

## Datasheet - AZ 17-11ZI-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
- Coding level "High" according to ISO 14119
- High level of contact reliability with low voltages and currents
- Insensitive to soiling
- 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 17-11ZI-ST-B5
Article number	101144081
EAN Code	4030661130804
eCl@ss	27-27-26-02

### Approval

Approval



### Classification

Standards	EN ISO 13849-1
B10d Normally-closed contact (NC)	2.000.000
B10d Normally open contact (NO)	1.000.000
- notice	at 10% I <sub>e</sub> 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

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Permanent light	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	100

## 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
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	Normally open contact (NO), Opener (NC)
Switching principle	Creep circuit element
Number of auxiliary contacts	1
Number of safety contacts	1
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

- Height of sensor	85
- Length of sensor	30

**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

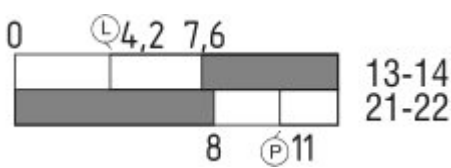
**Diagram**



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 17-11ZI-ST-B5-**2243**

...-2243 -1	Cable output: rear
...-1637	0,3 µm gold-plated contacts
...-6M	Cable length 6 Meter
...-5M	Cable length 5 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 (pl)** 587 kB, 08.07.2016

Code: mrl\_az17i\_pl

**Operating instructions and Declaration of conformity (es)** 556 kB, 27.04.2016

Code: mrl\_az17i\_es

**Operating instructions and Declaration of conformity (en)** 551 kB, 22.04.2016

Code: mrl\_az17i\_en

**Operating instructions and Declaration of conformity (fr)** 554 kB, 29.04.2016

Code: mrl\_az17i\_fr

**Operating instructions and Declaration of conformity (it)** 550 kB, 22.04.2016

Code: mrl\_az17i\_it

**Operating instructions and Declaration of conformity (de)** 556 kB, 22.04.2016

Code: mrl\_az17i\_de

**Operating instructions and Declaration of conformity (pt)** 555 kB, 13.05.2016

Code: mrl\_az17i\_pt

**Operating instructions and Declaration of conformity** (jp) 721 kB, 02.05.2016

Code: mrl\_az17i\_jp

**Operating instructions and Declaration of conformity** (cn) 675 kB, 21.06.2017

Code: mrl\_az17i\_cn

**Operating instructions and Declaration of conformity** (nl) 585 kB, 29.06.2018

Code: mrl\_az17i\_nl

**Operating instructions and Declaration of conformity** (br) 606 kB, 17.05.2016

Code: mrl\_az17i\_br

**Operating instructions and Declaration of conformity** (de) 121 kB, 24.09.2018

Code: mrl\_az17-azm170-betaetiger\_de

**Operating instructions and Declaration of conformity** (pl) 160 kB, 24.09.2018

Code: mrl\_az17-azm170-betaetiger\_pl

**Operating instructions and Declaration of conformity** (it) 120 kB, 24.09.2018

Code: mrl\_az17-azm170-betaetiger\_it

**Operating instructions and Declaration of conformity** (da) 134 kB, 24.09.2018

Code: mrl\_az17-azm170-betaetiger\_da

**Operating instructions and Declaration of conformity** (pt) 120 kB, 24.09.2018

Code: mrl\_az17-azm170-betaetiger\_pt

**Operating instructions and Declaration of conformity** (en) 120 kB, 24.09.2018

Code: mrl\_az17-azm170-betaetiger\_en

**Operating instructions and Declaration of conformity** (cs) 157 kB, 24.09.2018

Code: mrl\_az17-azm170-betaetiger\_cs

**Operating instructions and Declaration of conformity** (jp) 215 kB, 24.09.2018

Code: mrl\_az17-azm170-betaetiger\_jp

**Operating instructions and Declaration of conformity** (sv) 121 kB, 24.09.2018

Code: mrl\_az17-azm170-betaetiger\_sv

**Operating instructions and Declaration of conformity** (nl) 120 kB, 24.09.2018

Code: mrl\_az17-azm170-betaetiger\_nl

**Operating instructions and Declaration of conformity** (fr) 121 kB, 24.09.2018

Code: mrl\_az17-azm170-betaetiger\_fr

**Operating instructions and Declaration of conformity** (es) 120 kB, 24.09.2018

Code: mrl\_az17-azm170-betaetiger\_es

**BG-test certificate** (en) 159 kB, 26.11.2015

Code: z\_z17p02

**BG-test certificate** (de) 181 kB, 26.11.2015

Code: z\_z17p01

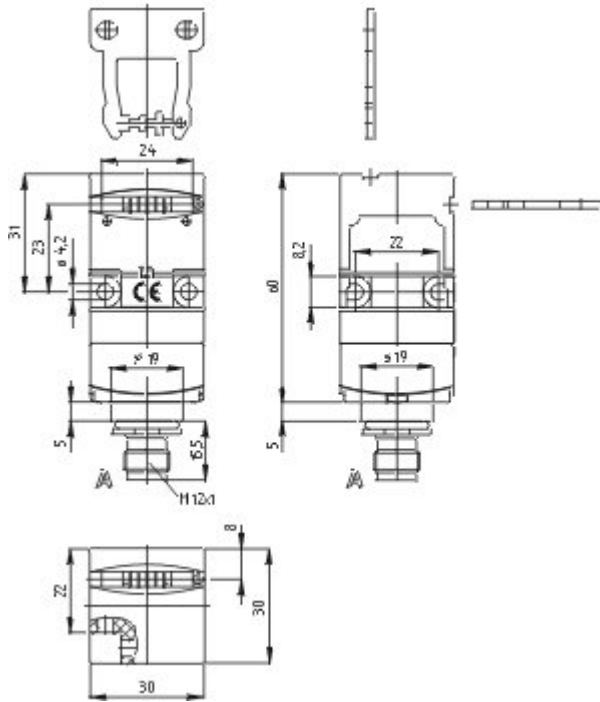
CCC certification (cn) 3 MB, 18.10.2017

Code: q\_175p03

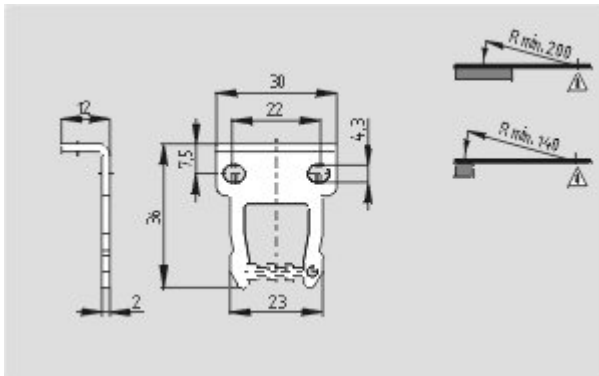
CCC certification (en) 3 MB, 29.08.2017

Code: q\_175p02

## Images



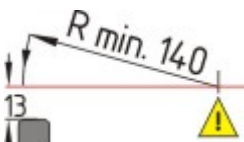
Dimensional drawing (basic component)



Dimensional drawing (actuator)



Actuating radius



Actuating radius

## System components

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### Connector



#### **S-K4M12**

- Connector without cable
- 4-pole



#### **A-K4M12**

- Pre-wired cable
- 4-pole

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

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