

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

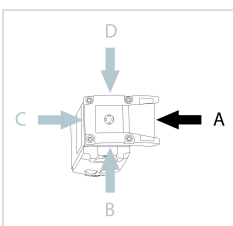
Description	Technical data	Accessories	Downloads
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Features

- › 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.

Control of the guard locking solenoid

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

AS-Interface inputs

D0, D1 Door monitoring

D2, D3 Guard lock monitoring

Evaluation is performed via a safety monitor.

AS-Interface outputs

D0 Guard locking

D1 Red LED

D2 Green LED

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 ⁶
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 _{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
PFHD	
Head upward	4.29×10^{-8}
Head downward or horizontal	3.1×10^{-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

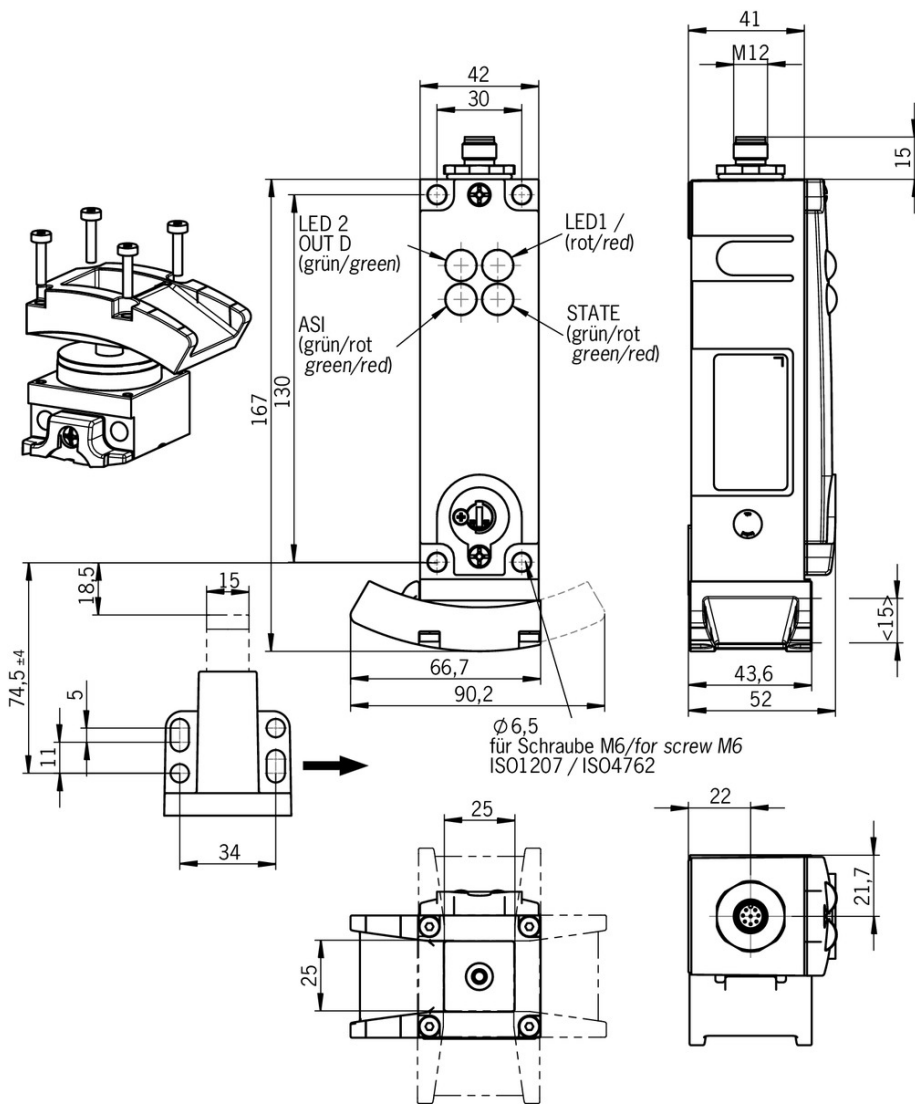
[9] 1 = Solenoid energized

[10, 11] 1 = LED on

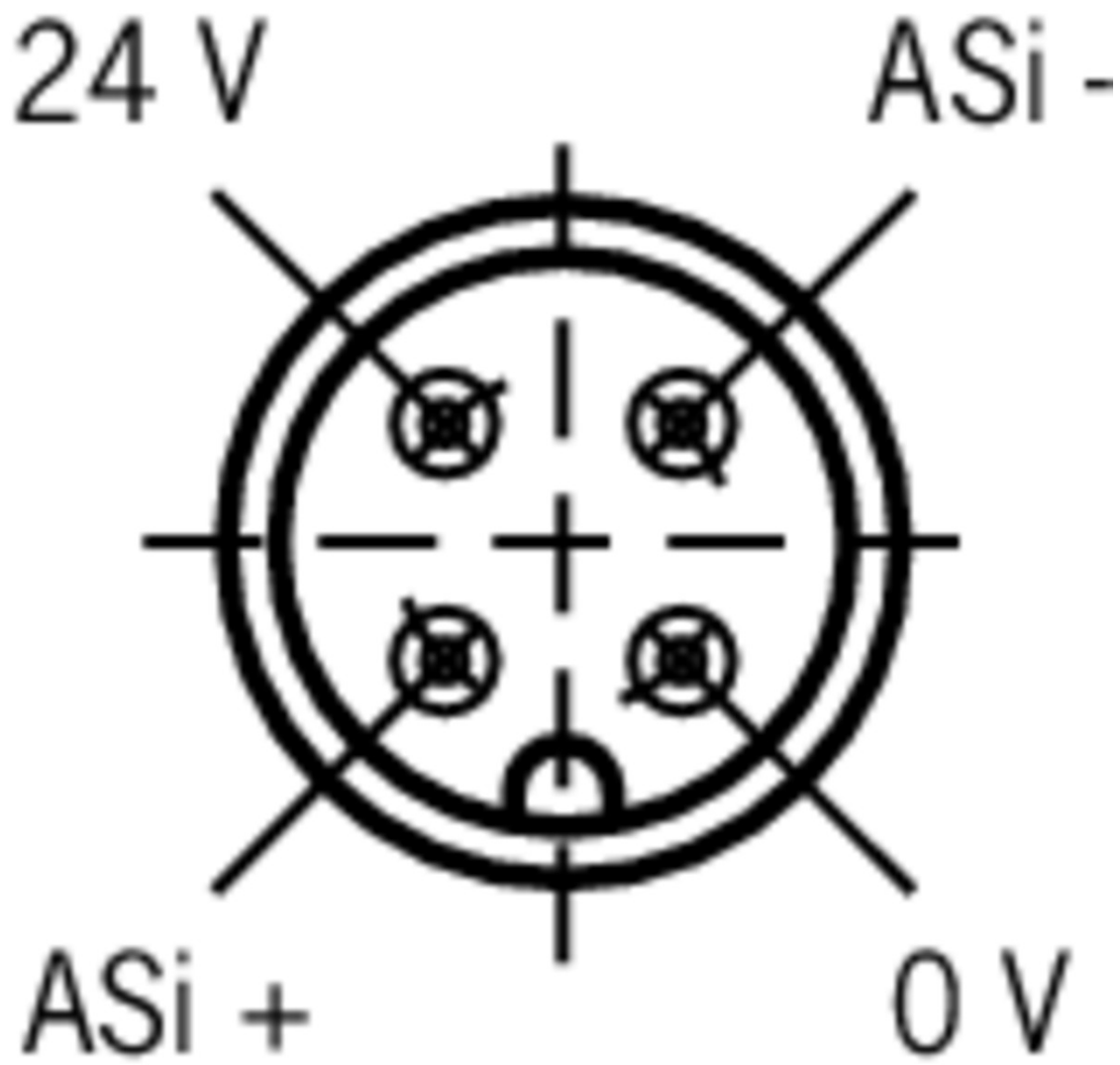
[12] ASI voltage is present

[13] Offline phase or address 0

Dimension drawing



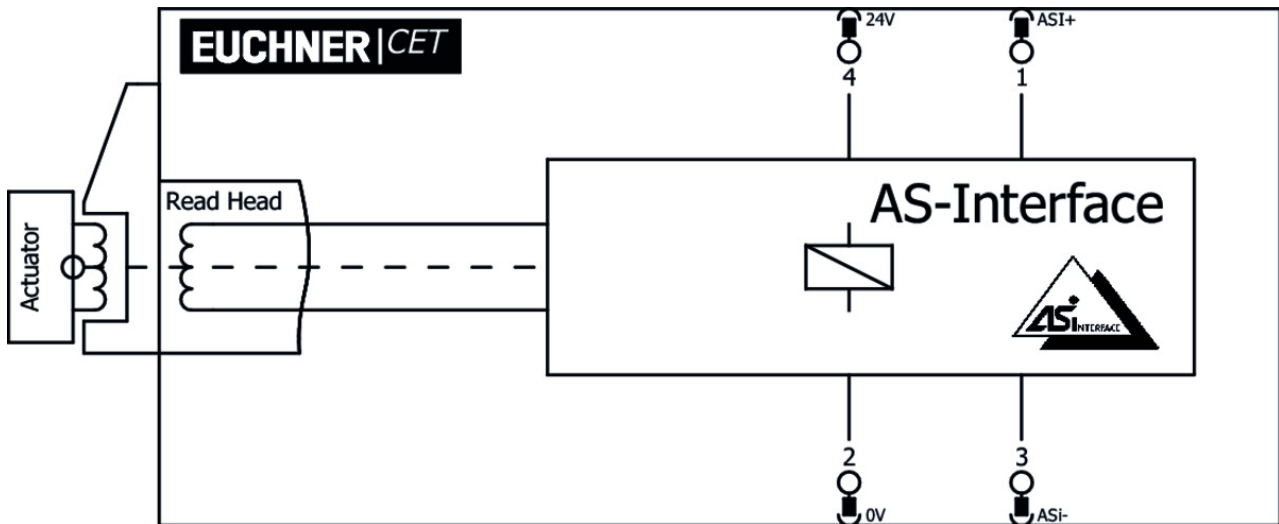
Connector assignment



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
-

▼ 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
-

▼ Safety screws for actuators, M5 x 16

073456 M5X16/V100

▼ Features

- › Safety screws M5 x 16
 - › Packaging unit 100 pieces
-

▼ 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

✓ 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-HILFSENTRIEGLUNG

✓ 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