

Datasheet - EX-AZ 16-12ZVRK-3D

Safety switch with separate actuator / EX-AZ 16



Preferred typ



- Thermoplastic enclosure
- Double-insulated
- Multiple coding
- 52 mm x 90 mm x 30 mm
- Large wiring compartment
- High level of contact reliability with low voltages and currents
- Insensitive to soiling
- Slotted holes for adjustment, circular holes for location
- Long life
- Ex certified
- 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	EX-AZ 16-12ZVRK-3D
Article number	101185377
EAN Code	4030661324883
eCl@ss	27-27-26-02

Approval


Approval	ATEX
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Classification

Standards	EN ISO 13849-1
B10d Normally-closed contact (NC)	2.000.000
B10d Normally open contact (NO)	1.000.000
- notice	at 10% I _e and ohmic load
Mission time	20 Years
notice	$MTTF_d = \frac{B_{10d}}{0,1 \times n_{op}}$ $n_{op} = \frac{d_{op} \times h_{op} \times 3600 \text{ s/h}}{t_{cycle}}$

Global Properties

Permanent light	EX-AZ 16
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Standards	EN 60079-0, EN 60079-31, EN 60947-5-1, BG-GS-ET-15
Compliance with the Directives (Y/N) 	Yes
Materials	
- Material of the housings	Plastic, glass-fibre reinforced thermoplastic, self-extinguishing
- Material of the contacts	Silver
Housing coating	None
Weight	145

Mechanical data

Design of electrical connection	Screw connection
Cable cross-section of the cable glands	
- Min. Cable cross-section of the cable glands	Ø 6
- Max. Cable cross-section of the cable glands	Ø 12
Cable section	
- Min. Cable section	0,75
- Max. Cable section	2.5
Mechanical life	> 1 million operations operations
notice	All indications about the cable section are including the conductor ferrules.
higher Latching force (Y/N)	Yes
Latching force	30
With ejection force (Y/N)	No
Positive break force	10
positive break travel	8
Max. Actuating speed	1

Ambient conditions

Ambient temperature	
- Min. environmental temperature	-20
- Max. environmental temperature	+70
Protection class	IP67 to IEC/EN 60529

Electrical data

Design of control element	Normally open contact (NO), Opener (NC)
Switching principle	Creep circuit element
Number of auxiliary contacts	1
Number of safety contacts	2
Rated impulse withstand voltage U_{imp}	6 kV
Rated insulation voltage U_i	500 V
Thermal test current I_{the}	2.5 A
Utilisation category	AC-15: 230 V / 2,5 A, DC-13: 24 V / 2,5 A
Max. fuse rating	4 A gG D-fuse

ATEX

EX-marking	EX II 3D Ex tc IIIC T90°C Dc X
Explosion protection categories for gases	None
Explosion protection Zones for gases	None
Explosion protected category for dusts	3D
Explosion protection Zones for dusts	22

Dimensions

Dimensions of the sensor

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

notice

Individual coding available on request

Included in delivery

Actuators must be ordered separately.

Including Ex-certified screwed cable gland and screw plug

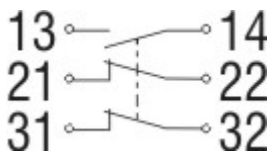
Slot sealing plugs

Keywords






Keywords

Ex, EEx, ATEX, Ex AZ 16, Ex AZ16, AZ 16 Ex, AZ16 ex, AZ16ex, ATEX AZ16

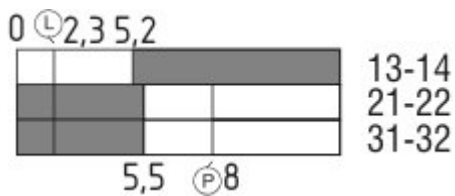
Diagram








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

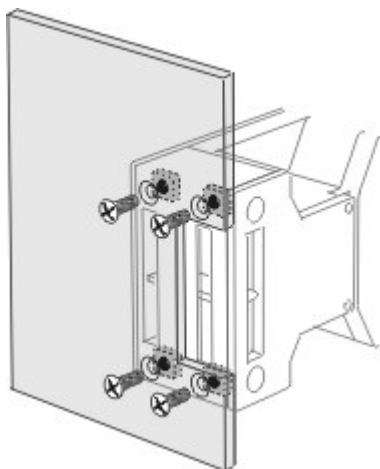
Ordering suffix

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

Order example: EX-AZ 16-12ZVRK-3D-**2254**

...-**2254**

Latching force 5 N



...-**1762**

Versions with M5 nuts
For front mounting of safety switch, e.g. on sheet-steel covers
Cannot be retrofitted

...-**1637**

0,3 µm gold-plated contacts

Ordering code

EX-AZ 16-(1)ZV(2)K-(3)-3D

(1)	
03	3 Opener (NC)
12	1 Normally open contact (NO) / 2 Opener (NC)
(2)	
without	Ejection force
R	Latching force 30 N
(3)	
2254	Latching force 5 N
1762	Front mounting
1637	gold-plated contacts

Documents

Operating instructions and Declaration of conformity (es) 256 kB, 21.11.2016

Code: mrl_ex-az16_es

Operating instructions and Declaration of conformity (de) 282 kB, 26.10.2016

Code: mrl_ex-az16_de

Operating instructions and Declaration of conformity (pl) 292 kB, 21.11.2016

Code: mrl_ex-az16_pl

Operating instructions and Declaration of conformity (da) 253 kB, 31.08.2015

Code: mrl_ex-az16_da

Operating instructions and Declaration of conformity (nl) 254 kB, 12.12.2016

Code: mrl_ex-az16_nl

Operating instructions and Declaration of conformity (pt) 259 kB, 16.01.2017

Code: mrl_ex-az16_pt

Operating instructions and Declaration of conformity (fr) 259 kB, 16.01.2017

Code: mrl_ex-az16_fr

Operating instructions and Declaration of conformity (it) 237 kB, 21.11.2016

Code: mrl_ex-az16_it

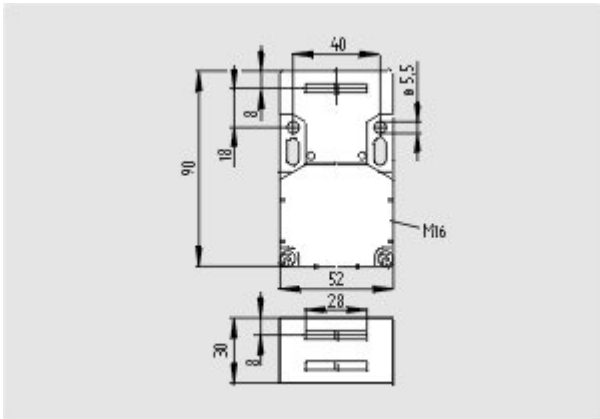
Operating instructions and Declaration of conformity (jp) 550 kB, 18.08.2017

Code: mrl_ex-az16_jp

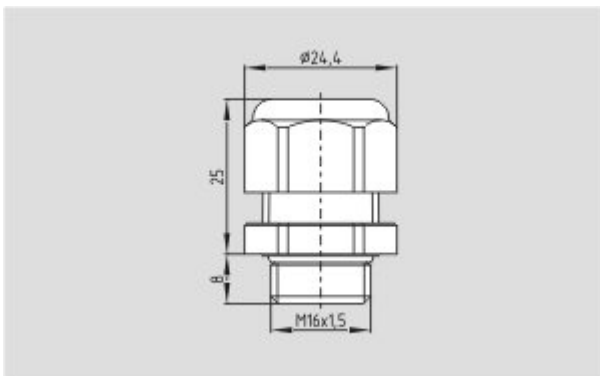
Operating instructions and Declaration of conformity (en) 297 kB, 26.10.2016

Code: mrl_ex-az16_en

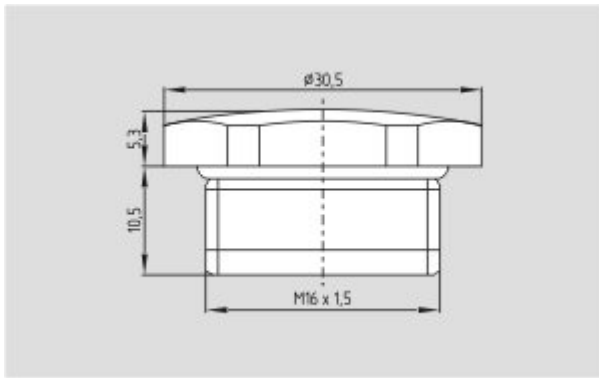
Images



Dimensional drawing (basic component)



Dimensional drawing (miscellaneous)



Dimensional drawing (miscellaneous)

System components

Mounting accessories



tamperproof screws

- To mount the actuator
- Higher protection against tampering with interlock
- Protects against unauthorised removal of actuator
- Various lengths available

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The data and values have been checked thoroughly. Technical modifications and errors excepted.

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