13.02.2019

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# Datasheet - AZM 170-02ZRIA-B6L 24 VAC/DC

Solenoid interlock / AZM 170I / AZM 170i-B6L





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

## **Ordering details**

Product type description
Article number
EAN Code
eCl@ss

#### Approval

Approval

AZM 170-02ZRIA-B6L 24 VAC/DC 101140812 4030661120003 27-27-26-03

Double-insulated 
Individual coding

Compact design

High holding force1 Cable entry M 20 x 1.5

left-hand model

Manual release

Long life

actuator

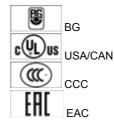
• 90 mm x 84 mm x 30 mm

· IDC method of termination

Coding level "High" according to ISO 14119

• Interlock with protection against incorrect locking.

• For very smal actuating radii in line with or at 90° to the plane of the



#### Classification

Standards B10d Normally-closed contact (NC) Mission time notice EN ISO 13849-1 2.000.000 20 Years  $MTTF_{d} = \frac{B_{10d}}{0.1 \times n_{op}}$  $n_{op} = \frac{d_{op} \times h_{op} \times 3600 \text{ s/h}}{t_{oycle}}$ 

# **Global Properties**

Permanent light	AZM 170I
Standards	EN 60947-5-1, BG-GS-ET-19
Compliance with the Directives (Y/N) C $\epsilon$	Yes
Number of actuating directions	2
Active principle	electromechanical
- Individual coding	
- Coding level "High" according to ISO 14119	
Duty cycle ED	Magnet 100 %
Materials	
- Material of the housings	Plastic, glass-fibre reinforced thermoplastic, self-extinguishing
- Material of the actuator	Stainless steel
- Material of the contacts	Silver
Housing coating	None
Weight	295

## Mechanical data

Design of electrical connection	IDC method of termination
Cable section	
- Min. Cable section	1 x 0,75
- Max. Cable section	1 x 1.0, 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 mm
Clamping force F	1000 N
Max. Actuating speed	2 m/s
Minimum actuating radius	50 mm

## **Ambient conditions**

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

# **Electrical data**

Opener (NC)
Creep circuit element
0
2
No
Yes

Rated control voltage Us	24 VAC/DC
Power consumption	max. 10 W
Power consumption	max. 10 W
Rated impulse withstand voltage Uimp	4 kV
Rated insulation voltage Ui	250 V
Thermal test current Ithe	10 A
Utilisation category	AC-15: 230 V / 4 A
Max. fuse rating	6 A gG D-fuse

## ATEX

Explosion protection categories for gases	
Explosion protected category for dusts	

# None None

# Miscellaneous data

Applications

sliding safety guard, removable guard,

#### Dimensions

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

#### notice

Actuating radius adjustable, minimum 50 mm, using an hexagonal key wrench 2 mm A/F () a

## The actuator is not available separately.

The axis of the hinge should be 11 mm above the top edge of the safety switch and in the same plane

Manual release

• For manual release using M5 triangular key, available as accessory

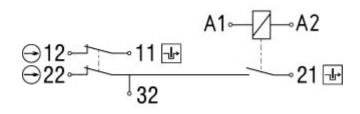
This type termination (IDC) method enables simple connetion of flexible conductors without the need for the use of conductor ferrules

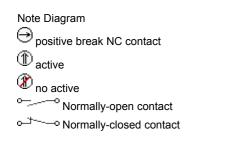
## Included in delivery

Included in delivery

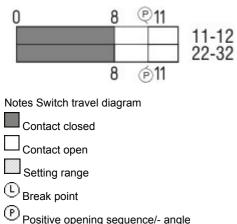
- · Individually coded actuator
- tamperproof screws
- Slot sealing plugs

#### Diagram





## Switch travel diagram



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: AZM 170-02ZRIA-B6L 24 VAC/DC**-1637** 

...-1637

0,3 µm gold-plated contacts

# Ordering code

## AZM 170(1)-(2)Z(3)I(4)-(5)-(6)-(7) (8)

(1)	
without	IDC method of termination
SK	Screw connection
(2)	
11	1 Normally open contact (NO) / 1 Opener (NC)
02	2 Opener (NC)
(3)	
without	Latching force 5 N
R	Latching force 30 N
1	Individual coding
(4)	
without	Power to unlock
Α	Power to lock
(5)	
without	cable gland
ST	Connector M12 x 1

(6)	
B1	with Actuator B1
B5	with Actuator B5
B6L	with Actuator B6L
B6R	with Actuator B6R
(7)	
without	Manual release
2197	Manual release from side (Power to unlock)
1637	gold-plated contacts
(8)	
24VAC/DC	Us 24 VAC/DC
110VAC	Us 110 VAC
230VAC	Us 230 VAC
	AZM 170ST and AZM 170SK
	AZM 170ST-(1)Z(2)I(3)-(4)-(5)-(6) 24 VAC/DC
	AZM 170SK-(1)Z(2)I(3)-(4)-(5)-(6) 24 VAC/DC
(4)	
<mark>(1)</mark> 11/11	1 Normally open contact (NO), 1 Opener (NC) / 1 Normally open contact
17/11	(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
Α	Power to lock
(4)	
B1	with Actuator B1
B5	with Actuator B5
B6L	with Actuator B6L
B6R	with Actuator B6R
(5)	
1637	gold-plated contacts
(6)	
2197	Manual release for Power to unlock

# Documents

**Operating instructions and Declaration of conformity** (fr) 886 kB, 18.11.2016 Code: mrl\_azm170i\_fr

**Operating instructions and Declaration of conformity** (it) 863 kB, 21.11.2016 Code: mrl\_azm170i\_it

**Operating instructions and Declaration of conformity** (es) 881 kB, 21.10.2016 Code: mrl\_azm170i\_es **Operating instructions and Declaration of conformity** (nl) 865 kB, 18.11.2016 Code: mrl\_azm170i\_nl

**Operating instructions and Declaration of conformity** (da) 867 kB, 17.11.2016 Code: mrl\_azm170i\_da

**Operating instructions and Declaration of conformity** (de) 941 kB, 11.10.2016 Code: mrl\_azm170i\_de

**Operating instructions and Declaration of conformity** (pt) 870 kB, 21.11.2016 Code: mrl\_azm170i\_pt

**Operating instructions and Declaration of conformity** (pl) 906 kB, 21.11.2016 Code: mrl\_azm170i\_pl

**Operating instructions and Declaration of conformity** (jp) 1 MB, 20.04.2016 Code: mrl\_azm170i\_jp

**Operating instructions and Declaration of conformity** (en) 957 kB, 11.10.2016 Code: mrl\_azm170i\_en

**BG-test certificate** (en) 260 kB, 09.12.2015 Code: z\_m17p02

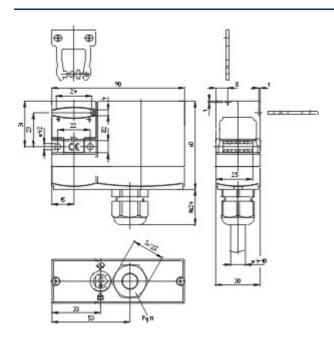
**BG-test certificate** (de) 257 kB, 09.12.2015 Code: z\_m17p01

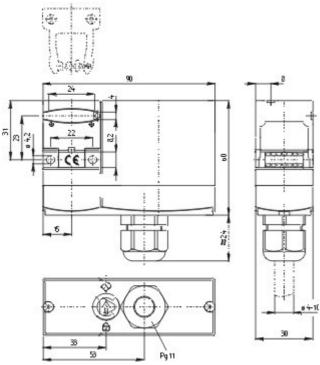
CCC certification (en) 5 MB, 26.10.2018 Code: q\_371p02

CCC certification (cn) 5 MB, 26.10.2018 Code: q\_371p03

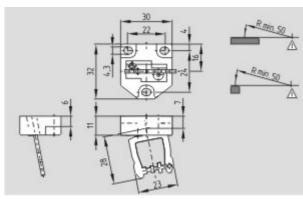
EAC certification (ru) 809 kB, 05.10.2015 Code: q\_6040p17\_ru

#### Images

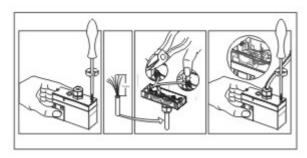




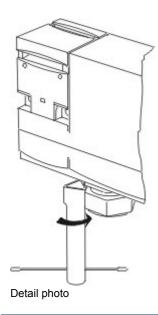
Dimensional drawing (basic component)

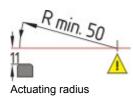


Dimensional drawing (miscellaneous)



Assembly example







Actuating radius

## System components

## Accessories



## 101208493 - AZM 170-B CENTERING GUIDE

• for AZ 17 and AZM 170



#### 101100887 - TRIANGULAR KEY TK-M5

 $\bullet$  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 throroughly. Technical modifications and errors excepted. Generiert am 13.02.2019 - 14:45:33h Kasbase 3.3.0.F.64l