


## Datasheet - EX-AZM 170-11ZK-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 170-11ZK-24VAC/DC-3G/D
Article number	EX-AZM 170-11ZK-24VAC/DC-3G/D
EAN Code	
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 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

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	Plastic, glass-fibre reinforced thermoplastic, self-extinguishing
- Material of the contacts	Silver
Housing coating	None
Weight	

## 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	Ø 6.5
- Max. Cable cross-section of the cable glands	Ø 12
Cable section	
- Min. Cable section	1 x 0,75, flexible
- Max. Cable section	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	5
Positive break force	8.5
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	-15
- Max. environmental temperature	+45
Protection class	IP67 to IEC/EN 60529

## Electrical data

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Design of control element	Normally open contact (NO), Opener (NC)
Switching principle	Creep circuit element
Number of auxiliary contacts	1
Number of safety contacts	1
Power to unlock	Yes
Power to lock	No
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 connection 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

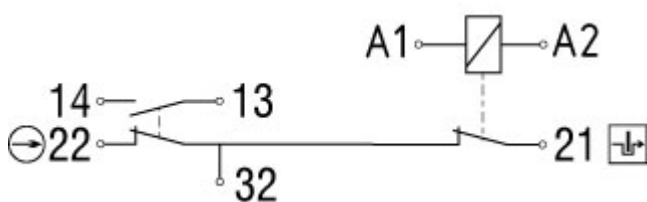
Actuators must be ordered separately.

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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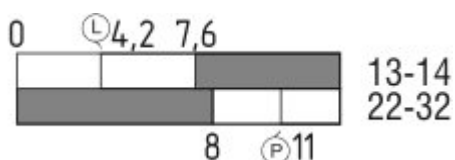
## Diagram








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

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

Order example: EX-AZM 170-11ZK(2)24VAC/DC-3G/D-**1637**

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

## Ordering code

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

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

## Documents

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**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

**Operating instructions and Declaration of conformity (da)** 532 kB, 11.04.2018

Code: mrl\_ex-azm170\_da

**Operating instructions and Declaration of conformity (de)** 448 kB, 26.03.2018

Code: mrl\_ex-azm170\_de

**Operating instructions and Declaration of conformity (pt)** 477 kB, 29.03.2018

Code: mrl\_ex-azm170\_pt

**Operating instructions and Declaration of conformity (it)** 468 kB, 29.03.2018

Code: mrl\_ex-azm170\_it

**Operating instructions and Declaration of conformity (nl)** 472 kB, 29.03.2018

Code: mrl\_ex-azm170\_nl

**Brochure (de)** 7 MB, 19.10.2016

Code: b\_atep01\_de

**Brochure (en)** 7 MB, 19.10.2016

Code: b\_atep01\_en

**Brochure (it)** 3 MB, 20.07.2007

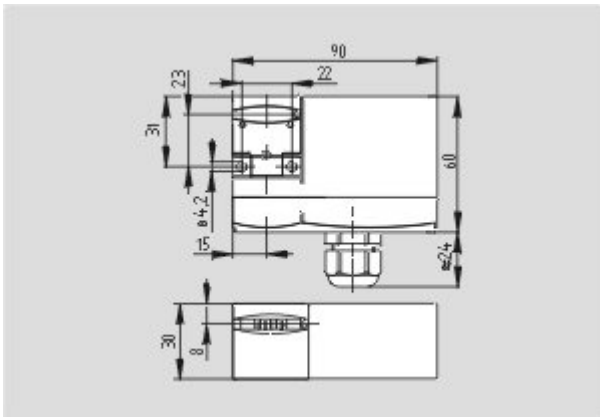
Code: b\_atep05

**Brochure (es)** 5 MB, 18.08.2009

Code: b\_atep09

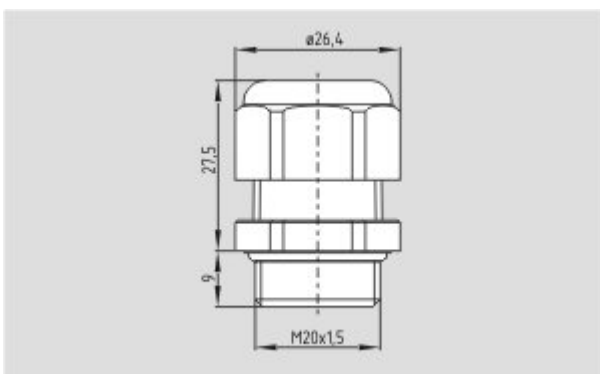
## Images

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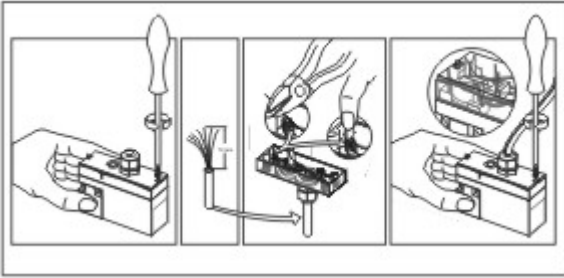


Dimensional drawing (basic component)

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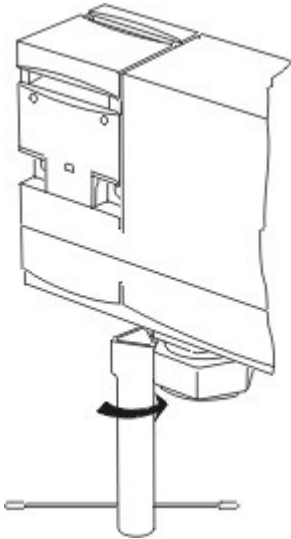


Dimensional drawing (miscellaneous)



Assembly example

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Detail photo

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## System components

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

- Particularly suitable for sliding doors
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#### 101139788 - AZ 17/170-B11

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

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