



## AZ 17-11ZK

- cable gland M16
- 30 mm x 60 mm x 30 mm
- Thermoplastic enclosure
- Double-insulated
- Long life
- small body
- Universal coding
- High level of contact reliability with low voltages and currents
- Insensitive to soiling
- 8 actuating planes

## Data

### Ordering data

|                               |               |
|-------------------------------|---------------|
| Product type description      | AZ 17-11ZK    |
| Article number (order number) | 101121960     |
| EAN (European Article Number) | 4030661049670 |
| 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<br>CCC |
|--------------|--------------|

### General data

|                                        |                                                                   |
|----------------------------------------|-------------------------------------------------------------------|
| Standards                              | EN ISO 13849-1<br>EN ISO 14119<br>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                           | 85 g                                                              |

### General data - Features

|                                |   |
|--------------------------------|---|
| Number of actuating directions | 2 |
| Number of auxiliary contacts   | 1 |
| Number of safety contacts      | 1 |
| Number of cable glands         | 1 |

### 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 20% ohmic contact 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 lifetime, minimum                                             | 1,000,000 Operations |
| Latching force                                                           | 5 N                  |
| Positive break travel                                                    | 11 mm                |
| Positive break force per NC contact, minimum                             | 17 N                 |
| Actuating speed, maximum                                                 | 2 m/s                |
| Mounting                                                                 | Screws               |
| Type of the fixing screws                                                | 2x M4                |
| Tightening torque of the fastening screws for the housing cover, minimum | 0.7 Nm               |
| Tightening torque of the fastening screws for the housing cover, maximum | 1 Nm                 |
| Note                                                                     | Torx T10             |

### Mechanical data - Connection technique

|                                   |                           |
|-----------------------------------|---------------------------|
| Cable entry                       | M16 x 1.5                 |
| Termination                       | IDC method of termination |
| Authorised cable section, minimum | 4 mm                      |
| Authorised cable section, maximum | 8 mm                      |
| Cable section, minimum            | 0.75 mm <sup>2</sup>      |
| Cable section, maximum            | 1 mm <sup>2</sup>         |
| Allowed type of cable             | flexible                  |

### Mechanical data - Dimensions

|                  |       |
|------------------|-------|
| Length of sensor | 30 mm |
| Width of sensor  | 30 mm |
| Height of sensor | 60 mm |

## Ambient conditions

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

## Ambient conditions - Insulation values

|                                           |         |
|-------------------------------------------|---------|
| Rated insulation voltage $U_i$            | 250 VAC |
| Rated impulse withstand voltage $U_{imp}$ | 4 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, 1 NC contacts            |
| Note (Switching element)             | with double break                      |
| Switching principle                  | slow action, positive break NC contact |
| Maximale Schalthäufigkeit            | 2,000 /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     |

## Other data

|                     |                                                                |
|---------------------|----------------------------------------------------------------|
| Note (applications) | sliding safety guard<br>removable guard<br>hinged safety guard |
|---------------------|----------------------------------------------------------------|

## Scope of delivery

|                   |                                                                                                      |
|-------------------|------------------------------------------------------------------------------------------------------|
| Scope of delivery | Actuator must be ordered separately.<br>Slot cover for dust-proof covering of the opening not in use |
|-------------------|------------------------------------------------------------------------------------------------------|

## Note

|                |                                                                                                                                        |
|----------------|----------------------------------------------------------------------------------------------------------------------------------------|
| Note (General) | This type termination (IDC) method enables simple connection of flexible conductors without the need for the use of conductor ferrules |
|----------------|----------------------------------------------------------------------------------------------------------------------------------------|

## Ordering code

Product type description:  
AZ 17-(1)Z(2)K-(3)-(4)-(5)

|                |                           |
|----------------|---------------------------|
| (1)            |                           |
| <b>11</b>      | 1 NO contact/1 NC contact |
| <b>02</b>      | 2 NC contact              |
| (2)            |                           |
| <b>without</b> | Latching force 5 N        |
| <b>R</b>       | Latching force 30 N       |
| (3)            |                           |
| <b>without</b> | M16 cable gland           |
| <b>2243</b>    | Front cable entry         |

|        |                       |
|--------|-----------------------|
| 2243-1 | Rear cable entry      |
| ST     | M12 connector, 4 pole |
| (4)    |                       |
| 1637   | Gold-plated contacts  |
| (5)    |                       |
| 5M     | Cable length 5 m      |
| 6M     | Cable length 6 m      |

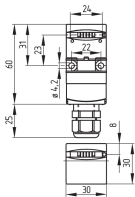
## Pictures

### Product picture (catalogue individual photo)



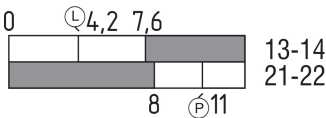
ID: kaz17f16  
 | 848.7 kB | .jpg | 352.778 x 843.844 mm - 1000 x 2392 px - 72 dpi  
 | 146.5 kB | .png | 74.083 x 177.094 mm - 210 x 502 px - 72 dpi  
 | 85.1 kB | .png | 51.506 x 123.472 mm - 146 x 350 px - 72 dpi

### Dimensional drawing basic component



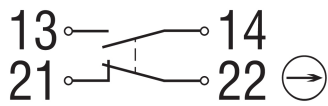
ID: 1az17g01  
 | 32.7 kB | .cdr |  
 | 3.7 kB | .png | 74.083 x 51.858 mm - 210 x 147 px - 72 dpi  
 | 67.0 kB | .jpg | 352.778 x 247.297 mm - 1000 x 701 px - 72 dpi

### Switch travel diagram



ID: kaz17s01  
 | 19.6 kB | .cdr |  
 | 2.0 kB | .png | 74.083 x 26.458 mm - 210 x 75 px - 72 dpi  
 | 52.6 kB | .jpg | 352.778 x 125.236 mm - 1000 x 355 px - 72 dpi

### Diagram



ID: kaz17k07

| 15.8 kB | .cdr |

| 50.1 kB | .jpg | 352.778 x 103.011 mm - 1000 x 292 px - 72 dpi

| 2.7 kB | .png | 74.083 x 21.519 mm - 210 x 61 px - 72 dpi

## Assembly example



ID: kaz17m02

| 210.2 kB | .cdr |

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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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