

C4000 Select Ex

Safety light curtain



Described product

C4000 Select Ex

Manufacturer

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Original document

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1 About this document

These operating instructions are available to all those who work with the C4000 Select Ex safety light curtain.

Please read these operating instructions carefully and make sure that you understand the content fully before working with the C4000 Select Ex safety light curtain.

Scope

These operating instructions only apply to the C4000 Select Ex safety light curtain with one of the following type label entries in the Operating Instructions field:

- 8017106
- 8017106/YIZ2
- 8017106/YSV4
- 8017106/1DVD

These operating instructions are only valid in conjunction with the underlying operating instructions “C4000 Select Safety Light Curtain” (SICK part number 8012198, change index TI77 or newer).

Unless otherwise specified in this document, the information in the underlying operating instructions will apply with reference to the C4000 Select safety light curtain without an extension connection and with the respective protective field height and resolution.

This document is included with the following SICK part numbers (this document in all available language versions):

8017106/1DVD

2 Safety information

In addition to the information in the underlying operating instructions for the C4000 Select safety light curtain, please observe the following points when using the C4000 Select Ex safety light curtain.

2.1 Correct use

The C4000 Select Ex safety light curtain is an electro-sensitive protective device (ESPE) and is suitable for the following applications:

- Hazardous point protection
- Access protection
- Hazardous area protection

The C4000 Select Ex safety light curtain is suitable for use in enclosed spaces only. It has UL/cUL certification for the following hazardous areas defined in the National Electrical Code® and Canadian Electrical Code®:

- Class I, Groups C, D
- Class II, Groups E, F, G
- Class III

The C4000 Select Ex safety light curtain also complies with the following standards: EN IEC 60079-0:2018 / IEC 60079-0 Edition 7.0, EN 60079-1:2014 / IEC 60079-1 Edition 7.0, EN 60079-31:2014 / IEC 60079-31 Edition 2.0 and is certified for the following hazardous areas:

- CE 0539 Ex II 2 G Ex db IIB T6 Gb
- CE 0539 Ex II 2 D Ex tb IIIC T56 °C Db
- Ex db IIB T6 Gb
- Ex tb IIIC T56 °C Db

DEMKO 14 ATEX 1315X
IECEX UL 14.0034X

The C4000 Select Ex safety light curtain does not emit any paint wetting impairment substances or volatile silicones and does not expel any fixed parts or materials into the surrounding area.

Foreseeable misuse

The C4000 Select Ex safety light curtain is **not** suitable for the following applications:

- Outdoors
- Under water
- In areas where there may be flying sparks

**DANGER**

Risk of ignition

Failure to observe this information could result in a risk of ignition.

- ▶ The sender, receiver, and cables delivered with the C4000 Select safety light curtain are not explosion-proof. The person purchasing, assembling, and using the safety light curtain is responsible for fitting the cables in suitable explosion-proof conduits and/or cable glands to ensure the integrity of the system.
 - ▶ The type label on each individual explosion-proof enclosure contains information on the device's hazardous area class and group. Every device that penetrates the explosion-proof enclosure must be suitable for the environment in which the explosion-proof enclosure is installed with regard to its hazardous area class and group or zone.
-

**DANGER**

Risk of ignition

Failure to observe this information could result in a risk of ignition.

- ▶ If the device is used in an environment classified as tb IIIC, tc IIIB or tc IIIC, the cover must not be removed, not even temporarily (e.g. for maintenance purposes).
-

**DANGER**

Risk of ignition

Failure to observe this information could result in a risk of ignition.

Only if the device is used outside North America:

- ▶ A cable gland must be mounted.
 - ▶ The cable gland must be certified for d and tb environments.
-

**DANGER**

Risk of ignition

Failure to observe this information could result in a risk of ignition.

Only if the device is used in North America:

- ▶ Any conduit openings that are not in use must be sealed. Sealing fittings must turn at least five (5) full revolutions and be at least 3.175 mm thick (1/8 of an inch).
 - ▶ Conduit sealing fittings must be applied in each installed conduit run (located a maximum of 457 mm (18 inches) away from the explosion-proof enclosure) in order to comply with the provisions of the most recent version of the National Electrical Code, Article 501.15 and/or 502.15, and all other applicable regulations.
-

2.2 General safety notes

**DANGER**

Hazard due to lack of effectiveness of the protective device

In the case of non-compliance, it is possible that the dangerous state of the machine may not be stopped or not stopped in a timely manner.

- ▶ Please read this document carefully and make sure that you understand the content fully before working with the device.
 - ▶ Follow all safety notes in this document.
-

**WARNING**

Risk of ineffectiveness of the protective device

Please observe the following information to ensure that you are using the C4000 Select Ex safety light curtain safely and correctly.

- ▶ National and international regulations and guidelines must be observed when mounting, using, and commissioning electrical devices as well as when carrying out regular technical inspections in explosion-hazardous areas. Article 500 of the National Electrical Code and ATEX Directive 2014/34 / EU shall apply in particular. Manufacturers of and entities operating machines using the safety light curtain are responsible for ensuring that all applicable safety regulations and guidelines are complied with.
- ▶ These operating instructions must be made available to the operator of the machine on which the safety light curtain is used. Qualified safety personnel must instruct the operator in how to use the device. The operator must also be directed to read and follow the operating instructions.

**NOTE**

SICK provides more information about the following explosion-proof connections:

- Joint between glass and cover
 - Joint between cover and explosion-proof enclosure
-

3 Mounting

This section contains instructions on how to mount the safety light curtain.

An optional alignment bracket is also available with extended adjustment possibilities, see "Accessories", page 30.



NOTE

Mount the safety light curtain in the following order.

3.1 Safety

In addition to the information in the underlying operating instructions, please observe the following points when mounting the safety light curtain.



DANGER

Risk of ignition or explosion

- ▶ Disconnect the voltage supply before starting to mount the explosion-proof enclosure to avoid igniting hazardous atmospheres.
 - ▶ Only reconnect the voltage supply once you have completed the mounting process.
-



DANGER

Risk of ignition

Failure to observe this information could result in a risk of ignition.

- ▶ If the device is used in an environment classified as tb IIIC, tc IIIB or tc IIIC, the cover must not be removed, not even temporarily (e.g. for maintenance purposes).
-



DANGER

Risk of ignition or explosion

- ▶ If you have to remove the cover when working on the safety light curtain, make sure that the joints and o-ring are clean and undamaged before refitting the cover.
-



DANGER

Risk of ignition or explosion

- ▶ The safety light curtain must be mounted so that there is a gap of more than 30 mm between all other objects and the flange joints between the housing and the cover.
-



DANGER

Dangerous state of the machine

- ▶ Make sure that the dangerous state of the machine is (and remains) switched off during mounting, electrical installation, and commissioning.
 - ▶ Make sure that the outputs of the safety light curtain do not affect the machine during mounting, electrical installation, and commissioning.
-

**DANGER**

Risk of ineffectiveness of the protective device

Persons or parts of the body to be protected are not recognized in case of non-observance.

- ▶ Only use brackets recommended by SICK for mounting.
- ▶ Take appropriate measures for vibration dampening if the vibration and shock requirements are above the values and test conditions specified in the data sheet, see ["Data sheet", page 25](#).

**CAUTION**

Risk of injury due to heavy weight

Lifting and moving heavy loads may cause injury.

Unsecured heavy loads may, for example, fall over and cause bruising.

- ▶ Only lift the device using equipment or two persons.
- ▶ Wear suitable protective clothing and safety shoes.

3.2 Unpacking

- ▶ Check the components for completeness and the integrity of all parts, see ["Scope of delivery", page 29](#).
- ▶ Please contact your respective SICK subsidiary should you have any complaints.

3.3 Installation

**DANGER**

Risk of ignition or explosion

- ▶ Disconnect the voltage supply before starting to mount the explosion-proof enclosure to avoid igniting hazardous atmospheres.
- ▶ Only reconnect the voltage supply once you have completed the mounting process.

**DANGER**

Risk of ignition

Failure to observe this information could result in a risk of ignition.

- ▶ If the device is used in an environment classified as tb IIIC, tc IIIB or tc IIIC, the cover must not be removed, not even temporarily (e.g. for maintenance purposes).

**DANGER**

Risk of ignition or explosion

- ▶ If you have to remove the cover when working on the safety light curtain, make sure that the joints and o-ring are clean and undamaged before refitting the cover.

The mounting process is comprised of either three or four stages:

1. If you have purchased the safety light curtain in pre-mounted condition, please skip this step.
First mount the C4000 Select safety light curtain in the explosion-proof enclosure using the two swivel mount brackets supplied. The swivel mount bracket makes it possible to rotate the sender and receiver around the axis of the device and to align them accurately.

2. Install the cable glands if necessary.
3. Secure the handles supplied onto the enclosure cover.
4. Mount the safety light curtain in the explosion-proof enclosure on the machine. The explosion-proof enclosure can either be attached directly or using the alignment bracket (available as an accessory, see "Accessories", page 30).



NOTE

- ▶ Read this section in full before mounting the safety light curtain.
- ▶ Read the section "Aligning the sender and receiver", page 22.

3.3.1 Mount the safety light curtain in the explosion-proof enclosure (only if the safety light curtain is used in North America)



NOTE

If the device in pre-mounted condition has been purchased, please skip this section.



DANGER

Risk of ignition or explosion

- ▶ Use fixing screws with a yield point of at least 640 MPa to attach the cover to the explosion-proof enclosure.



NOTE

Only safety light curtains with a resolution of 30 mm are suitable for mounting in the explosion-proof enclosure.

1. Unscrew the fixing screws on the cover and remove the cover from the explosion-proof enclosure.
2. Attach the swivel mount brackets to the upper and lower end caps on the safety light curtain.
3. Position the safety light curtain in the explosion-proof enclosure so that the connecting cable is at the same end of the explosion-proof enclosure as the 3/4" NPT opening.
4. Using the fixing screws supplied, attach the swivel mount brackets to the mounting holes provided in the explosion-proof enclosure.
5. Tighten the fixing screws on the swivel mount brackets with a torque of 2.5 to 3 Nm. Too high a torque could damage the swivel mount brackets while too low a torque does not provide sufficient protection against vibration.

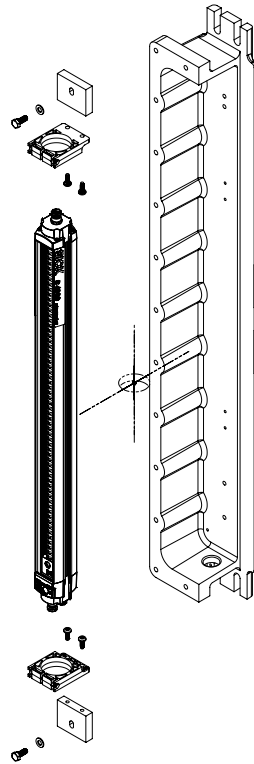


Figure 1: Mount the safety light curtain in the explosion-proof enclosure

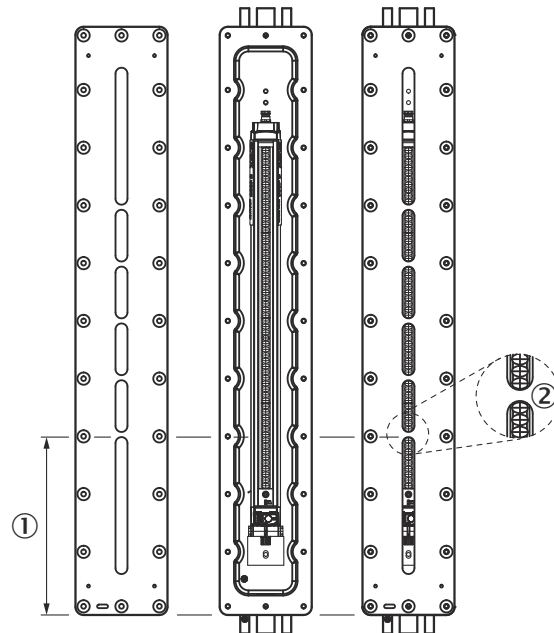


Figure 2: Align the safety light curtain in the explosion-proof enclosure

- ① Measure the distance from the end of the cover to the first rib.
- ② Detailed view

6. Align the safety light curtain in the explosion-proof enclosure so that it meets the following criteria:
 - o Each rib in the window on the cover must cover no more than one optical lens.
 - o Depending on the protective field height, the first rib on the side of the connection must cover the following optical lenses:

Protective field height	Optical lenses covered
600 mm	Tenth optical lens
900 mm	Second optical lens
1,200 mm	Second optical lens

7. Turn the safety light curtain in the swivel mount brackets so that the front screen of the safety light curtain faces the opening in the explosion-proof enclosure. The infra-red rays must be able to pass through the window in the cover without obstruction.
8. Tighten the screws used to secure the safety light curtain in the swivel mount brackets with a torque of 2.5 to 3 Nm.
9. Guide the connecting cable through the 3/4" NPT opening. Make sure that the thread for the 3/4" NPT opening is not damaged.
10. If a cable gland is required, follow the instructions to mount the gland, [see "Mounting the optional cable gland", page 12](#).
11. Fit the cover to the explosion-proof enclosure using the supplied fixing screws and washers. Tighten the fixing screws with a torque of 11.5 to 14.5 Nm.



NOTE

The washers must be used to obtain enclosure rating IP 66.

3.3.2 Mounting the optional cable gland

Depending on national regulations and requirements, a cable gland may have to be installed. The cable gland is available as an accessory.

1. Guide the cable through the cable gland.
2. Screw the cable gland into the 3/4" NPT opening on the explosion-proof enclosure.
3. Pull the collar on the cable gland so that the cable is securely attached.



DANGER

Risk of ignition or explosion

- ▶ Check the 3/4" NPT opening on the thread for damage.
- ▶ Do not use the device if the thread for the 3/4" NPT opening is damaged.

3.3.3 Mounting the handles onto the cover of the explosion-proof enclosure

1. Use the supplied M6 screws to secure the two handles onto the cover of the explosion-proof enclosure.
2. Tighten the screws with a torque of 4.5 to 5 Nm.

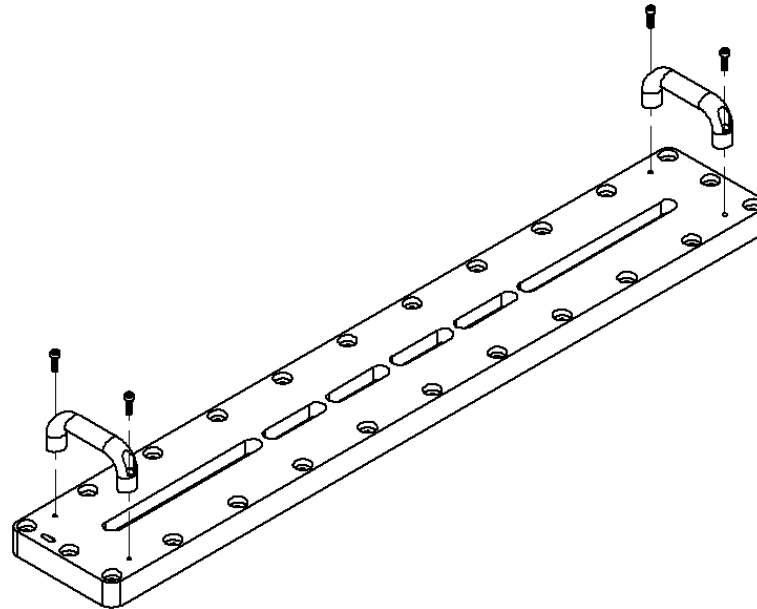


Figure 3: Mounting the two handles

3.3.4 Mounting the safety light curtain

General notes

- ▶ Find a place to mount the safety light curtain that is stable enough to hold its weight.
- ▶ Mount the sender and receiver on a level surface.
- ▶ Mount the sender and receiver at the same height.
- ▶ The end with the connecting cable must point in the same direction for both devices.

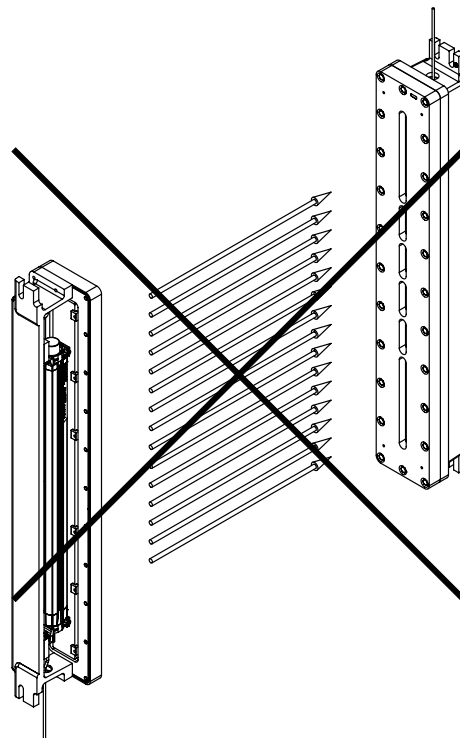


Figure 4: The sender and receiver are mounted incorrectly

- ▶ Sender and receiver must not be installed at 180° rotated relative to each other.
- ▶ Make sure that the sender and receiver are aligned correctly. The optical lens systems of the sender and the receiver must be located opposite one another.
- ▶ If necessary, use a water level to check that the components are parallel.
- ▶ The alignment bracket makes it possible to rotate the sender and receiver around the axis of the device and to align them accurately, see "[Aligning the sender and receiver](#)", page 22.

Mounting the safety light curtain without the alignment bracket

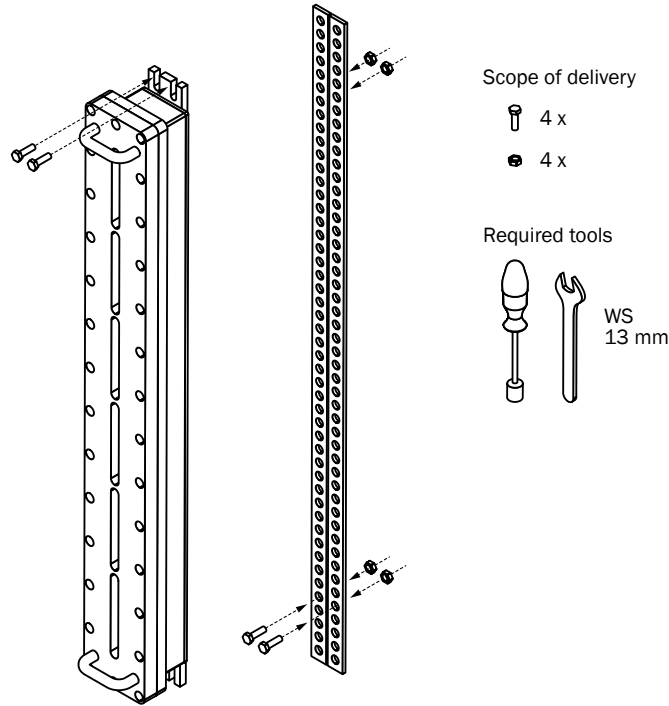


Figure 5: Mounting the safety light curtain without the alignment bracket

- ▶ Use wrench size 13 mm.

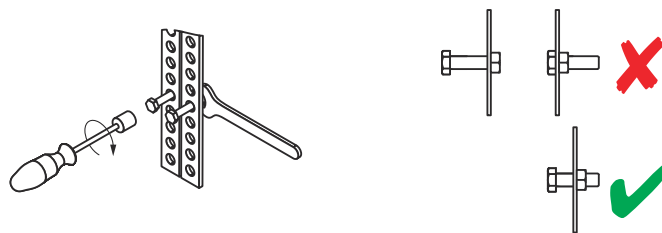


Figure 6: Mounting the safety light curtain without the alignment bracket: Step 1

1. Using 6 to 8 revolutions, screw in the two M8 screws for mounting the lower end of the explosion-proof enclosure. Make sure you leave enough space between the screws and the mounting surface for the lower end of the explosion-proof enclosure.

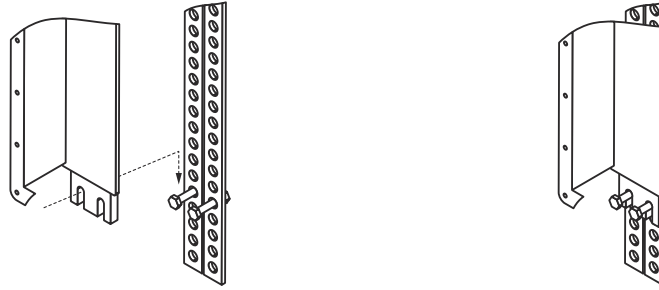


Figure 7: Mounting the safety light curtain without the alignment bracket: Step 2

2. Position the explosion-proof enclosure on the two screws so that the mounting holes are directly over the partly-tightened screws.

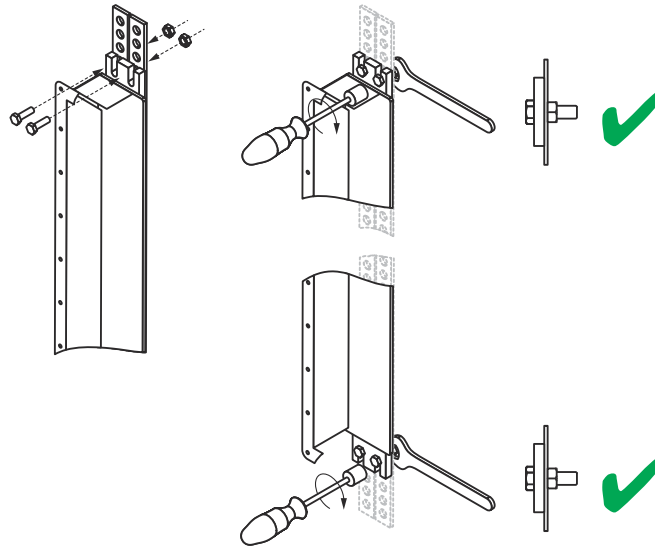


Figure 8: Mounting the safety light curtain without the alignment bracket: Steps 3 and 4

3. Fix the upper end of the explosion-proof enclosure to the mounting surface using two M8 screws.
4. Tighten the two lower M8 screws.

Mounting the safety light curtain using the alignment brackets

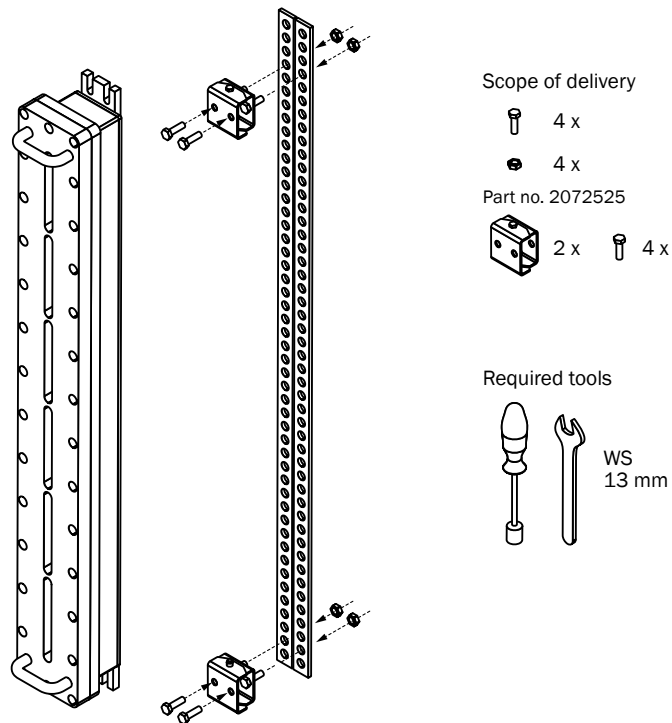


Figure 9: Mounting the safety light curtain using the alignment brackets

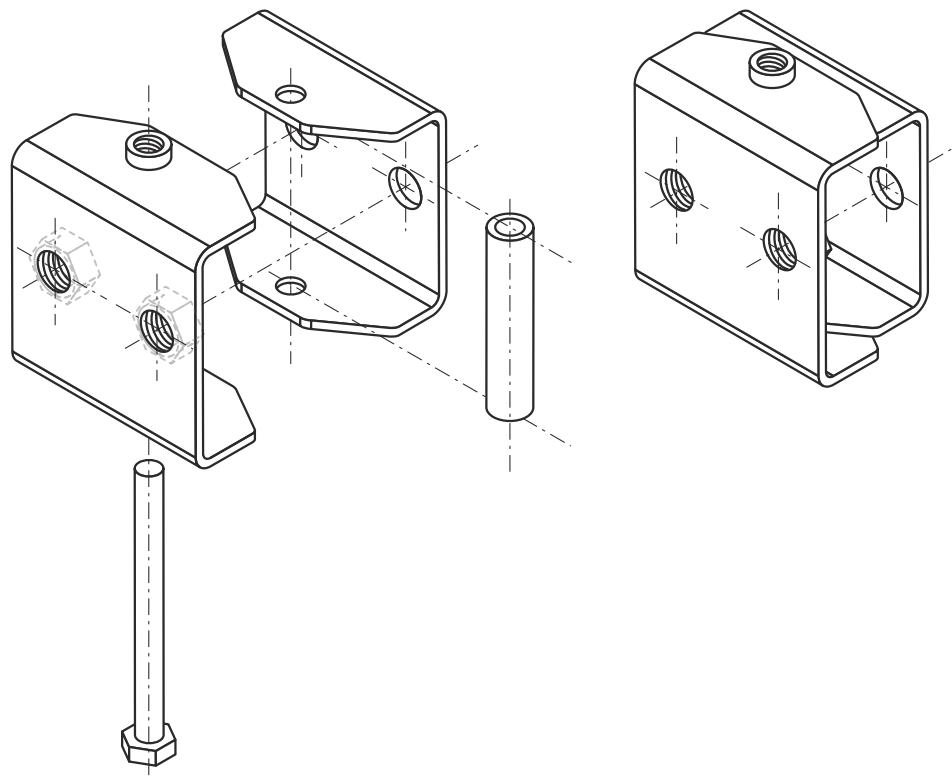


Figure 10: Assembling the alignment brackets

1. Mount the lower alignment bracket so that the threaded hole faces up and the head of the lock screw faces down.
2. Rotate the alignment bracket as far to one side as possible. Secure the alignment bracket on the open side by screwing the first M8 screw into the through hole.
3. Rotate the lower alignment bracket to the other side. Secure the alignment bracket using the second M8 screw.
4. Mount the upper alignment bracket so that the threaded hole faces down and the head of the lock screw faces up.
5. Rotate the upper alignment bracket as far to one side as possible. Secure the alignment bracket on the open side by screwing the first M8 screw into the through hole.
6. Rotate the upper alignment bracket to the other side. Secure the alignment bracket using the second M8 screw.

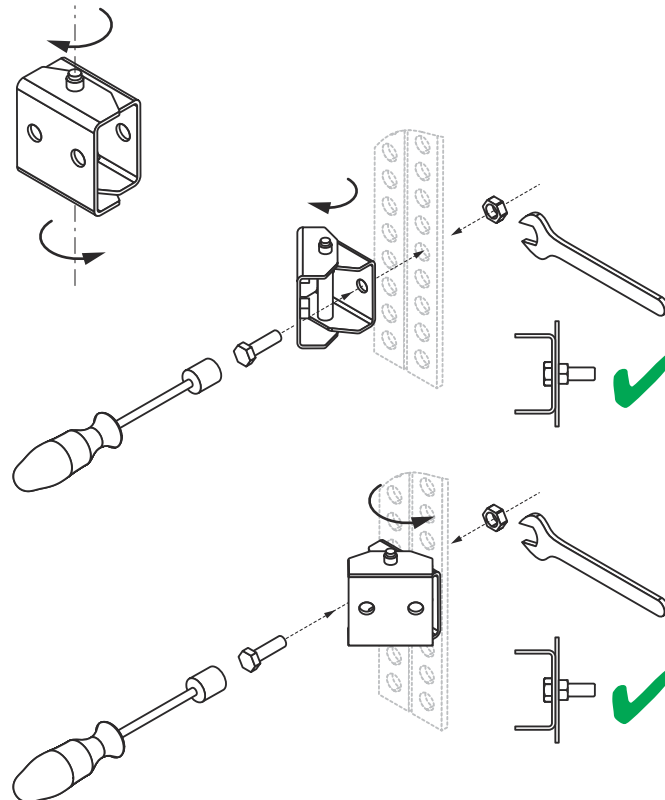


Figure 11: Mounting the safety light curtain using the alignment brackets: Steps 1 to 6

7. Using 6 to 8 revolutions, screw the two M8 screws for mounting the lower end of the explosion-proof enclosure into the lower alignment bracket. Make sure you leave enough space between the screws and the alignment bracket for the lower end of the explosion-proof enclosure.

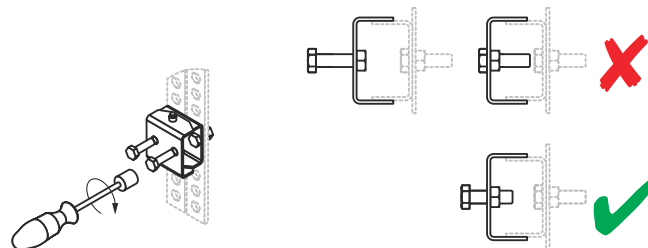


Figure 12: Mounting the safety light curtain using the alignment brackets: Step 7

8. Position the explosion-proof enclosure on the two screws so that the mounting holes are directly over the partly-tightened screws.

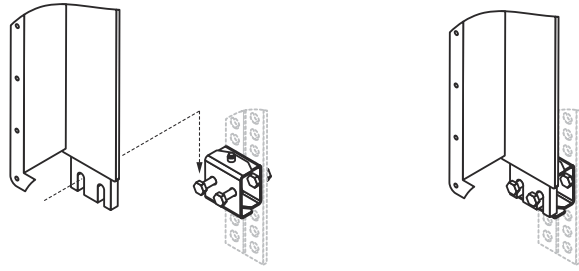


Figure 13: Mounting the safety light curtain using the alignment brackets: Step 8

9. Fix the upper end of the explosion-proof enclosure to the upper alignment bracket using two M8 screws.
10. Tighten the two lower screws.

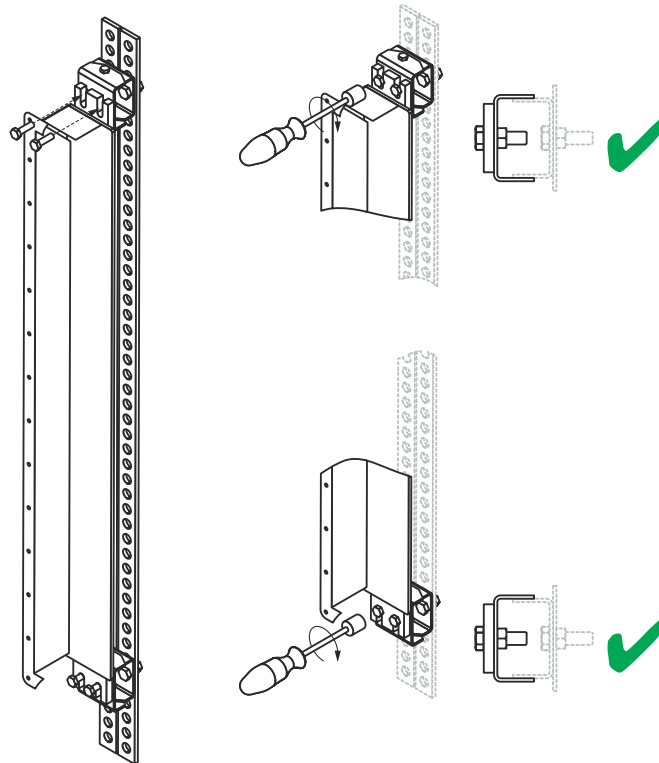


Figure 14: Mounting the safety light curtain using the alignment brackets: Steps 9 and 10

11. Turn the safety light curtains so that they face one another and so that the receiver receives the strongest signal possible.

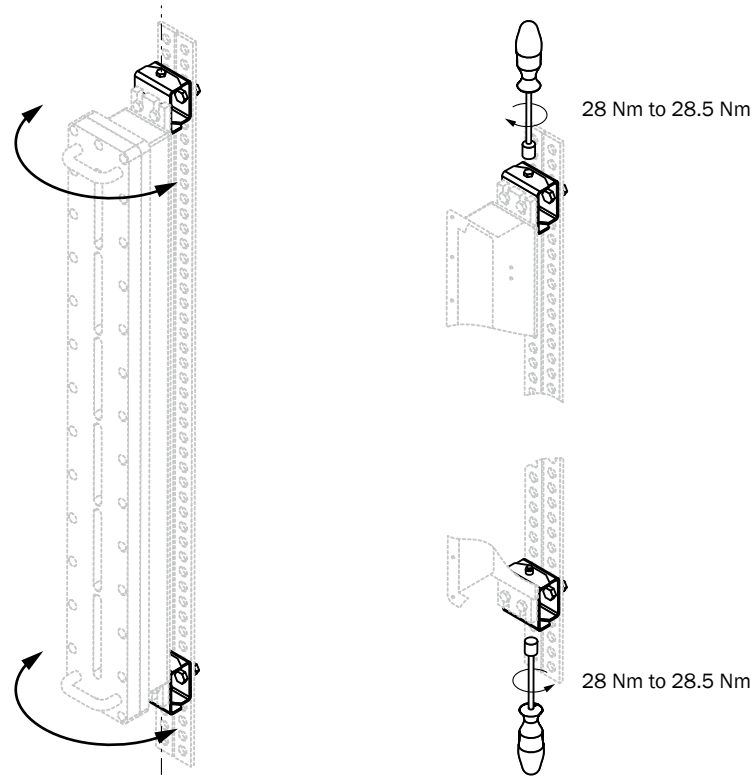


Figure 15: Mounting the safety light curtain using the alignment brackets: Steps 11 and 12

12. Tighten the locking screws on all alignment brackets with a torque of 28 to 28.5 Nm in order to secure the safety light curtain in this position.

4 Electrical installation

4.1 Safety

In addition to the information in the underlying operating instructions, please observe the following points when installing the electrics for the safety light curtain.



DANGER

Ignition Hazard

Failure to observe this information could result in a risk of ignition

- ▶ Always switch the voltage supply off before disconnecting a connecting cable from the device.
 - ▶ Ensure that all electrical connections to the device or to the connections are protected.
 - ▶ The IP enclosure rating for the connections and therefore for the device is only guaranteed if the connections are protected. Otherwise foreign objects can get into the terminal compartment. This can cause an explosion the next time the device is switched on.
 - ▶ Put in place measures for ensuring supply reliability and delivery dependability.
-



DANGER

Risk of ignition

Failure to observe this information could result in a risk of ignition.

- ▶ If the device is used in an environment classified as tb IIIC, tc IIIB or tc IIIC, the cover must not be removed, not even temporarily (e.g. for maintenance purposes).
-



DANGER

Risk of ignition or explosion

- ▶ If you have to remove the cover when working on the safety light curtain, make sure that the joints and o-ring are clean and undamaged before refitting the cover.
-



DANGER

Risk of ignition or explosion

- ▶ Disconnect the power supply before opening the explosion-proof enclosure to avoid igniting hazardous atmospheres.
 - ▶ Do not reconnect the power supply until you have completed the electrical installation.
-

**DANGER**

Risk of ignition or explosion

- ▶ Each connection to the protection earth (PE) on the explosion-proof enclosure must use at least one wire with a cross-section meeting the requirements of the table below.

Table 1: Minimum wire cross-section for protection earth (PE)

Wire cross-section of outer cable S	Minimum wire cross-section of the corresponding protection earth wire S _p
$S \leq 16 \text{ mm}^2$	S
$16 \text{ mm}^2 < S \leq 35 \text{ mm}^2$	16 mm ²
$S > 35 \text{ mm}^2$	0.5 S

5 Aligning the sender and receiver

After mounting and electrical installation, the sender and receiver must be aligned with each other.



DANGER

Dangerous state of the machine

- ▶ Make sure that the outputs of the safety light curtain have no effect on the machine during the alignment process.



NOTE

Use the optional alignment bracket if the alignment cannot be adjusted when mounting the safety light curtain directly.

Aligning using the alignment bracket

The alignment bracket can be used to adjust the safety light curtain as follows:

- Rotate ($\pm 45^\circ$)

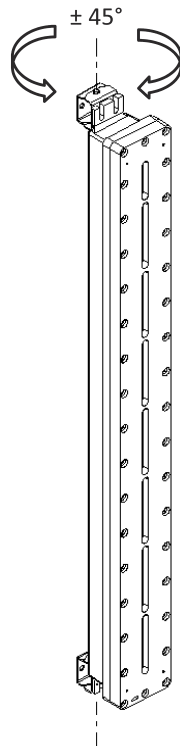


Figure 16: Rotating with the alignment bracket

Aligning the sender and receiver with one another

How to align the sender and receiver using the alignment bracket:

- ▶ Pay attention to the mounting heights of the sender and receiver. Both devices must be mounted at the same height.
- ▶ Provide a rectangular protective field. The sender and receiver must be mounted parallel to one another.
- ▶ Switch on the voltage supply to the safety light curtain.
- ▶ Rotate the sender to align the sender to the receiver.
- ▶ Rotate the receiver to align the receiver to the sender.

- ▶ Follow the alignment instructions in the underlying operating instructions.
- ▶ Once the sender and receiver are aligned correctly, secure the components in the alignment brackets with a torque of 28 to 28.5 Nm.
- ▶ Switch the power supply off and then on again.
- ▶ Check the alignment quality display as described in the underlying operating instructions to make sure that components are still correctly aligned with one another.

6 Maintenance



DANGER

Risk of ignition or explosion

- ▶ Disconnect the voltage supply before any maintenance work is carried out to avoid igniting hazardous atmospheres.
 - ▶ Only reconnect the voltage supply once you have completed the maintenance work.
-



DANGER

Risk of ignition

Failure to observe this information could result in a risk of ignition.

- ▶ If the device is used in an environment classified as tb IIIC, tc IIIB or tc IIIC, the cover must not be removed, not even temporarily (e.g. for maintenance purposes).
-



DANGER

Risk of ignition or explosion

- ▶ If you have to remove the cover when working on the safety light curtain, make sure that the joints and o-ring are clean and undamaged before refitting the cover.
-



DANGER

Risk of ignition or explosion

- ▶ Use fixing screws with a yield point of at least 640 MPa to attach the cover to the explosion-proof enclosure.
-

The safety light curtain is maintenance-free. Depending on the ambient conditions, regular cleaning is required.

6.1 Regular cleaning



DANGER

Risk of ignition or explosion

Static discharge could cause explosions in hazardous atmospheres.

- ▶ Always use anti-static cleaning agents to prevent static charge.
 - ▶ Do not clean the device using a dry cloth.
-



NOTICE

- ▶ Do not use any aggressive cleaning agents.
 - ▶ Do not use any abrasive cleaning agents.
 - ▶ Do not use any oil-based cleaning agents.
 - ▶ We recommend anti-static cleaning agents.
-

Clean the front screen.

1. Use a clean, soft brush to remove dust from the front screen.
2. Then wipe the front screen with a clean, damp cloth.
3. Check the position of the sender and receiver after cleaning.
4. Check the effectiveness of the protective device. You will find information on how to check the effectiveness in the underlying operating instructions.

7 Technical data

7.1 Data sheet



NOTE

The following table only contains details on the safety light curtain that are not included in the underlying operating instructions.

Table 2: General system data

	Minimum	Typical	Maximum
Protective field height, depending on type	600, 900, and 1,200 mm		
Resolution (detection capability)	30 mm		
Protective field width, can be configured using the DIP switch Small scanning range Large scanning range		0 m ... 5 m 4 m ... 16 m ¹⁾	
Enclosure rating (EN 60529)	IP 66 ²⁾		
Equipment group/category II	Ⓢ II 2 G Ex db IIB T6 Gb Ⓢ II 2 D Ex tb IIIC T56 °C Db		
Weight	Depending on the protective field height, see "Table of weights", page 25		

- 1) If you are using this protective field width, check to see if the alignment LEDs light up yellow (cleaning or alignment necessary). The system still has a reserve of 30 %.
- 2) In order to achieve enclosure rating IP 66, washers must be used for the fixing screws on the enclosure cover.

7.2 Table of weights

Table 3: Weight of sender and receiver

Protective field height [mm]	Weight [kg] ¹⁾	
	Sender	Receiver
600	29.45	29.45
900	37.84	37.82
1200	46.20	46.16

- 1) Tolerance: ± 50 g.

7.3 Dimensional drawings

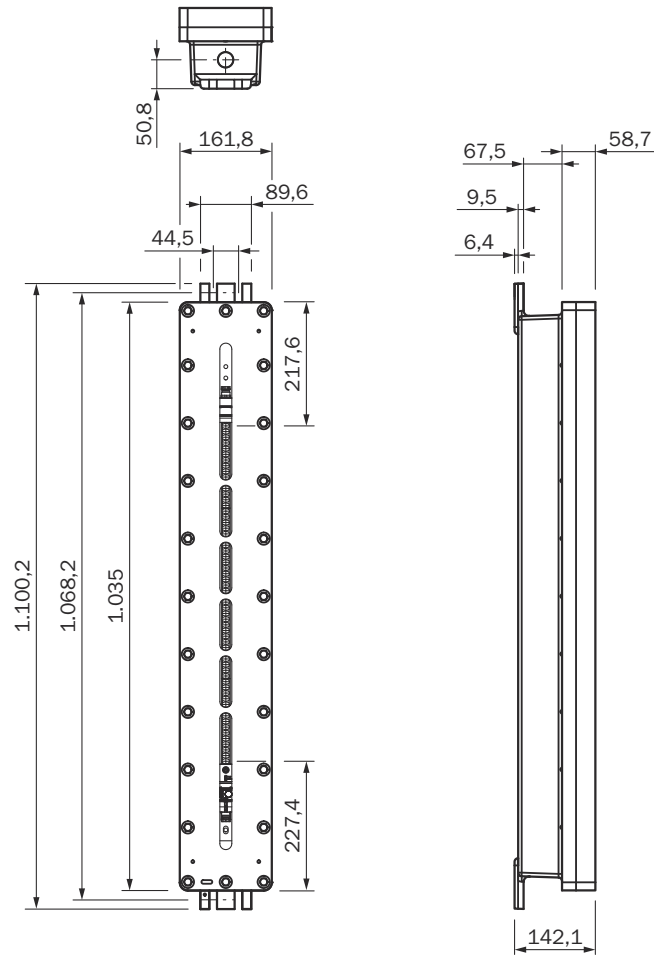


Figure 17: Dimensional drawing, sender and receiver, protective field height 600 mm

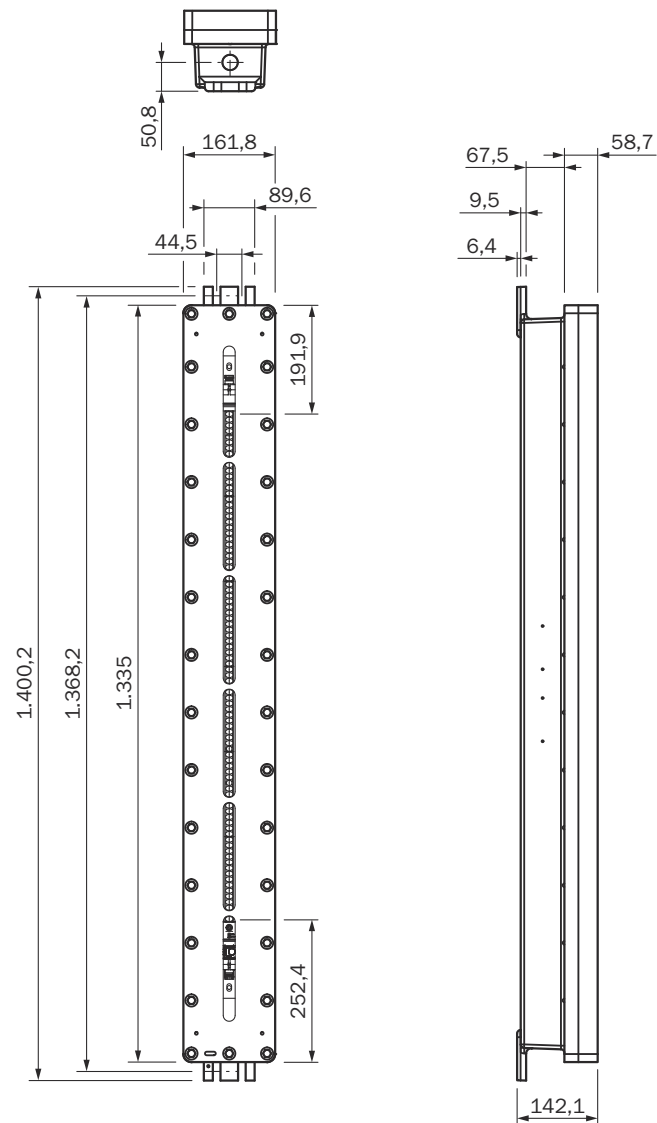


Figure 18: Dimensional drawing, sender and receiver, protective field height 900 mm

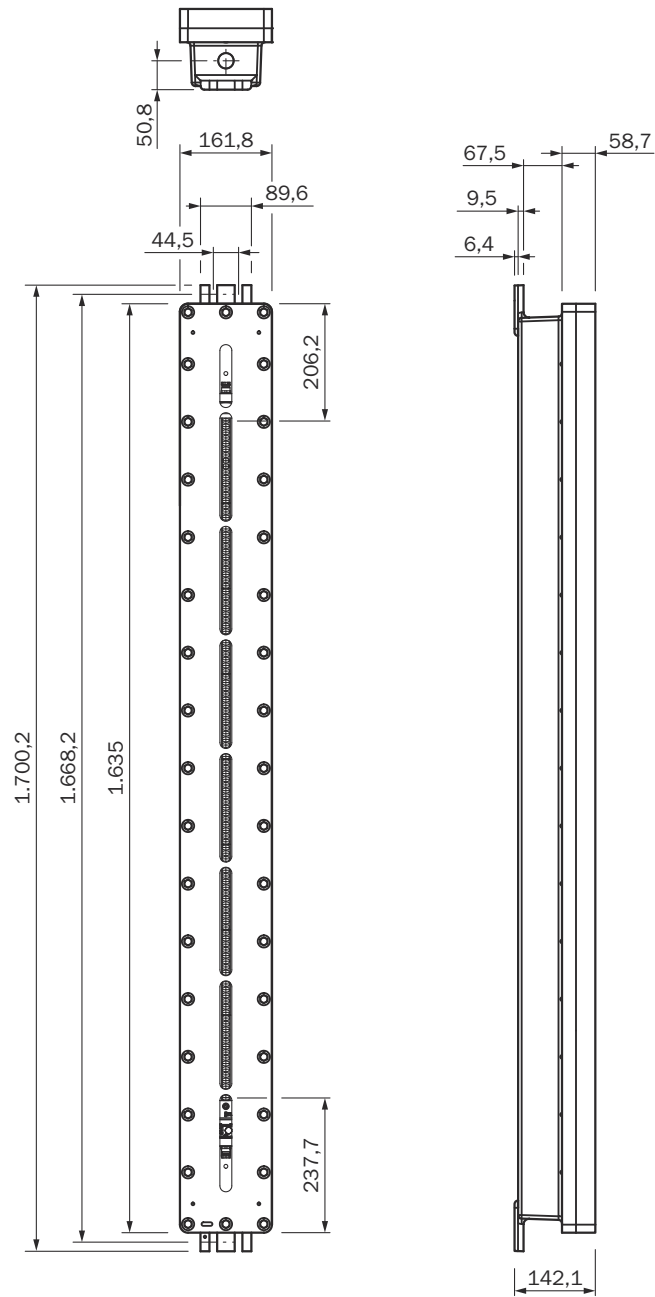


Figure 19: Dimensional drawing, sender and receiver, protective field height 1,200 mm

8 Ordering information

8.1 Scope of delivery

Scope of delivery, sender

- C4000 Select sender without extension connection
- Explosion-proof enclosure
- 2 swivel mount brackets
- 2 handles
- 30 m system connection cables, flying leads

Scope of delivery, receiver

- C4000 Select receiver without extension connection
- Explosion-proof enclosure
- 2 swivel mount brackets
- 2 handles
- 30 m system connection cables, flying leads
- Test rod with diameter corresponding to the physical resolution of the safety light curtain
- Label "Notes for ATEX II 2G / 2D"
- "Important Information" label
- Label "Effective resolution"
- Information label "Notes for the machine operator"
- Quick start instructions
- Operating instructions on CD-ROM

8.2 Ordering information C4000 Select Ex

Table 4: Ordering information C4000 Select Ex

Protective field height [mm]	☐ Sender		☐ Receiver		☐☐ Sender and receiver	
	Part number	Type code	Part number	Type code	Part number	Type code
600	1068389	EXS-06B6203B020	1068388	EXE-06B6203B020	1068387	EXP-06B6203B020
900	1068392	EXS-09B6403B020	1068391	EXE-09B6403B020	1068390	EXP-09B6403B020
1200	1068395	EXS-12B6603B020	1068394	EXE-12B6603B020	1068393	EXP-12B6603B020

9 Accessories

9.1 Brackets

Part	Part number
2 swivel mount brackets (included with delivery)	2074530
2 alignment brackets for the explosion-proof enclosure	2072525

Swivel mount bracket

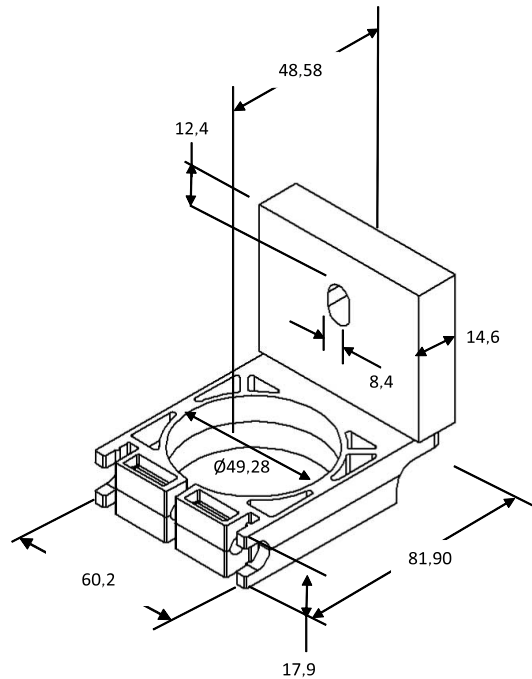


Figure 20: Dimensional drawing, swivel mount bracket (2074530)

Alignment bracket

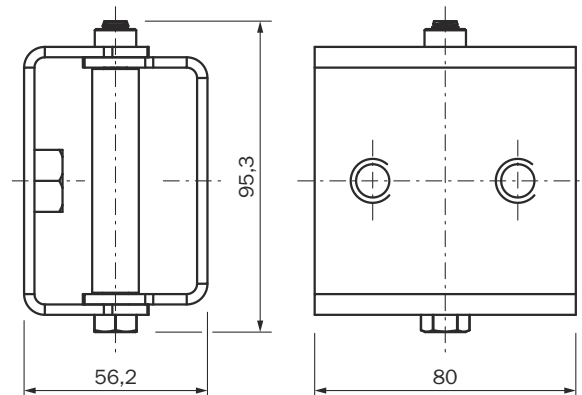


Figure 21: Dimensional drawing, alignment bracket (2072525)

9.2 Connectivity

Table 5: Ordering information for connecting and connection cable

Part	Part number
Connecting cable ¹⁾ M12, 5-pin (0.34 mm ²)	

Part	Part number
DOL-1205-G02M, female connector, straight, with 2 m cable, flying leads	6008899
DOL-1205-G05M, female connector, straight, with 5 m cable, flying leads	6009868
DOL-1205-G10M, female connector, straight, with 10 m cable, flying leads	6010544
DOL-1205-G15M, female connector, straight, with 15 m cable, flying leads	6029215
Male connector, straight, with 2 m cable, flying leads	6026133
Male connector, straight, with 5 m cable, flying leads	6026134
Male connector, straight, with 10 m cable, flying leads	6026135
Connection cable	
DOL-1205-G02M, female connector, straight with 2 m cable, male connector, straight	2044610
DOL-1205-G05M, female connector, straight with 5 m cable, male connector, straight	2044611
DSL-1205-G10M, female connector, straight with 10 m cable, male connector, straight	2044612
DSL-1205-G15M, female connector, straight with 15 m cable, male connector, straight	2044613
DSL-1205-G30M, female connector, straight with 30 m cable, male connector, straight	2044614
DSL-1205-G01MC, female connector, straight with 1 m cable, male connector, straight	6029280
DSL-1205-G02MC, female connector, straight with 2 m cable, male connector, straight	6025931
DSL-1205-G05MC, female connector, straight with 5 m cable, male connector, straight	6029282

1) Ambient operating temperature: Down to -30° C with fixed installation.

Table 6: Cable gland ordering information

Part	Part number
Cable gland for the European market	5329001

Table 7: Ordering information for power supply

Part	Type code	Part number
Output 24 V DC, 50 W (2.1 A), voltage supply NEC Class 2, SELV, PELV, input 120 V AC ... 240 V AC	PS50WE24V	7028789
Output 24 V DC, 95 W (3.9 A), voltage supply NEC Class 2, SELV, PELV, input 100 V AC ... 120 V / 220 V AC ... 240 V AC	PS95WE24V	7028790

9.3 Alignment aid

Part	Part number
Laser alignment aid AR60	1015741
Adapter	2074849

10 Annex

10.1 Conformities and certificates

You can obtain declarations of conformity, certificates, and the current operating instructions for the product at www.sick.com. To do so, enter the product part number in the search field (part number: see the entry in the “P/N” or “Ident. no.” field on the type label).

10.1.1 EU declaration of conformity

Excerpt

The undersigned, representing the manufacturer, herewith declares that the product is in conformity with the provisions of the following EU directive(s) (including all applicable amendments), and that the standards and/or technical specifications stated in the EU declaration of conformity have been used as a basis for this.

- ROHS DIRECTIVE 2011/65/EU
- EMC DIRECTIVE 2014/30/EU
- MACHINERY DIRECTIVE 2006/42/EC
- ATEX DIRECTIVE 2014/34/EU

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