

# C20S-060103A11

C2000 Standard

**SAFETY LIGHT CURTAINS** 





Illustration may differ



#### **Ordering information**

Housing cross-section	Protective field height	System part	Туре	Part no.
34 mm x 29 mm	600 mm	Sender	C20S-060103A11	1016477

Important notes: 1.) Concerns installation as a spare part: This type 2 device may be used as per section 1, paragraph (2a) of Machinery Directive 2006/42/EC within the EU as a spare part for identical PL d/SIL2 devices only if the machine was put on the market before May 10, 2015. Keep this note with your machine documentation. If the machine is resold, this note must be passed on to the next buyer. 2.) Concerns installation in new machines: Due to the amendment to the EN/IEC 61496-1 standard, this type 2 device may only be installed on new machines up to PLc/SIL1 as of May 10, 2015.

Other models and accessories → www.sick.com/C2000\_Standard

#### Detailed technical data

#### **Features**

Resolution	30 mm
Protective field height	600 mm
Scanning range	0 m 6 m
Synchronization	Optical synchronisation

#### Safety-related parameters

Туре	Type 2 (IEC 61496-1)
Safety integrity level	SIL 1 (IEC 61508)
Category	Category 2 (EN ISO 13849)
Test rate (internal test)	13 /s (EN ISO 13849) <sup>1)</sup>
Maximum demand rate	≤ 8 min <sup>-1</sup> (EN ISO 13849) <sup>2)</sup>
Performance level	PL c (EN ISO 13849)
$\ensuremath{PFH_D}$ (mean probability of a dangerous failure per hour)	2.2 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.

 $<sup>^{1)}\,\</sup>mbox{Internal test.}$  The test rate may not be exceeded if an external test is performed.

#### **Functions**

	Functions	Delivery status
Beam coding	✓	Uncoded

#### Interfaces

System connection	Male connector M12, 8-pin
Conductor cross section	0.25 mm <sup>2</sup>
Permitted cable length	$\leq$ 15 m $^{1)}$

<sup>&</sup>lt;sup>1)</sup> The length of the connecting cable is limited, because wire resistance max. 4 Ohm.

<sup>&</sup>lt;sup>2)</sup> Between two requirements on a safety-related response of the device, at least 100 internal or external tests must be carried out.

Configuration method	Hard wired
Display elements	7-segment display
Status display	LEDs

 $<sup>^{1)}\,\</sup>mbox{The length of the connecting cable is limited, because wire resistance max. 4 Ohm.$ 

#### Electrical data

rotection class	III (EN 50178)
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#### Mechanical data

Housing cross-section	34 mm x 29 mm
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#### Ambient data

Enclosure rating	IP65 (EN 60529)
Ambient operating temperature	0 °C +55 °C
Storage temperature	-25 °C +70 °C
Air humidity	15 % 95 %, Non-condensing
Vibration resistance	5 g, 10 Hz 55 Hz (IEC 68-2-6)
Shock resistance	10 g, 16 ms (EN 60068-2-29)

#### Other information

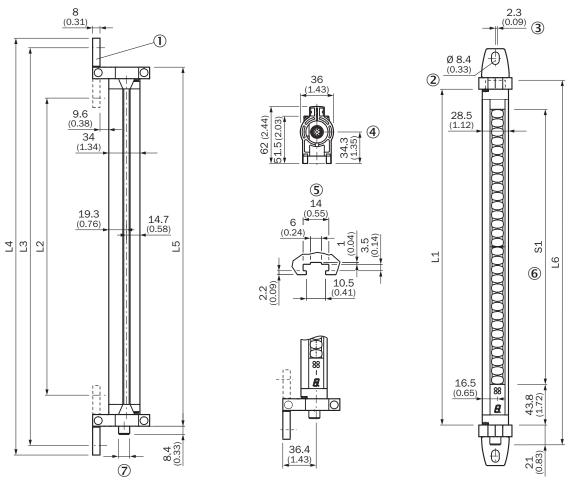
Wave length	950 nm

#### 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))

Protective field heights 150 mm to 1200 mm



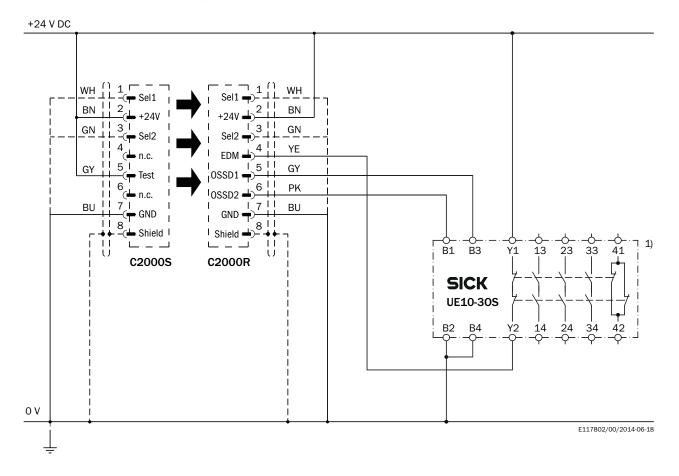
Sender with swivel mount, small housing (receiver mirror image)

- ① Mounting clamp
- ② M8 hexagon screw, DIN 933 with DIN 9021 washer (not included with delivery)
- 3 Center of light beam offset
- 4 Adjustment
- Sliding nut groove for side mounting
- 6 Protective field height
- ⑦ Male connector M12, 8-pin

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#### Connection diagram

C2000 Standard to UE10-30S safety relay



#### Recommended accessories

Other models and accessories → www.sick.com/C2000\_Standard

	Brief description	Туре	Part no.
Alignment aids			
	Laser alignment aid for various sensors, laser class 2 (IEC 60825). Do not look into the beam!, 19 mm x 67.3 mm x 66.9 mm	AR60	1015741
Plug connectors and cables			
	<ul> <li>Connection type head A: Female connector, M12, 8-pin, straight</li> <li>Description: Unshielded</li> <li>Connection systems: Screw-type terminals</li> <li>Permitted cross-section: 0.25 mm² 0.5 mm²</li> </ul>	DOS-1208-G	6028422
Terminal and alignment brackets			
	4 pieces, Mounting kit 6, side bracket, rotatable, zinc diecast	BEF-1SHABAZN4	2019506

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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."

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