |  |
|                           | 30 mm diameter, 250 mm length   | Test rod 30 mm     | 2022602  |  |  |
| Distributors              |   |                    |          |  |  |
|                           | <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 connect              | 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  |  |  |
| Ro Ro                     | <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. |
|---------------|--|--------------------|----------|
|               | <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: 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>                  | YF2A15-050UB5M2A15 | 2096010  |
|               | <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: 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>                 | YF2A15-100UB5M2A15 | 2096011  |
| Terminal and  | alignment brackets   |                    |          |
|               | 4 pieces, FlexFix bracket for 2 devices (e.g. sender and receiver), can be aligned $\pm$ 15°, including M5 screw, plastic  | BEF-1SHABPKU4      | 2066614  |
| 18            | 4 pieces, QuickFix bracket for 2 devices (e.g. sender and receiver), plastic   | BEF-3SHABPKU4      | 2098710  |
| Safety switch | ing amplifier  |                    |          |
|               | <ul> <li>Applications: Evaluation unit</li> <li>Compatible sensor types: Safety sensors with OSSDs</li> <li>Connection type: Front connector with spring terminals</li> <li>Restart interlock: yes</li> <li>External device monitoring (EDM): Integrated</li> <li>Outputs: 2 enabling current paths (safe), 2 application diagnostic outputs (not safe), 1 test pulse output (not safe)</li> <li>Housing width: 18 mm</li> </ul> | RLY3-OSSD200       | 1085344  |
|               | <ul> <li>Applications: Evaluation unit</li> <li>Compatible sensor types: Safety sensors with OSSDs</li> <li>Connection type: Front connector with spring terminals</li> <li>Restart interlock: yes</li> <li>External device monitoring (EDM): Integrated</li> <li>Outputs: 3 enabling current paths (safe), 2 application diagnostic outputs (not safe), 1 test pulse output (not safe)</li> <li>Housing width: 18 mm</li> </ul> | RLY3-OSSD300       | 1099969  |

## SICK AT A GLANCE

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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.

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