



## AZ 16-12ZI-B1 -M16-1637

- 3 cable entries M 16 x 1.5
- Thermoplastic enclosure
- Double-insulated
- 52 mm x 90 mm x 30 mm
- Universal coding
- Long life
- 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-B1 -M16-1637
Article number (order number)	101214652
EAN (European Article Number)	4030661399232
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	Low
Working principle	electromechanical
Housing material	Plastic, glass-fibre reinforced thermoplastic, self-extinguishing
Material of the actuator	Stainless steel
Gross weight	180 g

### General data - Features

Ejection force	Yes
Number of actuating directions	3
Number of auxiliary contacts	1
Number of safety contacts	2
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.
B <sub>10D</sub> Normally-open contact (NO)	1,000,000 Operations
Note	at 10% I <sub>e</sub> 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.
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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
Positive break travel	8 mm
Positive break force per NC contact, minimum	10 N
Positive break force, minimum	20 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	0.25 mm <sup>2</sup> 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 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 Gold-plated silver (AgNi 15 + Au 0,3µm)

### Electrical data - Safety contacts

Voltage, Utilisation category AC-15 230 VAC

Current, Utilisation category AC-15 4 A

Voltage, Utilisation category DC- 24 VDC  
13

Current, Utilisation category DC- 4 A  
13

### Electrical data - Auxiliary contacts

Voltage, Utilisation category AC- 230 VAC  
15

Current, Utilisation category AC- 4 A  
15

Voltage, Utilisation category DC- 24 VDC  
13

Current, Utilisation category DC- 4 A  
13

### Scope of delivery

Scope of delivery Slot sealing plugs  
Slot covers for dust-proof covering of the openings not in use

### 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.  
Minimum actuating radius on hinged guards 250 mm  
The actuator is not available separately.

### Ordering code

Product type description:  
AZ 16-(1)ZV(2)K-(3)-(4)-(5)

(1)

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<b>without</b>	1 NO contacts/1 NC contact
<b>02</b>	2 NC contact
<b>03</b>	3 NC contact
<b>12</b>	1 NO contact/2 NC contacts

(2)		
<b>without</b>		Ejection force
<b>R</b>		Latching force 30 N
(3)		
<b>G24</b>		with LED (only available for version with one NO and one NC contact)
(4)		
<b>M16</b>		cable entry M16
<b>M20</b>		Cable entry M20
<b>ST</b>		Connector M12, 4 pole, bottom
<b>STL</b>		Connector M12, 4 pole, left
<b>STR</b>		Connector M12, 4 pole, right
(5)		
<b>2254</b>		Latching force 5 N
<b>1762</b>		Front mounting
<b>1637</b>		Gold-plated contacts

## Pictures

### Product picture (catalogue individual photo)



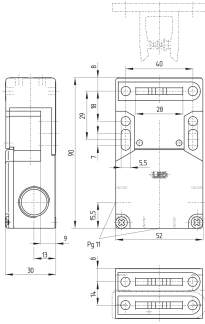
ID: kaz16f11

| 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



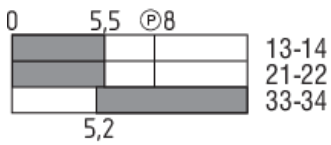
ID: kaz16gi1

| 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

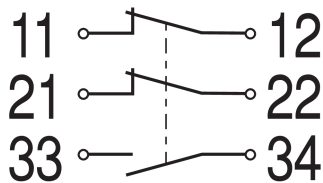
## Switch travel diagram



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

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.

Generated on: 26/08/2024, 1:35 pm