



AZM 170-02ZRI-ST-B5-2197 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
- Particularly suitable for front mounting

Data

Ordering data

Product type description	AZM 170-02ZRI-ST-B5-2197 24VAC/DC
Article number (order number)	101144339
EAN (European Article Number)	4030661132822
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	296 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 _{10D} Normally-closed contact (NC)	2,000,000 Operations
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Safety classification - Fault exclusion

Mission time 20 Year(s)

Mechanical data

Actuating radius, minimum 140 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, 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)

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) minimum actuating radius on rotating guard systems via the narrow edge of the actuator 140 mm
minimum actuating radius on hinged guards in line with the plane of the actuator 200 mm
The axis of the hinge must be 13 mm above and in a parallel plane to the top surface of the safety switch.
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
SK		Screw connection
(2)		
11		1 NO contacts/1 NC contact
02		2 NC contact
(3)		
without		Latching force 5 N
R		Latching force 30 N
I		Individual coding
(4)		
without		Power to unlock
A		Power to lock
(5)		
without		cable gland
ST		M12 x 1 connector
(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 (Standard in case of conector and power to unlock versions)
1637		Gold-plated contacts
(8)		
24VAC/DC		Us 24 VAC/DC

110VAC	Us 110 VAC
230VAC	Us 230 VAC
(1)	
11/11	1 NO contact, 1 NC contact / 1 NO contact 1, NC contact
11/02	1 NO contact, 1 NC contact / 2 NC contacts
12/00	1 NO contact, 2 NC contacts / -
12/11	1 NO contact, 2 NC contact / 1 NO contact 1, NC contact
12/02	1 NO contact, 2 NC contact / 2 NC contacts
02/01	2 NC contacts / 1 NC contact
02/10	2 NC contacts, - / 1 NO contact

(2)

without	Latching force 5 N
R	Latching force 30 N

(3)

without	Power to unlock
A	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
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(6)

2197	Manual release for Power to unlock
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Pictures

Product picture (catalogue individual photo)



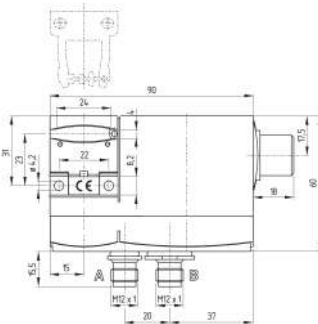
ID: kazm1fi4

| 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



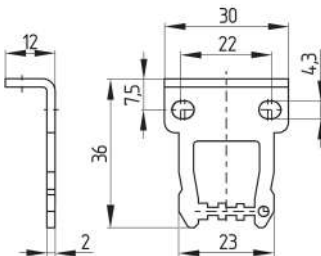
ID: kazm1gi4

| 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

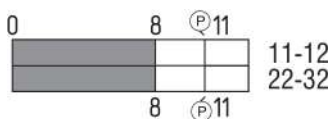


ID: 1az17b06

| 99.1 kB | .jpg | 352.778 x 277.989 mm - 1000 x 788 px - 72 dpi

| 4.8 kB | .png | 74.083 x 58.561 mm - 210 x 166 px - 72 dpi

Switch travel diagram



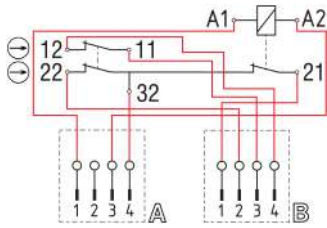
ID: kazm1s01

| 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



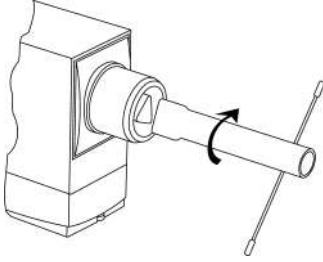
ID: kazm1k14

| 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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