



## Safety light curtains C4000 Palletizer Standard

C40E-1604FP010, C40S-1604CD010



#### receiver

Model Name > C40E-1604FP010  
Part No. > 1043177



#### sender

Model Name > C40S-1604CD010  
Part No. > 1043451



#### At a glance

- Type 4 (IEC 61496), PL e (EN ISO 13849)
- Self-teaching, dynamic blanking detects goods and pallets
- Direction recognition
- Multiple sampling
- Reduced resolution
- Muting alternative
- Beam coding
- Object gap suppression

#### Your benefits

- Cost-effective: No additional muting sensors or protective measures are required.
- A compact sensor pair reduces the mounting requirements considerably - additional muting sensors are not required
- With the dynamic and self-teaching blanking function, the system can reliably differentiate between people and material - this provides maximum safety
- The assorted feasibility of pallets allows the passage of mesh boxes, Euro pallets and half pallets, increasing plant availability
- Saves storage space: pallets can be parked permanently in the protective field
- One system monitors several conveyor belts, reducing sensor costs
- Quick commissioning: Euro pallets, mesh boxes etc. are detected without any programming



#### Functions-Sender

|                                             |                                                     |
|---------------------------------------------|-----------------------------------------------------|
| Beam coding:                                | ✓                                                   |
| Beam coding (delivery status):              | Code 1                                              |
| Configuration method:                       | PC with CDS (Configuration and Diagnostic Software) |
| Safe SICK device communication via EFI/SDL: | ✓                                                   |

## Functions-Receiver

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|                                                |                                                              |
|------------------------------------------------|--------------------------------------------------------------|
| Restart interlock:                             | ✓                                                            |
| Restart interlock (delivery status):           | External                                                     |
| External device monitoring (EDM):              | ✓                                                            |
| External device monitoring (delivery status):  | Deactivated                                                  |
| Beam coding:                                   | ✓                                                            |
| Beam coding (delivery status):                 | Code 1                                                       |
| Multiple sampling:                             | ✓                                                            |
| Multiple sampling (delivery status):           | 2 x sampling                                                 |
| Direction monitoring:                          | ✓                                                            |
| Reduced resolution:                            | ✓                                                            |
| Reduced resolution (delivery status):          | 3 beams                                                      |
| Bypass (with UE402):                           | ✓                                                            |
| Emergency stop/bypass at extension connection: | -                                                            |
| Operating mode switching (with UE402):         | ✓                                                            |
| Type of blanking:                              | self-teach dynamic blanking                                  |
| Type of blanking (delivery status):            | Goods detection: 500 mm ... protective field height - 150 mm |
| Speed monitoring:                              | ✓                                                            |
| Goods detection:                               | ✓                                                            |
| Object size monitoring:                        | ✓                                                            |
| Teach-in of individual objects:                | ✓                                                            |
| Object gap suppression:                        | ✓                                                            |
| Palett detection:                              | -                                                            |
| Object entry monitoring:                       | ✓                                                            |
| SDL interface:                                 | ✓                                                            |
| Configuration method:                          | PC with CDS (Configuration and Diagnostic Software)          |
| Extension connection:                          | -                                                            |
| Safe SICK device communication via EFI/SDL:    | ✓                                                            |

## Technical Data-Sender

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|                                                          |                                         |
|----------------------------------------------------------|-----------------------------------------|
| Protective field height:                                 | 1,650 mm                                |
| Resolution:                                              | 40 mm                                   |
| Scanning range from ... to:                              | 0.5 m ... 6 m                           |
| Scanning range from ... to (delivery status):            | 0.5 m ... 6 m                           |
| Housing length:                                          | 1,782 mm                                |
| Type:                                                    | Type 4 (IEC 61496)                      |
| Safety integrity level:                                  | SIL3 (IEC 61508), SILCL3 (IEC 62061)    |
| Category:                                                | category 4 (EN ISO 13849)               |
| Performance level:                                       | PL e (EN ISO 13849)                     |
| PFHd (mean probability of a dangerous failure per hour): | 1.5 * 1E-08 (EN ISO 13849)              |
| TM (mission time):                                       | 20 a (EN ISO 13849)                     |
| Supply voltage typical, from, to:                        | 24 V DC, 19.2 V DC, 28.8 V DC           |
| Power consumption:                                       | ≤ 1 A                                   |
| Connection type:                                         | Hirschmann plug M26 x 11 + FE, straight |
| Connection type configuration connection:                | M8 x 4                                  |
| Maximum connection cable cross-section:                  | 0.75 mm²                                |
| Wave length:                                             | 950 nm                                  |
| Protection class:                                        | III (EN 50178)                          |
| Enclosure rating:                                        | IP 65 (EN 60529)                        |
| Ambient operating temperature:                           | 0 °C ... 55 °C                          |
| Vibration resistance (checked to):                       | 5 g (IEC 60068-2-6)                     |

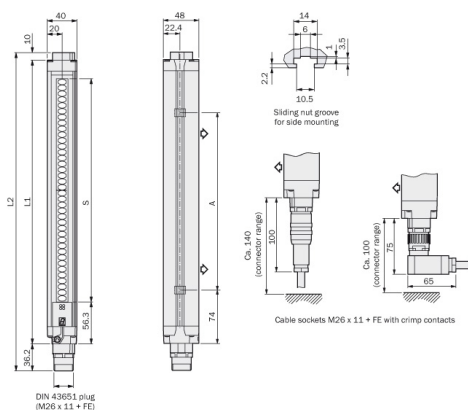
|                                    |                              |
|------------------------------------|------------------------------|
| Oscillation frequency from ... to: | 10 Hz ... 55 Hz              |
| Shock resistance:                  | 10 g, 16 ms (IEC 60068-2-29) |
| Weight:                            | 3,390 g                      |

## Technical Data-Receiver

|                                                          |                                         |
|----------------------------------------------------------|-----------------------------------------|
| Protective field height:                                 | 1,650 mm                                |
| Resolution:                                              | 40 mm                                   |
| Scanning range from ... to:                              | 0.5 m ... 6 m                           |
| Scanning range from ... to (delivery status):            | 0.5 m ... 6 m                           |
| Housing length:                                          | 1,782 mm                                |
| Type:                                                    | Type 4 (IEC 61496)                      |
| Safety integrity level:                                  | SIL3 (IEC 61508), SILCL3 (IEC 62061)    |
| Category:                                                | category 4 (EN ISO 13849)               |
| Performance level:                                       | PL e (EN ISO 13849)                     |
| PFHd (mean probability of a dangerous failure per hour): | 1.5 * 1E-08 (EN ISO 13849)              |
| TM (mission time):                                       | 20 a (EN ISO 13849)                     |
| Supply voltage typical, from, to:                        | 24 V DC, 19.2 V DC, 28.8 V DC           |
| Response time:                                           | 12 ms <sup>1)</sup>                     |
| Power consumption:                                       | ≤ 1.8 A                                 |
| Maximum switching current:                               | 500 mA                                  |
| Wave length:                                             | 950 nm                                  |
| Connection type:                                         | Hirschmann plug M26 x 11 + FE, straight |
| Connection type configuration connection:                | M8 x 4                                  |
| Maximum connection cable cross-section:                  | 0.75 mm <sup>2</sup>                    |
| Protection class:                                        | III (EN 50178)                          |
| Enclosure rating:                                        | IP 65 (EN 60529)                        |
| Ambient operating temperature:                           | 0 °C ... 55 °C                          |
| Vibration resistance (checked to):                       | 5 g (IEC 60068-2-6)                     |
| Oscillation frequency from ... to:                       | 10 Hz ... 55 Hz                         |
| Shock resistance:                                        | 10 g, 16 ms (IEC 60068-2-29)            |
| Weight:                                                  | 3,420 g                                 |

<sup>1)</sup> Without beam coding, with 1 x sampling, no cascaded systems. Other response times see operating instructions.

## Dimensional drawing



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