DATASHEET



AZ 16-12ZIB1-M16-2053

- 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 to medium-weight guards
- adjustable ball latch

Data

Ordering data

Product type description	AZ 16-12ZIB1-M16-2053
Article number (order number)	101150053
EAN (European Article Number)	4030661154473
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 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	174 g

General data - Features

Ejection force	Yes
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_{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	250 mm
Actuator	straight rigid
Mechanical life, minimum	1,000,000 Operations
Latching force, adjustable to	100 N
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.
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	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

Current, Utilisation category AC-15	4 A
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 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)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

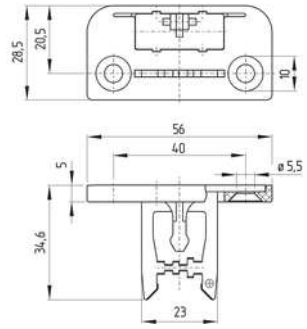
Pictures

Product picture (catalogue individual photo)



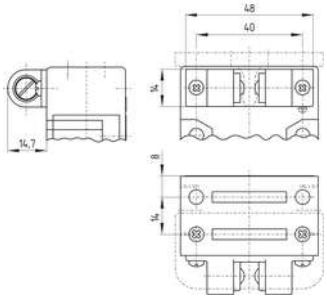
ID: kaz16f11
| 674.9 kB | .jpg | 352.778 x 685.094 mm - 1000 x 1942 px - 72 dpi
| 64.3 kB | .png | 73.731 x 143.581 mm - 209 x 407 px - 72 dpi
| 29.8 kB | .jpg | 63.5 x 123.472 mm - 180 x 350 px - 72 dpi

Dimensional drawing actuator



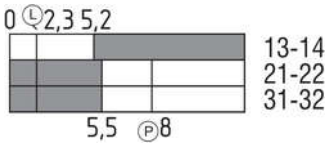
ID: kaz16bi5
| 5.2 kB | .png | 73.731 x 79.728 mm - 209 x 226 px - 72 dpi
| 169.3 kB | .jpg | 352.778 x 381 mm - 1000 x 1080 px - 72 dpi

Dimensional drawing actuator



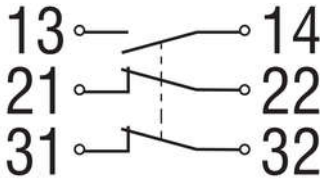
ID: kaz15b02
| 5.0 kB | .png | 74.083 x 68.086 mm - 210 x 193 px - 72 dpi
| 163.5 kB | .jpg | 352.778 x 324.203 mm - 1000 x 919 px - 72 dpi

Switch travel diagram



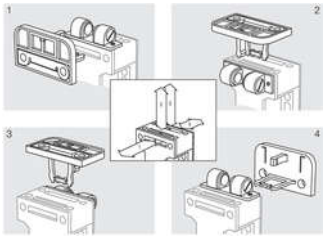
ID: kaz16s04
| 20.2 kB | .cdr |
| 2.1 kB | .png | 74.083 x 32.103 mm - 210 x 91 px - 72 dpi
| 65.6 kB | .jpg | 352.778 x 152.047 mm - 1000 x 431 px - 72 dpi

Diagram



ID: k2o1sk02
| 82.3 kB | .jpg | 352.778 x 193.322 mm - 1000 x 548 px - 72 dpi
| 3.2 kB | .png | 74.083 x 40.569 mm - 210 x 115 px - 72 dpi

Operating principle



ID: kaz16ai2
| 83.4 kB | .cdr |
| 245.9 kB | .jpg | 352.778 x 255.058 mm - 1000 x 723 px - 72 dpi
| 24.0 kB | .png | 74.083 x 53.622 mm - 210 x 152 px - 72 dpi