



## 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)	101157373
EAN (European Article Number)	4030661180038
eCl@ss number, Version 9.0	27-27-26-02
eCl@ss number, Version 11.0	27-27-26-02
eCl@ss number, Version 12.0	27-27-26-02
ETIM number, version 7.0	EC002592
ETIM number, version 6.0	EC002592

### Approval - Standards

Certificates	TÜV cULus CCC EAC
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## General data

Standards	EN 60947-5-1 EN ISO 13849-1 EN ISO 14119
Coding level according to ISO 14119	Low
Enclosure material	Plastic, glass-fibre reinforced thermoplastic, self-extinguishing
Material of the contacts, electrical	Silver
Gross weight	115 g

## General data - Features

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

## Safety appraisal

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

## Safety appraisal - Safety outputs

B <sub>10D</sub> Normally-closed contact (NC)	2,000,000 Operations
B <sub>10D</sub> Normally open contact (NO)	1,000,000 Operations
Note (B <sub>10D</sub> Normally open contact (NO))	at 10% I <sub>e</sub> and ohmic load

## Mechanical data

Mechanical life, minimum	1,000,000 Operations
Latching force	30 N
positive break travel	8 mm
Positive breaking force per NC contact, minimum	10 N

Actuating speed, maximum	2 m/s
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### Mechanical data - Connection technique

Terminal Connector	Screw terminals
Cable entry	3 x M20 x 1,5
Cable section, minimum	0.25 mm <sup>2</sup>
Cable section, maximum	2.5 mm <sup>2</sup>
Note (Cable section)	All indications including the conductor ferrules.

### 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, minimum	-30 °C
Ambient temperature, maximum	+80 °C
Storage and transport temperature, minimum	-40 °C
Storage and transport temperature, maximum	+85 °C
Permissible installation height above sea level, maximum	2,000 m

### Ambient conditions - Insulation value

Rated insulation voltage $U_i$	500 V
Rated impulse withstand voltage $U_{imp}$	6 kV
Overvoltage category	III
Degree of pollution to IEC/EN 60664-1	3

## Electrical data

Thermal test current	10 A
Required rated short-circuit current to EN 60947-5-1	1,000 A
Switching element	NO contact, NC contact
Switching principle	slow action, positive break NC contact
Switching frequency	4,000 /h

## 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

Included in delivery	Actuators must be ordered separately.
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## 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

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<b>G24</b>	with LED (only available for version with one NO and one NC contact)
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(4)

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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)**

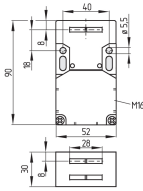


ID: kaz16f01

| 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

## Dimensional drawing basic component



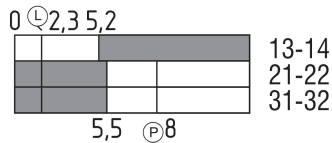
ID: 1az16g01

| 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



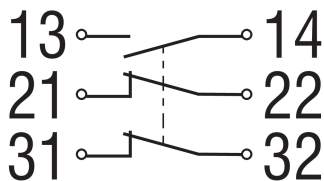
ID: kaz16s04

| 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

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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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