

# Plastic-bodied interlocking safety switch

**SKC**  
**SK**

Protection class IP 65

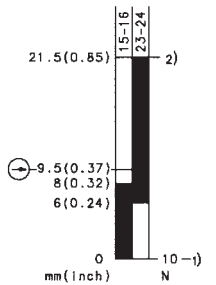
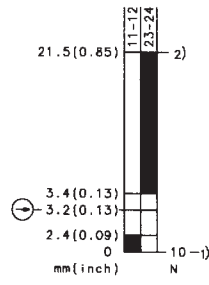
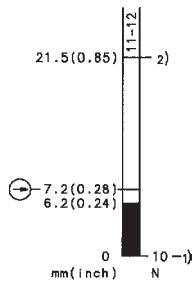
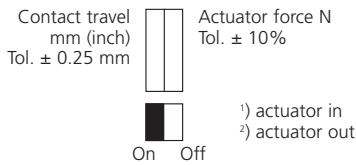


Designation  
**Part number**  
Circuit diagram  
⊕ Forced disconnect to IEC 947-5-1 chapter 3  
Za: not galvanically separated contacts  
Zb: galvanically separated contacts  
Slow make & break/snap-action  
Internal seal (iw)/external seal (w)

SKC-A1Z M  
**601.6169.039**  
  
⊕ Zb  
●/-  
iw

SK-U1Z M  
**601.6119.016**  
  
⊕ Zb  
●/-  
iw

SKC-UV1Z M  
**601.6139.034**  
  
⊕ 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

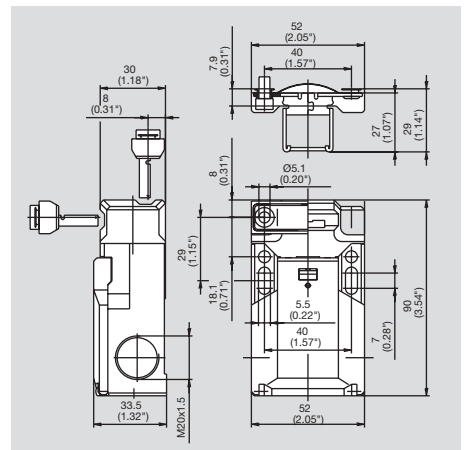
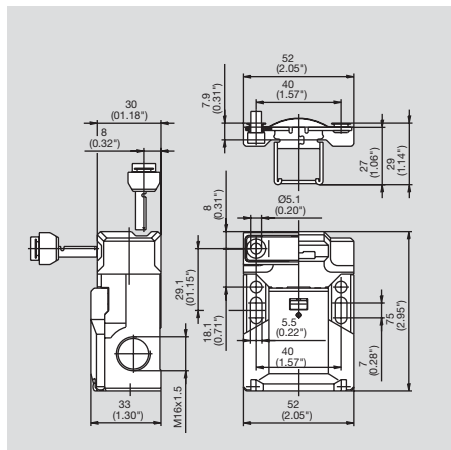
500 V AC  
10 A  
●  
30/min.  
1 x 10<sup>6</sup>  
-30 °C/+80 °C  
-22 °F/+176 °F

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  
●/-

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>
●/-	●/-	●/-
iw	iw	iw
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

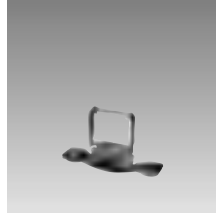
## SKC/SK

Safety switch  
DIN EN 60947-5-1

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

### Approvals

- UL, CSA
- BG



### Actuator M

- Metal
- Stainless steel



### Actuator P

- Thermoplastic
- Polyamide

Standard models	Actuator retention force	Contact diagram
Single & double poles		
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	

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

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

Part number	Part number
Designation	Designation
<b>601.6169.026</b>	○
SK-UV15Z M	
<b>601.6169.061</b>	○
SK-UV15Z F30 M	
<b>601.6169.025</b>	-
SK-UV15Z Fi100 M	
<b>601.6169.027</b>	○
SK-UV16Z M	
○	○
○	-

○ Technically possible (on request)  
- Not available



### 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.