

Datasheet - AZ 16ZVRK

Safety switch with separate actuator / AZ 16



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

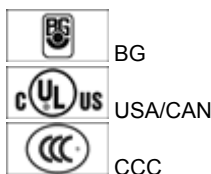
(Minor differences between the printed image and the original product may exist!)

Ordering details

Product type description	AZ 16ZVRK
Article number	1152094
EAN code	4030661164700

Approval

Approval



Classification

Standards	EN ISO 13849-1
B _{10d} Opener (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	$MTTF_d = \frac{B_{10d}}{0,1 \times n_{op}}$ $n_{op} = \frac{d_{op} \times h_{op} \times 3600 \text{ s/h}}{t_{zyklus}}$

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	20.000.000 operations
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
Max. Actuating speed	0,2 m/s
notice	All indications about the cable section are including the conductor ferrules.

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	Creep circuit element
Number of auxiliary contacts	1 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
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



 active

 Normally-open contact

 Normally-closed contact



■ Contact closed

☐ Contact open

Setting range

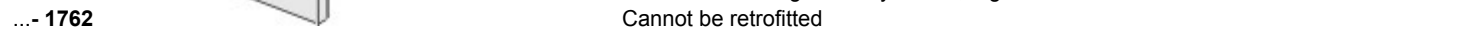
⑤ Break point

⌚ Positive opening sequence/- angle

VÖ adjustable range of NC contact

N after travel

Order example: AZ 16ZVRK-**2254**



...- 1762 Cannot be retrofitted

...- 1762 Cannot be retrofitted

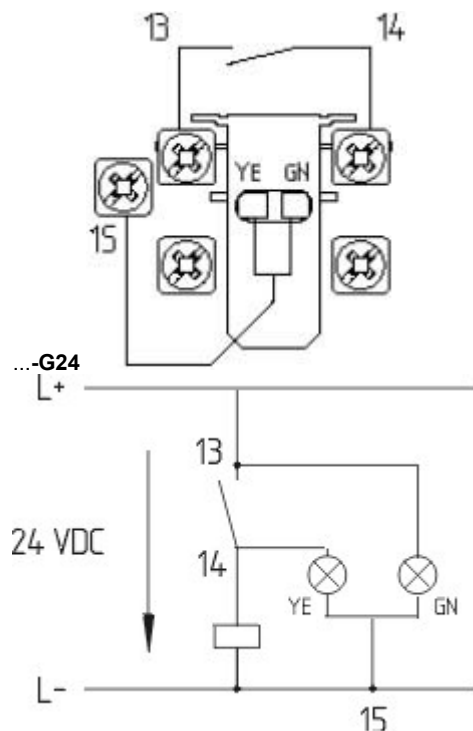
...- 1762 Cannot be retrofitted

...-1637

0,3 µm gold-plated contacts

...- M20

cable entries M20



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

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 (de) 396 kB, 18.02.2011

http://127.0.0.1/Bilddata/AZ/Pdf/Az15_16/bedien/DE/mrl_az15-16_de.pdf

Operating instructions and Declaration of conformity (en) 516 kB, 26.05.2010

http://127.0.0.1/Bilddata/AZ/Pdf/Az15_16/bedien/EN/mrl_az15-16_en.pdf

Operating instructions and Declaration of conformity (fr) 442 kB, 01.07.2010

http://127.0.0.1/Bilddata/AZ/Pdf/Az15_16/bedien/FR/mrl_az15-16_fr.pdf

Operating instructions and Declaration of conformity (pt) 436 kB, 24.06.2010

http://127.0.0.1/Bilddata/AZ/Pdf/Az15_16/bedien/pt/mrl_az15-16_pt.pdf

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

http://127.0.0.1/Bilddata/AZ/Pdf/Az15_16/bedien/ES/mrl_az15-16_es.pdf

Operating instructions and Declaration of conformity (br) 436 kB, 26.05.2010

http://127.0.0.1/Bilddata/AZ/Pdf/Az15_16/bedien/AZ_15_16_ACE/br/mrl_az15-16_br.pdf

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

http://127.0.0.1/Bilddata/AZ/Pdf/Az15_16/bedien/AZ_15_16_ACE/pt/mrl_az15-16_pt.pdf

Operating instructions and Declaration of conformity (jp) 479 kB, 15.03.2011

http://127.0.0.1/Bilddata/AZ/Pdf/Az15_16/bedien/JP/mrl_az15-16_jp.pdf

Operating instructions and Declaration of conformity (it) 330 kB, 27.11.2009

http://127.0.0.1/Bilddata/AZ/Pdf/Az15_16/bedien/IT/mrl_az15-16_it.pdf

Operating instructions and Declaration of conformity (nl) 431 kB, 14.09.2010

http://127.0.0.1/Bilddata/AZ/Pdf/Az15_16/bedien/NL/mrl_az15-16_nl.pdf

BG-test certificate (en) 197 kB, 01.06.2010

http://127.0.0.1/Bilddata/AZ/Pdf/Az15_16/baumuste/z_z15p02.pdf

BG-test certificate (de) 198 kB, 01.06.2010

http://127.0.0.1/Bilddata/AZ/Pdf/Az15_16/baumuste/z_z15p01.pdf

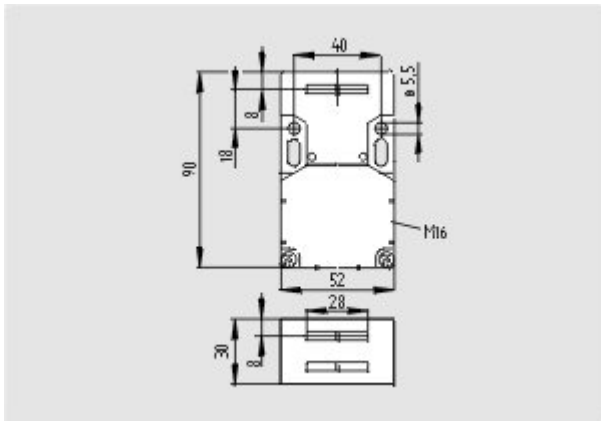
CCC certification (cn) 730 kB, 12.12.2006

http://127.0.0.1/Bilddata/AZ/Pdf/Az15_16/zertifikat/q_175p03.pdf

Gost certification (ru) 1 MB, 21.06.2007

http://127.0.0.1/Bilddata/AZ/Pdf/Az15_16/zertifikat/q_az1p01.pdf

Images



Dimensional drawing (basic component)

System components

Actuator

1083036 - AZ 15/16-B1



1092711 - AZ 15/16-B1-1747

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



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



1108276 - AZ 15/16-B1-2024



1108278 - AZ 15/16-B1-2024 WITH SLOT SEALING PLUG

- For protection against the ingress of coarse dirt



1111079 - AZ 15/16-B1-2053

- For interlocking of light to medium-weight guards



1111081 - AZ 15/16-B1-2053 WITH BALL LATCH

- For interlocking of light to medium-weight guards



1126793 - AZ 15/16-B1-2177

- For interlocking of light, unguided guards



1126794 - AZ 15/16-B1-2177 WITH CENTERING GUIDE

- For interlocking of light, unguided guards



1137408 - AZ 15/16-B1-2245

- Damps vibration on guard device



1095558 - AZ 15/16-B2

- For very small actuating radii in line with the plane of the actuator



1096091 - AZ 15/16-B2-1747

- For very small actuating radii in line with the plane of the actuator
- Suitable for retrofitting
- For play-free interlocking of light guards



1096089 - AZ 15/16-B2-1747 WITH MAGNETIC LATCH

- For very small 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





1095550 - AZ 15/16-B3

- For very small actuating radii at 90° to the plane of the actuator



1096090 - AZ 15/16-B3-1747 WITH MAGNETIC LATCH

- For very small 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



1096092 - AZ 15/16-B3-1747

- For very small actuating radii at 90° to the plane of the actuator
- Suitable for retrofitting
- For play-free interlocking of light guards



1137434 - AZ 15/16-B6

- For very small actuating radii in line with or at 90° to the plane of the actuator

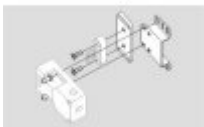
Door-handle system



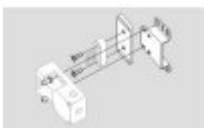
AZ 16-STS30

- Latching handle
- Suitable for all types of guard

Accessories



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



1150373 - Mounting set MS AZ 15/16 P

1089116 - Slot sealing plugs AZ 15/16-1476

- For protection against the ingress of coarse dirt



- To cover unused actuator slots
- Simple clip-in fitting



1115025 - Ball latch 2053-2

- Additional ball latch for stable latching of light to medium-weight guards
- For separate mounting on the guard



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

Mounting accessories



1135338 - TAMPERPROOF SCREWS M 5 x 12

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



1135339 - 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



1135340 - 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