# Datasheet - AZ 15 ZVK

Safety switch with separate actuator / AZ 15



Preferred typ





(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
- 3 cable entries M 16 x 1.5

# **Ordering details**

Product type description

Article number

EAN code

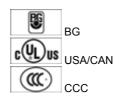
AZ 15 ZVK

1152787

4030661166308

### **Approval**

Approval



#### Classification

Standards

B<sub>10d</sub> Opener (NC)

Mission time

notice

EN ISO 13849-1

2.000.000

20 Years

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

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

Product name

Standards

Compliance with the Directives (Y/N) €€

Materials

- Material of the housings

- Material of the contacts

Housing coating

Weight

AZ 15

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

Plastic, glass-fibre reinforced thermoplastic, self-extinguishing

None

100 g

#### **Mechanical data**

Design of electrical connection

Cable section

- Min. Cable section - Max. Cable section

Mechanical life

higher Latching force (Y/N) With ejection force (Y/N) Positive break force positive break travel

Actuating speed notice

Screw connection

0,75 mm<sup>2</sup> 2.5 mm<sup>2</sup>

> 1.000.000 operations

No Yes 10 N 8 mm

max. 2 m/s

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

# **Ambient conditions**

Ambient temperature

- Min. environmental temperature - Max. environmental temperature

Protection class

-30 °C

+80 °C

IP67 to IEC/EN 60529

#### **Electrical data**

Design of control element

Switching principle

Number of auxiliary contacts Number of safety contacts

Rated impulse withstand voltage Uimp

Rated insulation voltage Ui Thermal test current Ithe

Utilisation category

Max. fuse rating

Opener (NC)

Creep circuit element

0 piece 1 piece 6 kV 500 V 10 A

> AC-15: 230 V / 4 A, DC-13: 24 V / 4 A

6 A gG D-fuse

#### **ATEX**

Explosion protection categories for gases

Explosion protected category for dusts

None

None

### **Dimensions**

Dimensions of the sensor

- Width of sensor

52 mm

- Height of sensor
- Length of sensor

75 mm

30 mm

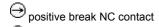
# Included in delivery

Actuators must be ordered separately.

# **Diagram**

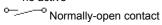


Note Diagram



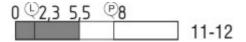






o----- Normally-closed contact

# 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

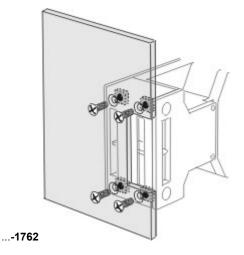
N after travel

# **Ordering suffix**

The applicable ordering suffix is added at the end of the part number of the safety switch. Order example: AZ 15 ZVK-1637

...-1637

0,3 µm gold-plated contacts



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

# **Ordering code**

### AZ 15 ZV(1)K-(2)-(3)

(1)

without Ejection force

R Latching force 30 N

(2)

without Cable entry M16

ST Connector M12, 4-pole

(3)

2254 Latching force 5 N

1762 Front mounting

1637 gold-plated contacts

#### **Documents**

Operating instructions and Declaration of conformity (ro) 400 kB, 18.11.2011

Code: mrl\_az15-16\_ro

Operating instructions and Declaration of conformity (br) 436 kB, 26.05.2010

Code: mrl\_az15-16\_br

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

Code: mrl\_az15-16\_pt

Operating instructions and Declaration of conformity (jp) 479 kB, 15.03.2011

Code: mrl\_az15-16\_jp

Operating instructions and Declaration of conformity (it) 330 kB, 27.11.2009

Code: mrl\_az15-16\_it

Operating instructions and Declaration of conformity (nl) 431 kB, 14.09.2010

Code: mrl\_az15-16\_nl

Operating instructions and Declaration of conformity (en) 516 kB, 26.05.2010

Code: mrl\_az15-16\_en

Operating instructions and Declaration of conformity (fr) 442 kB, 01.07.2010

Code: mrl\_az15-16\_fr

Operating instructions and Declaration of conformity (es) 405 kB, 25.03.2011

Code: mrl\_az15-16\_es

Operating instructions and Declaration of conformity (sv) 462 kB, 25.10.2011

Code: mrl\_az15-16\_sv

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

Code: mrl\_az15-16\_cs

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

Code: mrl\_az15-16\_da

Operating instructions and Declaration of conformity (pt) 406 kB, 21.12.2011

Code: mrl\_az15-16\_pt

Operating instructions and Declaration of conformity (pl) 400 kB, 05.09.2011

Code: mrl\_az15-16\_pl

Operating instructions and Declaration of conformity (de) 695 kB, 24.02.2011

Code: mrl\_az15-16\_de

BG-test certificate (en) 197 kB, 01.06.2010

Code: z\_z15p02

BG-test certificate (de) 198 kB, 01.06.2010

Code: z\_z15p01

CCC certification (en) 1 MB, 19.05.2011

Code: q\_175p02

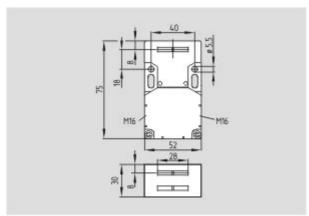
CCC certification (cn) 1 MB, 19.05.2011

Code: q\_175p03

Gost certification (ru) 2 MB, 07.07.2011

Code: q\_az1p01

### **Images**



Dimensional drawing (basic component)

# **System components**

# **Actuator**

1083036 - AZ 15/16-B1



# 1092711 - AZ 15/16-B1-1747

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





### 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



### 1108276 - AZ 15/16-B1-2024



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

• For protection against the ingress of course dirt



# 1111079 - AZ 15/16-B1-2053

• For interlocking of light to medium-weight guards



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

• For interlocking of light to medium-weight guards



# 1126793 - AZ 15/16-B1-2177

• For interlocking of light, unguided guards



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

• For interlocking of light, unguided guards



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

Damps vibration on guard device



#### 1095558 - AZ 15/16-B2

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



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

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



### 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



### 1095550 - AZ 15/16-B3

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



### 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



#### 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

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

• For very smal actuating radii in line with or at 90° to the plane of the actuator



### **Accessories**



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



# 1150373 - Mounting set MS AZ 15/16 P



# 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



# 1115025 - Ball latch 2053-2

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



### 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

# **Mounting accessories**



### 1135338 - TAMPERPROOF SCREWS

#### M 5 x 12

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

### 1135339 - 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



# 1135340 - 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

K.A. Schmersal GmbH, Möddinghofe 30, D-42279 Wuppertal
The data and values have been checked throroughly. Technical modifications and errors excepted.
Generiert am 20.03.2012 - 18:27:09h Kasbase 2.1.2.F DBI