



AZ16-12ZVRK-M20

- 3 cable entries M 20 x 1.5
- Large wiring compartment
- Thermoplastic enclosure
- Double-insulated
- 52 mm x 90 mm x 30 mm
- Universal coding
- Long life
- High level of contact reliability with low voltages and currents
- Insensitive to soiling
- Slotted holes for adjustment, circular holes for location

Data

Ordering data

Product type description	AZ16-12ZVRK-M20
Article number (order number)	161157373
eCl@ss number, version 12.0	27-27-26-02
eCl@ss number, version 11.0	27-27-26-02
eCl@ss number, version 9.0	27-27-26-02
ETIM number, version 7.0	EC002592
ETIM number, version 6.0	EC002592

Approvals - Standards

Certificates	TÜV cULus CCC
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General data

Standards	EN ISO 13849-1 EN ISO 14119 EN IEC 60947-5-1
Coding level according to EN ISO 14119	Low
Working principle	electromechanical
Enclosure material	Plastic, glass-fibre reinforced thermoplastic, self-extinguishing
Gross weight	115 g

General data - Features

Number of auxiliary contacts	1
Number of cable glands	3
Number of safety contacts	2

Safety classification

Standards	EN ISO 13849-1
Mission time	20 Year(s)

Safety classification - Safety outputs

B _{10D} Normally-closed contact (NC)	2,000,000 Operations
B _{10D} Normally open contact (NO)	1,000,000 Operations
Note (B _{10D} Normally open contact (NO))	at 10% I _e and ohmic load

Mechanical data

Mechanical life, minimum	1,000,000 Operations
Latching force	30 N
Positive break travel	8 mm

Positive break force per NC contact, minimum	10 N
Positive break force, minimum	20 N
Actuating speed, maximum	2 m/s
Mounting	Screws
Type of the fixing screws	2x M6

Mechanical data - Connection technique

Termination	Screw terminals
Cable entry	3 x M20 x 1,5
Cable section, minimum	0.25 mm ²
Cable section, maximum	2.5 mm ²
Note (Cable section)	All indications including the conductor ferrules.
Allowed type of cable	solid single-wire solid multi-wire flexible

Mechanical data - Dimensions

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

Ambient conditions

Degree of protection	IP67
Ambient temperature	-30_+80
Storage and transport temperature, minimum	-40 °C
Storage and transport temperature, maximum	+85 °C
Permissible installation altitude above sea level, maximum	2,000 m

Ambient conditions - Insulation values

Rated insulation voltage U_i 500 V

Rated impulse withstand voltage U_{imp} 6 kV

Overvoltage category III

Degree of pollution 3

Electrical data

Thermal test current 10 A

Required rated short-circuit current 1,000 A

Switching element NO contact, NC contact

Switching principle slow action, positive break NC contact

Switching frequency 4,000 /h

Material of the contacts, electrical Silver

Electrical data - Safety contacts

Voltage, Utilisation category AC-15 230 VAC

Current, Utilisation category AC-15 4 A

Voltage, Utilisation category DC-13 24 VDC

Current, Utilisation category DC-13 4 A

Electrical data - Auxiliary contacts

Voltage, Utilisation category AC-15 230 VAC

Current, Utilisation category AC-15 4 A

Voltage, Utilisation category DC-13 24 VDC

Current, Utilisation category DC-13 4 A

Scope of delivery

Ordering code

Product type description:
AZ 16-(1)ZV(2)K-(3)-(4)-(5)

(1)

without	1 NO contacts/1 NC contact
02	2 NC contact
03	3 NC contact
12	1 NO contact/2 NC contacts

(2)

without	Ejection force
R	Latching force 30 N

(3)

G24	with LED (only available for version with one NO and one NC contact)
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(4)

M16	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 (supplementary sheet/quick guide)

Mounting set MS-AZ 15/16 (138.2 kB, 05/10/2019, Revision C)

Operating instructions and Declaration of conformity

AZ 15/16 (411.7 kB, 07/08/2021, W)

Operating Instructions and Declaration of Conformity (Short)

Operating instructions in short form (For further information and languages, see the "Operation and assembly" tab) (410.7 kB, 10/26/2022)

CCC certification

AZ 15 / AZ 16 / AZ 17 / AZ 335 / AZ 355 (1.6 MB, 08/26/2022)

UL Certificate

AZ 10 / AZ 15 / AZ 16 / AZ 20 (413.2 kB, 08/01/2019)

SISTEMA-VDMA library

(659.5 kB, 03/23/2023)

Pictures

Product picture (catalogue individual photo)

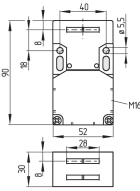


ID: kaz16f01

| 471.8 kB | .jpg | 165.806 x 268.817 mm - 470 x 762 px - 72 dpi

| 115.4 kB | .png | 74.083 x 119.944 mm - 210 x 340 px - 72 dpi

Dimensional drawing basic component



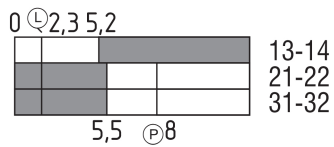
ID: laz16g01

| 28.1 kB | .cdr |

| 3.1 kB | .png | 74.083 x 51.506 mm - 210 x 146 px - 72 dpi

| 62.3 kB | .jpg | 352.778 x 245.886 mm - 1000 x 697 px - 72 dpi

Switch travel diagram



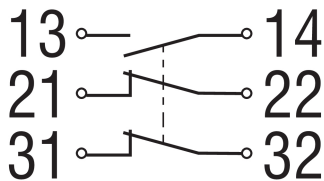
ID: kaz16s04

| 20.2 kB | .cdr |

| 2.1 kB | .png | 74.083 x 32.103 mm - 210 x 91 px - 72 dpi

| 65.6 kB | .jpg | 352.778 x 152.047 mm - 1000 x 431 px - 72 dpi

Diagram



ID: k2o1sk02

| 82.3 kB | .jpg | 352.778 x 193.322 mm - 1000 x 548 px - 72 dpi

| 3.2 kB | .png | 74.083 x 40.569 mm - 210 x 115 px - 72 dpi

System components

Actuator



AZ15/16-B1

- Straight actuator
- Particularly suitable for sliding doors



ACTUATOR AZ 15/16-B1-2245 KPL.

- Damps vibration on guard device
- Straight actuator with rubber mounting
- Particularly suitable for sliding doors



AZ15/16-B2

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



AZ15/16-B3

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



ACTUATOR AZ 15/16-B6 CPL.

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



AZ 15/16-B3-1747 RETROFIT KIT

- 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



AZ 15/16-B1-1747 RETROFIT KIT

- For play-free interlocking of light guards
- The magnetic latch can be easily fitted in any actuating plane
- Suitable for retrofitting
- Straight actuator with magnetic latch
- Particularly suitable for sliding doors



AZ 15/16-B1-2024 RETROFIT KIT

- For protection against the ingress of course dirt
- Straight actuator with slot lip-seal
- Particularly suitable for sliding doors



AZ 15/16-B1-2053 RETROFIT KIT

- For interlocking of light to medium-weight guards
- Straight actuator with ball latch
- Particularly suitable for sliding doors



AZ 15/16-B1-2177 RETROFIT KIT

- For interlocking of light, unguided guards



AZ 15/16-B2-1747 RETROFIT KIT

- 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



AZ 16-ST30-01



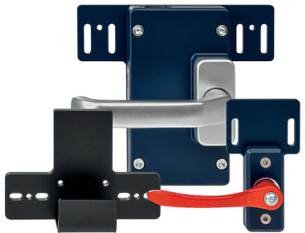
AZ 16-ST30-02



AZ 16-ST30-04



AZ 16-ST30-05



AZ 16-ST30-06



AZ 16-ST30-07



AZ 16-ST530-08

Accessories

Slot sealing plug AZ 15/16-1476



- For protection against the ingress of course dirt
- To cover unused actuator slots
- Simple clip-in fitting



MOUNTING SET AZ 15/16 P



SET BC 2053-2

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



MOUNTING SET AZ 15/16 R/P

LOCKOUT TAG 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

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The details and data referred to have been carefully checked. Images may diverge from original. Further technical data can be found in the manual. Technical amendments and errors possible.

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