Datasheet - AZ 16-12ZVRK

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
- 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

AZ 16-12ZVRK

101154221

4030661171586

Approval

Approval



Classification

Standards

B_{10d} Opener (NC)

B_{10d} Normally open contact (NO)

- notice

Mission time

notice

EN ISO 13849-1

2.000.000

1.000.000

at 10% le and ohmic load

20 Years

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

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

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

120 g

- Material of the contacts Silver Housing coating None

Weight

Mechanical data

Design of electrical connection Screw connection

Cable section

0,75 mm² - Min. Cable section - Max. Cable section 2.5 mm²

Mechanical life 20.000.000 operations

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

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

Ambient conditions

Ambient temperature

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

IP67 to IEC/EN 60529 Protection class

Electrical data

Design of control element Normally open contact (NO), Opener (NC)

Switching principle Creep circuit element

Number of auxiliary contacts 1 piece Number of safety contacts 2 piece Rated impulse withstand voltage Uimp 6 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

Diagram



Note Diagram

opositive break NC contact

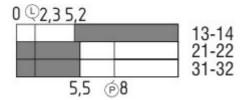
 $^{\textcircled{1}}_{\text{active}}$

no active

o-__- Normally-open contact

o-t--- Normally-closed contact

Switch travel diagram



Notes Switch travel diagram

Contact closed

Contact open

Setting range

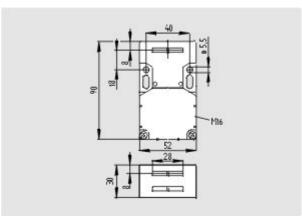
L Break point

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

VÖ adjustable range of NC contact

N after travel

Images



Dimensional drawing (basic component)

System components





101092711 - AZ 15/16-B1-1747

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



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



101111079 - AZ 15/16-B1-2053

• For interlocking of light to medium-weight guards



101111081 - AZ 15/16-B1-2053 WITH BALL LATCH

• For interlocking of light to medium-weight guards



101126793 - AZ 15/16-B1-2177

• For interlocking of light, unguided guards



101126794 - AZ 15/16-B1-2177 WITH CENTERING GUIDE

· For interlocking of light, unguided guards



101137408 - AZ 15/16-B1-2245

· Damps vibration on guard device



101095558 - AZ 15/16-B2

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



101096091 - 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



101096089 - 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



101095550 - AZ 15/16-B3

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



101096090 - 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

101096092 - 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





101137434 - AZ 15/16-B6

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

Door-handle system



AZ 16-STS30

- · Latching handle
- Suitable for all types of guard

Accessories



101149214 - Mounting set MS AZ 15/16 R/P

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101150373 - Mounting set MS AZ 15/16 P



101089116 - Slot sealing plugs AZ 15/16-1476

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



101115025 - 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



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



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

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 - 10:30:26h Kasbase 2.2.2 DBII