

Datasheet - AZ 16-02ZVRK


Safety switch with separate actuator / AZ 16



Preferred typ



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

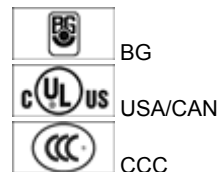
- thermoplastic enclosure
- Double-insulated 
- Large wiring compartment
- 52 mm x 90 mm x 30 mm
- Multiple coding
- Long life
- High level of contact reliability with low voltages and currents
- Slotted holes for adjustment, circular holes for location
- 3 cable entries M 16 x 1.5

Ordering details

Product type description	AZ 16-02ZVRK
Article number	101147145
EAN code	4030661141671

Approval

Approval




Classification

Standards	EN ISO 13849-1
B _{10d} Opener (NC)	2.000.000
Mission time notice	20 Years
	$MTTF_d = \frac{B_{10d}}{0,1 \times n_{op}}$
	$n_{op} = \frac{d_{op} \times h_{op} \times 3600 \text{ s/h}}{t_{cycle}}$

Global Properties

Product name	AZ 16
Standards	EN 60947-5-1, BG-GS-ET-15

Compliance with the Directives (Y/N) 

Yes

Materials

- Material of the housings
- Material of the contacts

Plastic, glass-fibre reinforced thermoplastic, self-extinguishing

Silver

Housing coating

None

Weight

115 g

Mechanical data

Design of electrical connection

Screw connection

Cable section

- Min. Cable section
- Max. Cable section

0,75 mm²

2.5 mm²

Mechanical life

20.000.000 operations

higher Latching force (Y/N)

Yes

Latching force

30 N

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

- Min. environmental temperature
- Max. environmental temperature

-30 °C

+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

2 piece

Rated impulse withstand voltage U_{imp}

6 kV

Rated insulation voltage U_i

500 V

Thermal test current I_{the}

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

52 mm

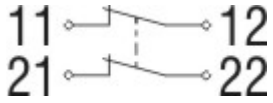
90 mm

30 mm

Included in delivery

Actuators must be ordered separately.

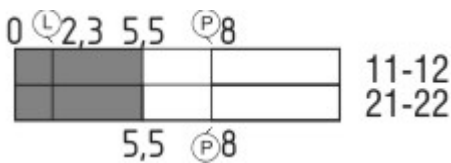
Diagram



Note Diagram

- positive break NC contact
- active
- no active
- Normally-open contact
- Normally-closed contact

Switch travel diagram



Notes Switch travel diagram

- Contact closed
 - Contact open
 - Setting range
 - 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 16-02ZVRK-2254

...-2254 Latching force 5 N

...- M20 cable entries M20

Ordering code

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

- (1)
without 1 Normally open contact (NO) / 1 Opener (NC)
- 02 2 Opener (NC)
- 03 3 Opener (NC)
- 12 Normally open contact (NO) 1 / Opener (NC) 2
- (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

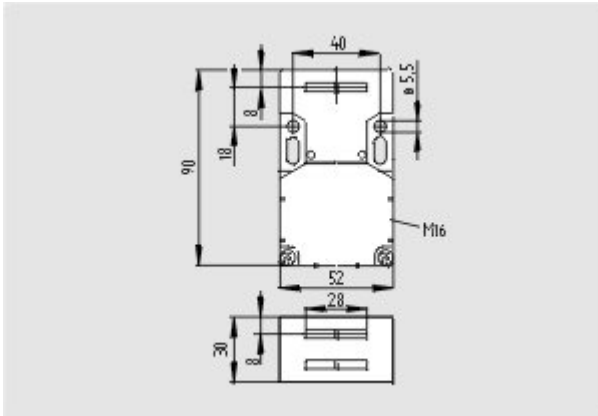
Connector M12, 4-pole, right

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 small actuating radii in line with the plane of the actuator



101096091 - AZ 15/16-B2-1747

- For very small 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 small 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 small actuating radii at 90° to the plane of the actuator



101096090 - AZ 15/16-B3-1747 WITH MAGNETIC LATCH

- For very small 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 small 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

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

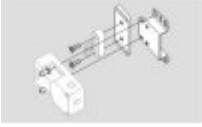
Door-handle system

AZ 16-ST30

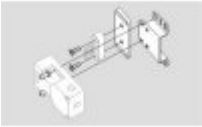
- Latching handle
- Suitable for all types of guard



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
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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
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