

## Datasheet - AZ 16-02ZVRK


Safety switch with separate actuator / AZ 16



Preferred typ



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

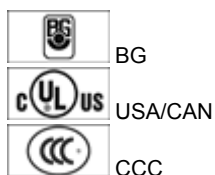
- thermoplastic enclosure
- Double-insulated 
- Large wiring compartment
- 52 mm x 90 mm x 30 mm
- Multiple coding
- Long life
- High level of contact reliability with low voltages and currents
- Slotted holes for adjustment, circular holes for location
- 3 cable entries M 16 x 1.5

### Ordering details

Product type description	AZ 16-02ZVRK
Article number	101147145
EAN code	4030661141671

### Approval

Approval




### Classification

Standards	EN ISO 13849-1
B <sub>10d</sub> Opener (NC)	2.000.000
Mission time notice	20 Years
	$MTTF_d = \frac{B_{10d}}{0,1 \times n_{op}}$
	$n_{op} = \frac{d_{op} \times h_{op} \times 3600 \text{ s/h}}{t_{cycle}}$

### Global Properties

Product name	AZ 16
Standards	EN 60947-5-1, BG-GS-ET-15

Compliance with the Directives (Y/N) 

Yes

#### Materials

- Material of the housings
- Material of the contacts

Plastic, glass-fibre reinforced thermoplastic, self-extinguishing

Silver

Housing coating

None

Weight

115 g

### Mechanical data

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Design of electrical connection

Screw connection

Cable section

- Min. Cable section
- Max. Cable section

0,75 mm<sup>2</sup>

2.5 mm<sup>2</sup>

Mechanical life

20.000.000 operations

higher Latching force (Y/N)

Yes

Latching force

30 N

With ejection force (Y/N)

No

Positive break force

20 N

positive break travel

8 mm

Actuating speed

max. 2 m/s

notice

All indications about the cable section are including the conductor ferrules.

### Ambient conditions

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Ambient temperature

- Min. environmental temperature
- Max. environmental temperature

-30 °C

+80 °C

Protection class

IP67 to IEC/EN 60529

### Electrical data

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Design of control element

Opener (NC)

Switching principle

Creep circuit element

Number of auxiliary contacts

0 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

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Explosion protection categories for gases

None

Explosion protected category for dusts

None

### Dimensions

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Dimensions of the sensor

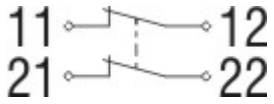
- Width of sensor
- Height of sensor
- Length of sensor

52 mm






90 mm

30 mm

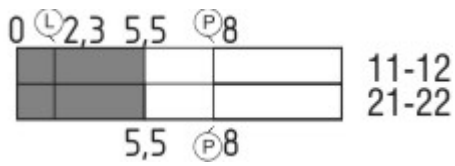
## Diagram








Note Diagram

-  positive break NC contact
-  active
-  no active
-  Normally-open contact
-  Normally-closed contact

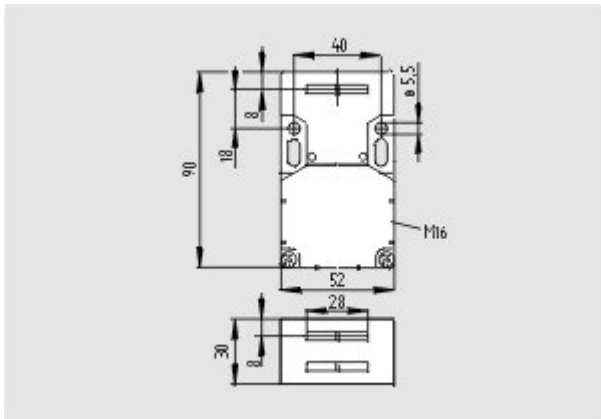
## Switch travel diagram



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

## Images



Dimensional drawing (basic component)

## System components

### Actuator

101083036 - AZ 15/16-B1



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**101092711 - AZ 15/16-B1-1747**

- For play-free interlocking of light guards
- Suitable for retrofitting



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**101093553 - AZ 15/16-B1-1747**

- For play-free interlocking of light guards
- The magnetic latch can be easily fitted in any actuating plane
- Suitable for retrofitting



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**101108276 - AZ 15/16-B1-2024**



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**101108278 - AZ 15/16-B1-2024 WITH SLOT SEALING PLUG**

- For protection against the ingress of course dirt



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**101111079 - AZ 15/16-B1-2053**

- For interlocking of light to medium-weight guards



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**101111081 - AZ 15/16-B1-2053 WITH BALL LATCH**

- For interlocking of light to medium-weight guards



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**101126793 - AZ 15/16-B1-2177**

- For interlocking of light, unguided guards





**101126794 - AZ 15/16-B1-2177 WITH CENTERING GUIDE**

- For interlocking of light, unguided guards



**101137408 - AZ 15/16-B1-2245**

- Damps vibration on guard device



**101095558 - AZ 15/16-B2**

- For very small actuating radii in line with the plane of the actuator



**101096091 - AZ 15/16-B2-1747**

- For very small actuating radii in line with the plane of the actuator
- Suitable for retrofitting
- For play-free interlocking of light guards



**101096089 - AZ 15/16-B2-1747 WITH MAGNETIC LATCH**

- For very small actuating radii in line with the plane of the actuator
- Suitable for retrofitting
- For play-free interlocking of light guards
- The magnetic latch can be easily fitted in any actuating plane



**101095550 - AZ 15/16-B3**

- For very small actuating radii at 90° to the plane of the actuator



**101096090 - AZ 15/16-B3-1747 WITH MAGNETIC LATCH**

- For very small actuating radii at 90° to the plane of the actuator
- Suitable for retrofitting
- For play-free interlocking of light guards
- The magnetic latch can be easily fitted in any actuating plane

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**101096092 - AZ 15/16-B3-1747**

- For very small actuating radii at 90° to the plane of the actuator
- Suitable for retrofitting
- For play-free interlocking of light guards



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**101137434 - AZ 15/16-B6**



- For very small actuating radii in line with or at 90° to the plane of the actuator

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**Door-handle system**



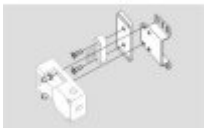
**AZ 16-ST30**

- Latching handle
- Suitable for all types of guard

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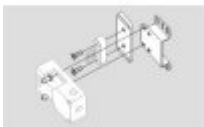
**Accessories**

**101149214 - Mounting set MS AZ 15/16 R/P**



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**101150373 - Mounting set MS AZ 15/16 P**



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**101089116 - Slot sealing plugs AZ 15/16-1476**

- For protection against the ingress of coarse dirt
- To cover unused actuator slots
- Simple clip-in fitting



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**101115025 - Ball latch 2053-2**

- Additional ball latch for stable latching of light to medium-weight guards
- For separate mounting on the guard



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**1110500 - SZ 16/335**

- To prevent inadvertent closing, e.g. during maintenance
- For complex plant
- Prevents actuation of the switch



- Up to 6 padlocks can be fitted
- The lockout tag can be mounted on a chain near to the safety switch

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## 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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