13.02.2019

14:45:35h

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

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





(Minor differences between the printed image and the original product may exist!)  $% \left( \frac{\partial f_{i}}{\partial t_{i}} \right) = \int_{t_{i}}^{t_{i}} \left( \frac{\partial f_{i}}{\partial t_{i}} \right) \left( \frac{\partial f_{i}}{\partial$ 

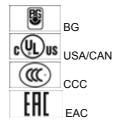
#### **Ordering details**

Product type description
Article number
EAN Code
eCl@ss

#### Approval

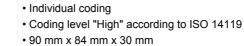
Approval

AZM 170-02ZRIA-ST-B6L 24 VAC/DC 101144375 4030661133164 27-27-26-03



### Classification

Standards B10d Normally-closed contact (NC) Mission time notice EN ISO 13849-1 2.000.000 20 Years



Compact design

Double-insulated

- Interlock with protection against incorrect locking.
- Long life
  - High holding force
  - · left-hand model
  - $\bullet$  For very smal actuating radii in line with or at 90° to the plane of the actuator
  - connector M12, 4-pole
  - A- and B-coding of the connectors

 $MTTF_{d} = \frac{B_{10d}}{0.1 \times n_{op}}$  $n_{op} = \frac{d_{op} \times h_{op} \times 3600 \text{ s/h}}{t_{oycle}}$ 

# **Global Properties**

Permanent light	AZM 170I
Standards	EN 60947-5-1, BG-GS-ET-19
Compliance with the Directives (Y/N) $CE$	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 housings - Material of the actuator	Plastic, glass-fibre reinforced thermoplastic, self-extinguishing Stainless steel
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- Material of the actuator	Stainless steel
- Material of the actuator - Material of the contacts	Stainless steel Silver

# Mechanical data

Design of electrical connection	Connector M12
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
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**

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 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 Thermal test current Ithe Utilisation category Max. fuse rating

#### ATEX

Explosion protection categories for gases Explosion protected category for dusts

#### **Miscellaneous data**

#### Applications

sliding safety guard,

📖 hinged safety guard

#### Dimensions

Dimensions of the sensor	
- Width of sensor	108
- Height of sensor	75.5
- 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.

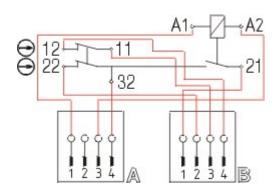
The axis of the hinge should be 11 mm above the top edge of the safety switch and in the same plane

#### **Included in delivery**

Included in delivery

- Individually coded actuator
- tamperproof screws
- Slot sealing plugs

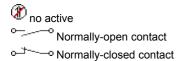
#### Diagram



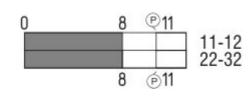
Note Diagram → positive break NC contact ① active 250 V 10 A AC-15: 230 V / 4 A 6 A gG D-fuse

None

None



#### 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: AZM 170-02ZRIA-ST-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
(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
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

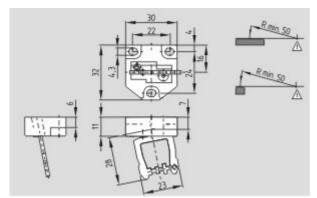
BG-test certificate (de) 257 kB, 09.12.2015 Code: z\_m17p01

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

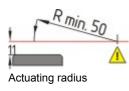
CCC certification (cn) 5 MB, 26.10.2018 Code: q\_371p03

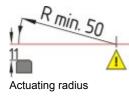
EAC certification (ru) 809 kB, 05.10.2015 Code: q\_6040p17\_ru

#### Images



Dimensional drawing (miscellaneous)





# System components

# 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. Connector A-K4M12 • Pre-wired cable 4-pole S SCHMERSAL S-K4M12 Connector without cable 4-pole S SCHMERSAL

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 - 14:45:36h Kasbase 3.3.0.F.64I