

# XC40P-1201A0A0CBA0

C4000 Select

**SAFETY LIGHT CURTAINS**

**SICK**  
Sensor Intelligence.



Illustration may differ

Ordering information

| Type               | part no. |
|--------------------|----------|
| XC40P-1201A0A0CBA0 | 1052781  |

Included in delivery: XC40E-1201A0A0CBA0 (1), XC40S-1201A0A00BA0 (1)

Other models and accessories → [www.sick.com/C4000\\_Select](http://www.sick.com/C4000_Select)

Detailed technical data

Features

|                         |                                                                             |
|-------------------------|-----------------------------------------------------------------------------|
| Description             | C4000 Select with bottom end cap extension connection (sender and receiver) |
| Application             | Normal industrial environment                                               |
| System part             | Pair                                                                        |
| Resolution              | 14 mm                                                                       |
| Scanning range          | 10 m                                                                        |
| Protective field height | 1,200 mm                                                                    |
| Synchronization         | Optical synchronisation                                                     |

Safety-related parameters

|                                                                     |                                        |
|---------------------------------------------------------------------|----------------------------------------|
| Type                                                                | Type 4 (IEC 61496-1)                   |
| Safety integrity level                                              | SIL 3 (IEC 61508)                      |
| Category                                                            | Category 4 (EN ISO 13849)              |
| Performance level                                                   | PL e (EN ISO 13849)                    |
| PFH <sub>D</sub> (mean probability of a dangerous failure per hour) | 3.2 x 10 <sup>-8</sup> (EN ISO 13849)  |
| T <sub>M</sub> (mission time)                                       | 20 years (EN ISO 13849)                |
| Safe state in the event of a fault                                  | At least one OSSD is in the OFF state. |

Functions

|                             | Functions | Delivery status |
|-----------------------------|-----------|-----------------|
| Protective operation        | ✓         |                 |
| Beam coding                 | ✓         | Uncoded         |
| Configurable scanning range | ✓         | 0 m ... 6 m     |
| Floating blanking           | ✓         |                 |

Interfaces

|                        |                           |
|------------------------|---------------------------|
| System connection      | Male connector M12, 5-pin |
| Permitted cable length | ≤ 30 m <sup>1)</sup>      |

<sup>1)</sup> Depending on load, power supply and wire cross-section. The technical specifications must be observed.

|                             |                             |
|-----------------------------|-----------------------------|
| <b>Extension connection</b> | Female connector M12, 5-pin |
| <b>Configuration method</b> | DIP switch                  |
| <b>Display elements</b>     | 7-segment display           |

<sup>1)</sup> Depending on load, power supply and wire cross-section. The technical specifications must be observed.

## Electrical data

|                                                |                                                                        |
|------------------------------------------------|------------------------------------------------------------------------|
| <b>Protection class</b>                        | III (IEC 61140)                                                        |
| <b>Supply voltage <math>V_S</math></b>         | 24 V DC (19.2 V ... 28.8 V) <sup>1)</sup>                              |
| <b>Residual ripple</b>                         | $\leq 10\%$ <sup>2)</sup>                                              |
| <b>Output signal switching devices (OSSDs)</b> |                                                                        |
| Type of output                                 | 2 PNP semiconductors, short-circuit protected, cross-circuit monitored |
| Current-carrying capacity per OSSD             | $\leq 500$ mA                                                          |

<sup>1)</sup> The external voltage supply must be capable of buffering brief mains voltage failures of 20 ms as specified in EN 60204-1. Suitable power supplies are available as accessories from SICK.

<sup>2)</sup> Within the limits of  $V_S$ .

## Mechanical data

|                         |                           |
|-------------------------|---------------------------|
| <b>Dimensions</b>       | See dimensional drawing   |
| <b>Housing material</b> | Aluminum extruded profile |

## Ambient data

|                                      |                                     |
|--------------------------------------|-------------------------------------|
| <b>Enclosure rating</b>              | IP65 (EN 60529)                     |
| <b>Ambient operating temperature</b> | 0 °C ... +55 °C                     |
| <b>Storage temperature</b>           | -25 °C ... +70 °C                   |
| <b>Air humidity</b>                  | 15 % ... 95 %, Non-condensing       |
| <b>Vibration resistance</b>          | 5 g, 10 Hz ... 55 Hz (EN 60068-2-6) |
| <b>Shock resistance</b>              | 10 g, 16 ms (EN 60068-2-27)         |

## Other information

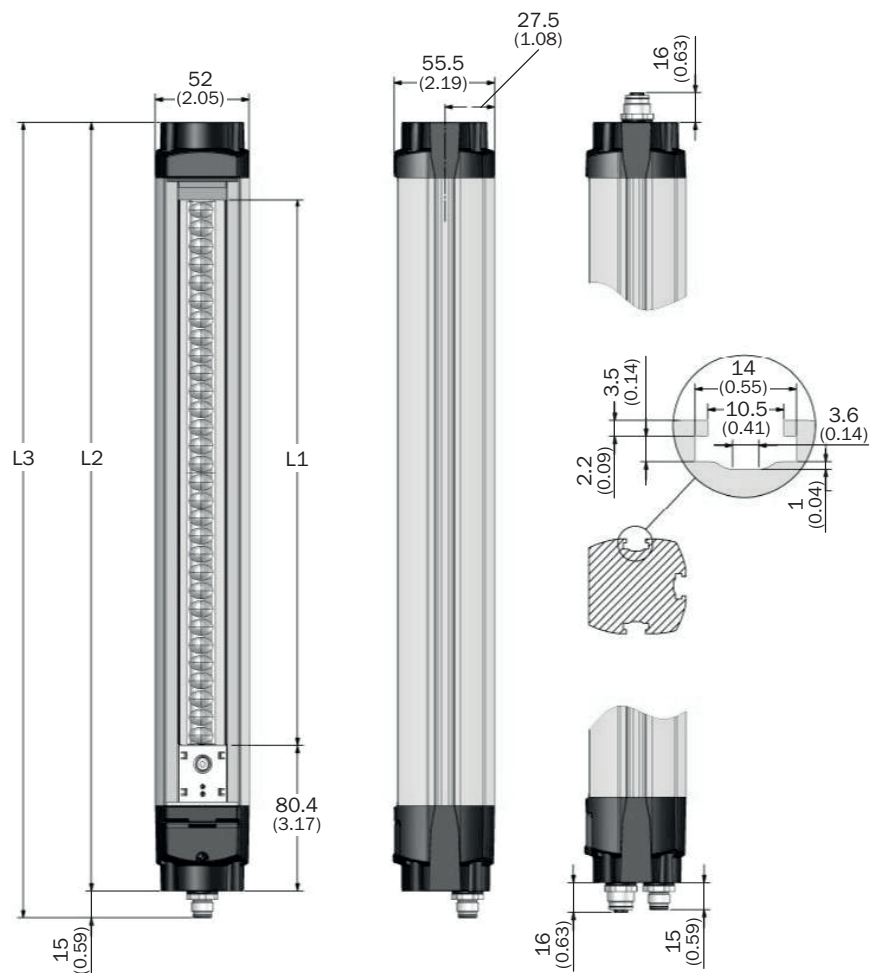
|                    |        |
|--------------------|--------|
| <b>Wave length</b> | 850 nm |
|--------------------|--------|

## Classifications

|                     |          |
|---------------------|----------|
| <b>ECLASS 5.0</b>   | 27272704 |
| <b>ECLASS 5.1.4</b> | 27272704 |
| <b>ECLASS 6.0</b>   | 27272704 |
| <b>ECLASS 6.2</b>   | 27272704 |
| <b>ECLASS 7.0</b>   | 27272704 |
| <b>ECLASS 8.0</b>   | 27272704 |
| <b>ECLASS 8.1</b>   | 27272704 |
| <b>ECLASS 9.0</b>   | 27272704 |
| <b>ECLASS 10.0</b>  | 27272704 |
| <b>ECLASS 11.0</b>  | 27272704 |
| <b>ECLASS 12.0</b>  | 27272704 |
| <b>ETIM 5.0</b>     | EC002549 |
| <b>ETIM 6.0</b>     | EC002549 |

|                |          |
|----------------|----------|
| ETIM 7.0       | EC002549 |
| ETIM 8.0       | EC002549 |
| UNSPSC 16.0901 | 46171620 |

Dimensional drawing Sender

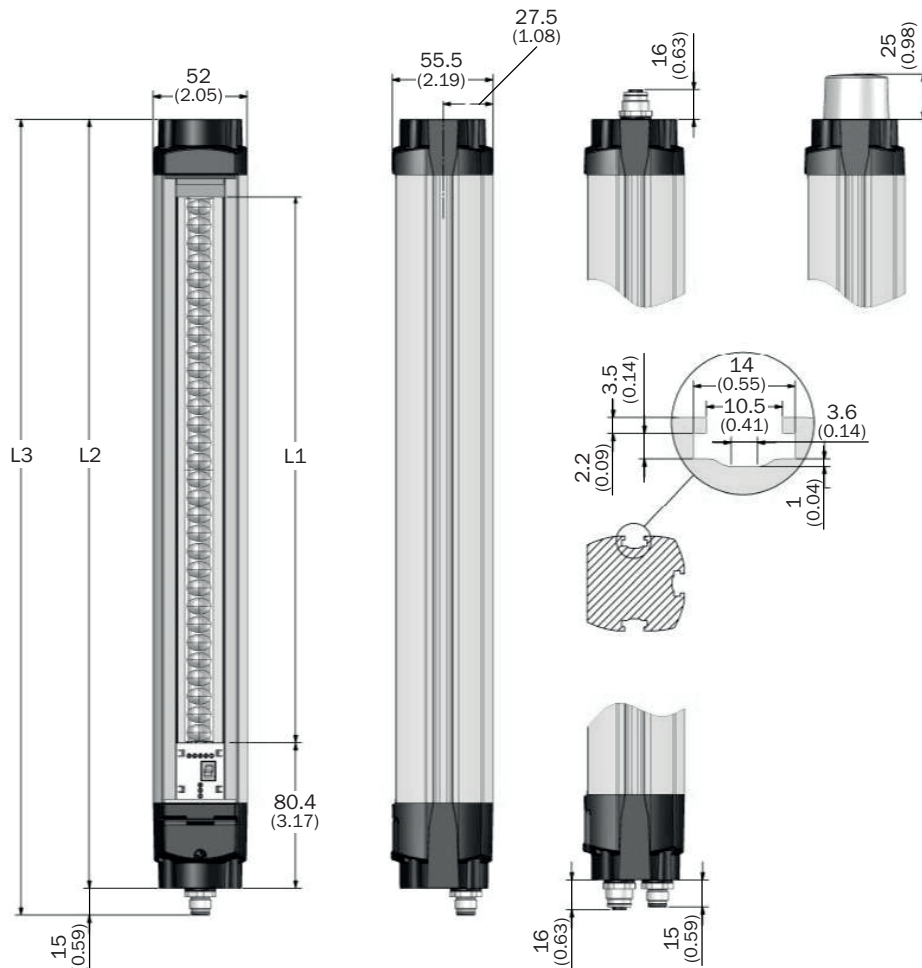


Dimensions in mm (inch)

| Protective field height S | L1            | L2            | L3            |
|---------------------------|---------------|---------------|---------------|
| 300 (11.81)               | 302 (11.89)   | 425 (16.73)   | 440 (17.32)   |
| 450 (17.72)               | 452 (17.80)   | 575 (22.64)   | 590 (23.23)   |
| 600 (23.62)               | 602 (23.70)   | 725 (28.54)   | 740 (29.13)   |
| 750 (29.53)               | 752 (29.61)   | 875 (34.45)   | 890 (35.04)   |
| 900 (35.43)               | 902 (35.51)   | 1,025 (40.35) | 1,040 (40.94) |
| 1,050 (41.34)             | 1,052 (41.42) | 1,175 (46.26) | 1,190 (46.85) |
| 1,200 (47.24)             | 1,202 (47.32) | 1,325 (52.17) | 1,340 (52.76) |
| 1,350 (53.15)             | 1,352 (53.23) | 1,475 (58.07) | 1,490 (58.66) |
| 1,500 (59.06)             | 1,502 (59.13) | 1,625 (63.98) | 1,640 (64.57) |
| 1,650 (64.96)             | 1,652 (65.04) | 1,775 (69.88) | 1,790 (70.47) |

| Protective field height S | L1            | L2            | L3            |
|---------------------------|---------------|---------------|---------------|
| 1,800 (70.87)             | 1,802 (70.94) | 1,925 (75.79) | 1,940 (76.38) |

## Dimensional drawing Receiver



Dimensions in mm (inch)

| Protective field height S | L1            | L2            | L3            |
|---------------------------|---------------|---------------|---------------|
| 300 (11.81)               | 302 (11.89)   | 425 (16.73)   | 440 (17.32)   |
| 450 (17.72)               | 452 (17.80)   | 575 (22.64)   | 590 (23.23)   |
| 600 (23.62)               | 602 (23.70)   | 725 (28.54)   | 740 (29.13)   |
| 750 (29.53)               | 752 (29.61)   | 875 (34.45)   | 890 (35.04)   |
| 900 (35.43)               | 902 (35.51)   | 1,025 (40.35) | 1,040 (40.94) |
| 1,050 (41.34)             | 1,052 (41.42) | 1,175 (46.26) | 1,190 (46.85) |
| 1,200 (47.24)             | 1,202 (47.32) | 1,325 (52.17) | 1,340 (52.76) |
| 1,350 (53.15)             | 1,352 (53.23) | 1,475 (58.07) | 1,490 (58.66) |
| 1,500 (59.06)             | 1,502 (59.13) | 1,625 (63.98) | 1,640 (64.57) |
| 1,650 (64.96)             | 1,652 (65.04) | 1,775 (69.88) | 1,790 (70.47) |
| 1,800 (70.87)             | 1,802 (70.94) | 1,925 (75.79) | 1,940 (76.38) |

### Recommended accessories

Other models and accessories → [www.sick.com/C4000\\_Select](http://www.sick.com/C4000_Select)

|                                                                                     | Brief description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | Type               | part no. |
|-------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------|----------|
| device protection and care                                                          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                    |          |
|    | <ul style="list-style-type: none"> <li><b>Product family:</b> Cleaning agents</li> <li><b>Description:</b> Cloth for cleaning optical surfaces</li> </ul>                                                                                                                                                                                                                                                                                                                                                     | Lens cloth         | 4003353  |
| Mounting systems                                                                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                    |          |
|    | <ul style="list-style-type: none"> <li><b>Description:</b> Mounting kit 12, rotatable, swivel mount</li> <li><b>Packing unit:</b> 4 pieces</li> <li><b>Suitable for:</b> All protective field heights</li> </ul>                                                                                                                                                                                                                                                                                              | BEF-2SMGEAKU4      | 2030510  |
|    | <ul style="list-style-type: none"> <li><b>Description:</b> Mounting kit 6, side bracket, rotatable</li> <li><b>Material:</b> Zinc diecast</li> <li><b>Details:</b> Zinc diecast</li> <li><b>Packing unit:</b> 4 pieces</li> <li><b>Suitable for:</b> All protective field heights</li> </ul>                                                                                                                                                                                                                  | BEF-1SHABAZN4      | 2019506  |
|   | <ul style="list-style-type: none"> <li><b>Description:</b> Mounting kit 1, mounting bracket, rigid, L-shaped, including fixing screws and washers</li> <li><b>Packing unit:</b> 4 pieces</li> <li><b>Suitable for:</b> All protective field heights</li> </ul>                                                                                                                                                                                                                                                | BEF-3WNGBAST4      | 7021352  |
| Commissioning aids and test equipment                                               |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                    |          |
|  | <ul style="list-style-type: none"> <li><b>Product:</b> Alignment aids</li> <li><b>Dimensions (W x H x L):</b> 19 mm<br/>67.3 mm<br/>66.9 mm</li> <li><b>Description:</b> Laser alignment aid for various sensors, laser class 2 (IEC 60825). Do not look into the beam!</li> </ul>                                                                                                                                                                                                                            | AR60               | 1015741  |
|  | <ul style="list-style-type: none"> <li><b>Product:</b> Test equipment</li> <li><b>Description:</b> 14 mm diameter, 250 mm length</li> </ul>                                                                                                                                                                                                                                                                                                                                                                   | Test rod 14 mm     | 2022599  |
| connectors and cables                                                               |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                    |          |
|  | <ul style="list-style-type: none"> <li><b>Connection type head A:</b> Female connector, M12, 5-pin, straight, A-coded</li> <li><b>Connection type head B:</b> Male connector, M12, 5-pin, straight, A-coded</li> <li><b>Signal type:</b> Sensor/actuator cable</li> <li><b>Cable:</b> 2 m, 5-wire, PUR, halogen-free</li> <li><b>Description:</b> Sensor/actuator cable, unshielded</li> <li><b>Application:</b> Uncontaminated zones, Zones with oils and lubricants, Robot, Drag chain operation</li> </ul> | YF2A15-020UB5M2A15 | 2096009  |

## 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](http://www.sick.com)