



## AZ 17-02ZK-ST

- Connector M12 x 1, 4-pole
- 30 mm x 78.5 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-ST |
| Article number (order number) | 101140773     |
| EAN (European Article Number) | 4030661119724 |
| 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 | IFA   |
|              | cULus |
|              | CCC   |
|              | UKCA  |

## 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                           | 80 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                |

### Mechanical data - Connection technique

|             |                                        |
|-------------|----------------------------------------|
| Termination | Connector plug M12, 4-pole, (A-coding) |
|-------------|----------------------------------------|

### Mechanical data - Dimensions

|                  |         |
|------------------|---------|
| Length of sensor | 30 mm   |
| Width of sensor  | 30 mm   |
| Height of sensor | 78.5 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                   | 4 kV   |
| $U_{imp}$                                         |        |
| 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          | 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              |
| Note, Utilisation category DC-13    | Connector 4-pole |

### Electrical data - Auxiliary contacts

|                                  |                 |
|----------------------------------|-----------------|
| Note, Utilisation category DC-13 | Connector 4-pin |
|----------------------------------|-----------------|

### 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) | Individual coding available on request |
|----------------|----------------------------------------|

## 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 |
|-----------|------------------|

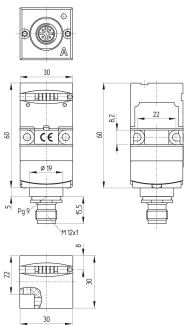
Pictures

Product picture (catalogue individual photo)



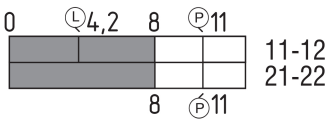
ID: kaz17f17  
| 651.2 kB | .jpg | 221.192 x 478.367 mm - 627 x 1356 px - 72 dpi  
| 106.0 kB | .png | 74.083 x 160.161 mm - 210 x 454 px - 72 dpi  
| 45.6 kB | .jpg | 57.15 x 123.472 mm - 162 x 350 px - 72 dpi

Dimensional drawing basic component



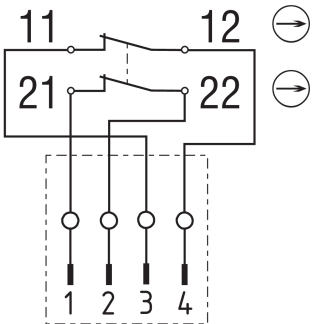
ID: kaz17g03  
| 44.7 kB | .cdr |  
| 8.1 kB | .png | 74.083 x 131.586 mm - 210 x 373 px - 72 dpi  
| 265.7 kB | .jpg | 352.778 x 626.533 mm - 1000 x 1776 px - 72 dpi

Switch travel diagram



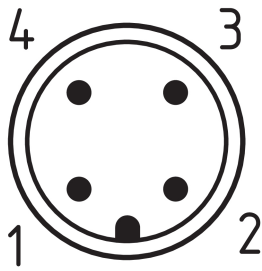
ID: kaz17s02  
| 20.1 kB | .cdr |  
| 2.0 kB | .png | 74.083 x 26.458 mm - 210 x 75 px - 72 dpi  
| 55.6 kB | .jpg | 352.778 x 125.236 mm - 1000 x 355 px - 72 dpi

Diagram



ID: kaz17k04  
| 18.8 kB | .cdr |  
| 105.4 kB | .jpg | 352.778 x 369.006 mm - 1000 x 1046 px - 72 dpi  
| 4.1 kB | .png | 73.731 x 77.258 mm - 209 x 219 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

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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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