

Datasheet - AZ 16ZVRK

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
- Insensitive to soiling
- Slotted holes for adjustment, circular holes for location
- 3 cable entries M 16 x 1,5
- LED version available

Ordering details

Product type description	AZ 16ZVRK
Article number	101152094
EAN code	4030661164700
eCl@ss	27-27-26-02

Approval

Approval	BG
	USA/CAN
	CCC

Classification

Standards	EN ISO 13849-1
B ^{10d} Normally-closed contact (NC)	2.000.000
B ^{10d} 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

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	Plastic, glass-fibre reinforced thermoplastic, self-extinguishing
- Material of the contacts	Silver
Housing coating	None
Weight	115 g

Mechanical data

Design of electrical connection	Screw connection
Cable section	
- Min. Cable section	0,75 mm ²
- Max. Cable section	2.5 mm ²
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	Normally open contact (NO), Opener (NC)
Switching principle	Snap action with self-cleaning contact
Number of auxiliary contacts	1 piece
Number of safety contacts	1 piece
Rated impulse withstand voltage U _{imp}	4 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

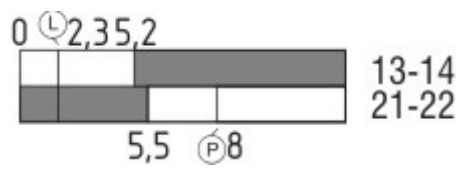
Dimensions

Dimensions of the sensor	
- Width of sensor	52 mm
- Height of sensor	90 mm
- Length of sensor	30 mm

Included in delivery

Actuators must be ordered separately.

Switch travel diagram

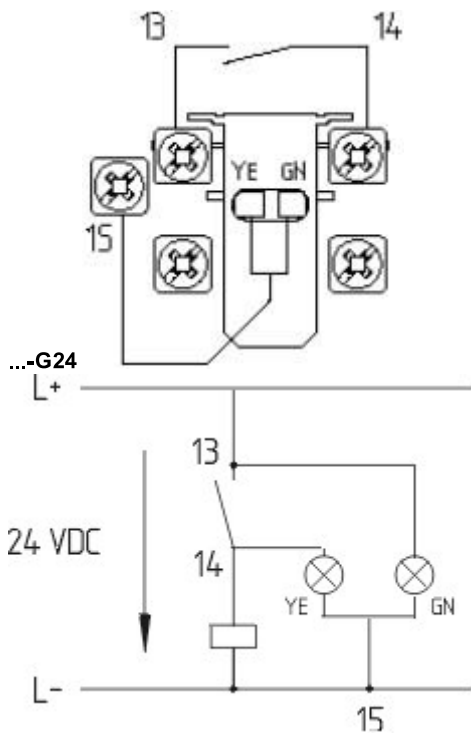


- Notes Switch travel diagram
- Contact closed
 - Contact open
 - ▨ Setting range
 - Ⓛ Break point
 - Ⓟ Positive opening sequence/- angle
- VS** adjustable range of NO contact
VÖ adjustable range of NC contact
N after travel

Ordering suffix

The applicable ordering suffix is added at the end of the part number of the safety switch.
Order example: AZ 16ZVRK-2254

...-2254 Latching force 5 N



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

...-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 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) 284 kB, 03.02.2016
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) 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) 181 kB, 12.06.2007

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) 815 kB, 21.07.2016

Code: q_175p03

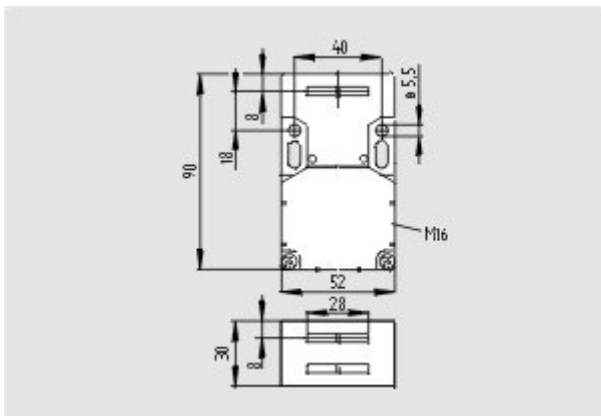
CCC certification (en) 847 kB, 21.07.2016

Code: q_175p02

EAC certification (ru) 844 kB, 05.10.2015

Code: q_6037p17_ru

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 coarse dirt

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

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