

## Datasheet - AZ 17-11ZRK

Safety switch with separate actuator / AZ 17



- thermoplastic enclosure
- Small body
- 8 actuating planes
- 30 mm x 60 mm x 30 mm
- Multiple coding
- Long life
- Double-insulated
- High level of contact reliability with low voltages and currents
- Not sensitive to dirty conditions by virtue of patented roller system
- cable gland M16

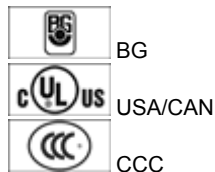
(Minor differences between the printed image and the original product may exist!)

### Ordering details

Product type description	AZ 17-11ZRK
Article number	1133967
EAN code	4030661050911

### Approval

Approval



### Classification

Standards	EN ISO 13849-1
B <sub>10d</sub> Opener (NC)	2.000.000
B <sub>10d</sub> Normally open contact (NO)	1.000.000
- notice	at 10% I <sub>e</sub> and ohmic load
Mission time	20 Years

$$MTTF_d = \frac{B_{10d}}{0,1 \times n_{op}}$$

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

### Global Properties

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Product name	AZ 17
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
Weight	85 g

### Mechanical data

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Design of electrical connection	IDC method of termination
Cable section	
- Min. Cable section	1 x 0,75 mm <sup>2</sup>
- Max. Cable section	1 x 1 mm <sup>2</sup>
Mechanical life	> 1.000.000 operations
higher Latching force (Y/N)	Yes
Latching force	30 N
Positive break force	17 N
positive break travel	11 mm
Max. Actuating speed	0,2 m/s

### Ambient conditions

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Protection class	IP67 to IEC/EN 60529
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### Electrical data

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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	1 piece
Rated impulse withstand voltage $U_{imp}$	4 kV
Rated insulation voltage $U_i$	250 V
Thermal test current $I_{the}$	10 A
Utilisation category	AC-15: 230 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	30 mm
- Height of sensor	85 mm
- Length of sensor	30 mm

### notice

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Individual coding available on request

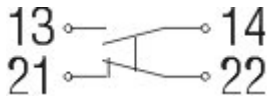
This type termination (IDC) method enables simple connection of flexible conductors without the need for the use of conductor ferrules

## Included in delivery






Actuators must be ordered separately.

Slot sealing plugs

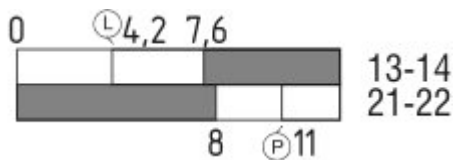
## Diagram








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 17-11ZRK-1637

...-1637

With gold-plated contacts (0,3 µm), ordering suffix -1637

## Ordering code

AZ 17-(1)Z(2)K-(3)-(4)-(5)

(1)

11 Normally open contact (NO) 1 / Opener (NC) 1

02 Opener (NC) 2

(2)

without Latching force 5 N

**R** Latching force 30 N

**(3)**

*without* cable gland M16

**2243** Front cable entry

**2243-1** Rear cable entry

**ST** Connector M12, 4-pole

**(4)**

**1637** gold-plated contacts

**(5)**

**5M** 5 m Cable length

**6M** 6 m Cable length

## Documents

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**Operating instructions and Declaration of conformity** (it) 965 kB, 10.03.2010

[http://www.schmersal.net/Bilddata/AZ/Pdf/Az17/bedien/it/mrl\\_az17\\_it.pdf](http://www.schmersal.net/Bilddata/AZ/Pdf/Az17/bedien/it/mrl_az17_it.pdf)

**Operating instructions and Declaration of conformity** (de) 1 MB, 10.03.2010

[http://www.schmersal.net/Bilddata/AZ/Pdf/Az17/bedien/de/mrl\\_az17\\_de.pdf](http://www.schmersal.net/Bilddata/AZ/Pdf/Az17/bedien/de/mrl_az17_de.pdf)

**Operating instructions and Declaration of conformity** (jp) 1 MB, 10.03.2010

[http://www.schmersal.net/Bilddata/AZ/Pdf/Az17/bedien/jp/mrl\\_az17\\_jp.pdf](http://www.schmersal.net/Bilddata/AZ/Pdf/Az17/bedien/jp/mrl_az17_jp.pdf)

**Operating instructions and Declaration of conformity** (fr) 966 kB, 10.03.2010

[http://www.schmersal.net/Bilddata/AZ/Pdf/Az17/bedien/fr/mrl\\_az17\\_fr.pdf](http://www.schmersal.net/Bilddata/AZ/Pdf/Az17/bedien/fr/mrl_az17_fr.pdf)

**Operating instructions and Declaration of conformity** (es) 964 kB, 10.03.2010

[http://www.schmersal.net/Bilddata/AZ/Pdf/Az17/bedien/es/mrl\\_az17\\_es.pdf](http://www.schmersal.net/Bilddata/AZ/Pdf/Az17/bedien/es/mrl_az17_es.pdf)

**Operating instructions and Declaration of conformity** (en) 1 MB, 10.03.2010

[http://www.schmersal.net/Bilddata/AZ/Pdf/Az17/bedien/en/mrl\\_az17\\_en.pdf](http://www.schmersal.net/Bilddata/AZ/Pdf/Az17/bedien/en/mrl_az17_en.pdf)

**Operating instructions and Declaration of conformity** (nl) 968 kB, 10.03.2010

[http://www.schmersal.net/Bilddata/AZ/Pdf/Az17/bedien/nl/mrl\\_az17\\_nl.pdf](http://www.schmersal.net/Bilddata/AZ/Pdf/Az17/bedien/nl/mrl_az17_nl.pdf)

**BG-test certificate** (de) 552 kB, 28.02.2007

[http://www.schmersal.net/Bilddata/AZ/Pdf/Az17/baumuste/z\\_z17p01.pdf](http://www.schmersal.net/Bilddata/AZ/Pdf/Az17/baumuste/z_z17p01.pdf)

**BG-test certificate** (en) 551 kB, 28.02.2007

[http://www.schmersal.net/Bilddata/AZ/Pdf/Az17/baumuste/z\\_z17p02.pdf](http://www.schmersal.net/Bilddata/AZ/Pdf/Az17/baumuste/z_z17p02.pdf)

**CCC certification** (en) 746 kB, 12.12.2006

[http://www.schmersal.net/Bilddata/AZ/Pdf/Az15\\_16/zertifikat/q\\_175p02.pdf](http://www.schmersal.net/Bilddata/AZ/Pdf/Az15_16/zertifikat/q_175p02.pdf)

**CCC certification** (cn) 730 kB, 12.12.2006

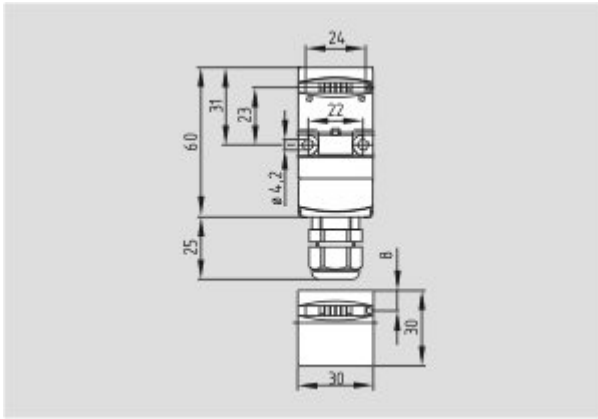
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**Gost certification** (ru) 1 MB, 21.06.2007

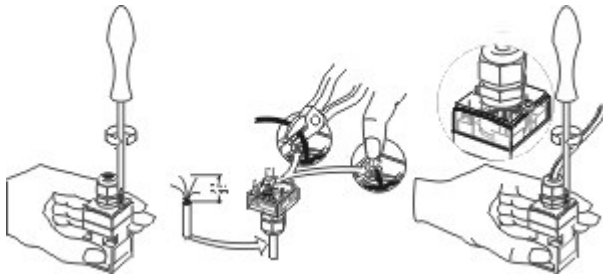
[http://www.schmersal.net/Bilddata/AZ/Pdf/Az15\\_16/zertifikat/q\\_az1p01.pdf](http://www.schmersal.net/Bilddata/AZ/Pdf/Az15_16/zertifikat/q_az1p01.pdf)

## Images

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Dimensional drawing (basic component)



Configuration graphic

## System components

### Actuator



**1122893 - AZ 17/170-B1**

- Particularly suitable for sliding doors



**1137406 - AZ 17/170-B1-2245**

- Damps vibration on guard device



**1122895 - AZ 17/170-B5**

- Particularly suitable for hinged guards (front mounting)



**1126060 - AZ 17-B6**

- For very small actuating radii
- The direction of actuation can be selected by applicable insertion of the insert



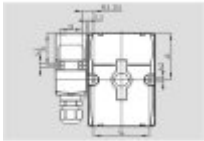
**1139788 - AZ 17/170-B11**

- Particularly suitable for sliding doors



**1139789 - AZ 17/170-B15**

- Particularly suitable for hinged guards (front mounting)

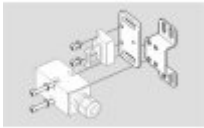


**AZ 17-B25**

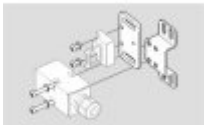
- Ergonomic operation
- No supplementary door-handle required
- Door hinge on left-hand side (View point towards the hazardous area)
- No protruding actuator
- Actuator without handle
- Simple mounting
- Several door-handles available
- Possibility to mount the own handles using a default square screw (8 mm)

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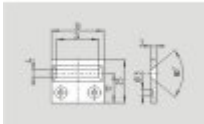
**Accessories**



**1150363 - Mounting set MS AZ 17 P**



**1149212 - Mounting set MS AZ 17 R/P**



**1208493 - AZM 170-B CENTERING GUIDE**

- for AZ 17 and AZM 170

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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
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#### **1135339 - 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



#### **1135340 - 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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