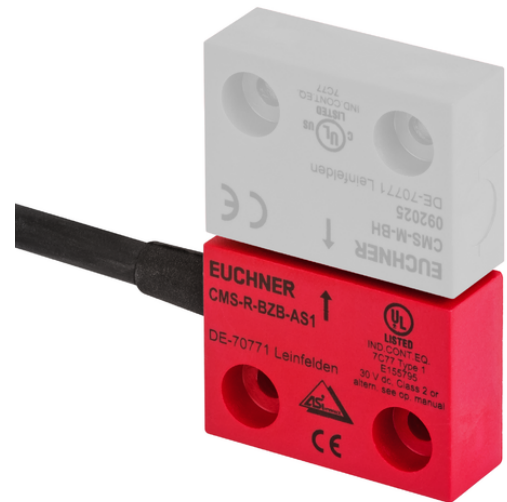


## CMS-R-BZB-01P-AS1 (Order no. 105094)

### Non-contact safety switch CMS-R-BZB-01P-AS1, with connection cable, connecting cable and plug connector(s) M12

- ▶ Safety switches with integrated read head and integrated evaluation unit.
- ▶ Operating distance 7 mm



### Actuator

An appropriate actuator to suit the read head selected is required. The dimensions of the actuators are the same as those of the read heads, although the former have no connecting cable.

### AS-Interface inputs

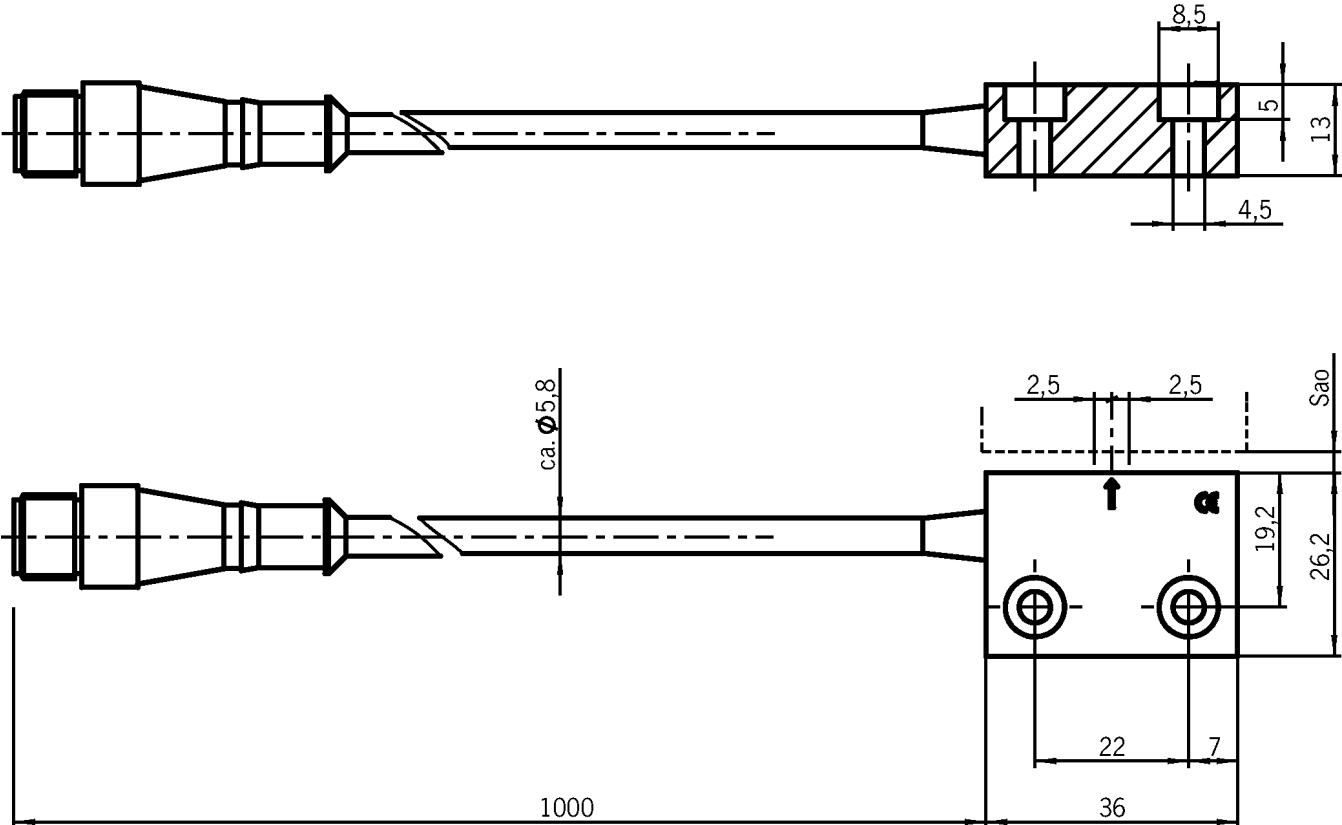
D0 – D3 Switch actuated/open

Evaluation is performed via a safety monitor.

### Principle of operation

Reed contacts are installed in the read head of the safety system CMS. The contacts blades on the reed contacts will close when under the influence of the magnetic field from the actuator. The read head only responds to the specific mating component, that is a specific actuator that is allocated to the read head type.

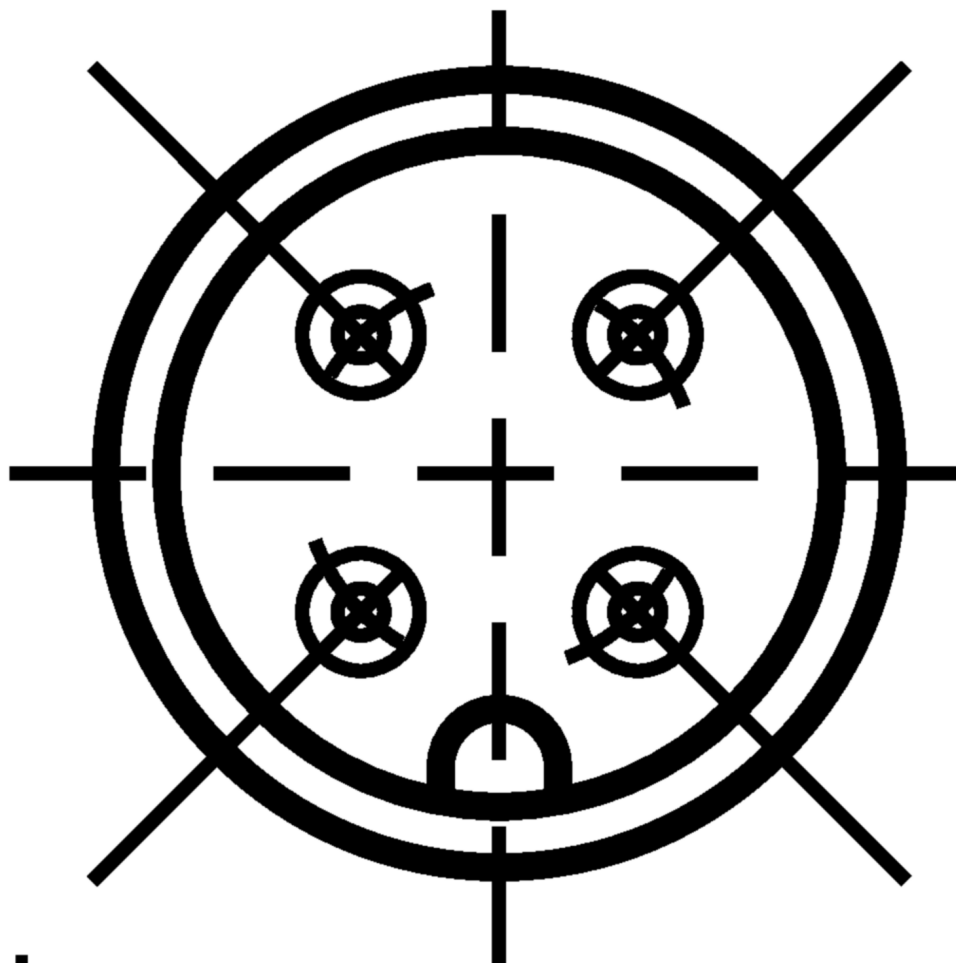
Dimensional drawings



Connection examples

n. c.

ASi -



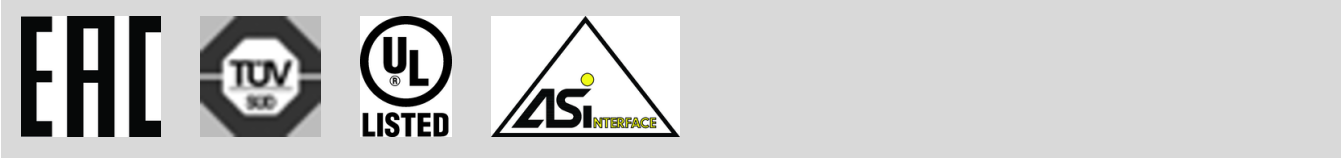
ASi +

n. c.

View of connection side

## Technical data

### Approvals



### Workspace

Operating distance on	min. 7 mm
Secured switch-off distance $s_{ar}$	max. 40 mm
Center offset	
symmetrical, at distance $s = 3$ mm	

### Electrical connection values

ASI operating current	max. 30 mA
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#### ASI data in

according to AS-i Safety at Work D0, D1, D2, D3  
 (Switch actuated = code sequence / switch not actuated = zero sequence)

ASI-LED	
LED red	No data exchange between master and slave (Master in the STOP mode / Slave not in LPS / Slave with incorrect IO;ID / Reset active on the slave)
LED red flashing	Fault
LED red/green alternately flashing	Fault
LED red/yellow alternately flashing	No data exchange between master and slave (Slave address=0)
LED green	Normal operation

#### ASI slave type

according to ASI specification 3.0 EA code: 0  
 according to ASI specification 3.0 ID code: B

ASI voltage	
DC	26.5 ... 30 ... 31.6 V

### Mechanical values and environment

Connection type	hard-wired encapsulated cable with plug connector M12
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Design	B
Installation orientation	any (During mounting it must be ensured that the marking arrows on the actuator and the read head are opposite each other.)
Cable length	1 m
Mechanical life	100 x 10 <sup>6</sup>
Response time	
after change in the actuation status	max. 5 ms
Degree of protection	IP67
Ambient temperature	-20 ... +60 °C
Material	
Cable material	PUR
Housing	Reinforced thermoplastic (PPS), fully encapsulated
Method of operation	magnetic, reed contact

## Characteristic values according to EN ISO 13849-1 and EN IEC 62061

Mission time	20 y
	<b>Monitoring of the guard position</b>
B <sub>10D</sub>	3 x 10 <sup>6</sup>
Category	3
Performance Level	PL e
PFH <sub>D</sub>	4.29 x 10 <sup>-8</sup>

## Downloads

All documentation for this material can be found on our website:

<https://www.euchner.de/en-us/a/105094/?#downloads-tab>

**Ordering data**

Ordernumber	105094
Item designation	CMS-R-BZB-01P-AS1
Gross weight	0,085kg
Customs tariff number	85389099990
ECLASS	27-27-24-02 Safety-related magnetic proximity switch

## Accessories

### Actuator

#### Actuator CMS design B



**092025**  
CMS-M-BH

- ▶ Cube-shaped version, 36 x 26 mm

### Connection accessories

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



**105756**  
BCM-A-P2-SEM4-1

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

### Mounting accessories

#### Spacer CMS-A-SA



**110414**  
CMS-A-SB VPE10

- ▶ Spacer for CMS read heads design B
- ▶ Packaging unit 10 pieces