


**Datasheet - EX-AZM 170-02ZRKA-24VAC/DC-3G/D**

Solenoid interlock / EX-AZM 170



- Interlock with protection against incorrect locking.
- Long life
- High holding force
- Double-insulated 
- 1 Cable entry M 20 x 1.5
- Ex-certified screwed cable gland
- Ex certified
- IDC method of termination
- Manual release

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

**Ordering details**

Product type description	EX-AZM 170-02ZRKA-24VAC/DC-3G/D
Article number	101194966
EAN Code	4030661360010
eCl@ss	27-27-26-03

**Approval**


Approval	ATEX
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**Classification**

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

**Global Properties**

Permanent light	EX-AZM 170
Standards	EN 60079-0, EN 60079-15, EN 60079-31, EN 60947-5-1, BG-GS-ET-19

Compliance with the Directives (Y/N) 

Yes

Duty cycle ED

Magnet 100 %

Materials

- Material of the housings
- Material of the contacts

Plastic, glass-fibre reinforced thermoplastic, self-extinguishing

Silver

Housing coating

None

Weight

289

## Mechanical data

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Design of electrical connection

IDC method of termination

Cable cross-section of the cable glands

- Min. Cable cross-section of the cable glands
- Max. Cable cross-section of the cable glands

Ø 6.5

Ø 12

Cable section

- Min. Cable section
- Max. Cable section

1 x 0,75, flexible

1 x 1, flexible

Mechanical life

> 1.000.000 operations

Emergency unlocking device (Y/N)

No

Manual release (Y/N)

Yes

- bottom

Emergency release (Y/N)

No

Latching force

30

Positive break force

17

positive break travel

11

Clamping force F

1000 N

Impact energy

1 J

Max. Actuating speed

1

## Ambient conditions

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Ambient temperature

- Min. environmental temperature
- Max. environmental temperature

-15

+45

Protection class

IP67 to IEC/EN 60529

## Electrical data

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Design of control element

Opener (NC)

Switching principle

Creep circuit element

Number of auxiliary contacts

0

Number of safety contacts

2

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  $I_{the}$

2 A

Utilisation category

AC-15: 230 V / 2 A, DC-13: 24 V / 2 A

Max. fuse rating

6 A gG D-fuse

## ATEX

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EX-marking	EX II 3D Ex tc IIIC T80°C Dc X EX II 3G Ex nC IIB T5 Gc X
Explosion protection categories for gases	3G
Explosion protection Zones for gases	2
Explosion protected category for dusts	3D
Explosion protection Zones for dusts	22

Dimensions

Dimensions of the sensor	
- Width of sensor	90
- Height of sensor	84
- Length of sensor	30

notice

- This type termination (IDC) method enables simple connetion of flexible conductors without the need for the use of conductor ferrules
- Individual coding available on request
- Manual release
- For manual release using M5 triangular key, available as accessory

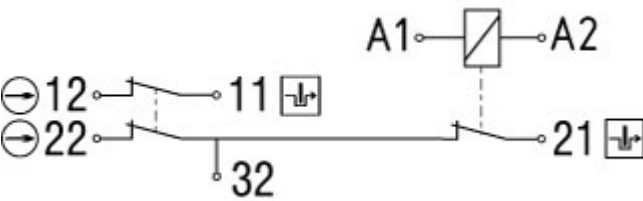
Included in delivery

- Actuators must be ordered separately.
- Including Ex-certified screwed cable gland and screw plug

Keywords

Keywords	Ex, EEx, ATEX, Ex AZM170, Ex AZM170, AZM 170 Ex, AZM170ex, AZM170ex, ATEX AZM170
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Diagram








- Note Diagram
- positive break NC contact
  - active
  - no active
  - Normally-open contact
  - Normally-closed contact

Switch travel diagram



Notes Switch travel diagram

-  Contact closed
-  Contact open
-  Setting range
-  Break point
-  Positive opening sequence/- angle
- VS** adjustable range of NO contact
- VÖ** adjustable range of NC contact
- N** after travel

Ordering suffix

The applicable ordering suffix is added at the end of the part number of the safety switch.  
Order example: EX-AZM 170-02ZRKA-24VAC/DC-3G/D-**1637**

...-**1637** 0,3 µm gold-plated contacts

Ordering code

EX-AZM 170-(1)Z(2)K(3)-24VAC/DC-(4)-3G/D

- (1)  
11 1 Normally open contact (NO) / 1 Opener (NC)  
02 2 Opener (NC)
- (2)  
without Latching force 5 N  
R Latching force 30 N
- (3)  
without Power to unlock  
A Power to lock
- (4)  
without Manual release  
1637 gold-plated contacts

Documents

Operating instructions and Declaration of conformity (pl) 502 kB, 12.04.2018  
Code: mrl\_ex-azm170\_pl

Operating instructions and Declaration of conformity (en) 474 kB, 26.03.2018  
Code: mrl\_ex-azm170\_en

Operating instructions and Declaration of conformity (es) 475 kB, 29.03.2018  
Code: mrl\_ex-azm170\_es

Operating instructions and Declaration of conformity (cn) 525 kB, 27.07.2017  
Code: mrl\_ex-azm170\_cn

Operating instructions and Declaration of conformity (jp) 752 kB, 18.08.2017  
Code: mrl\_ex-azm170\_jp

Operating instructions and Declaration of conformity (fr) 473 kB, 29.03.2018  
Code: mrl\_ex-azm170\_fr

Code: mrl\_ex-azm170\_da

Code: mrl\_ex-azm170\_de

Code: mrl\_ex-azm170\_pt

Code: mrl\_ex-azm170\_it

Code: mrl\_ex-azm170\_nl

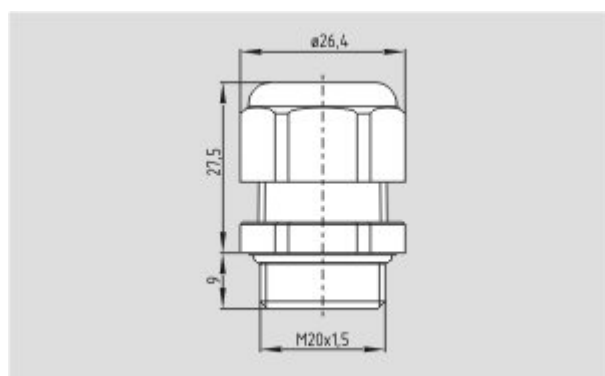
Code: b\_atep01\_de

Code: b\_atep01\_en

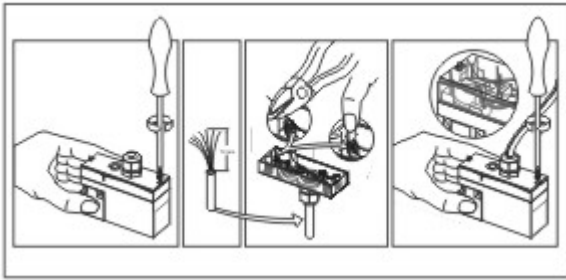
Code: b\_atep05

Code: b\_atep09

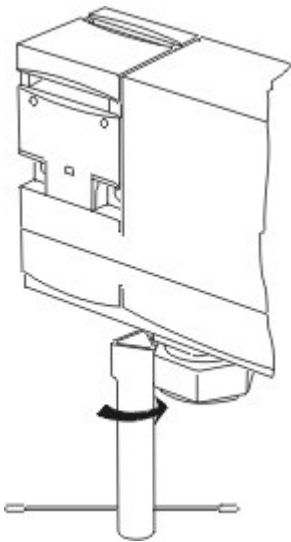
## Dimensional drawing (basic component)



Dimensional drawing (miscellaneous)



Assembly example



Detail photo

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## System components

### Actuator



#### **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



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

- Particularly suitable for sliding doors



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

- Particularly suitable for sliding doors

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



- 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



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

- Particularly suitable for sliding doors

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**Accessories**



**101100887 - TRIANGULAR KEY TK-M5**

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

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K.A. Schmersal GmbH & Co. KG, Möddinghofe 30, D-42279 Wuppertal

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

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