13.02.2019

14:45:37h

Datasheet - AZM 170-02ZRI-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 170-02ZRI-B6L 24 VAC/DC 101140810 4030661119984 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

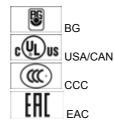
• 90 mm x 84 mm x 30 mm

· 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 ϵ	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	305

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
- bottom	
Manual release (Y/N)	Yes
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	Yes
Power to lock	No
Power to unlock	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

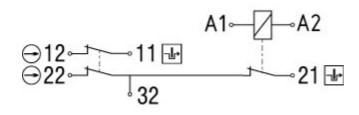
This type termination (IDC) method enables simple connetion of flexible conductors without the need for the use of conductor ferrules

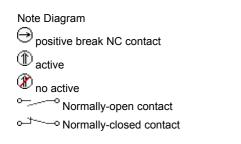
Included in delivery

Included in delivery

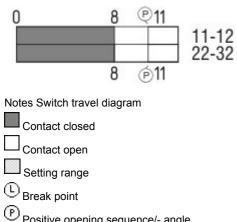
- · Individually coded actuator
- tamperproof screws
- Slot sealing plugs

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 170-02ZRI-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
I	Individual coding
(4)	
without	Power to unlock
Α	Power to lock
(5) without	apple gland
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
1711	(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

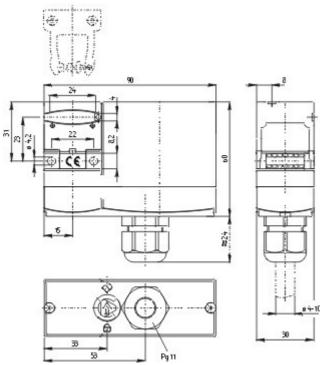
BG-test certificate (de) 257 kB, 09.12.2015 Code: z_m17p01

CCC certification (en) 5 MB, 26.10.2018 Code: q_371p02

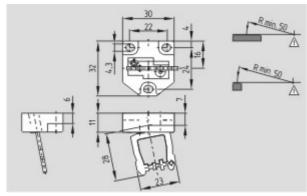
CCC certification (cn) 5 MB, 26.10.2018 Code: q_371p03

EAC certification (ru) 809 kB, 05.10.2015 Code: q_6040p17_ru

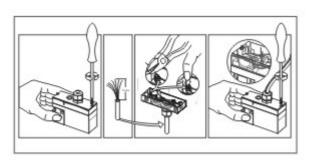
Images



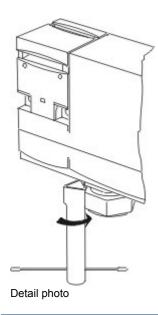
Dimensional drawing (basic component)

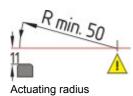


Dimensional drawing (miscellaneous)

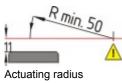


Assembly example









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 - 14:45:38h Kasbase 3.3.0.F.64l