## Datasheet - AZ 16-02ZVRK

Safety switch with separate actuator / AZ 16







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

- Thermoplastic enclosure
- Double-insulated
- Large wiring compartment
- 52 mm x 90 mm x 30 mm
- Multiple coding
- · Long life
- High level of contact reliability with low voltages and currents
- · Insensitive to soiling
- · Slotted holes for adjustment, circular holes for location
- 3 cable entries M 16 x 1.5

## **Ordering details**

Product type description

Article number

EAN code

eCl@ss

AZ 16-02ZVRK

101147145

4030661141671

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

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

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

### **Global Properties**

AZ 16 Product name

Standards EN 60947-5-1, BG-GS-ET-15

Compliance with the Directives (Y/N)  $\zeta \in$ 

Materials

- Material of the housings Plastic, glass-fibre reinforced thermoplastic, self-extinguishing

Yes

- Material of the contacts Silver Housing coating None

Weight 115 g

### **Mechanical data**

Design of electrical connection

Cable section

0,75 mm<sup>2</sup> - Min. Cable section - Max. Cable section 2.5 mm<sup>2</sup>

Mechanical life > 1.000.000 operations

All indications about the cable section are including the conductor ferrules. notice

Screw connection

higher Latching force (Y/N) Latching force 30 N With ejection force (Y/N) No Positive break force 20 N positive break travel 8 mm Actuating speed max. 2 m/s

#### **Ambient conditions**

Ambient temperature

-30 °C - Min. environmental temperature - Max. environmental temperature +80 °C

Protection class IP67 to IEC/EN 60529

## **Electrical data**

Design of control element Opener (NC)

Snap action with self-cleaning contact Switching principle

Number of auxiliary contacts 0 piece Number of safety contacts 2 piece Rated impulse withstand voltage Uimp 4 kV Rated insulation voltage Ui 500 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**

Dimensions of the sensor

- Width of sensor 52 mm 90 mm

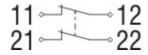
- Height of sensor

30 mm - Length of sensor

## Included in delivery

Actuators must be ordered separately.

## **Diagram**

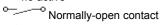


Note Diagram

⊖ positive break NC contact

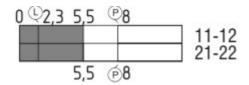






o-t---o Normally-closed contact

# 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 16-02ZVRK-2254

...-2254

Latching force 5 N

...-M20

cable entries M20

## **Ordering code**

## AZ 16-(1)ZV(2)K-(3)-(4)-(5)

(1)

without

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

02

2 Opener (NC)

3 Opener (NC)

03

12 Normally open contact (NO) 1 / Opener (NC) 2

(2)

without Ejection force

R Latching force 30 N

(3)

**G24** with LED (only available for version with one NO and one NC contact.)

(4)

without Cable entry M16 M20 Cable entry M20

ST Connector M12, 4-pole, bottom STL Connector M12, 4-pole, left STR Connector M12, 4-pole, right

(5)

2254 Latching force 5 N 1762 Front mounting 1637 gold-plated contacts

#### **Documents**

Operating instructions and Declaration of conformity (pt) 433 kB, 25.05.2010

Code: mrl\_az15-16\_pt

Operating instructions and Declaration of conformity (pt) 287 kB, 08.07.2016

Code: mrl\_az15-16\_pt

Operating instructions and Declaration of conformity (de) 267 kB, 04.03.2016

Code: mrl\_az15-16\_de

Operating instructions and Declaration of conformity (fr) 284 kB, 27.04.2016

Code: mrl\_az15-16\_fr

Operating instructions and Declaration of conformity (jp) 564 kB, 23.08.2016

Code: mrl az15-16 jp

Operating instructions and Declaration of conformity (cs) 400 kB, 11.10.2011

Code: mrl\_az15-16\_cs

Operating instructions and Declaration of conformity (es) 281 kB, 09.03.2016

Code: mrl\_az15-16\_es

Operating instructions and Declaration of conformity (pl) 313 kB, 15.04.2016

Code: mrl\_az15-16\_pl

Operating instructions and Declaration of conformity (sv) 275 kB, 17.06.2015

Code: mrl\_az15-16\_sv

Operating instructions and Declaration of conformity (da) 398 kB, 17.11.2011

Code: mrl\_az15-16\_da

Operating instructions and Declaration of conformity (en) 283 kB, 04.03.2016

Code: mrl\_az15-16\_en

Operating instructions and Declaration of conformity (nl) 266 kB, 02.07.2013

Code: mrl\_az15-16\_nl

Operating instructions and Declaration of conformity (fi) 256 kB, 02.07.2015

Code: mrl\_az15-16\_fi

Operating instructions and Declaration of conformity (it) 275 kB, 15.04.2016

Code: mrl\_az15-16\_it

Mounting and wiring instructions (de, en, fr, it, es, jp) 181 kB, 12.06.2007

Code: m\_mazp01

BG-test certificate (en) 135 kB, 18.11.2014

Code: z\_z15p02

BG-test certificate (de) 138 kB, 18.11.2014

Code: z\_z15p01

CCC certification (cn) 3 MB, 29.08.2017

Code: q\_175p03

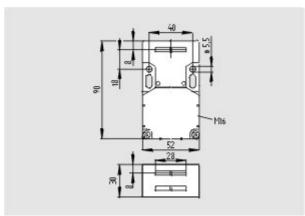
CCC certification (en) 3 MB, 29.08.2017

Code: q\_175p02

EAC certification (ru) 844 kB, 05.10.2015

Code: q\_6037p17\_ru

### **Images**



Dimensional drawing (basic component)

## **System components**

#### **Actuator**

101083036 - AZ 15/16-B1









## 101093553 - AZ 15/16-B1-1747

- For play-free interlocking of light guards
- The magnetic latch can be easily fitted in any actuating plane
- Suitable for retrofitting

## 101108276 - AZ 15/16-B1-2024





## 101108278 - AZ 15/16-B1-2024 WITH SLOT SEALING PLUG

• For protection against the ingress of course dirt

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 30.10.2017 - 12:36:57h Kasbase 3.2.7.F.64I