22.02.2016

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# Datasheet - AZ 15 ZVRK

Safety switch with separate actuator / AZ 15

# Preferred typ



- 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
- Insensitive to soiling
- 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 eCl@ss

# AZ 15 ZVRK 101153619 4030661169354 27-27-26-02

#### Approval

Approval



#### Classification

Standards B10d Opener (NC) Mission time notice EN ISO 13849-1 2.000.000 20 Years MTTF<sub>d</sub> =  $\frac{B_{100}}{0.1 \times n_{op}}$ 

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



# **Global Properties**

| Product name                            | AZ 15   |
|---|---|
| Standards                               | EN 60947-5-1, BG-GS-ET-15   |
| Compliance with the Directives (Y/N) CE | 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 mm <sup>2</sup>   |
| Mechanical life                 | > 1.000.000 operations  |
| notice                          | All indications about the cable section are including the conductor ferrules. |
| higher Latching force (Y/N)     | Yes   |
| Latching force                  | 30 N  |
| With ejection force (Y/N)       | No  |
| Positive break force            | 10 N  |
| positive break travel           | 8 mm  |
| Actuating speed                 | max. 2 m/s  |
|                                 |   |

# **Ambient conditions**

| Ambient temperature              |                      |
|----------------------------------|----------------------|
| - Min. environmental temperature | −30 °C               |
| - 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                    |
| Number of auxiliary contacts         | 0 piece                                  |
| Number of safety contacts            | 1 piece                                  |
| Rated impulse withstand voltage Uimp | 6 kV                                     |
| Rated insulation voltage U           | 500 V                                    |
| Thermal test current Ithe            | 10 A                                     |
| Utilisation category                 | AC-15: 230 V / 4 A,<br>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 |

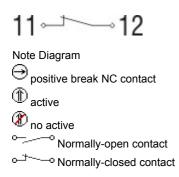
Dimensions

| Dimensions of the sensor |       |
|--------------------------|-------|
| - Width of sensor        | 52 mm |
| - Height of sensor       | 75 mm |
| - Length of sensor       | 30 mm |

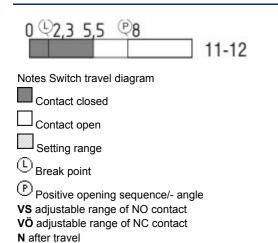
# Included in delivery

Actuators must be ordered separately.

# Diagram



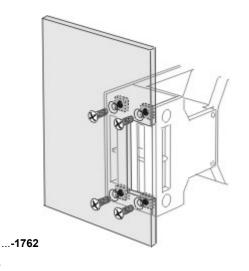
# Switch travel diagram



# 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          |
|------|-----------------------------|
|      |                             |
| 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 <mark>(1)</mark> K- <mark>(2)-(3)</mark> |                       |
|---|-----------------------|
| (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** (pt) 433 kB, 25.05.2010 Code: mrl\_az15-16\_pt

**Operating instructions and Declaration of conformity** (pt) 284 kB, 03.02.2016 Code: mrl\_az15-16\_pt

**Operating instructions and Declaration of conformity** (de) 265 kB, 05.10.2015 Code: mrl\_az15-16\_de

**Operating instructions and Declaration of conformity** (fr) 286 kB, 29.01.2016 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) 282 kB, 24.11.2015 Code: mrl\_az15-16\_es

**Operating instructions and Declaration of conformity** (pl) 313 kB, 06.02.2015 Code: mrl az15-16 pl **Operating instructions and Declaration of conformity** (sv) 275 kB, 17.06.2015 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) 280 kB, 05.10.2015 Code: mrl\_az15-16\_en

**Operating instructions and Declaration of conformity** (nl) 266 kB, 02.07.2013 Code: mrl\_az15-16\_nl

**Operating instructions and Declaration of conformity** (fi) 256 kB, 02.07.2015 Code: mrl\_az15-16\_fi

**Operating instructions and Declaration of conformity** (it) 276 kB, 04.11.2015 Code: mrl\_az15-16\_it

**BG-test certificate** (en) 135 kB, 18.11.2014 Code: z\_z15p02

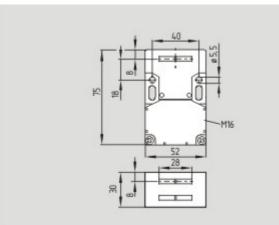
**BG-test certificate** (de) 138 kB, 18.11.2014 Code: z\_z15p01

CCC certification (cn) 270 kB, 20.01.2016 Code: q\_175p03

CCC certification (en) 316 kB, 20.01.2016 Code: q\_175p02

EAC certification (ru) 844 kB, 05.10.2015 Code: q\_6037p17\_ru

#### 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

#### 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

#### 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













Suitable for retrofitting

# 1092711 - AZ 15/16-B1-1747

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



# 101083036 - AZ 15/16-B1 Accessories 1149214 - Mounting set MS AZ 15/16 R/P 1150373 - Mounting set MS AZ 15/16 P 101110500 - SZ 16/335 • To prevent inadvertent closing, e.g. during maintenance · For complex plant and I · 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 101115025 - 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
- · 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

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 22.02.2016 - 18:22:49h Kasbase 3.2.1.F.64I