

## ITEM 116515 CET4-AS-CRA-CB-50X-1-116515

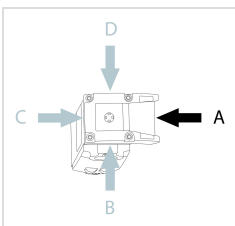
Description	Technical data	Accessories	Downloads
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### Features

- › Safety switch with guard locking and integrated evaluation electronics
- › Locking force up to 6500 N
- › Up to category 4/PL e according to EN ISO 13849-1
- › Multicode
- › Approach direction A (default setting on delivery)

### Approach direction



- › Figure  
Horizontal  
Can be adjusted in 90° steps

### Guard locking type

**CET4 Open-circuit current principle** guard locking by control of AS-i output 0. Release by spring force.

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### Control of the guard locking solenoid

The guard locking solenoid is controlled by the control system via ASIInterface bus bit D0.

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### AS-Interface inputs

**D0, D1** Door monitoring

**D2, D3** Guard lock monitoring

Evaluation is performed via a safety monitor.

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### AS-Interface outputs

**D0** Guard locking

**D1** Red LED

**D2** Green LED

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### LED function display

- › The ASI LED indicates the operating voltage on the bus.
  - › The State LED indicates if a fault has been detected on the AS-Interface bus.
  - › The green and the red LEDs can be controlled as required by the control system via the bus using bits D1 and D2.
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### Auxiliary release

Is used for releasing the guard locking with the aid of a tool. The auxiliary release must be sealed to prevent tampering (for example with sealing lacquer).

### Approvals



### Mechanical values and environment

Housing material	Slide	Stainless steel
	Safety switch housing	Die-cast aluminum
Weight	Net	1 kg
Ambient temperature	At $U_B = 24V$ DC	-20 ... 55 °C
Degree of protection		IP67 [1]

Resilience to vibration	In acc. with EN IEC 60947-5-2
Mechanical life	1 x 10 <sup>6</sup>
Installation position	Any [2]
Degree of freedom	Z ±4 mm Y ±5 mm X ±5 mm
Switching frequency	max.0,5 Hz
Connection	1x Plug connector M12 [3]
Approach speed	20 m/min
Guard locking principle	Open-circuit current principle
Locking force F <sub>max</sub>	6500 N
Locking force F <sub>Zh</sub>	5000 N [4]

### Electrical connection ratings

ASi voltage	22,5 ... 30 V 31,6 V
ASi operating current	50 mA
ASi auxiliary voltage IEC 60742, PELV	24 V -15% ... +10%
ASi auxiliary current	480 mA
Degree of contamination (external, according to EN 60947-1)	3
ASi slave type	According to ASI specification 2.1 EA code: 7 According to ASI specification 2.1 ID code: B
ASi data in	According to As-i Safety at Work D0 [5] According to As-i Safety at Work D1 [6] According to As-i Safety at Work D2 [7] According to As-i Safety at Work D3 [8]
ASi data out	Guard locking solenoid D0 [9] LED red D1 [10] LED green D2 [11]
ASi LED	LED green Power [12] LED red Fault [13]
Safety class EN IEC 61140	III

### Miscellaneous

For the approval according to UL the following applies	Operation only with UL class 2 power supply, or equivalent measures see operating instructions
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## Reliability values acc. to EN ISO 13849-1

Performance Level	PL e
Category	
Head upward	3
Head downward or horizontal	4
PFHD	
Head upward	$4.29 \times 10^{-8}$
Head downward or horizontal	$3.1 \times 10^{-9}$
Mission time	20 y

[1] Screwed tight plug connector/mating component

[2] Preferably head downward

[3] 4-pin

[4]  $FZH = FMAX/1.3$

[5, 6] Door position

[7, 8] Guard locking

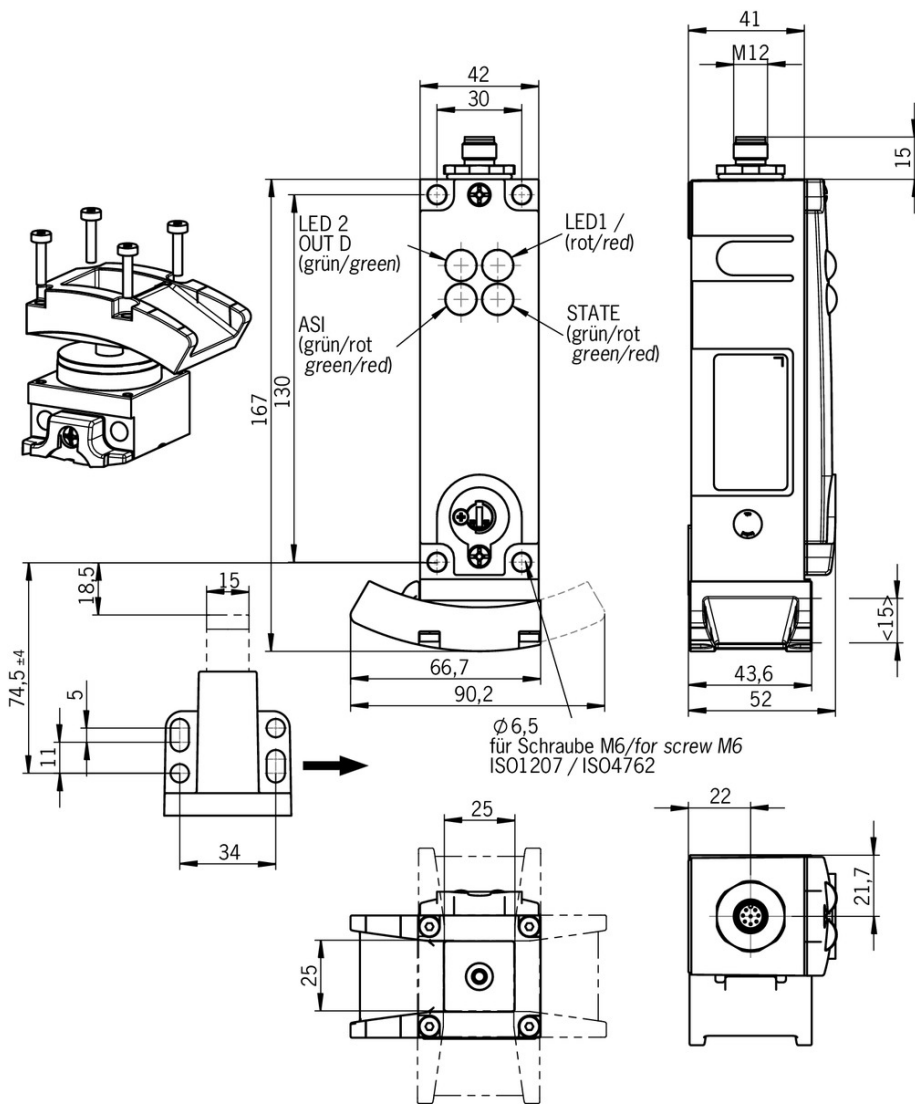
[9] 1 = Solenoid energized

[10, 11] 1 = LED on

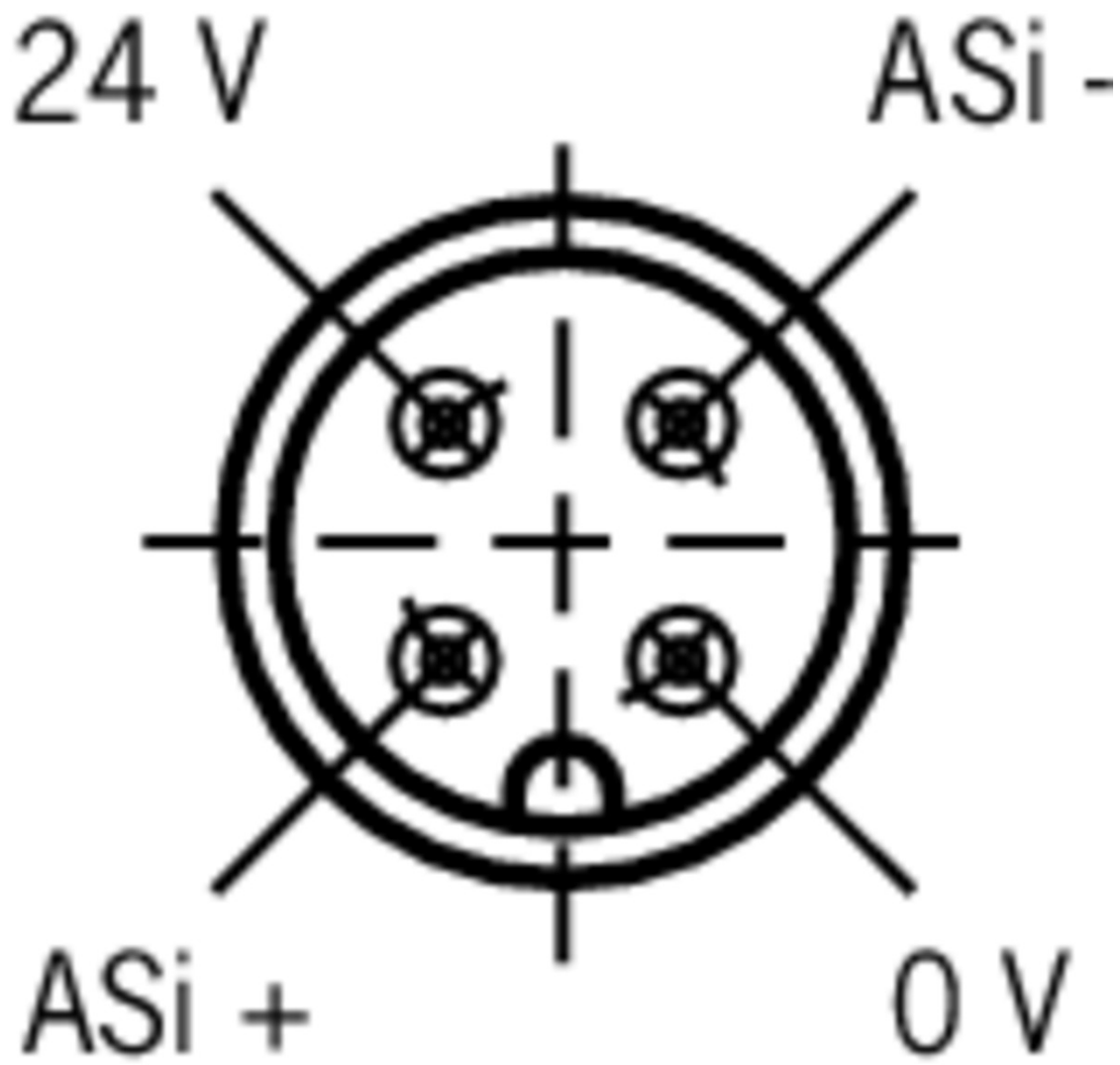
[12] ASI voltage is present

[13] Offline phase or address 0

# Dimension drawing



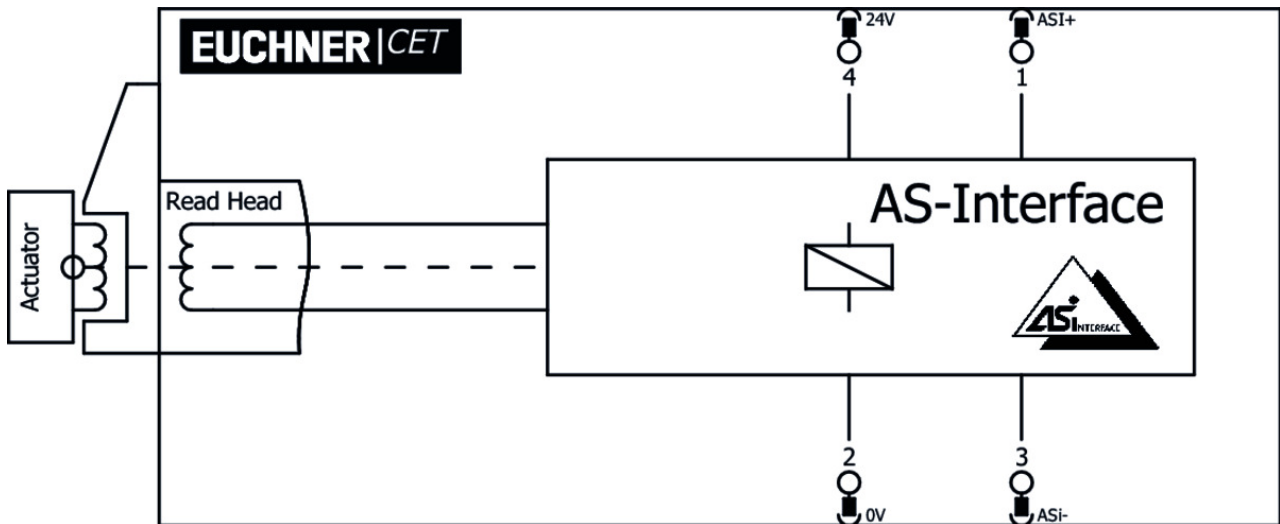
**Connector assignment**



**Legende**

View of plug side

## Block diagram



## Actuator

### Actuator CET-A-BWK-50X



#### 096327 CET-A-BWK-50X

##### Features

- › Actuator for read head/safety switch CET
- › Four safety screws M5x16 included

## Bolt

### Bolt CET-A-C



#### 104309 RIEGEL CET-A-C

##### Features

- › Steel bolt
- › In combination with CET
- › For left or right hinged doors
- › Can be locked in open position with padlocks



#### 109672 RIEGEL CET-A-C-C2308

##### Features

- › Steel bolt
- › In combination with CET
- › For left or right hinged doors
- › Can be locked in open position with padlocks
- › Bolt without door stop, suitable for swing doors

## Mounting accessories

### Mounting plate EMP-L-... for CET read head/switches



#### **106695** EMP-L-CET

##### ▼ Features

- › Mounting plate for CET read heads/switches
  - › For hinged or sliding doors
  - › Suitable for aluminum profiles 40 ... 45 mm
  - › Horizontal and vertical mounting
  - › Suitable for CET with escape release
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#### ▼ Mounting plate EMP-B-... for actuator CET



#### **106694** EMP-B-CET

##### ▼ Features

- › Mounting plate for actuator CET for hinged or sliding doors
  - › Suitable for aluminum profiles 40 ... 45 mm
  - › Horizontal and vertical mounting
  - › Made of aluminum
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#### ▼ Safety screws for actuators, M5 x 16

#### **073456** M5X16/V100

##### ▼ Features

- › Safety screws M5 x 16
  - › Packaging unit 100 pieces
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#### ▼ Mounting plate EM-P switch for safety switch CET



#### **126399** AM-P-126399

##### ▼ Features

- › Mounting plate for CET read heads/switches
  - › Direct mounting on aluminum profiles of width 30/40/50 mm
  - › Suitable for the mounting plates AM-P-126400 and AM-P-126398
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#### ▼ Mounting plate EM-P actuator for safety switch CET



#### **126400** AM-P-126400

##### ▼ Features

- › Mounting plate for CET actuator
  - › Suitable for mounting on aluminum profiles of width 30/40/50 mm
  - › Suitable for the mounting plates AM-P-126399 and AM-P-126398
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#### ▼ Mounting plate EM-P handle for safety switch CET



#### **126398** AM-P-126398

##### ▼ Features

- › Mounting plate with handle (handle included)
  - › For hinged or sliding doors
  - › Horizontal and vertical assembly circuits possible
  - › Suitable for aluminum profiles of width 30/40/50 mm
  - › Suitable for the CET mounting plates AM-P-126399 and AM-P-126400
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## Function expansion

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### ✓ Cover for read head and actuator CET



#### **098808** CET ABDECKUNG RECHTS

##### ✓ Features

- › Cover for read heads / safety switches CET and actuators CET
- › For approach direction A



#### **098807** CET ABDECKUNG LINKS

##### ✓ Features

- › Cover for read heads / safety switches CET and actuators CET
- › For approach direction C

### ✓ Emergency unlocking for CET



#### **103714** NOTENTSPERRUNG CET

### ✓ Mechanical key release for CET read head/switch



#### **098850** SCHLUESSEL-HILFSENTRIEGELUNG

##### ✓ Features

- › Identical locking
- › Key removable in “unlocked” and “locked” positions

### ✓ Cover for actuator CET



#### **124979** AM-C-124979

##### ✓ Features

- › Cover for actuator CET
- › Horizontal and vertical fastening option on the actuator
- › Mounting using 4 screws M5x16 (included with the actuator)
- › Not suitable in combination with lockout bar for actuator CET

### ✓ Lockout mechanism for CET actuator



#### **122609** AE-L-CET-122609

##### ✓ Features

- › Prevents unintentional closing of the door
- › Can be secured with padlocks
- › Not suitable in combination with cover AM-C for actuator CET



#### **156429** AE-L-CET-156429

##### ✓ Features

- › Prevents unintentional closing of the door
- › Can be secured with padlocks

### ✓ Holder for lockout mechanism CET actuator



### 156338 Y-CHN-A1-156338

#### Features

- › Holder (incl. wire rope) for lockout bar CET

#### Lockout bar and holder for CET actuators



### 155865 AE-SET-LCHN-A1-155865

#### Features

- › Prevents unintentional closing of the door
- › Can be secured with padlocks

## Connection material

#### Connection cable with plug connector M12, 5-pin, 1m

### 089420 C-M12M05-04X034PU01,0-M12F05-089420

#### Features

- › For the bus coupling module
- › M12 female plug, 5-pin
- › M12 male plug, 5-pin
- › PUR cable
- › Cable length 1 m

#### Bus coupling module with plug connector M12, 5-pin



### 105756 BCM-A-P2-SEM4-1

#### Features

- › Conversion from M12 to ribbon cable
- › Very compact design
- › Easy handling




## Instructions

#### Betriebsanleitung Sicherheitsschalter CET.-AS-...-CB-... (Multicode)

	Doc. no.	Version	Language	Download
Betriebsanleitung Sicherheitsschalter CET.-AS-...-CB-... (Multicode)	112685	04-10/13		1.3 MB
Operating Instructions Safety Switch CET.-AS-...-CB-... (Multicode)	112685	04-10/13		1.3 MB







#### Sicherheitsinformation und Wartung CET.-AS/CTP.-AS

Doc. no.	Version	Language	Download
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Sicherheitsinformation und Wartung CET.- AS/CTP.-AS Safety Information and Maintanance CET.- AS/CTP.-AS	113769	03-11/15	 	 0.3 MB
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## Catalogs

- Sicherheitsschalter mit AS-Interface Safety Switches with AS-Interface Interrupteurs de sécurité avec AS-Interface

	Doc. no.	Version	Language	Download
Sicherheitsschalter mit AS-Interface	092164	11-04/17		 2.3 MB
Interrupteurs de sécurité avec AS-Interface	112564	11-04/17		 2.3 MB
Safety Switches with AS-Interface	092332	11-04/17		 2.3 MB

## Declaration of conformity

- EU-Konformitätserklärung

	Doc. no.	Version	Language	Download
EU-Konformitätserklärung Declaración UE de conformidad Déclaration UE de conformité Dichiarazione di conformità EU declaration of conformity	2110802	10-01/17	    	 0.3 MB