# **Datasheet - AZ 15 ZVRK-ST**

Safety switch with separate actuator / AZ 15





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

- thermoplastic enclosure
- Double-insulated
- Long life
- 52 mm x 75 mm x 30 mm
- · Multiple coding
- Large wiring compartment
- High level of contact reliability with low voltages and currents
- · Slotted holes for adjustment, circular holes for location
- Not sensitive to dirty conditions by virtue of patented roller system
- 2 cable entries M 16 x 1.5
- Connector M12, 4-pole

## **Ordering details**

Product type description

Article number

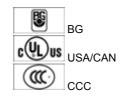
EAN code

AZ 15 ZVRK-ST 101161660

4030661196282

## **Approval**

Approval



## Classification

Standards

B<sub>10d</sub> Opener (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**

Product name AZ 15

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

Compliance with the Directives (Y/N) ( Yes suitable for elevators (Y/N) Yes

Materials

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

- Material of the contacts Silver
Housing coating None
Weight 105 g

#### **Mechanical data**

Design of electrical connection Connector M12

Mechanical life > 1.000.000 operations

higher Latching force (Y/N)

Latching force

30 N

With ejection force (Y/N)

Positive break force

10 N

positive break travel

8 mm

Actuating speed

max. 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 piece

Number of safety contacts 1 piece

Rated impulse withstand voltage U<sub>imp</sub> 6 kV

Rated insulation voltage U<sub>i</sub> 500 V

Thermal test current I<sub>the</sub> 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

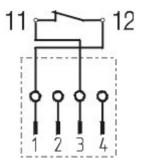
None

# Dimensions

Dimensions of the sensor

- Width of sensor
 - Height of sensor
 - Length of sensor
 30 mm

# Diagram



Note Diagram

opositive break NC contact

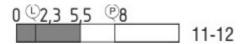
 $^{\textcircled{\scriptsize{1}}}_{\text{active}}$ 

no active

O—\_\_\_ONormally-open contact

o-t---o Normally-closed contact

# Switch travel diagram



Notes Switch travel diagram

Contact closed

Contact open

Setting range

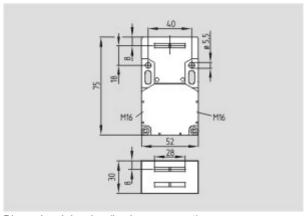
 $^{\textcircled{L}}_{\text{Break point}}$ 

Positive opening sequence/- angle **VS** adjustable range of NO contact

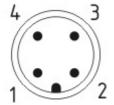
VÖ adjustable range of NC contact

N after travel

# **Images**



Dimensional drawing (basic component)



## **System components**

#### **Actuator**



#### 1137434 - AZ 15/16-B6

 $\bullet$  For very smal actuating radii in line with or at  $90^\circ$  to the plane of the actuator



## 1096092 - AZ 15/16-B3-1747

- For very smal actuating radii at 90° to the plane of the actuator
- Suitable for retrofitting
- For play-free interlocking of light guards



## 1096090 - AZ 15/16-B3-1747 WITH MAGNETIC LATCH

- For very smal actuating radii at 90° to the plane of the actuator
- · Suitable for retrofitting
- For play-free interlocking of light guards
- The magnetic latch can be easily fitted in any actuating plane



## 1095550 - AZ 15/16-B3

• For very smal actuating radii at 90° to the plane of the actuator



## 1096089 - AZ 15/16-B2-1747 WITH MAGNETIC LATCH

- For very smal actuating radii in line with the plane of the actuator
- Suitable for retrofitting
- For play-free interlocking of light guards
- The magnetic latch can be easily fitted in any actuating plane



#### 1096091 - AZ 15/16-B2-1747

- $\bullet$  For very smal actuating radii in line with the plane of the actuator
- Suitable for retrofitting
- For play-free interlocking of light guards



## 1095558 - AZ 15/16-B2

• For very smal actuating radii in line with the plane of the actuator



#### 1137408 - AZ 15/16-B1-2245

Damps vibration on guard device



#### 1126794 - AZ 15/16-B1-2177 WITH CENTERING GUIDE

• For interlocking of light, unguided guards



## 1126793 - AZ 15/16-B1-2177

• For interlocking of light, unguided guards



## 1111081 - AZ 15/16-B1-2053 WITH BALL LATCH

• For interlocking of light to medium-weight guards



#### 1111079 - AZ 15/16-B1-2053

• For interlocking of light to medium-weight guards



#### 1108278 - AZ 15/16-B1-2024 WITH SLOT SEALING PLUG

• For protection against the ingress of course dirt



1108276 - AZ 15/16-B1-2024

## 1093553 - 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





#### 1092711 - AZ 15/16-B1-1747

- · For play-free interlocking of light guards
- Suitable for retrofitting

#### 101083036 - AZ 15/16-B1



#### **Accessories**



# 1149214 - Mounting set MS AZ 15/16 R/P

# THE ST

# 1150373 - Mounting set MS AZ 15/16 P



## 1110500 - SZ 16/335

- To prevent inadvertent closing, e.g. during maintenance
- For complex plant
- Prevents actuation of the switch
- Up to 6 padlocks can be fitted
- The lockout tag can be mounted on a chain near to the safety switch



#### 1115025 - Ball latch 2053-2

- Additional ball latch for stable latching of light to medium-weight guards
- For separate mounting on the guard

## 1089116 - Slot sealing plugs AZ 15/16-1476

- For protection against the ingress of course dirt
- To cover unused actuator slots
- Simple clip-in fitting



#### Connector



#### A-K4M12

- · Pre-wired cable
- 4-pole



#### S-K4M12

- · Connector without cable
- 4-pole

## **Mounting accessories**



## 101135340 - TAMPERPROOF SCREWS M 5 x 20

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



# 101135339 - TAMPERPROOF SCREWS M 5 x 16

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

K.A. Schmersal GmbH, Möddinghofe 30, D-42279 Wuppertal The data and values have been checked throroughly. Technical modifications and errors excepted. Generiert am 03.12.2012 - 10:17:25h Kasbase 2.2.2.F DBI