Datasheet - AZ 15 ZVRK

Safety switch with separate actuator / AZ 15





- 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



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

Ordering details

Product type description

Article number

EAN code

AZ 15 ZVRK

101153619

4030661169354

Approval

Approval



Classification

Standards

B_{10d} Opener (NC)

Mission time

notice

EN ISO 13849-1

2.000.000

20 Years

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

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

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 100 g

Mechanical data

Design of electrical connection Screw connection

Cable section

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

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

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

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

 $\begin{tabular}{lll} Number of auxiliary contacts & 0 piece \\ Number of safety contacts & 1 piece \\ Rated impulse withstand voltage U_{imp} & 6 kV \\ Rated insulation voltage U_i & 500 V \\ Thermal test current I_{the} & 10 A \\ \end{tabular}$

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

- Height of sensor	75 mm	
- Length of sensor	30 mm	
Included in delivery		
Actuators must be ordered separately.		
Diagram		
11 - 12		
Note Diagram		
positive break NC contact		
(1) active		
no active		
Normally-open contact		
oto Normally-closed contact		
Switch travel diagram		
0 ©2,3 5,5 ©8 11-12		
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

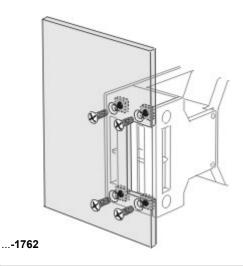
The applicable ordering suffix is added at the end of the part number of the safety switch.

Order example: AZ 15 ZVRK-2254

...-2254

Latching force 5 N

0,3 µm gold-plated contacts



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 (br) 436 kB, 26.05.2010

Code: mrl_az15-16_br

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

Code: mrl_az15-16_pt

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

Code: mrl_az15-16_pt

Operating instructions and Declaration of conformity (de) 248 kB, 28.05.2013

Code: mrl_az15-16_de

Operating instructions and Declaration of conformity (fr) $268\ kB$, 29.07.2013

Code: mrl_az15-16_fr

Operating instructions and Declaration of conformity (jp) 374 kB, 10.07.2013

Code: mrl_az15-16_jp

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

Code: mrl_az15-16_cs

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

Code: mrl az15-16 es

Operating instructions and Declaration of conformity (pl) 298 kB, 02.07.2013

Code: mrl_az15-16_pl

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

Code: mrl_az15-16_sv

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

Code: mrl_az15-16_da

Operating instructions and Declaration of conformity (en) 260 kB, 28.05.2013

Code: mrl_az15-16_en

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

Code: mrl_az15-16_ro

Operating instructions and Declaration of conformity (nl) 266 kB, 02.07.2013

Code: mrl_az15-16_nl

Operating instructions and Declaration of conformity (it) 261 kB, 02.07.2013

Code: mrl_az15-16_it

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

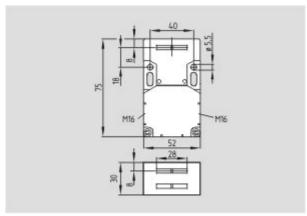
CCC certification (cn) 1 MB, 19.05.2011

Code: q_175p03

Gost certification (ru) 2 MB, 07.07.2011

Code: q_az1p01

Images



Dimensional drawing (basic component)

Actuator



1137434 - AZ 15/16-B6

 \bullet For very smal actuating radii in line with or at 90° 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

- 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





Accessories



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

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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

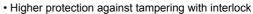
- For protection against the ingress of course dirt
- To cover unused actuator slots
- Simple clip-in fitting

Mounting accessories

101135340 - TAMPERPROOF SCREWS M 5 x 20

• To mount the actuator





- 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 & Co. KG, Möddinghofe 30, D-42279 Wuppertal The data and values have been checked throroughly. Technical modifications and errors excepted. Generiert am 01.08.2013 - 16:47:58h Kasbase 2.2.17.F DBI

