# Datasheet - AZ 17-02ZI-ST-B6L

Safety switch with separate actuator / AZ 17ZI / AZ 17/170ZI-B6L







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

- left-hand model
- $\bullet$  For very smal actuating radii in line with or at 90° to the plane of the actuator
- 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
- Connector M12 x 1, 4-pole

# **Ordering details**

Product type description

Article number

EAN Code

eCl@ss

AZ 17-02ZI-ST-B6L

101144087

4030661130866

27-27-26-02

#### **Approval**

Approval



### Classification

Standards

B10d Normally-closed contact (NC)

Mission time

notice

EN ISO 13849-1

2.000.000

20 Years

$$MTTF_d = \frac{B_{10d}}{0.1 \times n_{op}}$$

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

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 115

#### **Mechanical data**

Design of electrical connection Connector M12

Mechanical life > 1.000.000 operations

higher Latching force (Y/N)

Latching force

5

Positive break force

17 N

positive break travel

11 mm

Max. Actuating speed

2 m/s

#### **Ambient conditions**

Ambient temperature

Min. environmental temperature
 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

 $\begin{array}{ccc} \text{- Max. supply voltage} & 230 \text{ V} \\ \text{Rated impulse withstand voltage U}_{\text{imp}} & 4 \text{ kV} \\ \text{Rated insulation voltage U}_{\text{i}} & 250 \text{ V} \\ \text{Thermal test current I}_{\text{the}} & 10 \text{ A} \\ \end{array}$ 

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

30

85

30

- Height of sensor

- Length of sensor

#### notice

Actuating radius adjustable, minimum 50 mm, using an hexagonal key wrench 2 mm A/F (a and b)

The axis of the hinge should be 11 mm above the top edge of the safety switch and in the same plane

The actuator is not available separately.

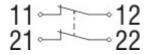
### Included in delivery

Not available as spare part

Included in delivery

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

### Diagram



Note Diagram

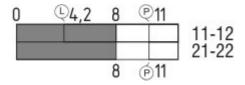
⊖ positive break NC contact



no active

Normally-open contact

## Switch travel diagram



Notes Switch travel diagram

Contact closed

Contact open

Setting range

 $^{\textcircled{L}}_{\text{Break point}}$ 

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-B6L-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 Normally open contact (NO) / 1 Opener (NC)

02 2 Opener (NC)

(2)

without Latching force 5 N R Latching force 30 N

(3)

withoutcable gland M16STConnector M12

(4)

B1Actuator B1B5Actuator B5B6LActuator B6LB6RActuator 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

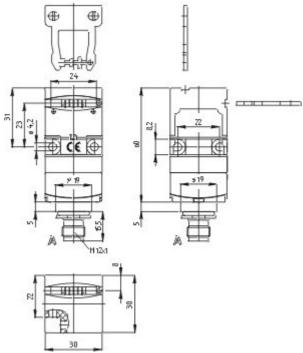
Code: z\_z17p01

CCC certification (cn) 3 MB, 18.10.2017

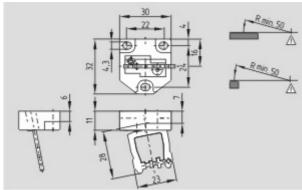
Code: q\_175p03

Code: q\_175p02

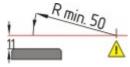
# **Images**



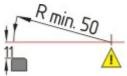
Dimensional drawing (basic component)



Dimensional drawing (miscellaneous)



Actuating radius



Actuating radius

# **System components**

### Connector



### A-K4M12

- Pre-wired cable
- 4-pole

### S-K4M12



- Connector without cable
- 4-pole

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 - 14:37:38h Kasbase 3.3.0.F.64I