



## AZ 17-02ZK

- 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 17-02ZK    |
| Article number (order number) | 131121961     |
| EAN (European Article Number) | 8905236104466 |
| 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 safety contacts      | 2 |
| 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. |
| 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                                                           | 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 M5                |
| 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            | M 16 x 1.5                |
| Termination            | IDC method of termination |
| 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<br>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                    | 2 NC contact                           |
| Switching principle                  | slow action, positive break NC contact |
| Maximum switching frequency          | 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     |

### 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 sealing plugs<br>Slot cover for dust-proof covering of the opening not in use |
|-------------------|----------------------------------------------------------------------------------------------------------------------------|

### Note

|                |                                                                                                                                       |
|----------------|---------------------------------------------------------------------------------------------------------------------------------------|
| Note (General) | This type termination (IDC) method enables simple connetion 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 contacts/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          |
| <b>2243-1</b>  | Rear cable entry           |
| <b>ST</b>      | M12 connector, 4 pole      |
| (4)            |                            |
| <b>1637</b>    | Gold-plated contacts       |
| (5)            |                            |
| <b>5M</b>      | Cable length 5 m           |
| <b>6M</b>      | Cable length 6 m           |

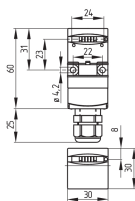
### Pictures

Product picture (catalogue individual photo)



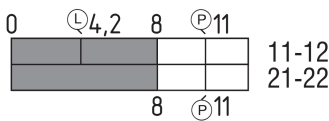
ID: kaz17f16  
| 670.2 kB | .jpg | 221.192 x 529.167 mm - 627 x 1500 px - 72 dpi  
| 125.7 kB | .png | 74.083 x 177.094 mm - 210 x 502 px - 72 dpi  
| 38.2 kB | .jpg | 51.506 x 123.472 mm - 146 x 350 px - 72 dpi

Dimensional drawing basic component



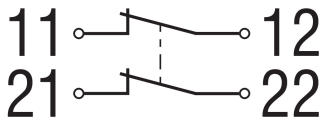
ID: 1az17g01  
| 32.7 kB | .cdr |  
| 3.7 kB | .png | 74.083 x 51.858 mm - 210 x 147 px - 72 dpi  
| 67.0 kB | .jpg | 352.778 x 247.297 mm - 1000 x 701 px - 72 dpi

Switch travel diagram



ID: kaz17s02  
| 20.1 kB | .cdr |  
| 2.0 kB | .png | 74.083 x 26.458 mm - 210 x 75 px - 72 dpi  
| 55.6 kB | .jpg | 352.778 x 125.236 mm - 1000 x 355 px - 72 dpi

Diagram



ID: k2o--k01  
| 48.8 kB | .jpg | 352.778 x 125.236 mm - 1000 x 355 px - 72 dpi  
| 2.3 kB | .png | 74.083 x 26.458 mm - 210 x 75 px - 72 dpi