



## AZ 16-12ZVRK-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	AZ 16-12ZVRK-M20
Article number (order number)	131157373
EAN (European Article Number)	8905236103643
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	IFA 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
Housing material	Plastic, glass-fibre reinforced thermoplastic, self-extinguishing
Gross weight	115 g

### General data - Features

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

### Safety classification

Standards	EN ISO 13849-1
Performance Level, up to	c
Category	1
B <sub>10D</sub> Normally-closed contact (NC)	2,000,000 Operations
Note	Electrical life on request.
B <sub>10D</sub> Normally-open contact (NO)	1,000,000 Operations
Note	at 10% I <sub>e</sub> and ohmic load
Mission time	20 Year(s)

### Safety classification - Fault exclusion

Please note:	Can be used when fault exclusion for dangerous damage to the 1-channel mechanism is permissible and sufficient protection against manipulation is guaranteed.
Performance Level, up to	d
Category	3

Note for 2-channel use and with suitable logic unit.

Mission time 20 Year(s)

### 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

Cable entry	3 x M20 x 1,5
Termination	Screw terminals
Cable section, minimum	0.25 mm <sup>2</sup>
Cable section, maximum	2.5 mm <sup>2</sup>
Note	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
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Ambient temperature	-30 ... +80 °C
Storage and transport temperature	-40 ... +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
Overtoltage category	III
Degree of pollution	3

### Electrical data

Thermal test current	10 A
Required rated short-circuit current	1,000 A
Switching element	1 NO contact, 2 NC contacts
Switching principle	slow action, positive break NC contact
Maximum 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- 230 VAC  
15

Current, Utilisation category AC- 4 A  
15

Voltage, Utilisation category DC- 24 VDC  
13

Current, Utilisation category DC- 4 A  
13

## Scope of delivery

Scope of delivery Slot covers for dust-proof covering of the openings not in use

## Ordering code

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

(1)

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

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<b>without</b>	Ejection force
<b>R</b>	Latching force 30 N

(3)

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<b>G24</b>	with LED (only available for version with one NO and one NC contact)
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<b>M16</b>	cable entry M16
<b>M20</b>	Cable entry M20

<b>ST</b>	Connector M12, 4 pole, bottom
<b>STL</b>	Connector M12, 4 pole, left
<b>STR</b>	Connector M12, 4 pole, right

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<b>2254</b>	Latching force 5 N
<b>1762</b>	Front mounting
<b>1637</b>	Gold-plated contacts

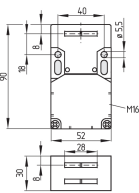
## Pictures

### Product picture (catalogue individual photo)



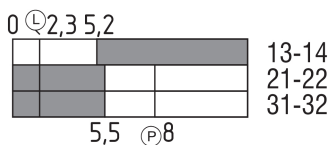
ID: kaz16f01  
 | 471.8 kB | .jpg | 165.806 x 268.817 mm - 470 x 762 px - 72 dpi  
 | 115.4 kB | .png | 74.083 x 119.944 mm - 210 x 340 px - 72 dpi  
 | 74.5 kB | .jpg | 76.2 x 123.472 mm - 216 x 350 px - 72 dpi

### Dimensional drawing basic component



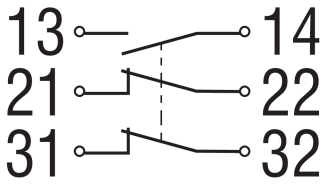
ID: 1az16g01  
 | 28.1 kB | .cdr |  
 | 3.1 kB | .png | 74.083 x 51.506 mm - 210 x 146 px - 72 dpi  
 | 62.3 kB | .jpg | 352.778 x 245.886 mm - 1000 x 697 px - 72 dpi

### 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

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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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