

Plastic-bodied  
interlocking safety switch

SKC  
SK

Protection class IP 65

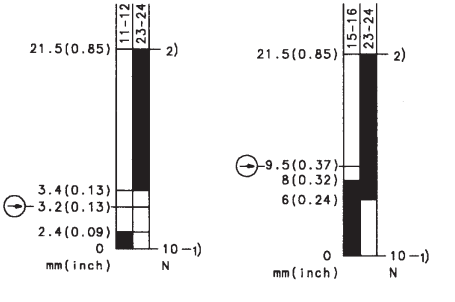
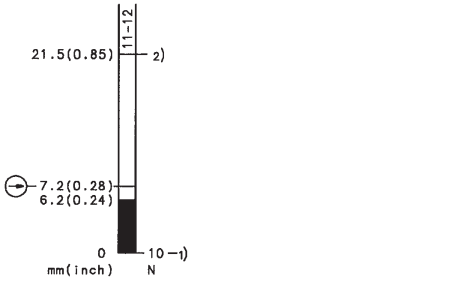
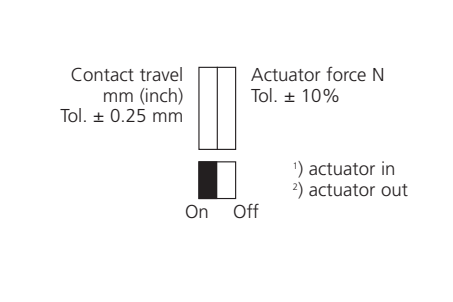


|                                                 |
|-------------------------------------------------|
| Designation                                     |
| <b>Part number</b>                              |
| Circuit diagram                                 |
| ⊕ Forced disconnect to<br>IEC 947-5-1 chapter 3 |
| Za: not galvanically separated contacts         |
| Zb: galvanically separated contacts             |
| Slow make & break/snap-action                   |
| Internal seal (iw)/external seal (w)            |

|                     |
|---------------------|
| SKC-A1Z M           |
| <b>601.6169.039</b> |
|                     |
| ⊕ Zb                |
| ●/-                 |
| iw                  |

|                     |
|---------------------|
| SK-U1Z M            |
| <b>601.6119.016</b> |
|                     |
| ⊕ Zb                |
| ●/-                 |
| iw                  |

|                     |
|---------------------|
| SK-UV1Z M           |
| <b>601.6139.034</b> |
|                     |
| ⊕ Zb                |
| ●/-                 |
| iw                  |



|                                               |           |
|-----------------------------------------------|-----------|
| Voltage                                       | max.      |
| Permanent current                             | max.      |
| In-rush current complies with standards       |           |
| IEC 947-5-1 AC 15/DC 13                       |           |
| Switching frequency                           | max.      |
| Mechanical life – number of switching actions |           |
| Operating temperature                         | min./max. |

|                     |
|---------------------|
| 500 V AC            |
| 10 A                |
| ●                   |
| 30/min.             |
| 1 x 10 <sup>6</sup> |
| -30 °C/+80 °C       |
| -22 °F/+176 °F      |

|                     |
|---------------------|
| 500 V AC            |
| 10 A                |
| ●                   |
| 30/min.             |
| 1 x 10 <sup>6</sup> |
| -30 °C/+80 °C       |
| -22 °F/+176 °F      |

|                     |
|---------------------|
| 500 V AC            |
| 10 A                |
| ●                   |
| 30/min.             |
| 1 x 10 <sup>6</sup> |
| -30 °C/+80 °C       |
| -22 °F/+176 °F      |

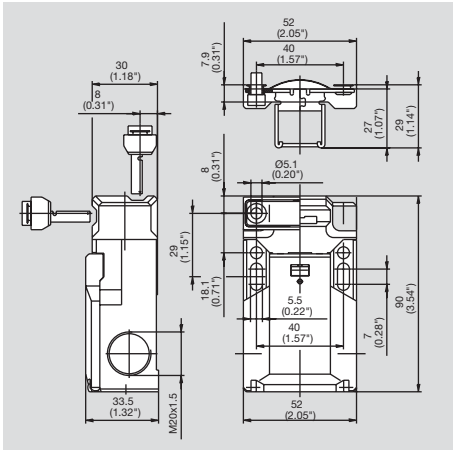
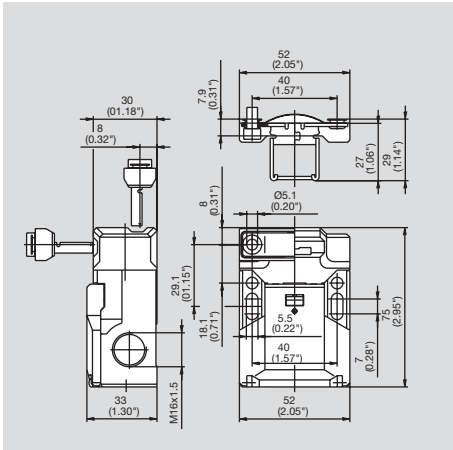
|                                   |
|-----------------------------------|
| Approvals                         |
| Weight                            |
| Delivery: ex-stock/built to order |

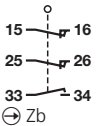
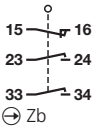
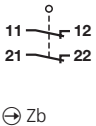
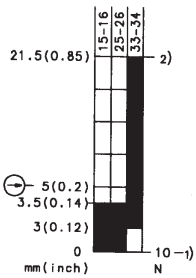
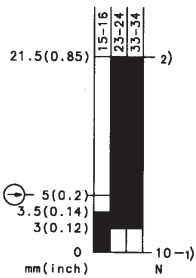
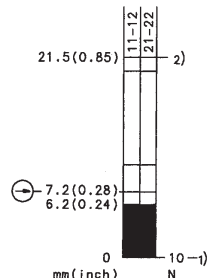
|                 |
|-----------------|
| BG, UL, CSA     |
| 0.11 kg/0.24 lb |
| ●/-             |

|                 |
|-----------------|
| BG, UL, CSA     |
| 0.13 kg/0.29 lb |
| ●/-             |

|                 |
|-----------------|
| BG, UL, CSA     |
| 0.13 kg/0.29 lb |
| ●/-             |

All dimensions in mm (inch)



|                                                                                    |                                                                                    |                                                                                    |
|------------------------------------------------------------------------------------|------------------------------------------------------------------------------------|------------------------------------------------------------------------------------|
| SK-UV15Z M                                                                         | SK-UV16Z M                                                                         | SK-A2Z M                                                                           |
| <b>601.6169.026</b>                                                                | <b>601.6169.027</b>                                                                | <b>601.6169.036</b>                                                                |
|   |   |   |
| ●/-                                                                                | ●/-                                                                                | ●/-                                                                                |
| iV                                                                                 | iV                                                                                 | iV                                                                                 |
|  |  |  |
| 400 V AC                                                                           | 400 V AC                                                                           | 500 V AC                                                                           |
| 6 A                                                                                | 6 A                                                                                | 10 A                                                                               |
| ●                                                                                  | ●                                                                                  | ●                                                                                  |
| 30/min.                                                                            | 30/min.                                                                            | 30/min.                                                                            |
| 1 x 10 <sup>6</sup>                                                                | 1 x 10 <sup>6</sup>                                                                | 1 x 10 <sup>6</sup>                                                                |
| -30 °C/+80 °C                                                                      | -30 °C/+80 °C                                                                      | -30 °C/+80 °C                                                                      |
| -22 °F/+176 °F                                                                     | -22 °F/+176 °F                                                                     | -22 °F/+176 °F                                                                     |
| BG, UL, CSA                                                                        | BG, UL, CSA                                                                        | BG, UL, CSA                                                                        |
| 0.13 kg/0.29 lb                                                                    | 0.13 kg/0.29 lb                                                                    | 0.13 kg/0.29 lb                                                                    |
| ●/-                                                                                | ●/-                                                                                | ●/-                                                                                |

# Actuator selection table

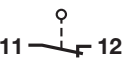
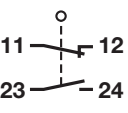
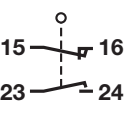
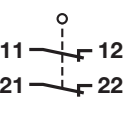
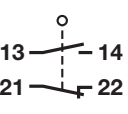
## SKC/SK

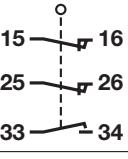
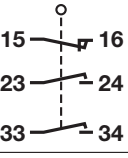
Safety switch  
DIN EN 60947-5-1

-  Forced disconnection of NC contacts
- Galvanically separated contacts according to Zb form

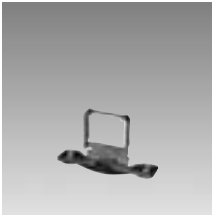
### Approvals

- UL, CSA
- BG

| Standard models       | Actuator        | Contact diagram                                                                     |
|-----------------------|-----------------|-------------------------------------------------------------------------------------|
| Single & double poles | retention force |                                                                                     |
| SKC-A1Z               | 10N             |    |
| SKC-A1Z F30           | 30N             |                                                                                     |
| SKC-A1Z Fi100         | 100N            |                                                                                     |
| SK-U1Z                | 10N             |   |
| SK-U1Z F30            | 30N             |                                                                                     |
| SK-U1Z Fi100          | 100N            |                                                                                     |
| SK-UV1Z               | 10N             |  |
| SK-UV1Z F30           | 30N             |                                                                                     |
| SK-UV1Z Fi100         | 100N            |                                                                                     |
| SK-A2Z                | 10N             |  |
| SK-A2Z F30            | 30N             |                                                                                     |
| SK-A2Z Fi100          | 100N            |                                                                                     |
| SK-SU1Z               | 10N             |  |
| SK-SU1Z F30           | 30N             |                                                                                     |
| SK-SU1Z Fi100         | 100N            |                                                                                     |

| Standard models | Actuator        | Contact diagram                                                                     |
|-----------------|-----------------|-------------------------------------------------------------------------------------|
| Three poles     | retention force |                                                                                     |
| SK-UV15Z        | 10N             |  |
| SK-UV15Z F30    | 30N             |                                                                                     |
| SK-UV15Z Fi100  | 100N            |                                                                                     |
| SK-UV16Z        | 10N             |  |
| SK-UV16Z F30    | 30N             |                                                                                     |
| SK-UV16Z Fi100  | 100N            |                                                                                     |

○ Technically possible (on request)  
– Not available



### Actuator M

- Metal
- Stainless steel



### Actuator P

- Thermoplastic
- Polyamide

| Part number     | Part number  |
|-----------------|--------------|
| Designation     | Designation  |
| 601.6169.039    | 601.6169.054 |
| SKC-A1Z M       | SKC-A1Z P    |
| ○               | ○            |
| 601.6169.003    | –            |
| SKC-A1Z Fi100 M |              |
| 601.6119.016    | 601.6119.035 |
| SK-U1Z M        | SK-U1Z P     |
| 611.6119.109    | ○            |
| SK-U1Z F30 M    |              |
| 601.6119.001    | –            |
| SK-U1Z Fi100 M  |              |
| 601.6139.034    | ○            |
| SK-UV1Z M       | ○            |
| ○               | ○            |
| ○               | –            |
| 601.6169.036    | ○            |
| SK-A2Z M        |              |
| 601.6169.053    | ○            |
| SK-A2Z F30 M    |              |
| 601.6169.024    | –            |
| SK-A2Z Fi100 M  |              |
| ○               | ○            |
| ○               | ○            |
| ○               | –            |

| Part number      | Part number |
|------------------|-------------|
| Designation      | Designation |
| 601.6169.026     | ○           |
| SK-UV15Z M       |             |
| 601.6169.061     | ○           |
| SK-UV15Z F30 M   |             |
| 601.6169.025     | –           |
| SK-UV15Z Fi100 M |             |
| 601.6169.027     | ○           |
| SK-UV16Z M       |             |
| ○                | ○           |
| ○                | –           |



### Actuator F

- Spring loaded to accommodate over-travel
- Stainless steel or polyamide



### Actuator MRU

- Adjustable horizontally & vertically
- Flexible
- Stainless steel
- Spring loaded to accommodate overtravel

| Part number         | Part number         |
|---------------------|---------------------|
| Designation         | Designation         |
| ○                   | <b>601.6169.087</b> |
| ○                   | SKC-A1Z MRU         |
| ○                   | ○                   |
| ○                   | ○                   |
| <b>601.6119.074</b> | <b>601.6119.084</b> |
| SK-U1Z PF           | SK-U1Z MRU          |
| ○                   | ○                   |
| ○                   | ○                   |
| ○                   | ○                   |
| ○                   | ○                   |
| ○                   | ○                   |
| ○                   | ○                   |
| ○                   | <b>601.6169.085</b> |
| ○                   | SK-A2Z MRU          |
| ○                   | ○                   |
| ○                   | <b>601.6169.032</b> |
| ○                   | SK-A2Z Fi100 MRU    |
| ○                   | ○                   |
| ○                   | ○                   |
| ○                   | ○                   |

| Part number         | Part number         |
|---------------------|---------------------|
| Designation         | Designation         |
| <b>601.6169.063</b> | <b>601.6169.086</b> |
| SK-UV15Z MF         | SK-UV15Z MRU        |
| ○                   | ○                   |
| ○                   | ○                   |
| ○                   | ○                   |
| ○                   | ○                   |
| ○                   | ○                   |
| ○                   | ○                   |

#### Technical data Standard models single & double poles

Insulation voltage:  
 $U_i = 500 \text{ V}$

Thermal constant current:  
 $I_{th} = 10 \text{ A}$

Switching frequency:  
Max. 30/min.

Mechanical life:  
 $1 \times 10^6$  cycles

Operating temperature:  
 $-30 \text{ }^\circ\text{C}/+80 \text{ }^\circ\text{C}$   
 $-22 \text{ }^\circ\text{F}/+176 \text{ }^\circ\text{F}$

Weight:  
0.13 kg/0.29 lbs

#### Technical data Standard models three poles

Insulation voltage:  
 $U_i = 400 \text{ V}$

Thermal constant current:  
 $I_{th} = 6 \text{ A}$

Switching frequency:  
Max. 30/min.

Mechanical life:  
 $1 \times 10^6$  cycles

Operating temperature:  
 $-30 \text{ }^\circ\text{C}/+80 \text{ }^\circ\text{C}$   
 $-22 \text{ }^\circ\text{F}/+176 \text{ }^\circ\text{F}$

Weight:  
0.13 kg/0.29 lbs

#### ● Forced Ejection (FE):

The actuator mechanism is spring loaded to forcibly eject the actuator.

#### ● Actuator Retention (F 30, Fi 100)

This model retains the actuator with the indicated force in Newtons.

#### ● MRU Actuator:

This actuator is spring mounted to accommodate some misalignment as well as over travel.

#### Important note:

To ensure safety integrity, actuators should only be purchased together with the safety switch.