

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

Solenoid interlock / EX-AZM 170



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

- 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

Ordering details

Product type description	EX-AZM 170-02ZKA-24VAC/DC-3G/D
Article number	EX-AZM 170-02ZKA-24VAC/DC-3G/D
EAN code	

Approval


Approval	EX
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Classification

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

Global Properties

Product name	EX-AZM 170
Standards	Ex nC IIB T5 X, Ex tD A22 IP67 T80° C X, EN 60947-5-1, EN 61241-0, EN 61241-1, EN 60079-0, EN 60079-15, BG-GS-ET-19

Compliance with the Directives (Y/N) 	Yes
Duty cycle	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

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 mm
- Max. Cable cross-section of the cable glands	Ø 12 mm
Cable section	
- Min. Cable section	1 x 0,75 mm ² , flexible
- Max. Cable section	1 x 1 mm ² , 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 N
Positive break force	17 N
positive break travel	11 mm
Clamping force F _{max}	1000 N
Max. Actuating speed	1 m/s

Ambient conditions

Ambient temperature	
- Min. environmental temperature	-15 °C
- Max. environmental temperature	+45 °C
Protection class	IP67 to IEC/EN 60529

Electrical data

Design of control element	Opener (NC)
Switching principle	Creep circuit element
Number of auxiliary contacts	0 piece
Number of safety contacts	2 piece
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

Explosion protection categories for gases

ATEX gas ex-protection, Cat. 3

Explosion protection Zones for gases	2
Explosion protected category for dusts	ATEX dust ex-protection, Cat. 3
Explosion protection Zones for dusts	22

Dimensions

Dimensions of the sensor

- Width of sensor	90 mm
- Height of sensor	84 mm
- Length of sensor	30 mm

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

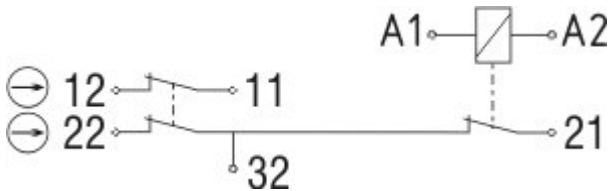
Actuators must be ordered separately.

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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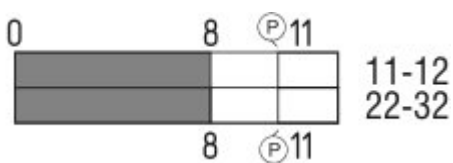
Diagram



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

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

Order example: EX-AZM 170-02ZKA-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)	
<i>without</i>	Latching force 5 N
R	Latching force 30 N
(3)	
<i>without</i>	Power to unlock
A	Power to lock
(4)	
<i>without</i>	Manual release
1637	gold-plated contacts

Documents

Operating instructions and Declaration of conformity (pl) 565 kB, 17.07.2013

Code: mrl_ex-azm170_pl

Operating instructions and Declaration of conformity (en) 527 kB, 18.03.2013

Code: mrl_ex-azm170_en

Operating instructions and Declaration of conformity (es) 531 kB, 25.07.2013

Code: mrl_ex-azm170_es

Operating instructions and Declaration of conformity (jp) 642 kB, 25.07.2013

Code: mrl_ex-azm170_jp

Operating instructions and Declaration of conformity (fr) 533 kB, 25.07.2013

Code: mrl_ex-azm170_fr

Operating instructions and Declaration of conformity (da) 531 kB, 25.07.2013

Code: mrl_ex-azm170_da

Operating instructions and Declaration of conformity (de) 522 kB, 20.02.2013

Code: mrl_ex-azm170_de

Operating instructions and Declaration of conformity (it) 528 kB, 25.07.2013

Code: mrl_ex-azm170_it

Operating instructions and Declaration of conformity (nl) 705 kB, 14.07.2010

Code: mrl_ex-azm170_nl

Brochure (it) 3 MB, 20.07.2007

Code: b_atep05

Brochure (de) 7 MB, 25.02.2011

Code: b_atep01

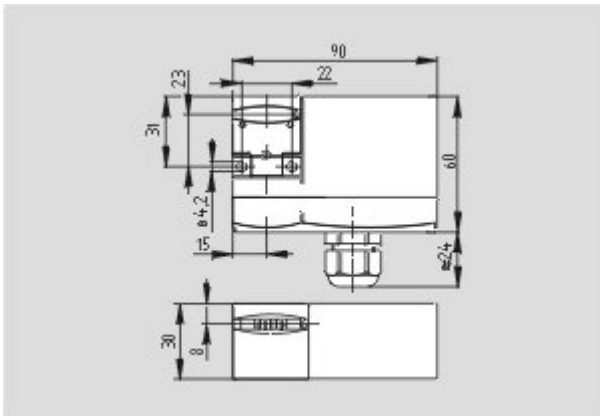
Brochure (es) 5 MB, 18.08.2009

Code: b_atep09

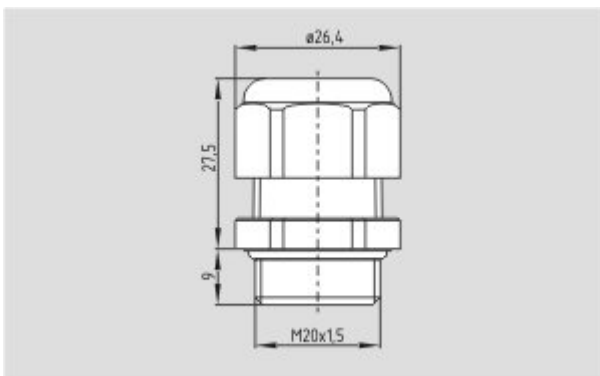
Brochure (en) 8 MB, 28.08.2012

Code: b_atep02

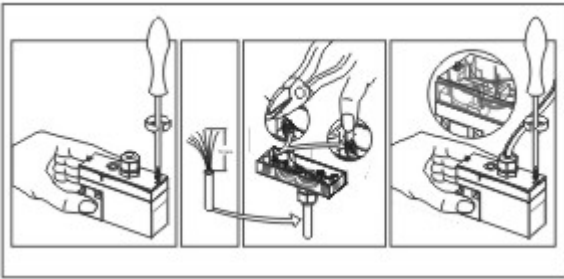
Images



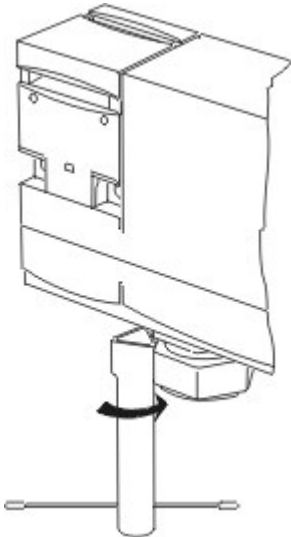
Dimensional drawing (basic component)



Dimensional drawing (miscellaneous)



Assembly example



Detail photo

System components

Actuator



101123391 - AZM 170-B6

- For very small actuating radii
- The direction of actuation can be selected by applicable insertion of the insert



1122895 - AZ 17/170-B5

- Particularly suitable for hinged guards (front mounting)



1139789 - AZ 17/170-B15

- Particularly suitable for hinged guards (front mounting)

1139788 - AZ 17/170-B11

- Particularly suitable for sliding doors



1137406 - AZ 17/170-B1-2245

- Damps vibration on guard device



101122893 - AZ 17/170-B1

- Particularly suitable for sliding doors



Accessories



101100887 - TRIANGULAR KEY M5

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

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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Image

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