



## AZ 16-03ZIB1-M16-2024

- 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
- For protection against the ingress of coarse dirt

## Data

### Ordering data

|                               |                       |
|-------------------------------|-----------------------|
| Product type description      | AZ 16-03ZIB1-M16-2024 |
| Article number (order number) | 101150057             |
| EAN (European Article Number) | 4030661154510         |
| 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 | IFA<br>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                                                              |
| Working principle                      | electromechanical                                                 |
| Housing material                       | Plastic, glass-fibre reinforced thermoplastic, self-extinguishing |
| Material of the actuator               | Stainless steel                                                   |
| Gross weight                           | 174 g                                                             |

## General data - Features

|                        |     |
|------------------------|-----|
| Ejection force         | Yes |
| Number of cable glands | 3   |

## Safety classification

|                                               |                             |
|-----------------------------------------------|-----------------------------|
| Standards                                     | EN IEC 60947-5-1            |
| Performance Level, up to                      | c                           |
| Category                                      | 1                           |
| B <sub>10D</sub> Normally-closed contact (NC) | 2,000,000 Operations        |
| Note                                          | Electrical life on request. |
| 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                    | 250 mm               |
| Actuator                                     | straight<br>rigid    |
| Mechanical life, minimum                     | 1,000,000 Operations |
| Positive break travel                        | 8 mm                 |
| Positive break force per NC contact, minimum | 10 N                 |
| Positive break force, minimum                | 30 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 mm <sup>2</sup>                              |
| Cable section, maximum | 2.5 mm <sup>2</sup>                               |
| Note                   | All indications including the conductor ferrules. |
| Allowed type of cable  | solid single-wire<br>solid multi-wire<br>flexible |

### 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                    | 3 NC contact                           |
| 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     |

## Scope of delivery

Scope of delivery

Slot sealing plugs

## 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.

Minimum actuating radius on hinged guards 250 mm

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)



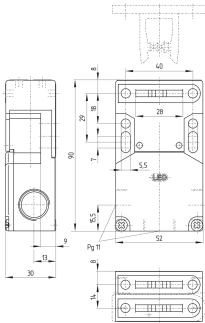
ID: kaz16f11

| 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



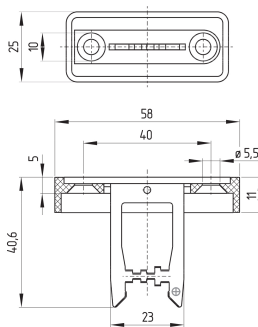
ID: kaz16gi1

| 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

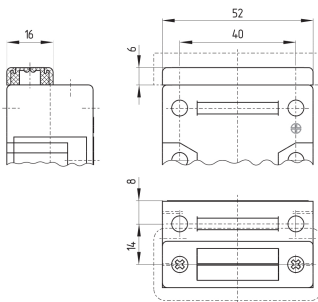


ID: kaz16bi4

| 5.4 kB | .png | 74.083 x 91.017 mm - 210 x 258 px - 72 dpi

| 173.8 kB | .jpg | 352.778 x 434.269 mm - 1000 x 1231 px - 72 dpi

## Dimensional drawing actuator

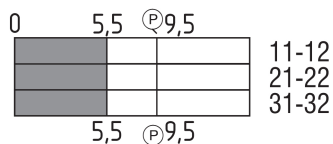


ID: kaz15b03

| 4.7 kB | .png | 74.083 x 70.203 mm - 210 x 199 px - 72 dpi

| 153.0 kB | .jpg | 352.778 x 335.139 mm - 1000 x 950 px - 72 dpi

## Switch travel diagram

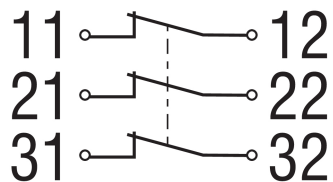


ID: kaz16si6

| 62.1 kB | .jpg | 352.778 x 150.636 mm - 1000 x 427 px - 72 dpi

| 2.3 kB | .png | 74.083 x 33.867 mm - 210 x 96 px - 72 dpi

## Diagram



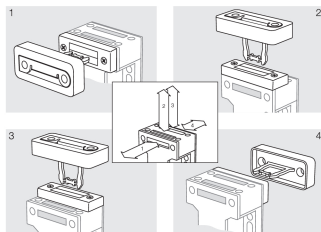
ID: k3o--k04

| 81.6 kB | .jpg | 352.778 x 210.961 mm - 1000 x 598 px - 72 dpi

| 3.6 kB | .jpg | 35.278 x 35.278 mm - 100 x 100 px - 72 dpi

| 3.4 kB | .png | 74.083 x 44.45 mm - 210 x 126 px - 72 dpi

## Operating principle



ID: kaz16ai1

| 69.3 kB | .cdr |

| 227.5 kB | .jpg | 352.778 x 253.294 mm - 1000 x 718 px - 72 dpi

| 21.3 kB | .png | 74.083 x 53.269 mm - 210 x 151 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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