01.03.2018

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SCHMERSAL

# Datasheet - AZ 17-02ZI-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
Strobe lamp
eCl@ss

Approval

Approval



AZ 17-02ZI-B5 101122854 4030661049731 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> =  $\frac{B_{100}}{0.1 \times n_{op}}$ 

 $n_{op} = \frac{d_{op} \times h_{op} \times 3600 \text{ s/h}}{1000 \text{ s/h}}$ 

t cycle

#### **Global Properties**

Permanent light	AZ 17ZI
Standards	EN 60947-5-1, BG-GS-ET-15
Idle assignable pushbutton and LED (Y/N)	No
Response time	
- Actuator	≤ 100 ms
Duration of risk	< 200 ms
Time to readiness	< 4000 ms
Time to readiness	< 4000 ms
Recommended actuator	AZ/AZM201-B1, AZ/AZM201-B30
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		
- Min. Cable section	1 x 0,75	
- Max. Cable section	1 x 1.0, flexible	
Mechanical life	> 1.000.000 operations	
higher Latching force (Y/N)	No	
Latching force	5	
Positive break force	17	
positive break travel	11	
Max. Actuating speed	2	

# **Ambient conditions**

Ambient temperature	
- Min. environmental temperature	-30
- Max. environmental temperature	+80
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
Switch frequency	1 HZ
Operating current	0,7 A
Supply voltage	
- Min. supply voltage	
- Max. supply voltage	230
Rated impulse withstand voltage	4
Rated insulation voltage	250
Thermal test current	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		
Dimensions of the sensor - Width of sensor	30	
	30 85	

## 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.

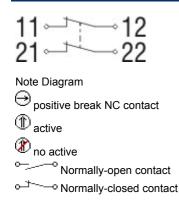
This type termination (IDC) method enables simple connetion of flexible conductors without the need for the use of conductor ferrules

#### Included in delivery

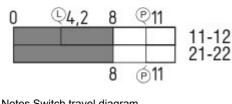
Not available as spare part Included in delivery

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

## Diagram



## Switch travel diagram



Notes Switch travel diagram

- Contact closed
- Contact open
- Setting range
- L 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-B5**-2243** 

2243	Cable output: front
2243 -1	Cable output: rear
1637	0,3 µm gold-plated contacts
<b>5M</b>	Cable length 5 Meter
6M	Cable length 6 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) cable gland M16 without ST Connector M12 (4) **B1** Actuator B1 Actuator B5 B5 Actuator B6L 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** (br) 606 kB, 17.05.2016 Code: mrl\_az17i\_br

**Operating instructions and Declaration of conformity** (pl) 587 kB, 08.07.2016 Code: mrl\_az17i\_pl

**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** (da) 127 kB, 25.01.2018 Code: mrl\_az17-azm170-betaetiger\_da

**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** (cs) 153 kB, 27.01.2016 Code: mrl\_az17-azm170-betaetiger\_cs

**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

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

Code: mrl\_az17-azm170-betaetiger\_es

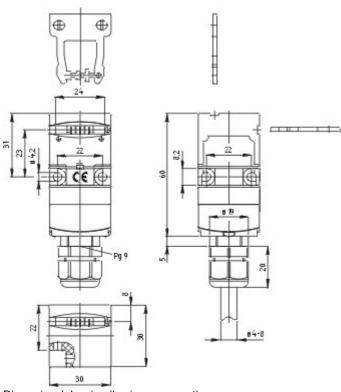
**BG-test certificate** (en) 159 kB, 26.11.2015 Code: z\_z17p02

**BG-test certificate** (de) 181 kB, 26.11.2015 Code: z\_z17p01

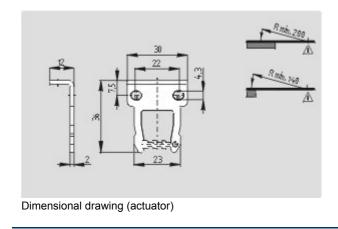
CCC certification (cn) 3 MB, 29.08.2017 Code: q\_175p03

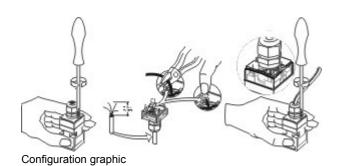
CCC certification (en) 3 MB, 29.08.2017 Code: q\_175p02

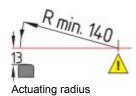
### Images











13 A

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 01.03.2018 - 12:43:40h Kasbase 3.3.0.F.64I