# Datasheet - EX-AZ 16-03ZVK-3D

Safety switch with separate actuator / EX-AZ 16





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

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

#### **Ordering details**

Product type description

Article number

EAN Code

eCl@ss

EX-AZ 16-03ZVK-3D

101194774

4030661359526

27-27-26-02

**Approval** 

Approval ATEX

Classification

Standards

B10d Normally-closed contact (NC)

Mission time

notice

EN ISO 13849-1

2.000.000

20 Years

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

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

**Global Properties** 

Permanent light

Standards

Compliance with the Directives (Y/N)  $\subset \epsilon$ 

Materials

EX-AZ 16

EN 60079-0, EN 60079-31, EN 60947-5-1, BG-GS-ET-15

Yes

- Material of the housings

Plastic, glass-fibre reinforced thermoplastic, self-extinguishing

- Material of the contacts

Silver None

Housing coating

Weight

140

**Mechanical data** 

Design of electrical connection

Screw connection

Cable cross-section of the cable glands

- Min. Cable cross-section of the cable glands

Ø 6 Ø 12

- Max. Cable cross-section of the cable glands

ש וצ

Cable section

- Min. Cable section 0,75- Max. Cable section 2.5

Mechanical life > 1 million operations

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

higher Latching force (Y/N)

With ejection force (Y/N)

Positive break force

positive break travel

Max. Actuating speed

No

Yes

10

**Ambient conditions** 

Ambient temperature

Min. environmental temperature
 Max. environmental temperature

Protection class IP67 to IEC/EN 60529

**Electrical data** 

Design of control element Opener (NC)

Switching principle Creep circuit element

Number of auxiliary contacts0Number of safety contacts3Rated impulse withstand voltage Uimp6 kVRated insulation voltage Ui500 VThermal test current Ithe2.5 A

Utilisation category AC-15: 230 V / 2,5 A, DC-13: 24 V / 2,5 A

Max. fuse rating 4 A gG D-fuse

**ATEX** 

EX-marking EX II 3D Ex tc IIIC T90°C Dc X

Explosion protection categories for gases

Explosion protection Zones for gases

None

Explosion protected category for dusts

Explosion protection Zones for dusts

22

**Dimensions** 

Dimensions of the sensor

- Width of sensor 52

90 30

- Length of sensor

notice

Individual coding available on request

## Included in delivery

Actuators must be ordered separately.

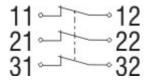
Including Ex-certified screwed cable gland and screw plug
Slot sealing plugs

#### **Keywords**

Keywords

Ex, EEx, ATEX, Ex AZ 16, Ex AZ16, AZ 16 Ex, AZ16 ex, AZ16ex, ATEX AZ16

### **Diagram**



Note Diagram

opositive break NC contact





O—\_\_\_ONormally-open contact

o-t---o Normally-closed contact

#### Switch travel diagram



Notes Switch travel diagram

Contact closed

Contact open

Setting range

(L) Break point

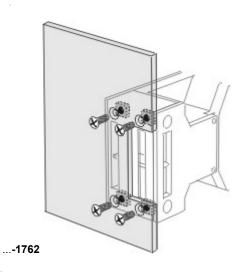
Positive opening sequence/- angle

VS adjustable range of NO contact

VÖ adjustable range of NC contact

N after travel

### **Ordering suffix**



Versions with M5 nuts For front mounting of safety switch, e.g. on sheet-steel covers Cannot be retrofitted

0,3 µm gold-plated contacts

#### **Ordering code**

EX-AZ 16-(1)ZV(2)K-(3)-3D

(1)

...-1637

03 3 Opener (NC)

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

(2)

without Ejection force

R Latching force 30 N

(3)

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

#### **Documents**

Operating instructions and Declaration of conformity (es) 256 kB, 21.11.2016

Code: mrl\_ex-az16\_es

Operating instructions and Declaration of conformity (de) 282 kB, 26.10.2016

Code: mrl\_ex-az16\_de

Operating instructions and Declaration of conformity (pl) 292 kB, 21.11.2016

Code: mrl\_ex-az16\_pl

Operating instructions and Declaration of conformity (da) 253 kB, 31.08.2015

Code: mrl\_ex-az16\_da

Operating instructions and Declaration of conformity (nl) 254 kB, 12.12.2016

Code: mrl\_ex-az16\_nl

Operating instructions and Declaration of conformity (pt) 259 kB, 16.01.2017

Code: mrl\_ex-az16\_pt

Operating instructions and Declaration of conformity (fr) 259 kB, 16.01.2017

Code: mrl\_ex-az16\_fr

Operating instructions and Declaration of conformity (it) 237 kB, 21.11.2016

Code: mrl\_ex-az16\_it

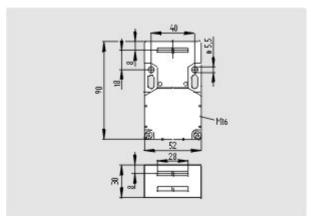
Operating instructions and Declaration of conformity (jp) 550 kB, 18.08.2017

Code: mrl\_ex-az16\_jp

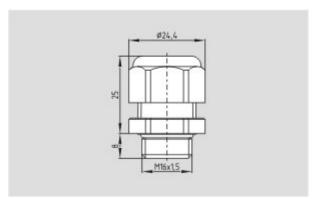
Operating instructions and Declaration of conformity (en) 297 kB, 26.10.2016

Code: mrl\_ex-az16\_en

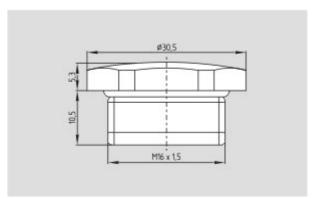
## **Images**



Dimensional drawing (basic component)



Dimensional drawing (miscellaneous)



Dimensional drawing (miscellaneous)

# **Mounting accessories**



## tamperproof screws

- To mount the actuator
- Higher protection against tampering with interlock
- Protects against unauthorised removal of actuator
- Various lengths available

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 - 14:39:28h Kasbase 3.3.0.F.64l