DATASHEET



AZ 16-02ZVK-ST

- Connector M12, 4-pole
- 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 16-02ZVK-ST
Article number (order number)	101143123
EAN (European Article Number)	4030661127200
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	120 g

General data - Features

Ejection force	Yes
Number of actuating directions	3
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.
Mission time	20 Year(s)

Mechanical data

Mechanical life, minimum	1,000,000 Operations
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

Connector position	Bottom
Cable entry	M12 (A-coding)
Termination	Connector plug M12, 4-pole, (A-coding)

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 °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
Rated impulse withstand voltage, connector 4-pole	2.5 kV

Electrical data

Thermal test current	10 A
Required rated short-circuit current	1,000 A
Switching element	2 NC contact
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
Note, Utilisation category DC-13	Connector 4-pole

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
Note, Utilisation category DC-13	Connector 4-pin

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)

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

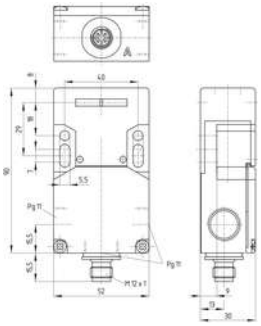
Pictures

Product picture (catalogue individual photo)



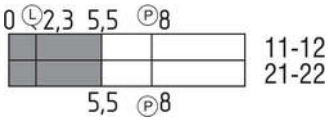
ID: kaz16f02
| 177.3 kB | .jpg | 137.936 x 230.717 mm - 391 x 654 px - 72 dpi
| 96.4 kB | .png | 74.083 x 123.825 mm - 210 x 351 px - 72 dpi
| 48.8 kB | .jpg | 73.731 x 123.472 mm - 209 x 350 px - 72 dpi

Dimensional drawing basic component



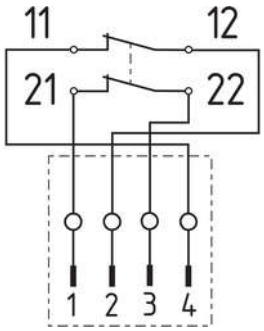
ID: kaz16g02
| 37.1 kB | .cdr |
| 6.5 kB | .png | 74.083 x 93.133 mm - 210 x 264 px - 72 dpi
| 200.1 kB | .jpg | 352.778 x 443.794 mm - 1000 x 1258 px - 72 dpi

Switch travel diagram



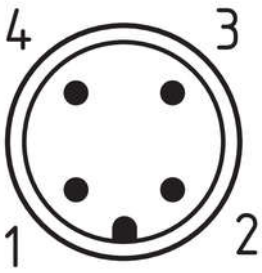
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| 20.1 kB | .cdr |
| 2.1 kB | .png | 74.083 x 26.106 mm - 210 x 74 px - 72 dpi
| 56.2 kB | .jpg | 352.778 x 123.472 mm - 1000 x 350 px - 72 dpi

Diagram



ID: kaz16k06
| 18.0 kB | .cdr |
| 116.5 kB | .jpg | 352.425 x 437.444 mm - 999 x 1240 px - 72 dpi
| 3.7 kB | .png | 74.083 x 91.722 mm - 210 x 260 px - 72 dpi

Contact arrangement



ID: km12-k4c
| 4.2 kB | .png | 74.083 x 74.083 mm - 210 x 210 px - 72 dpi
| 113.3 kB | .jpg | 352.778 x 352.778 mm - 1000 x 1000 px - 72 dpi

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.