



## AZM 170-02ZRI-ST-B6L 24VAC/DC

- Connector M12, 4-pole
- A- and B-coding of the connectors
- Manual release from side
- Double-insulated
- Individual coding
- Coding level "High" according to ISO 14119
- 90 mm x 84 mm x 30 mm
- Compact design
- Interlock with protection against incorrect locking.
- Long life
- High holding force
- left-hand model
- For very small actuating radii in line with or at 90° to the plane of the actuator

## Data

### Ordering data

Product type description	AZM 170-02ZRI-ST-B6L 24VAC/DC
Article number (order number)	101144373
EAN (European Article Number)	4030661133140
eCl@ss number, version 12.0	27-27-26-03
eCl@ss number, version 11.0	27-27-26-03
eCl@ss number, version 9.0	27-27-26-03
ETIM number, version 7.0	EC002593
ETIM number, version 6.0	EC002593

### Approvals - Standards

Certificates	BG cULus CCC
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## General data

Standards	BG-GS-ET-19 EN ISO 13849-1 EN ISO 14119 EN IEC 60947-5-1
Coding	Individual coding
Coding level according to EN ISO 14119	High
Working principle	electromechanical
Housing material	Plastic, glass-fibre reinforced thermoplastic, self-extinguishing
Material of the actuator	Stainless steel
Gross weight	297 g

## General data - Features

Power to unlock	Yes
Manual release	Yes
Number of actuating directions	2
Number of safety contacts	2

## Safety classification

Standards	EN ISO 13849-1
Performance Level, up to	d
Category	3
Mission time	20 Year(s)

## Safety classification - Safety outputs

B <sub>10D</sub> Normally-closed contact (NC)	2,000,000 Operations
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### Safety classification - Fault exclusion

Mission time	20 Year(s)
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### Mechanical data

Actuating radius, minimum	50 mm
Mechanical life, minimum	1,000,000 Operations
Holding force $F_{Zh}$ in accordance with EN ISO 14119	1,000 N
Holding force $F_{max}$ , maximum	1,300 N
Latching force	30 N
Positive break travel	11 mm
Positive break force per NC contact, minimum	8.5 N
Positive break force, minimum	17 N
Actuating speed, maximum	2 m/s
Mounting	Screws
Type of the fixing screws	2x M5

### Mechanical data - Connection technique

Termination	Connector plug M12, 4-pole, (A-coding) Connector plug M12, 4-pole, (B-coding)
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### Mechanical data - Dimensions

Length of sensor	30 mm
Width of sensor	108 mm
Height of sensor	75.5 mm

### Ambient conditions

Degree of protection	IP67
Ambient temperature	-25 ... +60 °C

Storage and transport temperature, minimum	+25 °C
Storage and transport temperature, maximum	+85 °C
Protection class	II

### Ambient conditions - Insulation values

Rated insulation voltage $U_i$	250 VAC
Rated impulse withstand voltage $U_{imp}$	2.5 kV
Oversvoltage category	III
Degree of pollution	3

### Electrical data

Thermal test current	4 A
Rated control voltage	24 VAC/DC
Required rated short-circuit current	1,000 A
Electrical power consumption, maximum	10 W
Switching element	Opener (NC)
Note (Switching element)	Change-over contact with double break, type Zb or 2 NC or 3 NC or 4 NC contacts, with galvanically separated contact bridges
Switching principle	slow action, positive break NC contact
Switching frequency	1,000 /h
Material of the contacts, electrical	Silver

### Electrical data - Magnet control

Magnet switch-on time	100 %
Test pulse duration, maximum	5 ms
Test pulse interval, minimum	50 ms

## Electrical data - Safety contacts

Voltage, Utilisation category AC-15 230 VAC

Current, Utilisation category AC-15 4 A

Voltage, Utilisation category DC-13 24 VDC

Current, Utilisation category DC-13 4 A

## Other data

Note (applications) sliding safety guard  
removable guard  
hinged safety guard

## Scope of delivery

Scope of delivery Not available as spare part  
Slot sealing plugs  
The actuator is included in the scope of delivery

## Note

Note (General) The axis of the hinge must be 11 mm above and in a parallel plane to the top surface of the safety switch.  
Actuating radius adjustable to minimum 50 mm, using a hexagonal key wrench AF 2 mm (a)  
The actuator is not available separately.

Note (Manual release) right  
For manual release using M5 triangular key, available as accessory  
Manual release from side

## Ordering code

Product type description:  
AZM 170(1)-(2)Z(3)I(4)-(5)-(6)-(7) (8)

(1)

without

Cut clamps

<b>SK</b>	Screw connection
(2)	
<b>11</b>	1 NO contacts/1 NC contact
<b>02</b>	2 NC contact
(3)	
<b>without</b>	Latching force 5 N
<b>R</b>	Latching force 30 N
<b>I</b>	Individual coding
(4)	
<b>without</b>	Power to unlock
<b>A</b>	Power to lock
(5)	
<b>without</b>	cable gland
<b>ST</b>	M12 x 1 connector
(6)	
<b>B1</b>	with actuator B1
<b>B5</b>	with actuator B5
<b>B6L</b>	with actuator B6L
<b>B6R</b>	with actuator B6R
(7)	
<b>without</b>	Manual release
<b>2197</b>	Manual release from side (Standard in case of conector and power to unlock versions)
<b>1637</b>	Gold-plated contacts
(8)	
<b>24VAC/DC</b>	Us 24 VAC/DC
<b>110VAC</b>	Us 110 VAC
<b>230VAC</b>	Us 230 VAC

(1)	
<b>11/11</b>	1 NO contact, 1 NC contact / 1 NO contact 1, NC contact
<b>11/02</b>	1 NO contact, 1 NC contact / 2 NC contacts
<b>12/00</b>	1 NO contact, 2 NC contacts / -
<b>12/11</b>	1 NO contact, 2 NC contact / 1 NO contact 1, NC contact
<b>12/02</b>	1 NO contact, 2 NC contact / 2 NC contacts
<b>02/01</b>	2 NC contacts / 1 NC contact
<b>02/10</b>	2 NC contacts, - / 1 NO contact

(2)	
<b>without</b>	Latching force 5 N
<b>R</b>	Latching force 30 N

(3)	
<b>without</b>	Power to unlock
<b>A</b>	Power to lock

(4)	
<b>B1</b>	with actuator B1
<b>B5</b>	with actuator B5
<b>B6L</b>	with actuator B6L
<b>B6R</b>	with actuator B6R

(5)	
<b>1637</b>	Gold-plated contacts

(6)	
<b>2197</b>	Manual release for Power to unlock

## Pictures

**Product picture (catalogue individual photo)**



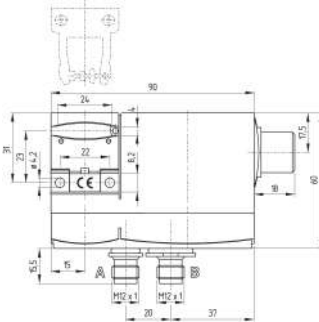
ID: kazm1fi4

| 611.5 kB | .jpg | 291.042 x 301.625 mm - 825 x 855 px - 72 dpi

| 39.7 kB | .png | 73.731 x 76.553 mm - 209 x 217 px - 72 dpi

| 65.0 kB | .jpg | 119.239 x 123.472 mm - 338 x 350 px - 72 dpi

## Dimensional drawing basic component



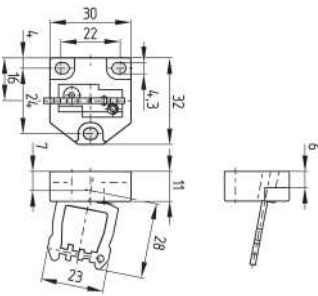
ID: kazm1gi4

| 91.6 kB | .cdr |

| 5.1 kB | .png | 74.083 x 74.083 mm - 210 x 210 px - 72 dpi

| 153.6 kB | .jpg | 352.778 x 353.483 mm - 1000 x 1002 px - 72 dpi

## Dimensional drawing actuator

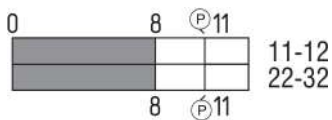


ID: 1azm1b35

| 139.7 kB | .jpg | 352.778 x 317.853 mm - 1000 x 901 px - 72 dpi

| 17.8 kB | .png | 74.083 x 66.675 mm - 210 x 189 px - 72 dpi

## Switch travel diagram



ID: kazm1s01

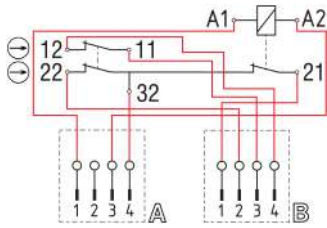
| 19.5 kB | .cdr |

| 1.8 kB | .png | 74.083 x 26.458 mm - 210 x 75 px - 72 dpi

| 49.4 kB | .jpg | 352.778 x 125.236 mm - 1000 x 355 px - 72 dpi

## Diagram





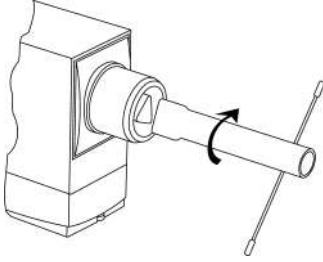
ID: kazm1k14

| 46.9 kB | .cdr |

| 135.9 kB | .jpg | 352.778 x 240.947 mm - 1000 x 683 px - 72 dpi

| 5.7 kB | .png | 74.083 x 50.447 mm - 210 x 143 px - 72 dpi

## Operating principle



ID: kazm1a71

| 113.1 kB | .jpg | 352.778 x 280.811 mm - 1000 x 796 px - 72 dpi

| 4.6 kB | .png | 74.083 x 58.914 mm - 210 x 167 px - 72 dpi

Schmersal India Pvt. Ltd., Plot No - G-7/1, Ranjangaon MIDC, Tal. - Shirur, Dist.- Pune 412 220

The details and data referred to have been carefully checked. Images may diverge from original. Further technical data can be found in the manual. Technical amendments and errors possible.

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