



AZM 170ST-12/02ZKA 24VAC/DC

- connector, can be rotated
- Thermoplastic enclosure
- Double-insulated
- Compact design
- Interlock with protection against incorrect locking.
- Long life
- High holding force

Data

Ordering data

| | |
|-------------------------------|-----------------------------|
| Product type description | AZM 170ST-12/02ZKA 24VAC/DC |
| Article number (order number) | 101186193 |
| EAN (European Article Number) | 4030661333427 |
| 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 |
|--------------|--------------------|

General data

| | |
|--|---|
| Standards | EN ISO 13849-1 EN ISO 14119 EN IEC 60947-5-1 |
| Coding level according to EN ISO 14119 | Low |
| Working principle | electromechanical |
| Housing material | Plastic, glass-fibre reinforced thermoplastic, self-extinguishing |
| Gross weight | 330 g |

General data - Features

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|--------------------------------|-----|
| Power to lock | Yes |
| Number of actuating directions | 2 |
| Number of auxiliary contacts | 1 |
| Number of safety contacts | 4 |

Safety classification

| | |
|---|--------------------------------------|
| Standards | EN ISO 13849-1 |
| Performance Level, up to | c |
| Category | 1 |
| B _{10D} Normally-closed contact (NC) | 2,000,000 Operations |
| Note | Electrical life on request. |
| B _{10D} Normally-open contact (NO) | 1,000,000 Operations |
| Note | at 10% I _e and ohmic load |
| Mission time | 20 Year(s) |

Safety classification - Safety outputs

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|--|--------------------------------------|
| Note (B _{10D} Normally open contact (NO)) | at 10% I _e and ohmic load |
|--|--------------------------------------|

Safety classification - Fault exclusion

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|--------------------------|---|
| Please note: | Can be used when fault exclusion for dangerous damage to the 1-channel mechanism is permissible and sufficient protection against manipulation is guaranteed. |
| Performance Level, up to | d |
| Category | 3 |
| Note | for 2-channel use and with suitable logic unit. |
| Mission time | 20 Year(s) |

Mechanical data

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|--|----------------------|
| 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 | 5 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 |
| Tightening torque of the fastening screws for the housing cover, minimum | 0.7 Nm |
| Tightening torque of the fastening screws for the housing cover, maximum | 1 Nm |
| Note | Torx T10 |

Mechanical data - Connection technique

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|-------------|--|
| Termination | Connector plug M12, 4-pole, (A-coding) Connector plug M12, 8-pole, (A-coding) |
|-------------|--|

Mechanical data - Dimensions

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|------------------|---------|
| Length of sensor | 30 mm |
| Width of sensor | 90 mm |
| Height of sensor | 92.5 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 |
| Permissible installation altitude above sea level, maximum | 2,000 m |

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

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|---------------------------------------|--|
| Thermal test current | 2 A |
| Rated control voltage | 24 VAC/DC |
| Required rated short-circuit current | 1,000 A |
| Electrical power consumption, maximum | 12 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

| | |
|-------------------------------------|--------|
| 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

| | |
|-------------------------------------|--------|
| 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 |
|---------------------|--|

Scope of delivery

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|-------------------|--------------------------------------|
| Scope of delivery | Actuator must be ordered separately. |
|-------------------|--------------------------------------|

Ordering code

Product type description:
AZM 170(1)-(2)Z(3)K(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 |
| (4) | |
| without | Power to unlock |
| A | Power to lock |
| (5) | |
| without | Cable entry M20 |
| ST | 2 connector, M12, 4-pin |
| ST-2431 | As well as ST; individual solenoid monitoring |
| ST8 | Connector M12 8-pole |
| (6) | |
| 24VAC/DC | Us 24 VAC/DC |
| 110VAC | Us 110 VAC |
| 230VAC | Us 230 VAC |
| (7) | |
| 1637 | Gold-plated contacts |
| (8) | |
| without | Manual release |
| 2197 | Manual release from side (Standard in case of connector and power to unlock versions) |

Pictures

Product picture (catalogue individual photo)



ID: kazm1f60

| 750.0 kB | .jpg | 352.778 x 349.956 mm - 1000 x 992 px - 72 dpi

| 52.3 kB | .png | 74.083 x 73.378 mm - 210 x 208 px - 72 dpi

| 77.0 kB | .jpg | 123.472 x 122.414 mm - 350 x 347 px - 72 dpi

Dimensional drawing basic component



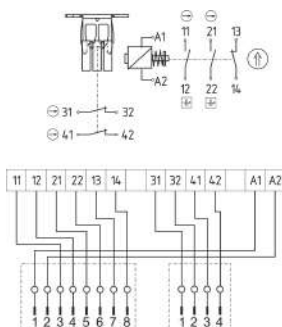
ID: 1azm1g21

| 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

Diagram



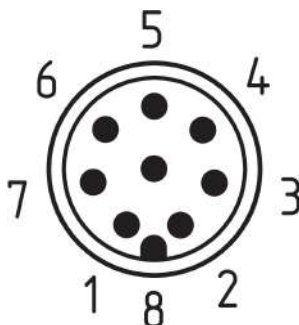
ID: kazm1k81

| 121.9 kB | .ai | 210.002 x 297 mm - 595 x 841 px - 72 dpi

| 175.6 kB | .jpg | 352.425 x 404.989 mm - 999 x 1148 px - 72 dpi

| 6.5 kB | .png | 74.083 x 85.019 mm - 210 x 241 px - 72 dpi

Contact arrangement

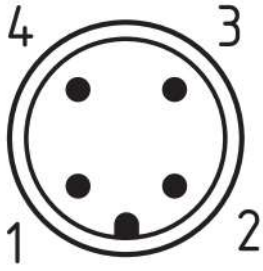


ID: km23-k8b

| 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

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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