07.02.2018

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SCHMERSAL

Datasheet - AZ 16ZVK

Safety switch with separate actuator / AZ 16

X Preferred typ



- 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
- · Insensitive to soiling
- · Slotted holes for adjustment, circular holes for location
- 3 cable entries M 16 x 1.5
- LED version available

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

Ordering details

Product type description
Article number
Strobe lamp
eCl@ss

AZ 16ZVK 101152887 4030661166773 27-27-26-02

Approval

Approval



Classification

Standards
B10d Normally-closed contact (NC)
B10d Normally open contact (NO)
- notice
Mission time
notice

EN ISO 13849-1 2.000.000 1.000.000 at 10% le and ohmic load 20 Years MTTF_d = $\frac{B_{100}}{0.1 \times n_{op}}$ $n_{op} = \frac{d_{op} \times h_{op} \times 3600 \text{ s/h}}{t_{oycle}}$

Global Properties

Permanent light	AZ 16
Standards	EN 60947-5-1, BG-GS-ET-15
Compliance with the Directives (Y/N) C ϵ	Yes
Materials	
- Material of the housings	Plastic, glass-fibre reinforced thermoplastic, self-extinguishing
- Material of the contacts	Silver
Housing coating	None
Weight	120

Mechanical data

Design of electrical connection	Screw connection
notice	All indications about the cable section are including the conductor ferrules.
Cable section	
- Min. Cable section	0,75
- Max. Cable section	2.5
Mechanical life	> 1.000.000 operations
higher Latching force (Y/N)	No
With ejection force (Y/N)	Yes
Positive break force	10
positive break travel	8
Actuating speed	2

Ambient conditions

Ambient temperature	
- Min. environmental temperature	-30
- Max. environmental temperature	+80
Protection class	IP67 to IEC/EN 60529

Electrical data

Design of control element	Normally open contact (NO), Opener (NC)
Switching principle	Snap action with self-cleaning contact
Number of auxiliary contacts	1
Number of safety contacts	1
Rated impulse withstand voltage	4
Rated insulation voltage	500
Thermal test current	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

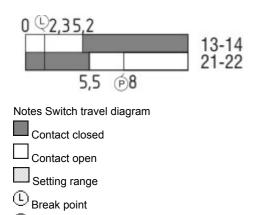
Dimensions

- Length of sensor

Included in delivery

Actuators must be ordered separately.

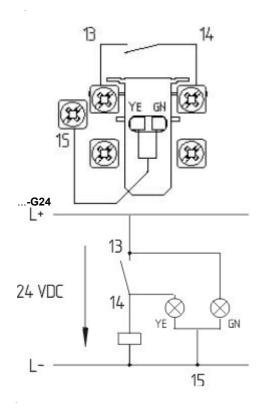
Switch travel diagram



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 16ZVK-G24



only available for version with one NO and one NC contact. Protected against incorrect polarity and voltage spikes.

cable entries M20

...**-M20**

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	Ejection force
R	Latching force 30 N
(3)	
G24	with LED (only available for version with one NO and one NC contact.)
(4)	
without	Cable entry M16
M20	Cable entry M20
ST	Connector M12, 4-pole, bottom
STL	Connector M12, 4-pole, left
STR	Connector M12, 4-pole, right
(5)	
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) 287 kB, 08.07.2016 Code: mrl_az15-16_pt

Operating instructions and Declaration of conformity (de) 267 kB, 04.03.2016 Code: mrl_az15-16_de

Operating instructions and Declaration of conformity (fr) 284 kB, 27.04.2016 Code: mrl_az15-16_fr

Operating instructions and Declaration of conformity (jp) 564 kB, 23.08.2016 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) 281 kB, 09.03.2016 Code: mrl_az15-16_es

Operating instructions and Declaration of conformity (pl) 313 kB, 15.04.2016 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) 283 kB, 04.03.2016 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) 275 kB, 15.04.2016 Code: mrl_az15-16_it

Mounting and wiring instructions (de, en, fr, it, es, jp) 173 kB, 30.01.2018 Code: m_mazp01

BG-test certificate (en) 135 kB, 18.11.2014 Code: z_z15p02

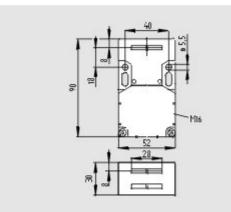
BG-test certificate (de) 138 kB, 18.11.2014 Code: z_z15p01

CCC certification (cn) 3 MB, 29.08.2017 Code: q_175p03

CCC certification (en) 3 MB, 29.08.2017 Code: q_175p02

EAC certification (ru) 844 kB, 05.10.2015 Code: q_6037p17_ru

Images



Dimensional drawing (basic component)

System components

Actuator





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 07.02.2018 - 11:22:51h Kasbase 3.3.0.F.64I