# Datasheet - AZM 170SK-11ZRKA 24 VAC/DC

S SCHMERSAL

Solenoid interlock / AZM 170





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

- thermoplastic enclosure
- Double-insulated □
- · Compact design
- 90 mm x 84 mm x 30 mm
- 1 Cable entry M 20 x 1.5
- · Interlock with protection against incorrect locking.
- · Long life
- · High holding force
- Screw connection
- Manual release

## **Ordering details**

Product type description

Article number

EAN code

AZM 170SK-11ZRKA 24 VAC/DC

101144262

4030661132105

Classification

Standards

B<sub>10d</sub> Opener (NC)

Mission time

notice

EN ISO 13849-1

2.000.000

20 Years

$$MTTF_d = \frac{B_{10d}}{0.1 \times n_{co}}$$

$$n_{op} = \frac{d_{op} \times h_{op} \times 3600 \text{ s/h}}{t_{oyole}}$$

### **Global Properties**

Product name

Standards

Compliance with the Directives (Y/N)  $\zeta \in$ 

Number of actuating directions

Active principle

Duty cycle

Materials

AZM 170

EN 60947-5-1, BG-GS-ET-19

Yes

2 piece

electromechanical

Magnet 100 %

- Material of the housings

Plastic, glass-fibre reinforced thermoplastic, self-extinguishing

- Material of the contacts

Silver None

Housing coating

300 g

Weight

# Mechanical data

Design of electrical connection

Screw connection

Cable section

- Min. Cable section

1 x 0,25 mm<sup>2</sup>

2 m/s

- Max. Cable section 1 x 1.5 mm², flexible

Mechanical life > 1.000.000 operations

Emergency unlocking device (Y/N)

Manual release (Y/N)

Yes

- bottom

Emergency release (Y/N)NoLatching force30 NPositive break force8.5 Npositive break travel11 mmClamping force Fmax1000 N

### **Ambient conditions**

Max. Actuating speed

Ambient temperature

Min. environmental temperature
 Max. environmental temperature
 +60 °C

Protection class IP67 to IEC/EN 60529

### **Electrical data**

Design of control element Normally open contact (NO), Opener (NC)

Switching principle Creep circuit element

Number of auxiliary contacts1 pieceNumber of safety contacts1 piecePower to unlockNoPower to lockYes

Rated control voltage Us

Power consumption

Rated impulse withstand voltage Uimp

4 kV

Rated insulation voltage Ui

Thermal test current lthe

24 VAC/DC

max. 10 W

250 V

Thermal test current lthe

Utilisation category AC-15: 230 V / 4 A DC-13: 24 V / 4 A

Max. fuse rating 6 A gG D-fuse

### **ATEX**

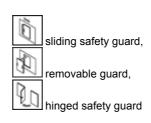
Explosion protection categories for gases

None
Explosion protected category for dusts

None

#### Miscellaneous data

Applications



## **Dimensions**

Dimensions of the sensor

- Width of sensor

- Height of sensor

- Length of sensor

90 mm

100.5 mm

30 mm

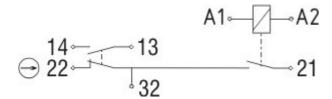
### notice

Individual coding available on request

Manual release

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

## **Diagram**



Note Diagram

→ positive break NC contact

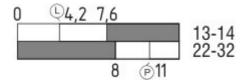
 $^{\textcircled{\scriptsize{1}}}_{\text{active}}$ 

no active

o-\_\_\_o Normally-open contact

o\_\_\_\_\_o\_Normally-closed contact

## Switch travel diagram



Notes Switch travel diagram

Contact closed

Contact open

Setting range

 $^{\textcircled{L}}_{\text{Break point}}$ 

Positive opening sequence/- angle

VS adjustable range of NO contact

VÖ adjustable range of NC contact

N after travel

## **Ordering suffix**

...-1637 0,3 μm gold-plated contacts
...ST-2431 connector M12 , Individual solenoid monitoring

## **Ordering code**

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

(1)	1			

without IDC method of termination

SK Screw connection

(2)

11 Normally open contact (NO) / 1 Opener (NC)

02 2 Opener (NC)

1 Normally open contact (NO), 2 Opener (NC) / -

(3)

withoutLatching force 5 NRLatching force 30 NIIndividual coding

(4)

without Power to unlock

A Power to lock

(5)

without cable gland ST Connector M12 x 1

ST-2431 Connector M12 x 1, Individual solenoid monitoring

(6)

 24VAC/DC
 Us 24 VAC/DC

 110VAC
 Us 110 VAC

 230VAC
 Us 230 VAC

**(7)** 

without Manual release

2197 Manual release from side (Power to unlock)

1637 gold-plated contacts

AZM 170ST and AZM 170SK

AZM 170ST-(1)Z(2)K(3)-(4)-(5)-024 AZM 170SK-(1)Z(2)K(3)-(4)-(5)-024

(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)

1 Normally open contact (NO), 2 Opener (NC) / -

1 Normally open contact (NO), 2 Opener (NC) / 1 Normally open contact

(NO), 1 Opener (NC)

1 Normally open contact (NO), 2 Opener (NC) / 2 Opener (NC)

2 Opener (NC), - / 1 Opener (NC), -

2 Opener (NC), - / 1 Normally open contact (NO), -

(1)

12/02 02/01

12/11

02/10

(2)

without Latching force 5 N R

Latching force 30 N

(3)

Power to unlock without Α Power to lock

(4)

1637 gold-plated contacts

(5)

2197 Manual release for Power to unlock

#### **Documents**

Operating instructions and Declaration of conformity (fr) 670 kB, 01.07.2010

Code: mrl\_azm170\_fr

Operating instructions and Declaration of conformity (de) 923 kB, 24.02.2011

Code: mrl\_azm170\_de

Operating instructions and Declaration of conformity (it) 645 kB, 09.04.2010

Code: mrl\_azm170\_it

Operating instructions and Declaration of conformity (nl) 720 kB, 23.09.2010

Code: mrl\_azm170\_nl

Operating instructions and Declaration of conformity (en) 746 kB, 12.03.2010

Code: mrl\_azm170\_en

Operating instructions and Declaration of conformity (jp) 709 kB, 14.04.2011

Code: mrl\_azm170\_jp

Operating instructions and Declaration of conformity (pl) 576 kB, 11.07.2013

Code: mrl\_azm170\_pl

Operating instructions and Declaration of conformity (da) 582 kB, 07.08.2012

Code: mrl\_azm170\_da

Operating instructions and Declaration of conformity (es) 665 kB, 25.03.2010

Code: mrl\_azm170\_es

BG-test certificate (en) 236 kB, 10.12.2013

Code: z\_m17p02

BG-test certificate (de) 238 kB, 10.12.2013

Code: z\_m17p01

CCC certification (en) 469 kB, 21.09.2012

Code: q\_371p02

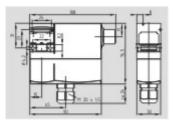
CCC certification (cn) 470 kB, 21.09.2012

Code: q\_371p03

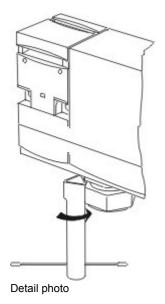
Gost certification (ru) 2 MB, 07.07.2011

Code: q\_az1p01

# **Images**



Dimensional drawing (basic component)



# **System components**

# **Actuator**



# 101122893 - AZ 17/170-B1

• Particularly suitable for sliding doors



# 1137406 - AZ 17/170-B1-2245

• Damps vibration on guard device



# 1122895 - AZ 17/170-B5

• Particularly suitable for hinged guards (front mounting)

## 1139788 - AZ 17/170-B11

• Particularly suitable for sliding doors





### 1139789 - AZ 17/170-B15

• Particularly suitable for hinged guards (front mounting)



## 101123391 - AZM 170-B6

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

#### **Accessories**



### 1208493 - AZM 170-B CENTERING GUIDE

• for AZ 17 and AZM 170



# 101100887 - TRIANGULAR KEY M5

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

## Connector



# A-K4M12

- Pre-wired cable
- 4-pole



### S-K4M12

- · Connector without cable
- 4-pole

Image

Image et=sS