# DATASHEET



## AZ 16-12ZI-B6R-M16

- 3 cable entries M 16 x 1.5
- Thermoplastic enclosure
- Individual coding
- Coding level "High" according to ISO 14119
- 52 mm x 90 mm x 30 mm
- Long life
- Double-insulated
- Large wiring compartment
- High level of contact reliability with low voltages and currents
- Insensitive to soiling
- Slotted holes for adjustment, circular holes for location

## Data

### Ordering data

| | |
|---|---|
| Product type description | AZ 16-12ZI-B6R-M16 |
| Article number (order number) | 103005855 |
| EAN (European Article Number) | 4030661440729 |
| eCl@ss number, version 12.0 | 27-27-26-02 |
| eCl@ss number, version 11.0 | 27-27-26-02 |
| eCl@ss number, version 9.0 | 27-27-26-02 |
| ETIM number, version 7.0 | EC002592 |
| ETIM number, version 6.0 | EC002592 |

### Approvals - Standards

| | |
|---|---|
| Certificates | cULus |

### General data

| | |
|---|---|
| Standards | EN ISO 13849-1<br>EN ISO 14119<br>EN IEC 60947-5-1 |
| Coding level according to EN ISO 14119 | High |
| Housing material | Plastic, glass-fibre reinforced thermoplastic, self-extinguishing |
| Material of the actuator | Stainless steel |
| Gross weight | 200 g |

## General data - Features

| | |
|---|---|
| Ejection force | Yes |
| Number of auxiliary contacts | 1 |
| Number of safety contacts | 2 |

### 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 - Fault exclusion

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

| | |
|---|---|
| Actuating radius, minimum | 35 mm |
| Actuator | angled<br>flexible |
| Mechanical life, minimum | 1,000,000 Operations |
| Positive break travel | 8 mm |
| Positive break force per NC contact, minimum | 10 N |
| Actuating speed, maximum | 2 m/s |
| Mounting | Screws |
| Type of the fixing screws | 2x M6 |

## Mechanical data - Connection technique

| | |
|---|---|
| Cable entry | 3 x M16 x 1,5 |
| Termination | Screw terminals |
| Cable section, minimum | 0.75 mm² |
| Cable section, maximum | 2.5 mm² |
| Note | All indications including the conductor ferrules. |

## Mechanical data - Dimensions

| | |
|---|---|
| Length of sensor | 30 mm |
| Width of sensor | 52 mm |
| Height of sensor | 90 mm |

## Ambient conditions

| | |
|---|---|
| Degree of protection | IP67 |
| Ambient temperature | -30 ... +80 °C |
| Storage and transport temperature | -40 ... +85 °C |

| | |
|---|---|
| Permissible installation altitude above sea level, maximum | 2,000 m |

## Ambient conditions - Insulation values

| | |
|---|---|
| Rated insulation voltage $U_i$ | 500 V |
| Rated impulse withstand voltage $U_{imp}$ | 6 kV |
| Overvoltage category | III |
| Degree of pollution | 3 |

## Electrical data

| | |
|---|---|
| Thermal test current | 10 A |
| Required rated short-circuit current | 1,000 A |
| Switching element | 1 NO contact, 2 NC contacts |
| Switching principle | slow action, positive break NC contact |
| Maximum switching frequency | 4,000 /h |
| Material of the contacts, electrical | Silver |

## 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 |

## 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 | 4 A |

## Scope of delivery

| | |
|---|---|
| Scope of delivery | Individually coded actuator B6 right-hand model |

## Note

| | |
|---|---|
| Note (General) | The axis of the hinge must be 5 mm above and in a parallel plane to the top surface of the safety switch.<br>Minimum actuating radius on hinged guards 35 mm<br>The actuator is not available separately. |

## Ordering code

Product type description:
AZ 16-(1)ZI-(2)-(3)

(1)

| | |
|---|---|
| **03** | 3 NC contact |
| **12** | 1 NO contact/2 NC contacts |

(2)

| | |
|---|---|
| **B1** | straight design |
| **B1-1747** | straight design with magnetic latch |
| **B1-2024** | straight design with slot-lip seal |
| **B1-2053** | straight design with ball latch |
| **B1-2177** | straight design with centering guide |
| **B6L** | angled, flexible to the left |
| **B6R** | angled, flexible to the right |

(3)

| | |
|---|---|
| **M16** | cable entry M16 |
| **M20** | Cable entry M20 |

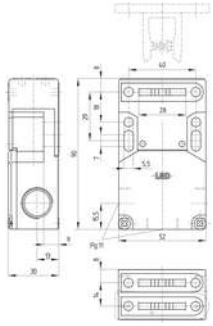
# Pictures

## Product picture (catalogue individual photo)



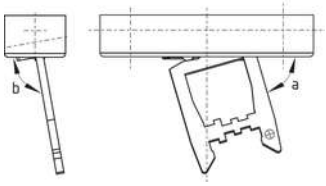
ID: kaz16f11
| 674.9 kB | .jpg | 352.778 x 685.094 mm - 1000 x 1942 px - 72 dpi
| 64.3 kB | .png | 73.731 x 143.581 mm - 209 x 407 px - 72 dpi
| 29.8 kB | .jpg | 63.5 x 123.472 mm - 180 x 350 px - 72 dpi

## Dimensional drawing basic component



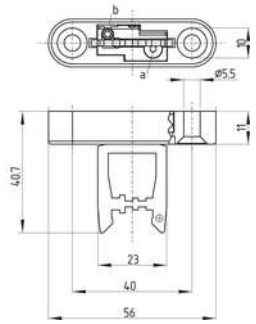
ID: kaz16gi1
| 49.5 kB | .cdr |
| 8.1 kB | .png | 74.083 x 115.006 mm - 210 x 326 px - 72 dpi
| 283.3 kB | .jpg | 352.778 x 548.569 mm - 1000 x 1555 px - 72 dpi

## Dimensional drawing actuator



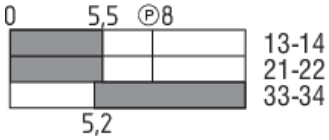

ID: kaz16bi8b
| 121.8 kB | .ai | 297 x 210.002 mm - 841 x 595 px - 72 dpi
| 1.7 kB | .png | 74.083 x 52.564 mm - 210 x 149 px - 72 dpi
| 91.9 kB | .jpg | 352.778 x 306.917 mm - 1000 x 870 px - 72 dpi

## Dimensional drawing actuator



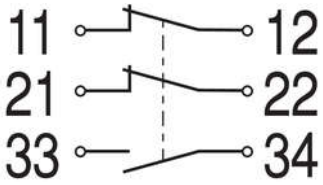

ID: kaz16bi6
| 90.1 kB | .ai | 210.002 x 297 mm - 595 x 841 px - 72 dpi
| 3.3 kB | .png | 73.731 x 104.422 mm - 209 x 296 px - 72 dpi
| 172.0 kB | .jpg | 352.425 x 462.492 mm - 999 x 1311 px - 72 dpi

## Switch travel diagram




ID: kaz16si7
| 2.4 kB | .png | 74.083 x 33.514 mm - 210 x 95 px - 72 dpi

## Diagram




ID: k2o1sk04
| 16.0 kB | .cdr |
| 80.6 kB | .jpg | 352.778 x 195.439 mm - 1000 x 554 px - 72 dpi
| 3.3 kB | .png | 74.083 x 40.922 mm - 210 x 116 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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