

## Datasheet - AZM 170SK-11/02ZRKA 24 VAC/DC

Solenoid interlock / AZM 170

 Preferred typ

- Thermoplastic enclosure
- Double-insulated
- Compact design
- 90 mm x 84 mm x 30 mm
- 1 Cable entry M 20 x 1.5
- Interlock with protection against incorrect locking.
- Long life
- High holding force
- Screw connection

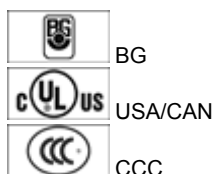
(Minor differences between the printed image and the original product may exist!)

### Ordering details

Product type description	AZM 170SK-11/02ZRKA 24 VAC/DC
Article number	101183253
EAN Code	4030661319070
eCl@ss	27-27-26-03

### Approval

Approval




### Classification

Standards	EN ISO 13849-1
B10d Normally-closed contact (NC)	2.000.000
Mission time notice	20 Years
	$MTTF_d = \frac{B_{10d}}{0,1 \times n_{op}}$
	$n_{op} = \frac{d_{op} \times h_{op} \times 3600 \text{ s/h}}{t_{cycle}}$

## Global Properties

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Permanent light	AZM 170
Standards	EN 60947-5-1, BG-GS-ET-19
Compliance with the Directives (Y/N) 	Yes
Number of actuating directions	2
Active principle	electromechanical
Duty cycle ED	Magnet 100 %
Materials	
- Material of the housings	Plastic, glass-fibre reinforced thermoplastic, self-extinguishing
- Material of the contacts	Silver
Housing coating	None
Weight	310

## Mechanical data

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Design of electrical connection	Screw connection
Cable section	
- Min. Cable section	1 x 0,25
- Max. Cable section	1 x 1.5, flexible
Mechanical life	> 1.000.000 operations
Emergency unlocking device (Y/N)	No
Manual release (Y/N)	No
Emergency release (Y/N)	No
Latching force	30
Positive break force	17
positive break travel	11 mm
Clamping force F	1000 N
Max. Actuating speed	2 m/s

## Ambient conditions

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Ambient temperature	
- Min. environmental temperature	-25 °C
- Max. environmental temperature	+60 °C
Protection class	IP67 to IEC/EN 60529

## Electrical data

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Design of control element	Normally open contact (NO), Opener (NC)
notice	change-over contact with double break, type Zb or 2 NC contacts, with galvanically separated contact bridges
Switching principle	Creep circuit element
Number of auxiliary contacts	1
Number of safety contacts	3
Power to unlock	No
Power to lock	Yes
Rated control voltage $U_s$	24 VAC/DC
Power consumption	max. 10 W
Rated impulse withstand voltage $U_{imp}$	4 kV
Rated insulation voltage $U_i$	250 V
Thermal test current $I_{the}$	10 A
Utilisation category	AC-15: 230 V / 4 A DC-13: 24 V / 4 A

Max. fuse rating

6 A gG D-fuse

## ATEX

Explosion protection categories for gases

None

Explosion protected category for dusts

None

## Miscellaneous data

Applications



sliding safety guard,



removable guard,



hinged safety guard

## Dimensions

Dimensions of the sensor

- Width of sensor

90

- Height of sensor

100.5

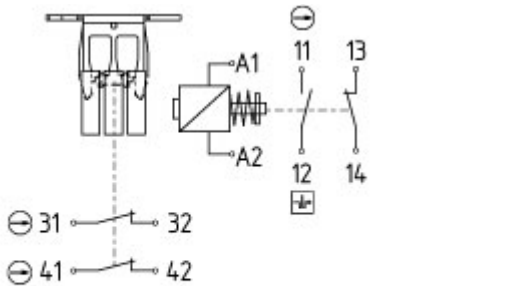
- Length of sensor

30 mm

## notice

Individual coding available on request

## Diagram



11	12	13	14	31	32	41	42	A1	A2
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Note Diagram

positive break NC contact

active

no active

Normally-open contact

Normally-closed contact

## Ordering suffix

The applicable ordering suffix is added at the end of the part number of the safety switch.

Order example: AZM 170SK-11/02ZRKA 24 VAC/DC-1637

...-1637

0,3 µm gold-plated contacts

**Ordering code**

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AZM 170(1)-(2)Z(3)K(4)-(5)-(6)-(7)

(1)		
without		IDC method of termination
SK		Screw connection
(2)		
11		1 Normally open contact (NO) / 1 Opener (NC)
02		2 Opener (NC)
12/0.0		1 Normally open contact (NO), 2 Opener (NC) / -
(3)		
without		Latching force 5 N
R		Latching force 30 N
I		Individual coding
(4)		
without		Power to unlock
A		Power to lock
(5)		
without		cable gland
ST		Connector M12 x 1
ST-2431		Connector M12 x 1, Individual solenoid monitoring
(6)		
24VAC/DC		U <sub>s</sub> 24 VAC/DC
110VAC		U <sub>s</sub> 110 VAC
230VAC		U <sub>s</sub> 230 VAC
(7)		
without		Manual release
2197		Manual release from side (Power to unlock)
1637		gold-plated contacts

**AZM 170ST and AZM 170SK**

**AZM 170ST-(1)Z(2)K(3)-(4)-(5)-024**

**AZM 170SK-(1)Z(2)K(3)-(4)-(5)-024**

(1)		
11/11		1 Normally open contact (NO), 1 Opener (NC) / 1 Normally open contact (NO), 1 Opener (NC)
11/02		1 Normally open contact (NO), 1 Opener (NC) / 2 Opener (NC)
12/00		1 Normally open contact (NO), 2 Opener (NC) / -
12/11		1 Normally open contact (NO), 2 Opener (NC) / 1 Normally open contact (NO), 1 Opener (NC)
12/02		1 Normally open contact (NO), 2 Opener (NC) / 2 Opener (NC)
02/01		2 Opener (NC), - / 1 Opener (NC), -
02/10		2 Opener (NC), - / 1 Normally open contact (NO), -
(2)		
without		Latching force 5 N
R		Latching force 30 N
(3)		
without		Power to unlock

<b>A</b>	Power to lock
<b>(4)</b>	
<b>1637</b>	gold-plated contacts
<b>(5)</b>	
<b>2197</b>	Manual release for Power to unlock

## Documents

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**Operating instructions and Declaration of conformity** (en) 509 kB, 21.04.2016

Code: mrl\_azm170-xx-xx\_en

**Operating instructions and Declaration of conformity** (da) 509 kB, 24.11.2015

Code: mrl\_azm170-xx-xx\_da

**Operating instructions and Declaration of conformity** (it) 509 kB, 22.04.2016

Code: mrl\_azm170-xx-xx\_it

**Operating instructions and Declaration of conformity** (nl) 532 kB, 29.06.2018

Code: mrl\_azm170-xx-xx\_nl

**Operating instructions and Declaration of conformity** (de) 494 kB, 21.04.2016

Code: mrl\_azm170-xx-xx\_de

**Operating instructions and Declaration of conformity** (cs) 546 kB, 24.11.2015

Code: mrl\_azm170-xx-xx\_cs

**Operating instructions and Declaration of conformity** (pt) 515 kB, 08.07.2016

Code: mrl\_azm170-xx-xx\_pt

**Operating instructions and Declaration of conformity** (jp) 601 kB, 07.09.2016

Code: mrl\_azm170-xx-xx\_jp

**Operating instructions and Declaration of conformity** (fr) 511 kB, 28.04.2016

Code: mrl\_azm170-xx-xx\_fr

**Operating instructions and Declaration of conformity** (es) 512 kB, 24.11.2015

Code: mrl\_azm170-xx-xx\_es

**Operating instructions and Declaration of conformity** (pl) 549 kB, 02.06.2017

Code: mrl\_azm170-xx-xx\_pl

**Operating instructions and Declaration of conformity** (cn) 544 kB, 05.05.2017

Code: mrl\_azm170-xx-xx\_cn

**BG-test certificate** (en) 260 kB, 09.12.2015

Code: z\_m17p02

**BG-test certificate** (de) 257 kB, 09.12.2015

Code: z\_m17p01

**CCC certification** (en) 5 MB, 26.10.2018

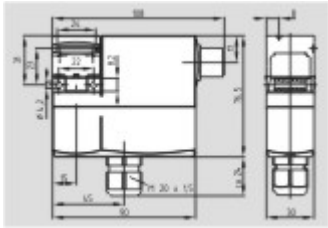
Code: q\_371p02

**CCC certification** (cn) 5 MB, 26.10.2018

Code: q\_371p03

## Images

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Dimensional drawing (basic component)

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## System components

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### Actuator



#### **101122893 - AZ 17/170-B1**

- Particularly suitable for sliding doors
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#### **101137406 - AZ 17/170-B1-2245**

- Particularly suitable for sliding doors
  - Damps vibration on guard device
- 



#### **101122895 - AZ 17/170-B5**

- Particularly suitable for sliding doors
- 



#### **101139788 - AZ 17/170-B11**

- Particularly suitable for sliding doors
- 



#### **101139789 - AZ 17/170-B15**

- Particularly suitable for sliding doors
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#### **101123391 - AZM 170-B6**

- Particularly suitable for hinged guards
- For very small actuating radii
- The direction of actuation can be selected by applicable insertion of the insert

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#### **Accessories**



#### **101208493 - AZM 170-B CENTERING GUIDE**

- for AZ 17 and AZM 170



#### **101100887 - TRIANGULAR KEY TK-M5**

- For manual release using M5 triangular key, available as accessory
- For maintenance, installation, etc.

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#### **Connector**



#### **A-K4M12**

- Pre-wired cable
- 4-pole



#### **S-K4M12**

- Connector without cable
- 4-pole

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The data and values have been checked thoroughly. Technical modifications and errors excepted.

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