



AZM 170ST-11/02ZRI-B5-2197 24VAC/DC

- Manual release from side
- connector, can be rotated
- 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 170ST-11/02ZRI-B5-2197 24VAC/DC
Article number (order number)	103006398
EAN (European Article Number)	4030661440668

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	369 g

General data - Features

Power to unlock	Yes
Manual release	Yes
Number of actuating directions	2
Number of auxiliary contacts	1
Number of safety contacts	3

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
B _{10D} Normally open contact (NO)	1,000,000 Operations
Note (B _{10D} Normally open contact (NO))	at 10% I _e and ohmic load

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 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, 8-pole, (A-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 60 V
Rated impulse withstand voltage U_{imp} 0.8 kV
Overvoltage category III
Degree of pollution 3

Electrical data

Thermal test current 2 A
Rated control voltage 24 VAC/DC
Required rated short-circuit current 1,000 A
Electrical power consumption, maximum 10 W
Switching element NO contact, NC contact
Note (Switching element) Change-over contact with double break, type Zb or 2 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	2 A

Electrical data - Auxiliary 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	2 A

Other data

Note (applications)	sliding safety guard removable guard hinged safety guard
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Scope of delivery

Scope of delivery	Not available as spare part Slot sealing plugs The actuator is included in the scope of delivery
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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 Additional manual release on 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)



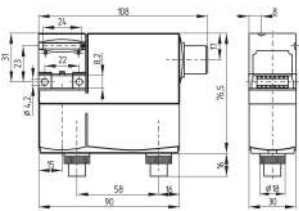
ID: saz1f52

| 241.1 kB | .jpg | 287.161 x 234.597 mm - 814 x 665 px - 72 dpi

| 28.0 kB | .png | 74.083 x 60.678 mm - 210 x 172 px - 72 dpi

| 45.9 kB | .jpg | 123.472 x 100.894 mm - 350 x 286 px - 72 dpi

Dimensional drawing basic component



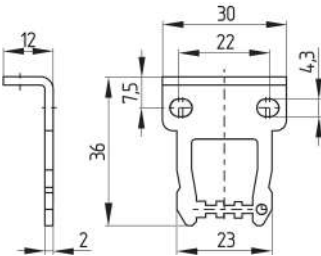
ID: 1azm1g21

| 47.6 kB | .cdr |

| 9.8 kB | .png | 74.083 x 51.506 mm - 210 x 146 px - 72 dpi

| 124.4 kB | .jpg | 352.778 x 245.181 mm - 1000 x 695 px - 72 dpi

Dimensional drawing actuator

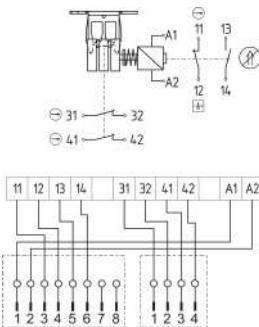


ID: 1az17b06

| 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

Diagram



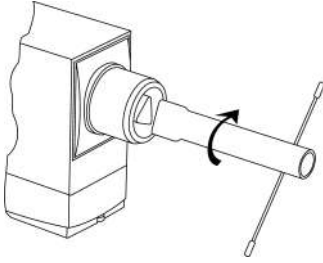
ID: kazm1k70

| 116.2 kB | .ai | 210.002 x 297 mm - 595 x 841 px - 72 dpi

| 184.1 kB | .jpg | 352.778 x 434.622 mm - 1000 x 1232 px - 72 dpi

| 6.5 kB | .png | 73.731 x 91.017 mm - 209 x 258 px - 72 dpi

Operating principle

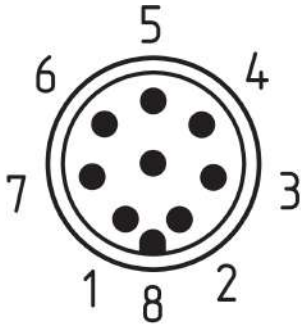


ID: kazm1a71

| 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

Contact arrangement

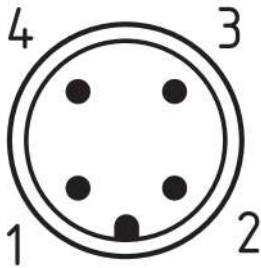


ID: km23-k8b

| 5.3 kB | .png | 73.731 x 79.728 mm - 209 x 226 px - 72 dpi

| 139.8 kB | .jpg | 352.778 x 380.647 mm - 1000 x 1079 px - 72 dpi

Contact arrangement



ID: km12-k4c

| 4.2 kB | .png | 74.083 x 74.083 mm - 210 x 210 px - 72 dpi

| 113.3 kB | .jpg | 352.778 x 352.778 mm - 1000 x 1000 px - 72 dpi

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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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