

ITEM 105090 CMS-R-AZA-01PL-AS1

Description	Technical data	Accessories	Downloads
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Features

- › Safety switches with integrated read head and integrated evaluation unit.
- › LED diagnostic displays
- › switch-on distance 9 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 connection cable.

AS-Interface inputs

D0 - D3 Switch actuated/open
Evaluation is performed via a safety monitor.

AS-Interface output

D1 LED 1 on read head (only CMS-R-AZA...)

LED function display

- › The ASI LED (dual LED red/green) displays the colors red, green and yellow. The status of the switch and the bus is indicated via this LED.
- › LED 1 can be connected via the AS-Interface bus, e.g. to indicate the door state.

Principle of operation

Reed contacts are installed in the read head of the safety system CMS. The contact blades on the reed contacts are closed 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 which is allocated to the read head type.

Approvals



Mechanical values and environment

Design	A
Material	
Cable material	PUR
Housing material	Reinforced thermoplastic (PPS), fully encapsulated
Weight	
Net	0,1 kg
Ambient temperature	-25 ... 60 °C
Degree of protection	IP67
Mechanical life	100 x 10 ⁶
Installation position	Any, pay attention to marking [1]
Reaction time	
After change in the actuation status	max.5 ms
Connection	Hard-wired encapsulated cable with plug connector M12
Cable length	1 m
Method of operation	Magnetic, reed contact

Electrical connection ratings

ASi voltage	26,5 ... 30 V 31,6 V
ASi operating current	max.30 mA
ASi slave type	
According to ASI specification 3.0	EA code: 7
According to ASI specification 3.0	ID code: B
ASi data in	
According to ASI safety at work	D0,D1,D2,D3 [2]
ASi data out	

	LED red	D1 [3]
ASi LED		
	LED green	Normal operation
	LED red	No data exchange between master and slave [4]
	LED red/yellow alternately flashing	No data exchange between master and slave [5]
	LED red/green alternately flashing	Fault
	LED red flashing	Fault

Operating distance

Switch-on distance	9 mm
Assured switch-off distance S_{ar}	max.70 mm
Center offset	
Symmetrical, read distance $s = 3\text{mm}$	2,5 mm

Miscellaneous

in compliance with	EN 60947-5-3: 2013; EN ISO 13849-1: 2008; EN ISO 14119: 2013; EN 62026-2: 2013 (AS-i)
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Reliability values acc. to EN ISO 13849-1

	Monitoring of the safety guard position
Category	3
Performance Level	PL e
B_{10D}	3×10^6
PFH_D	4.29×10^{-8}

Mission time	20 y
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[1] During mounting it is to be ensured the marking arrows on actuator and read head are opposite each other.

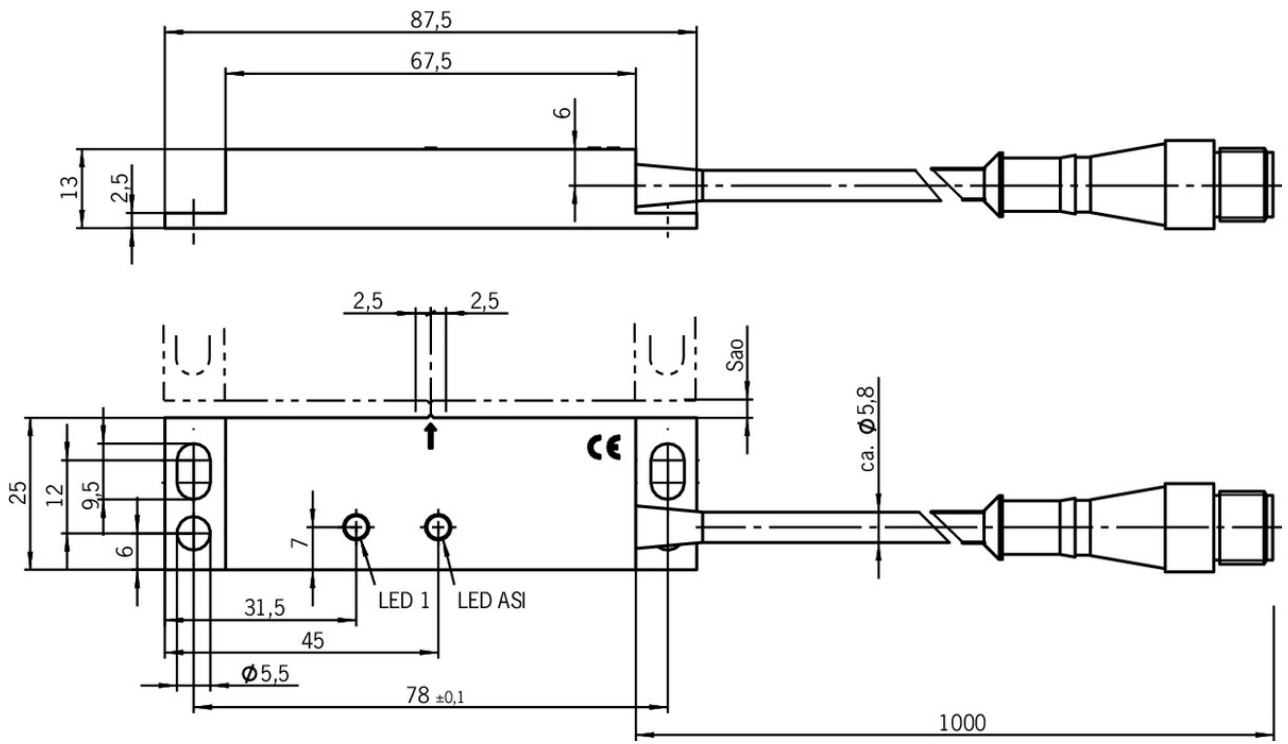
[2] Switch actuated = code sequence / switch not actuated = zero sequence

[3] 1 = LED on

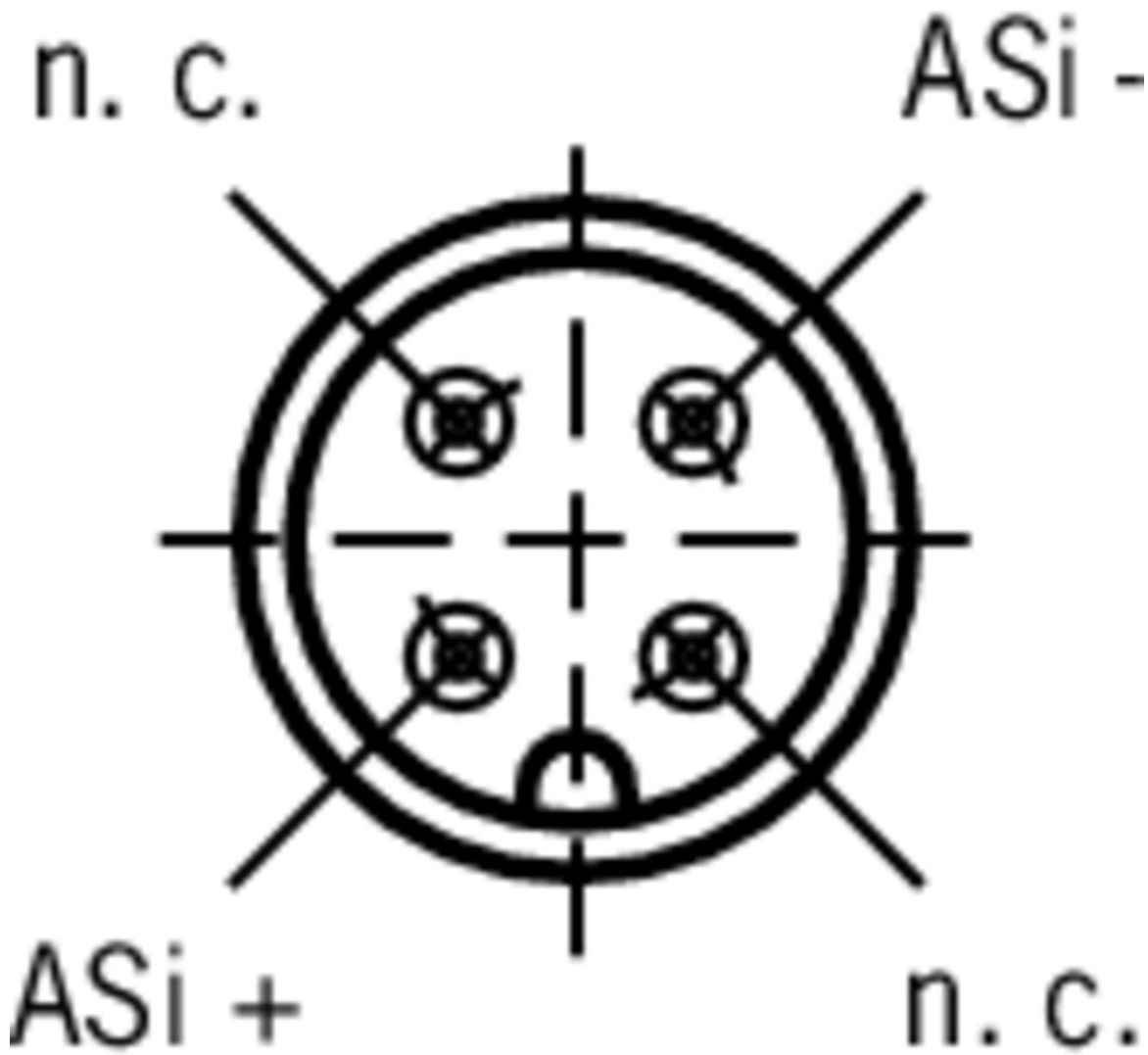
[4] Master in the STOP mode / Slave not in LPS / Slave with incorrect IO;ID / Reset active on the slave

[5] Slave address=0

Dimension drawing



Connector assignment



Legende

View of connection side

Actuator

▼ Actuator CMS design A



084592 CMS-M-AC

▼ Features

› Cube-shaped version 88 x 25 mm

Connection material

▼ 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 CMS...AS1

	Doc. no.	Version	Language	Download
Betriebsanleitung Sicherheitsschalter CMS...AS1 Operating Instructions Safety Switch CMS...AS1	105099	04-11/16	 	 0.5 MB







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	2110138	05-10/16	    	 0.2 MB