

## Datasheet - AZ 15 ZVK

Safety switch with separate actuator / AZ 15



Preferred typ



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

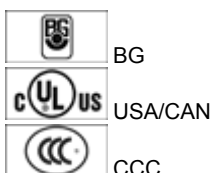
- thermoplastic enclosure
- Double-insulated
- Long life
- 52 mm x 75 mm x 30 mm
- Multiple coding
- Large wiring compartment
- High level of contact reliability with low voltages and currents
- Slotted holes for adjustment, circular holes for location
- Not sensitive to dirty conditions by virtue of patented roller system
- 3 cable entries M 16 x 1.5

### Ordering details

Product type description	AZ 15 ZVK
Article number	101152787
EAN code	4030661166308
eCl@ss	27-27-26-02

### Approval


Approval



### Classification

Standards	EN ISO 13849-1
B <sub>10d</sub> Opener (NC)	2.000.000
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 15
Standards	EN 60947-5-1, BG-GS-ET-15
Compliance with the Directives (Y/N) 	Yes
suitable for elevators (Y/N)	Yes
Materials	
- Material of the housings	Plastic, glass-fibre reinforced thermoplastic, self-extinguishing
- Material of the contacts	Silver
Housing coating	None
Weight	100 g

## Mechanical data

Design of electrical connection	Screw connection
Cable section	
- Min. Cable section	0,75 mm <sup>2</sup>
- Max. Cable section	2.5 mm <sup>2</sup>
Mechanical life	> 1.000.000 operations
notice	All indications about the cable section are including the conductor ferrules.
higher Latching force (Y/N)	No
With ejection force (Y/N)	Yes
Positive break force	10 N
positive break travel	8 mm
Actuating speed	max. 2 m/s

## 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	Opener (NC)
Switching principle	Creep circuit element
Number of auxiliary contacts	0 piece
Number of safety contacts	1 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	75 mm
- Length of sensor	30 mm

## Included in delivery

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Actuators must be ordered separately.

## Diagram

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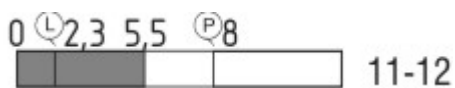


Note Diagram

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

## Switch travel diagram

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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

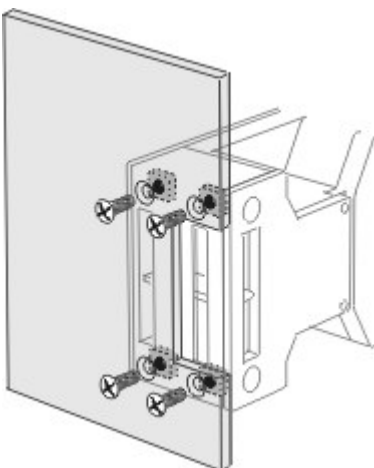
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The applicable ordering suffix is added at the end of the part number of the safety switch.

Order example: AZ 15 ZVK-1637

...-1637

0,3 µm gold-plated contacts



...-1762

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

## Ordering code

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AZ 15 ZV(1)K-(2)-(3)

(1)

*without*

**R**

Ejection force

Latching force 30 N

(2)

*without*

**ST**

Cable entry M16

Connector M12, 4-pole

(3)

**2254**

Latching force 5 N

**1762**

Front mounting

**1637**

gold-plated contacts

## Documents

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**Operating instructions and Declaration of conformity** (pt) 268 kB, 21.08.2013

Code: mrl\_az15-16\_pt

**Operating instructions and Declaration of conformity** (pt) 433 kB, 25.05.2010

Code: mrl\_az15-16\_pt

**Operating instructions and Declaration of conformity** (de) 248 kB, 28.05.2013

Code: mrl\_az15-16\_de

**Operating instructions and Declaration of conformity** (fr) 268 kB, 29.07.2013

Code: mrl\_az15-16\_fr

**Operating instructions and Declaration of conformity** (jp) 374 kB, 10.07.2013

Code: mrl\_az15-16\_jp

**Operating instructions and Declaration of conformity** (cs) 400 kB, 11.10.2011

Code: mrl\_az15-16\_cs

**Operating instructions and Declaration of conformity** (es) 266 kB, 30.07.2013

Code: mrl\_az15-16\_es

**Operating instructions and Declaration of conformity** (pl) 298 kB, 02.07.2013

Code: mrl\_az15-16\_pl

**Operating instructions and Declaration of conformity** (sv) 462 kB, 25.10.2011

Code: mrl\_az15-16\_sv

**Operating instructions and Declaration of conformity** (da) 398 kB, 17.11.2011

Code: mrl\_az15-16\_da

**Operating instructions and Declaration of conformity** (en) 260 kB, 28.05.2013

Code: mrl\_az15-16\_en

**Operating instructions and Declaration of conformity** (ro) 400 kB, 18.11.2011

Code: mrl\_az15-16\_ro

**Operating instructions and Declaration of conformity (nl)** 266 kB, 02.07.2013

Code: mrl\_az15-16\_nl

**Operating instructions and Declaration of conformity (it)** 261 kB, 02.07.2013

Code: mrl\_az15-16\_it

**BG-test certificate (en)** 135 kB, 18.11.2014

Code: z\_z15p02

**BG-test certificate (de)** 138 kB, 18.11.2014

Code: z\_z15p01

**CCC certification (en)** 396 kB, 24.06.2014

Code: q\_175p02

**CCC certification (cn)** 408 kB, 24.06.2014

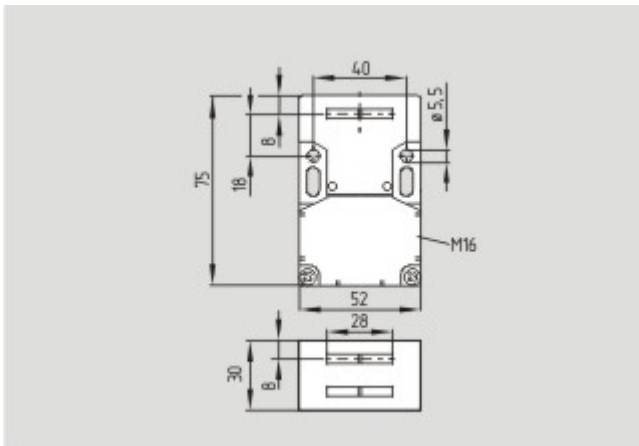
Code: q\_175p03

**Gost certification (ru)** 2 MB, 07.07.2011

Code: q\_az1p01

## Images

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Dimensional drawing (basic component)

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## System components

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### Actuator



#### 1137434 - AZ 15/16-B6

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

#### 1096092 - 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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**1096090 - 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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**1095550 - AZ 15/16-B3**

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



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**1096089 - 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



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**1096091 - 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



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**1095558 - AZ 15/16-B2**

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



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**1137408 - AZ 15/16-B1-2245**

Damps vibration on guard device



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**1126794 - AZ 15/16-B1-2177 WITH CENTERING GUIDE**

- For interlocking of light, unguided guards



**1126793 - AZ 15/16-B1-2177**

- For interlocking of light, unguided guards



**1111081 - AZ 15/16-B1-2053 WITH BALL LATCH**

- For interlocking of light to medium-weight guards



**1111079 - AZ 15/16-B1-2053**

- For interlocking of light to medium-weight guards



**1108278 - AZ 15/16-B1-2024 WITH SLOT SEALING PLUG**

- For protection against the ingress of course dirt



**1108276 - AZ 15/16-B1-2024**



**1093553 - 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



**1092711 - AZ 15/16-B1-1747**

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

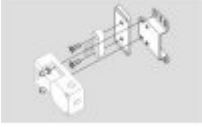
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**101083036 - AZ 15/16-B1**

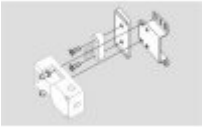


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## Accessories



### 1149214 - Mounting set MS AZ 15/16 R/P



### 1150373 - Mounting set MS AZ 15/16 P



### 101110500 - 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



### 101115025 - Ball latch 2053-2

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



### 1089116 - Slot sealing plugs AZ 15/16-1476

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

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## Mounting accessories



### 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

### 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

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K.A. Schmersal GmbH & Co. KG, Möddinghofe 30, D-42279 Wuppertal  
The data and values have been checked thoroughly. Technical modifications and errors excepted.  
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