

## Datasheet - AZ 17-02ZI-ST-B5

Safety switch with separate actuator / AZ 17ZI / AZ 17/170ZI-B5



- Thermoplastic enclosure
- Double-insulated
- Long life
- 30 mm x 60 mm x 30 mm
- Small body
- Individual coding
- High level of contact reliability with low voltages and currents
- Not sensitive to dirty conditions by virtue of patented roller system
- 8 actuating planes
- Slot sealing plug included
- Particularly suitable for hinged guards (front mounting)
- Connector M12 x 1, 4-pole

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

### Ordering details

Product type description	AZ 17-02ZI-ST-B5
Article number	101144083
EAN code	4030661130828
eCl@ss	27-27-26-02

### Approval

Approval



### Classification

Standards	EN ISO 13849-1
B <sub>10d</sub> Normally-closed contact (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

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Product name	AZ 17ZI
Standards	EN 60947-5-1, BG-GS-ET-15
Materials	
- Material of the housings	Plastic, glass-fibre reinforced thermoplastic, self-extinguishing
- Material of the actuator	Stainless steel
- Material of the contacts	Silver
Housing coating	None
Weight	90 g

### Mechanical data

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Design of electrical connection	Connector M12
Mechanical life	> 1.000.000 operations
higher Latching force (Y/N)	No
Latching force	5 N
Positive break force	17 N
positive break travel	11 mm
Max. Actuating speed	2 m/s

### Ambient conditions

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Ambient temperature	
- Min. environmental temperature	-30 °C
- Max. environmental temperature	+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
Supply voltage	
- Min. supply voltage	
- Max. supply voltage	230 V
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 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	30 mm
- Height of sensor	85 mm
- Length of sensor	30 mm

## notice

On hinged guards, minimum actuating radius at 90° to the plane of the actuator 140 mm  
minimum actuating radius on hinged guards in line with the plane of the actuator 200 mm  
The axis of the hinge should be 13 mm above the top edge of the safety switch and in the same plane  
The actuator is not available separately.

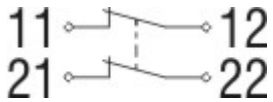
## Included in delivery

Not available as spare part

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 17-02ZI-ST-B5-**2243**

...-**2243**

Cable output: front

...-2243 -1	Cable output: rear
...-1637	0,3 µm gold-plated contacts
...-5M	Cable length 5 Meter
...-6M	Cable length 6 Meter

## Ordering code

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

<b>(1)</b>	
<b>11</b>	1 Normally open contact (NO) / 1 Opener (NC)
<b>02</b>	2 Opener (NC)
<b>(2)</b>	
<i>without</i>	Latching force 5 N
<b>R</b>	Latching force 30 N
<b>(3)</b>	
<i>without</i>	cable gland M16
<b>ST</b>	Connector M12
<b>(4)</b>	
<b>B1</b>	Actuator B1
<b>B5</b>	Actuator B5
<b>B6L</b>	Actuator B6L
<b>B6R</b>	Actuator B6R
<b>(5)</b>	
<b>1637</b>	gold-plated contacts

## Documents

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**Operating instructions and Declaration of conformity (de)** 316 kB, 05.02.2014

Code: mrl\_az17-azm170-betaetiger\_de

**Operating instructions and Declaration of conformity (pl)** 157 kB, 11.03.2014

Code: mrl\_az17-azm170-betaetiger\_pl

**Operating instructions and Declaration of conformity (it)** 117 kB, 10.02.2014

Code: mrl\_az17-azm170-betaetiger\_it

**Operating instructions and Declaration of conformity (pt)** 116 kB, 23.05.2014

Code: mrl\_az17-azm170-betaetiger\_pt

**Operating instructions and Declaration of conformity (en)** 116 kB, 24.02.2014

Code: mrl\_az17-azm170-betaetiger\_en

**Operating instructions and Declaration of conformity (jp)** 171 kB, 03.04.2014

Code: mrl\_az17-azm170-betaetiger\_jp

**Operating instructions and Declaration of conformity (sv)** 115 kB, 17.06.2015

Code: mrl\_az17-azm170-betaetiger\_sv

**Operating instructions and Declaration of conformity (nl)** 116 kB, 11.03.2014

Code: mrl\_az17-azm170-betaetiger\_nl

**Operating instructions and Declaration of conformity (fr)** 117 kB, 03.04.2014

Code: mrl\_az17-azm170-betaetiger\_fr

**Operating instructions and Declaration of conformity (es)** 117 kB, 12.02.2014

Code: mrl\_az17-azm170-betaetiger\_es

**BG-test certificate (en)** 578 kB, 15.08.2011

Code: z\_z17p02

**BG-test certificate (de)** 589 kB, 15.08.2011

Code: z\_z17p01

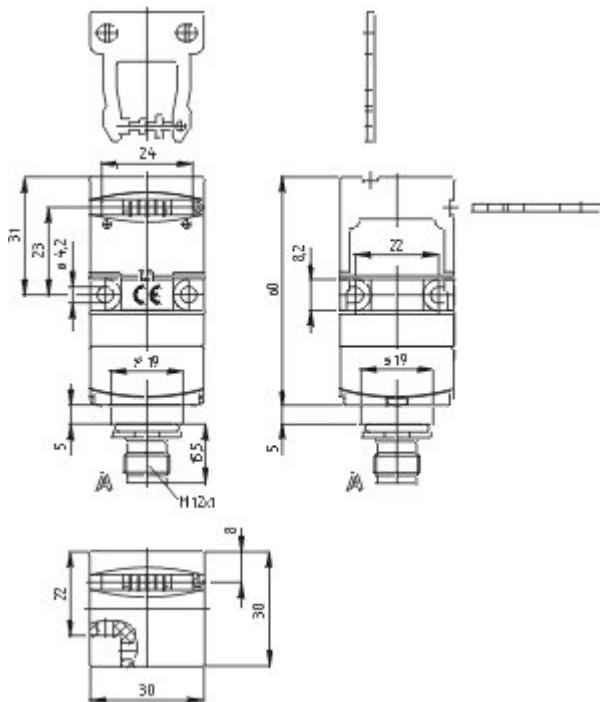
**CCC certification (cn)** 408 kB, 24.06.2014

Code: q\_175p03

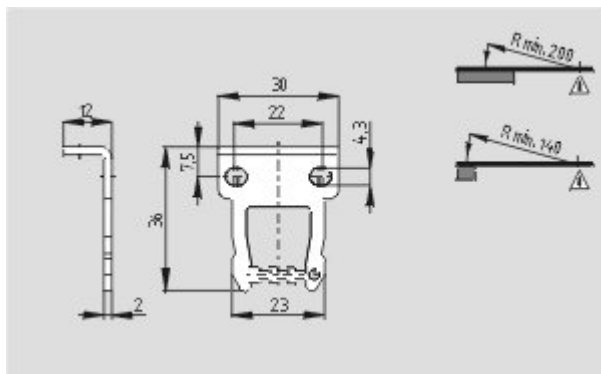
**CCC certification (en)** 396 kB, 24.06.2014

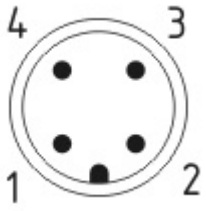
Code: q\_175p02

## Images



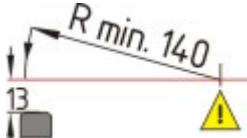
Dimensional drawing (basic component)





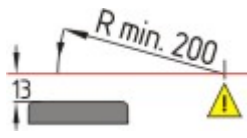
Contact arrangement

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Actuating radius

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Actuating radius

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## System components

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### Connector



#### A-K4M12

- Pre-wired cable
- 4-pole



#### S-K4M12

- Connector without cable
- 4-pole