


Datasheet - AZ 16-12ZI-B1-2024 WITH SLOT LIP-SEAL



Safety switch with separate actuator / AZ 16ZI / AZ 16ZI-B1 - 2024 WITH SLOT LIP-SEAL



(Minor differences between the printed image and the original product may exist!)

- Thermoplastic enclosure
- Individual coding
- 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
- Not sensitive to dirty conditions by virtue of patented roller system
- Slotted holes for adjustment, circular holes for location
- For protection against the ingress of course dirt
- 3 cable entries M 16 x 1.5

Ordering details

Product type description	AZ 16-12ZI-B1-2024 MIT SCHLITZABDECKUNG/-VERSCHLUESSEN
Article number	101145136
EAN code	4030661136226
eCl@ss	27-27-26-02

Approval

Approval



Classification

Standards	EN ISO 13849-1
B10d Opener (NC)	2.000.000
B10d Normally open contact (NO)	1.000.000
- notice	at 10% I _e and ohmic load
Mission time	20 Years
notice	$MTTF_d = \frac{B_{10d}}{0,1 \times n_{op}}$

$$n_{op} = \frac{d_{op} \times h_{op} \times 3600 \text{ s/h}}{t_{cycle}}$$

Global Properties

Product name	AZ 16ZI
Standards	EN 60947-5-1, BG-GS-ET-15
Materials	
- Material of the housings	Plastic, glass-fibre reinforced thermoplastic, self-extinguishing
- Material of the contacts	Silver
Housing coating	None

Mechanical data

Design of electrical connection	Screw connection
Cable section	
- Min. Cable section	0,75 mm ²
- Max. Cable section	2.5 mm ²
Design of actuators	straight, rigid
Mechanical life	> 1.000.000 operations
notice	All indications about the cable section are including the conductor ferrules.
With ejection force (Y/N)	Yes
Positive break force	20 N
positive break travel	8 mm
Actuating speed	max. 2 m/s
Minimum actuating radius	250 mm

Ambient conditions

Ambient temperature	
- Min. environmental temperature	-30 °C
- Max. environmental temperature	+80 °C
Protection class	IP67 to IEC/EN 60529

Electrical data

Design of control element	Normally open contact (NO), Opener (NC)
Switching principle	Creep circuit element
Number of auxiliary contacts	1 piece
Number of safety contacts	2 piece
Rated impulse withstand voltage U _{imp}	6 kV
Rated insulation voltage U _i	500 V
Thermal test current I _{the}	10 A
Utilisation category	AC-15: 230 V / 4 A, DC-13: 24 V / 4 A
Max. fuse rating	6 A gG D-fuse

ATEX

Explosion protection categories for gases	None
Explosion protected category for dusts	None

Dimensions

Dimensions of the sensor	
- Width of sensor	52 mm
- Height of sensor	90 mm
- Length of sensor	30 mm

notice

Minimum actuating radius on hinged guards 250 mm

The axis of the hinge should be 11 mm above the top edge of the safety switch and in the same plane

The actuator is not available separately.

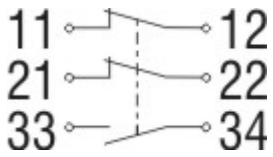
Included in delivery

Individually coded actuator


tamperproof screws

Slot sealing plugs


Diagram





Note Diagram

 positive break NC contact

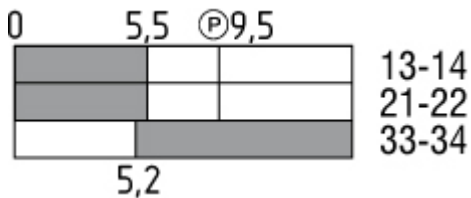
 active

 no active

 Normally-open contact

 Normally-closed contact

Switch travel diagram





Notes Switch travel diagram

 Contact closed

 Contact open

 Setting range

 Break point

 Positive opening sequence/- angle

VS adjustable range of NO contact

VÖ adjustable range of NC contact

N after travel

Ordering suffix

The applicable ordering suffix is added at the end of the part number of the safety switch.

Order example: AZ 16-12ZI-B1-2024 WITH SLOT LIP-SEAL-**1762**



....-1762

Versions with M5 nuts
For front mounting of safety switch, e.g. on sheet-steel covers
Cannot be retrofitted

....-1637

0,3 µm gold-plated contacts

....-M20

cable entries M20

Ordering code

AZ 16-(1)ZI-(2)-(3)

(1)	
3.0	3 Opener (NC)
12	1 Normally open contact (NO) / 2 Opener (NC)
(2)	Actuator:
B1	straight Design
B1-1747	straight Design with magnetic latch
B1-2024	straight Design with slot sealing plug
B1-2053	straight Design with ball latch
B1-2177	straight Design with centering guide
(3)	
M16	Cable entry M16
M20	Cable entry M20

Documents

Operating instructions and Declaration of conformity (jp) 593 kB, 01.09.2014

Code: mrl_az16zi_jp

Operating instructions and Declaration of conformity (nl) 345 kB, 30.09.2014

Code: mrl_az16zi_nl

Operating instructions and Declaration of conformity (it) 344 kB, 01.09.2014

Code: mrl_az16zi_it

Operating instructions and Declaration of conformity (pt) 350 kB, 17.06.2014

Code: mrl_az16zi_pt

Operating instructions and Declaration of conformity (da) 361 kB, 25.01.2012

Code: mrl_az16zi_da

Operating instructions and Declaration of conformity (en) 528 kB, 27.01.2011

Code: mrl_az16zi_en

Operating instructions and Declaration of conformity (de) 577 kB, 24.02.2011

Code: mrl_az16zi_de

Operating instructions and Declaration of conformity (ro) 362 kB, 25.01.2012

Code: mrl_az16zi_ro

Operating instructions and Declaration of conformity (fr) 347 kB, 30.09.2014

Code: mrl_az16zi_fr

Operating instructions and Declaration of conformity (es) 349 kB, 11.08.2014

Code: mrl_az16zi_es

Operating instructions and Declaration of conformity (sv) 343 kB, 17.06.2015

Code: mrl_az16zi_sv

Operating instructions and Declaration of conformity (pl) 414 kB, 11.08.2014

Code: mrl_az16zi_pl

BG-test certificate (en) 536 kB, 05.01.2011

Code: z__16p02

BG-test certificate (de) 544 kB, 05.01.2011

Code: z__16p01

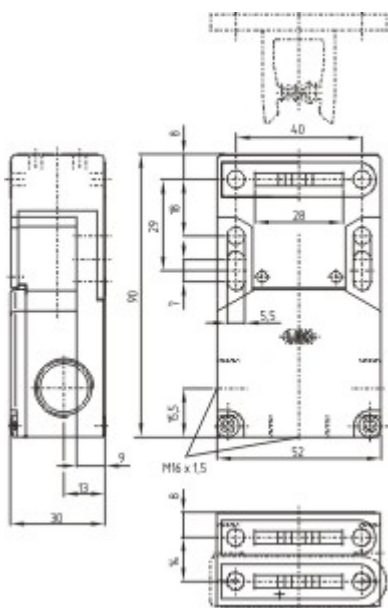
CCC certification (cn) 408 kB, 24.06.2014

Code: q_175p03

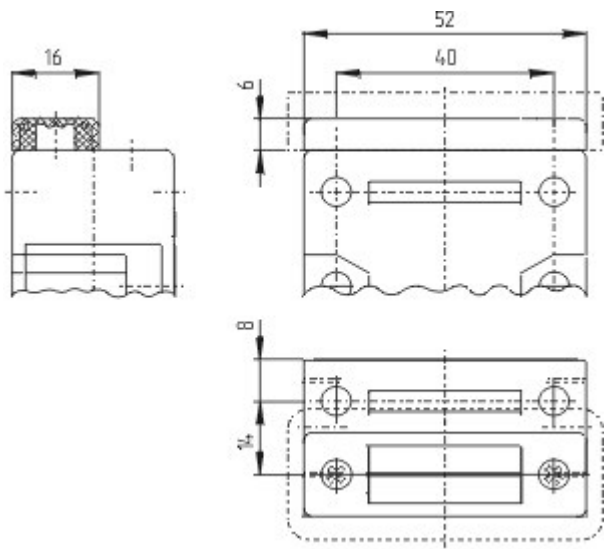
CCC certification (en) 396 kB, 24.06.2014

Code: q_175p02

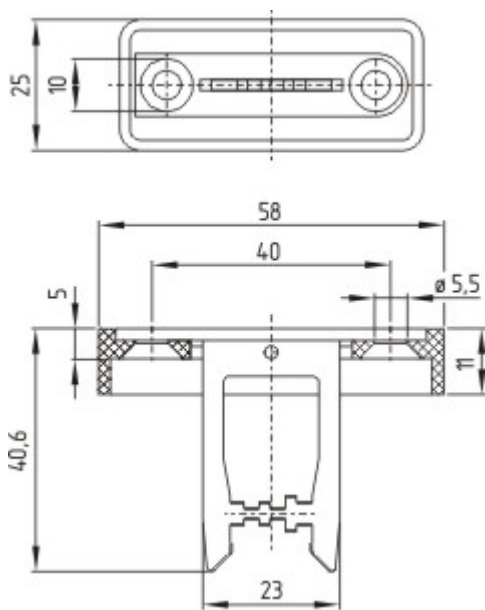
Images



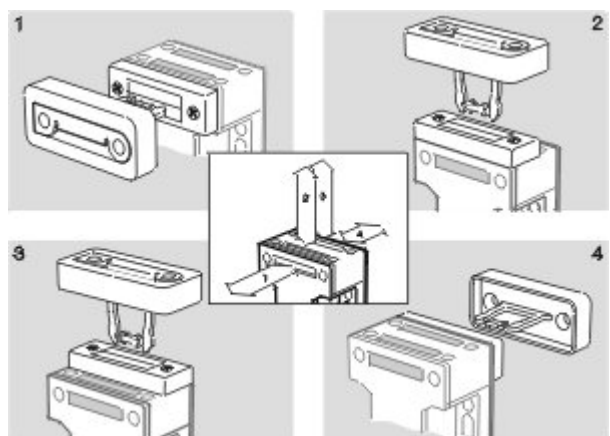
Dimensional drawing (basic component)



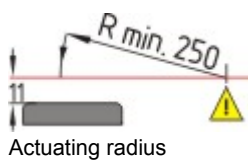
Dimensional drawing (miscellaneous)



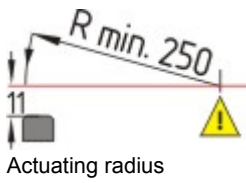
Dimensional drawing (miscellaneous)



Operating principle



Actuating radius



System components

Mounting accessories



1135338 - TAMPERPROOF SCREWS M 5 x 12

- To mount the actuator
- Higher protection against tampering with interlock
- Protects against unauthorised removal of actuator
- Various lengths available



101135339 - TAMPERPROOF SCREWS M 5 x 16

- To mount the actuator
- Higher protection against tampering with interlock
- Protects against unauthorised removal of actuator
- Various lengths available



101135340 - TAMPERPROOF SCREWS M 5 x 20

- To mount the actuator
- Higher protection against tampering with interlock
- Protects against unauthorised removal of actuator
- Various lengths available

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The data and values have been checked thoroughly. Technical modifications and errors excepted.

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