



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 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	cULus
	CCC

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 _{10D} Normally-closed contact (NC)	2,000,000 Operations
Note	Electrical life on request.
B _{10D} Normally-open contact (NO)	1,000,000 Operations
Note	at 10% I _e 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.
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Mission time	20 Year(s)
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Mechanical data

Mechanical lifetime, minimum	1,000,000 Operations
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Latching force	30 N
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Positive break travel	8 mm
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Positive break force per NC contact, minimum	10 N
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Positive break force, minimum	20 N
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Actuating speed, maximum	2 m/s
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Mounting	Screws
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Type of the fixing screws	2x M6
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Mechanical data - Connection technique

Type of electrical connection	Screw terminals M20 x 1.5
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Cable entry	3 x M16 x 1,5
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Termination	Screw terminals
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Cable section, minimum	0.25 mm ²
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Cable section, maximum	2.5 mm ²
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Note	All indications including the conductor ferrules.
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Allowed type of cable	solid single-wire solid multi-wire flexible
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Mechanical data - Dimensions

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

Degree of protection	IP67
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
Overvoltage 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
Maximale Schalthäufigkeit	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

Scope of delivery Actuator must be ordered separately.

Ordering code

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

(1)	
without	1 NO contact/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)
(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

Pictures

Product picture (catalogue individual photo)



ID: kaz16f01

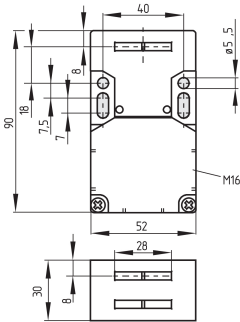
| 919.0 kB | .jpg | 352.778 x 571.853 mm - 1000 x 1621 px - 72 dpi

| 130.4 kB | .png | 74.083 x 119.944 mm - 210 x 340 px - 72 dpi

| 47.6 kB | .png | 74.083 x 74.083 mm - 210 x 210 px - 72 dpi

| 10.0 MB | .png | 166.557 x 269.99 mm - 2000 x 3242 px - 305 dpi

Dimensional drawing basic component

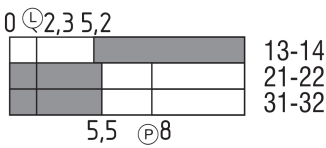


ID: 1az16g01

| 157.8 kB | .jpg | 352.425 x 473.428 mm - 999 x 1342 px - 72 dpi

| 10.0 kB | .png | 73.731 x 99.131 mm - 209 x 281 px - 72 dpi

Switch travel diagram



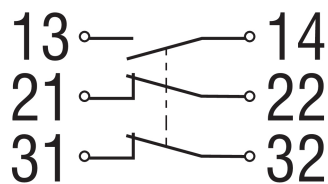
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| 20.2 kB | .cdr |

| 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

Schmersal Ltd., Sparrowhawk Close, WR14 1GL Malvern
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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