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

S SCHMERSAL Solenoid interlock / AZM 170

 ☒ Preferred typ



- Thermoplastic enclosure
- Double-insulated
- · Compact design
- 90 mm x 84 mm x 30 mm
- · Interlock with protection against incorrect locking.
- · Long life
- High holding force
- Connector M12, 4-pole
- Manual release

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

## **Ordering details**

Product type description

Article number

EAN Code

eCl@ss

AZM 170-11ZRKA-ST 24 VAC/DC

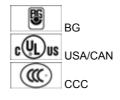
101141455

4030661122014

27-27-26-03

**Approval** 

Approval



## Classification

Standards

B10d Normally-closed contact (NC)

Mission time

notice

EN ISO 13849-1 2.000.000

20 Years

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

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

# **Global Properties**

Permanent light

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

Compliance with the Directives (Y/N) **C €**Yes

Number of actuating directions

2

Active principle electromechanical
Duty cycle ED Magnet 100 %

Materials Wagnet

Material of the housings
 Material of the contacts
 Plastic, glass-fibre reinforced thermoplastic, self-extinguishing
 Silver

Housing coating

Weight

None
285

#### Mechanical data

Design of electrical connection Connector M12

Mechanical life > 1.000.000 operations

Emergency unlocking device (Y/N) No

- bottom

Manual release (Y/N)

Emergency release (Y/N)

Latching force

70

Positive break force

8.5

positive break travel

Clamping force F

Max. Actuating speed

Yes

No

130

11 mm

11 mm

11 mm

12 m/s

### **Ambient conditions**

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)

notice change-over contact with double break, type Zb or 2 NC contacts, with

galvanically separated contact bridges

Switching principle Creep circuit element

Number of auxiliary contacts1Number of safety contacts1Power to unlockNoPower to lockYes

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 line 10 A

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

75.5

30 mm

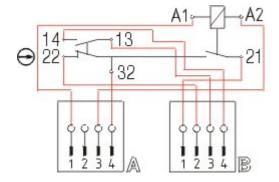
### notice

Individual coding available on request

Manual release

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

# Diagram



Note Diagram

⊖ positive break NC contact

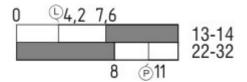
 $^{\scriptsize{\textcircled{\scriptsize{1}}}}$  active

no active

O—\_\_\_O Normally-open contact

o-t--- Normally-closed contact

# Switch travel diagram



Notes Switch travel diagram

Contact closed

Contact open

Setting range

(L) 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 170-11ZRKA-ST 24 VAC/DC-1637

...-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)
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 N

Individual coding

(4)

withoutPower to unlockAPower to lock

(5)

withoutcable glandSTConnector 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)

11/02

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

(NO), 1 Opener (NC)

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

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)

withoutPower to unlockAPower to lock

(4)

1637 gold-plated contacts

(5)

2197 Manual release for Power to unlock

#### **Documents**

Operating instructions and Declaration of conformity (fr) 701 kB, 15.02.2018

Code: mrl\_azm170\_fr

Operating instructions and Declaration of conformity (de) 672 kB, 20.05.2019

Code: mrl azm170 de

Operating instructions and Declaration of conformity (it) 718 kB, 06.06.2019

Code: mrl\_azm170\_it

Operating instructions and Declaration of conformity (cn) 655 kB, 08.05.2017

Code: mrl\_azm170\_cn

Operating instructions and Declaration of conformity (nl) 702 kB, 12.07.2018

Code: mrl\_azm170\_nl

Operating instructions and Declaration of conformity (en) 702 kB, 20.05.2019

Code: mrl\_azm170\_en

Operating instructions and Declaration of conformity (jp) 843 kB, 23.08.2016

Code: mrl\_azm170\_jp

Operating instructions and Declaration of conformity (pl) 736 kB, 14.06.2018

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) 719 kB, 31.05.2019

Code: mrl\_azm170\_es

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

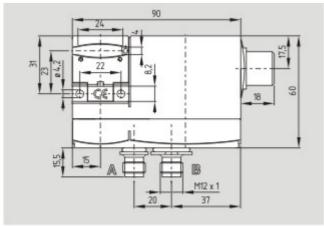
CCC certification (cn) 5 MB, 26.10.2018

Code: q\_371p03

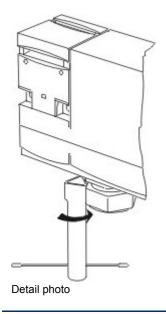
EAC certification (ru) 809 kB, 05.10.2015

Code: q\_6040p17\_ru

# **Images**



Dimensional drawing (basic component)



# System components

# Actuator



# 101122893 - AZ 17/170-B1

• Particularly suitable for sliding doors



### 101137406 - AZ 17/170-B1-2245

- · Particularly suitable for sliding doors
- Damps vibration on guard device



#### 101122895 - AZ 17/170-B5

· Particularly suitable for sliding doors



### 101139788 - AZ 17/170-B11

• Particularly suitable for sliding doors



### 101139789 - AZ 17/170-B15

• Particularly suitable for sliding doors



# 101123391 - AZM 170-B6

- Particularly suitable for hinged guards
- For very smal actuating radii
- The direction of actuation can be selected by applicable insertion of the insert

### **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-K4M12

- Connector without cable
- 4-pole



### A-K4M12

- Pre-wired cable
- 4-pole



## S-K4M12

- Connector without cable
- 4-pole

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 26.07.2019 - 16:20:35h Kasbase 3.3.0.F.64I