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# Datasheet - AZ 17-02ZRI-B5

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

**X** Preferred typ





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)
- cable gland M16

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

#### **Ordering details**

Product type description
Article number
EAN Code
eCl@ss

#### Approval

Approval



AZ 17-02ZRI-B5 101136309 4030661056494 27-27-26-02

### Classification

Standards B10d Normally-closed contact (NC) Mission time notice EN ISO 13849-1 2.000.000 20 Years MTTF<sub>d</sub> =  $\frac{B_{10d}}{0.1 \times n_{op}}$ 

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

#### **Global Properties**

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

Design of electrical connection	IDC method of termination
Cable section including conductor ferrules	
- Min. Cable section	1 x 0,75
- Max. Cable section	2 x 1.0, flexible
Mechanical life	> 1.000.000 operations
higher Latching force (Y/N)	Yes
Latching force	30
Positive break force	17 N
positive break travel	11 mm
Max. Actuating speed	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
Number of safety contacts	2
Supply voltage	
- Min. supply voltage	
- Max. supply voltage	230 V
Rated impulse withstand voltage Uimp	4 kV
Rated insulation voltage Ui	250 V
Thermal test current Ithe	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

- Height of sensor	85
- Length of sensor	30

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.

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

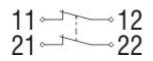
#### Included in delivery

Not available as spare part Included in delivery

- · Individually coded actuator
- tamperproof screws
- Slot sealing plugs

#### Diagram

notice



Note Diagram

 $\ominus$  positive break NC contact

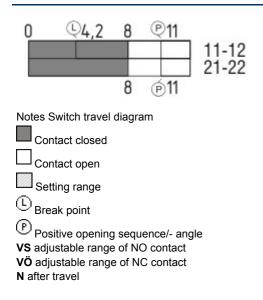
(1) active

🏽 no active

°----- Normally-open contact

o------- Normally-closed contact

#### Switch travel diagram



#### **Ordering suffix**

The applicable ordering suffix is added at the end of the part number of the safety switch. Order example: AZ 17-02ZRI-B5**-2243** 

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

#### Ordering code

AZ 17-(1)Z(2)I-(3)-(4)-(5)	
(1)	
11	1 Normally open contact (NO) / 1 Opener (NC)
02	2 Opener (NC)
(2)	
without	Latching force 5 N
R	Latching force 30 N
(3)	
without	cable gland M16
ST	Connector M12
(4)	
B1	Actuator B1
B5	Actuator B5
B6L	Actuator B6L
B6R	Actuator B6R
(5)	
1637	gold-plated contacts

#### **Documents**

**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

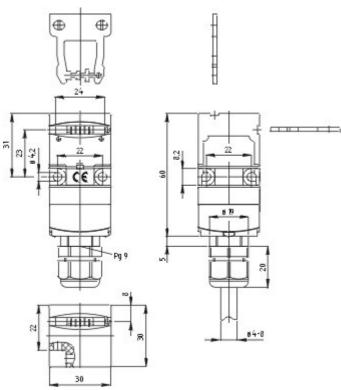
**Operating instructions and Declaration of conformity** (es) 120 kB, 24.09.2018 Code: mrl\_az17-azm170-betaetiger\_es

**BG-test certificate** (en) 159 kB, 26.11.2015 Code: z\_z17p02

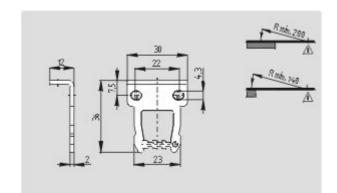
**BG-test certificate** (de) 181 kB, 26.11.2015 Code: z z17p01 CCC certification (cn) 3 MB, 18.10.2017 Code: q\_175p03

CCC certification (en) 3 MB, 29.08.2017 Code: q\_175p02

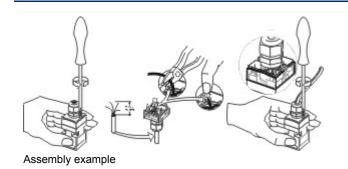
# Images

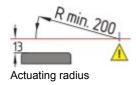


Dimensional drawing (basic component)



Dimensional drawing (actuator)





R min. 140 13 Actuating radius

K.A. Schmersal GmbH & Co. KG, Möddinghofe 30, D-42279 Wuppertal The data and values have been checked throroughly. Technical modifications and errors excepted. Generiert am 13.02.2019 - 14:37:24h Kasbase 3.3.0.F.64I