

**ITEM 113631 CET4-AS-CRA-AB-50X-SJ-AS1-113631**

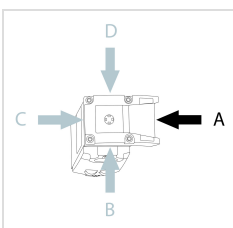
Description	Technical data	Accessories	Downloads
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**Features**

- › 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
- › Unicode
- › 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 ASInterface 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.

### 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		$1 \times 10^6$
Installation position		Any [2]
Degree of freedom	Z	$\pm 4 mm$

	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 $F_{max}$		6500 N
Locking force $F_{Zh}$		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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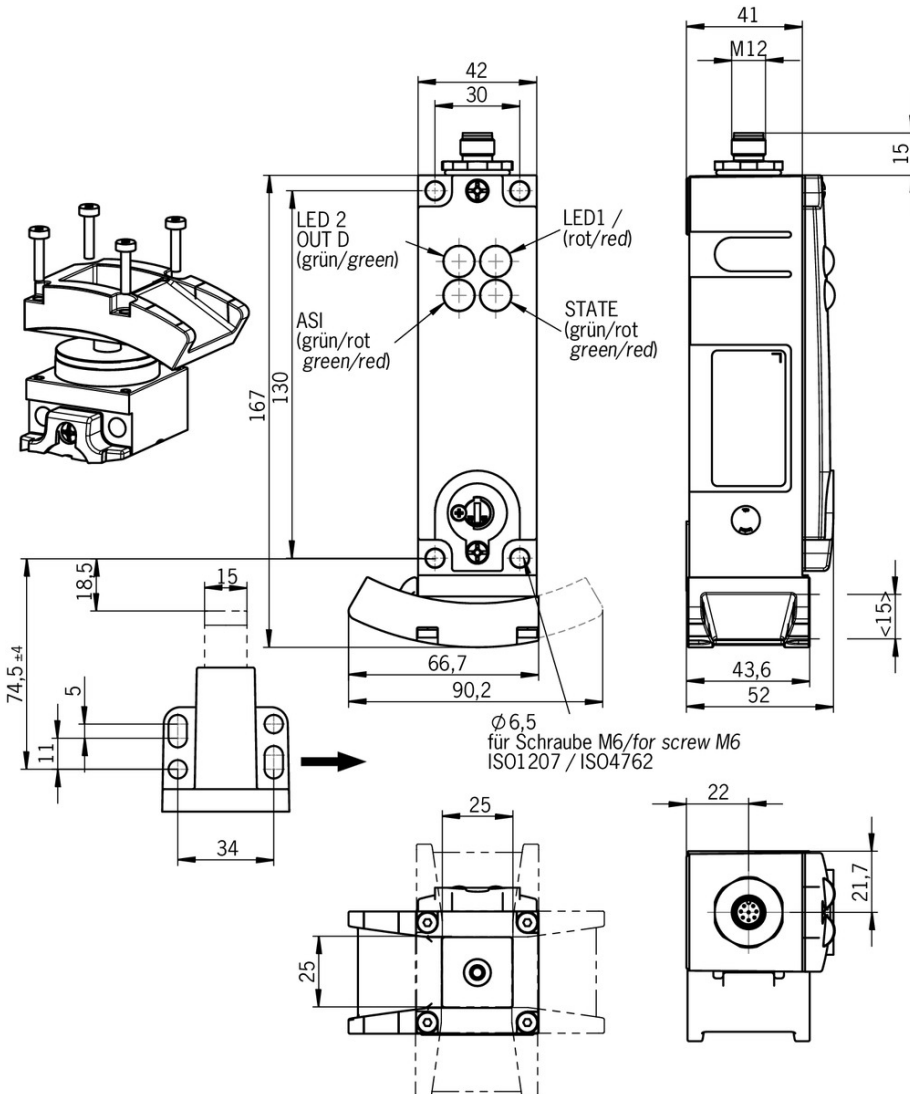
### Reliability values acc. to EN ISO 13849-1

Performance Level	PL e
Category	
Head upward	3

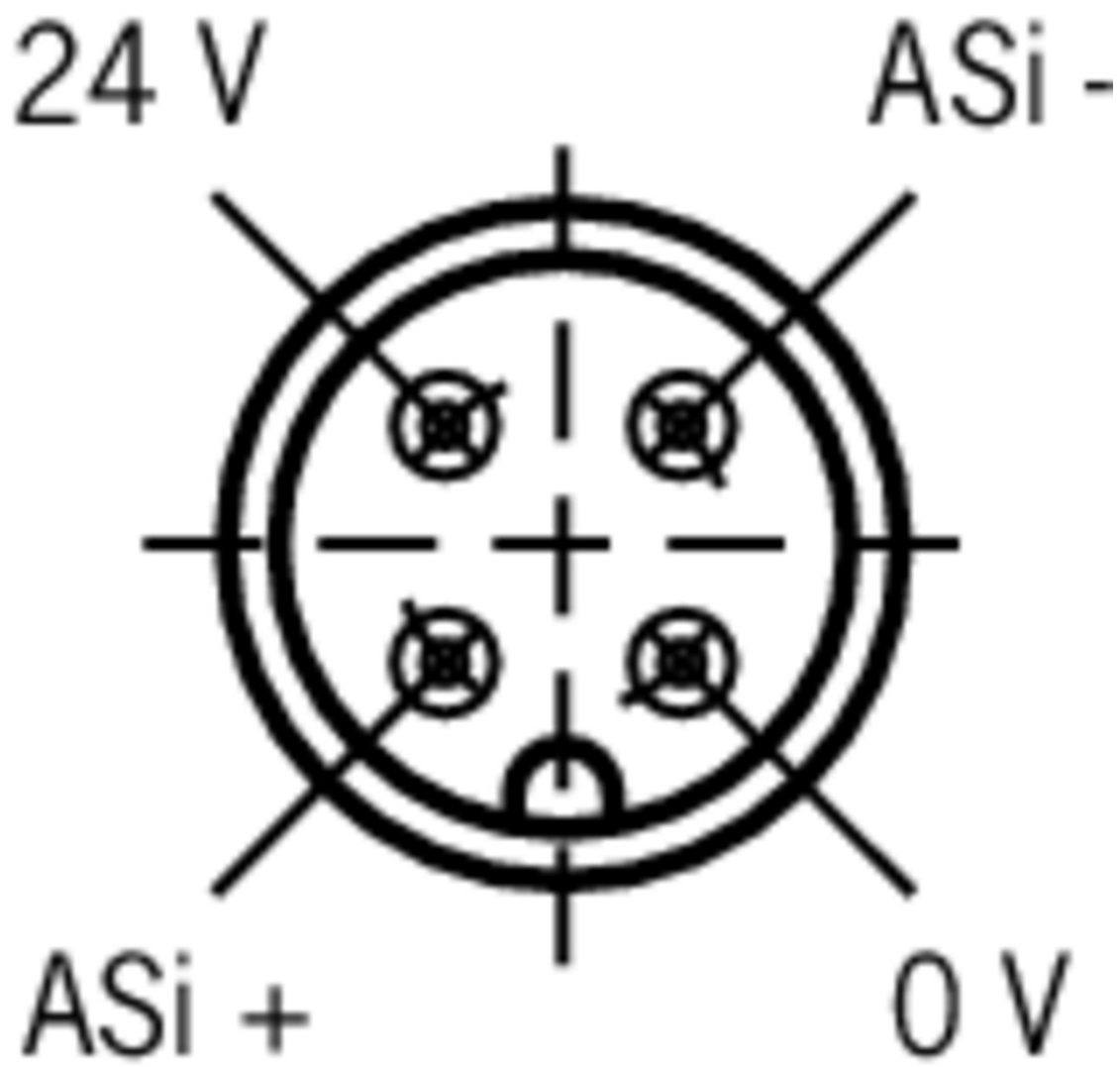
Head downward or horizontal	4
PFH <sub>D</sub>	
Head upward	$4.29 \times 10^{-8}$
Head downward or horizontal	$3.1 \times 10^{-9}$
Mission time	20 y

- [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



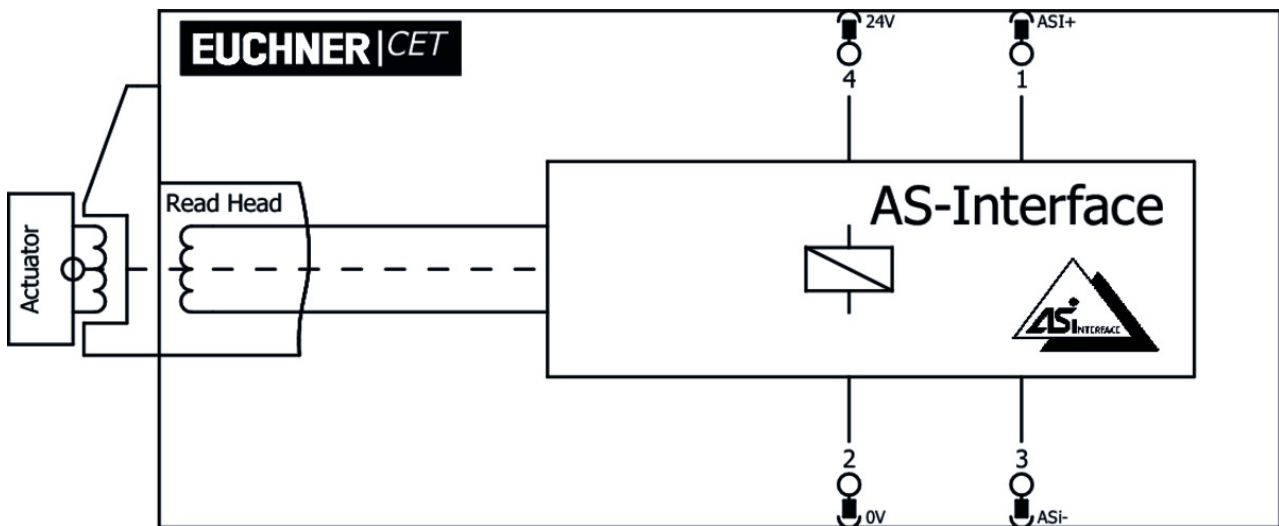
**Connector assignment**



**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

## Function expansion

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

###### ▼ Features

- › Prevents unintentional closing of the door
  - › Can be secured with padlocks
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#### ▼ Holder for lockout mechanism CET actuator



##### **156338** Y-CHN-A1-156338

###### ▼ Features

- › Holder (incl. wire rope) for lockout bar CET
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#### ▼ 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
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### Mounting accessories

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#### ▼ 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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## 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

## 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-...-AB-... (Unicode)

	Doc. no.	Version	Language	Download
Betriebsanleitung Sicherheitsschalter CET.-AS-...-AB-... (Unicode)	113689	03-10/13		1.3 MB
Operating Instructions Safety Switch CET.-AS-...-AB-... (Unicode)	113689	03-10/13		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

## CAD data

CAD data for this item on TraceParts