Datasheet - AZ 16-02ZVRK

Safety switch with separate actuator / AZ 16







- 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



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

Ordering details

Product type description AZ 16-02ZVRK Article number 101147145

EAN code 4030661141671

Approval

Approval



Classification

B_{10d} Opener (NC)

Mission time notice

Standards

20 Years

EN ISO 13849-1 2.000.000

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

Global Properties

Product name

Standards

AZ 16

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

Compliance with the Directives (Y/N) € €

Materials

Yes

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

- Material of the contacts Housing coating None Weight 115 g

Mechanical data

Design of electrical connection

Screw connection

Cable section

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

20.000.000 operations Mechanical life

higher Latching force (Y/N) Yes Latching force 30 N With ejection force (Y/N) No 20 N Positive break force 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 +80 °C - Max. environmental temperature

IP67 to IEC/EN 60529 Protection class

Electrical data

Design of control element Opener (NC)

Switching principle Creep circuit element

Number of auxiliary contacts 0 piece Number of safety contacts 2 piece 6 kV Rated impulse withstand voltage Uimp 500 V Rated insulation voltage Ui Thermal test current Ithe 10 A

Utilisation category AC-15: 230 V / 4 A.

DC-13: 24 V / 4 A 6 A gG D-fuse

Max. fuse rating

ATEX

Explosion protection categories for gases None Explosion protected category for dusts None

Dimensions

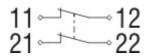
Dimensions of the sensor

- Width of sensor 52 mm - Height of sensor 90 mm - Length of sensor 30 mm

Included in delivery

Actuators must be ordered separately.

Diagram



Note Diagram

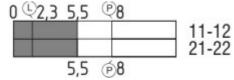
opositive break NC contact

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

no active

Normally-open 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

...-2254

The applicable ordering suffix is added at the end of the part number of the safety switch. Order example: AZ 16-02ZVRK-2254

Latching force 5 N

...- M20 cable entries M20

Ordering code

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

(1)

without

2 Opener (NC)

02 03

3 Opener (NC)

03

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

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

12

(2)

without

R

(3)

G24

(4)

without

M20

ST STL

STR

(5)

2254

1762

1637

Ejection force

Latching force 30 N

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

Cable entry M16

Cable entry M20

Connector M12, 4-pole, bottom Connector M12, 4-pole, left

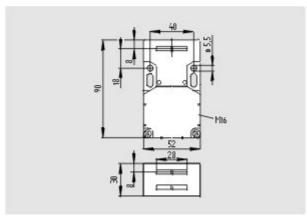
Connector M12, 4-pole, right

Latching force 5 N

Front mounting

gold-plated contacts

Images



Dimensional drawing (basic component)

System components

Actuator



101083036 - AZ 15/16-B1

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



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 13.09.2012 - 16:00:48h Kasbase 2.2.2 DBII