



## AZ 16-03ZIB1-M16-2177

- 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 interlocking of light, unguided guards

## Data

### Ordering data

Product type description	AZ 16-03ZIB1-M16-2177
Article number (order number)	101150059
EAN (European Article Number)	4030661154534
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 cULus
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## General data

Standards	EN ISO 13849-1 EN ISO 14119 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	150 g

## General data - Features

Ejection force	Yes
Number of safety contacts	3
Number of cable glands	3

## Safety classification

Standards	EN ISO 13849-1 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 rigid
Mechanical life, minimum	1,000,000 Operations
Latching force	30 N
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 solid multi-wire 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

## 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)

<b>03</b>	3 NC contact
<b>12</b>	1 NO contact/2 NC contacts

(2)

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

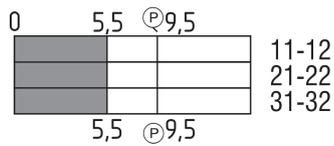
(3)

<b>M16</b>	cable entry M16
<b>M20</b>	Cable entry M20

## Pictures



## Switch travel diagram

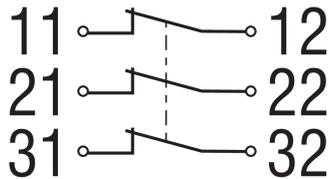


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| 62.1 kB | .jpg | 352.778 x 150.636 mm - 1000 x 427 px - 72 dpi

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

## Diagram



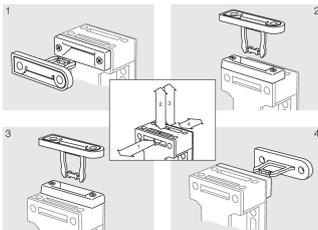
ID: k3o--k04

| 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



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| 216.0 kB | .jpg | 352.778 x 254.353 mm - 1000 x 721 px - 72 dpi

| 20.3 kB | .png | 74.083 x 53.269 mm - 210 x 151 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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