

Safety Switches with Separate Actuator

SKC



In terms of lengths, the SKC safety position switch is the 15 mm shorter variant of the SK. This makes it the right choice for confined installation conditions.

The SKC otherwise offers the same advantages as the SK: Industrial standard with particular emphasis on safety, personal protection, variable actuator head with two actuator openings.

Other decisive advantages include:

- **Different actuating forces:**

Corresponding to your specific application, in addition to the standard 10 N, you can also choose an actuating force of 5, 20, 30 or 50 N.

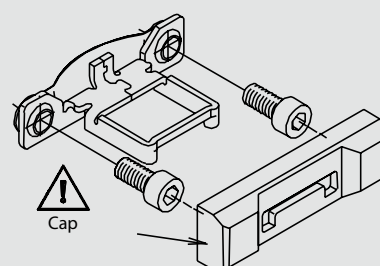
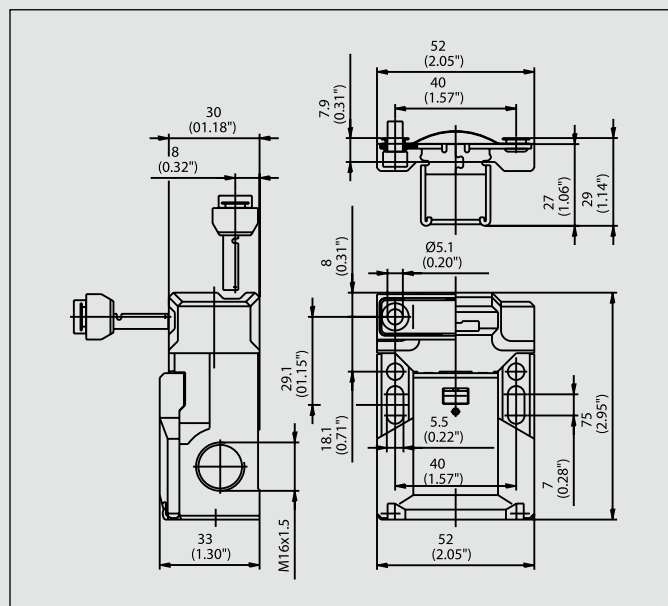
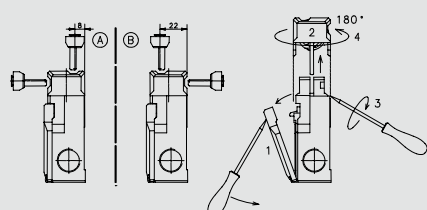
Actuating forces from 30 to 100 N can be realised with the aid of additional components that are mounted on the outside of the switch.

- **Anti-tamper facility:**

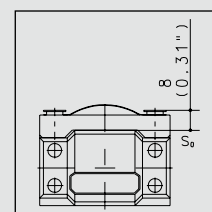
The switching system is protected by multiple coding to ensure enhanced safety of your application.

- **Outstanding handling:**

With the two slots you can easily adjust the SKC safety switch and lock it in position by means of the two holes accessible from the top or the two holes accessible from the front. The switch can be wired from three different sides. A transparent cover prevents foreign particles from entering the contact space while connecting the power supply cable.



R_{min} 150 mm (5.9")
Actuator: Metal



Technical data

Electrical data		
Rated insulation voltage	U _i max.	250 V AC
Rated operating voltage	U _e max.	240 V
Conventional thermal current	I _{the}	5 A
Utilization category	AC-15, U _e /I _e 240 V / 1.5 A	
Mechanical data		
Switching frequency	≤ 30/min.	
Mechanical service life	1 x 10 ⁶ switching cycles	
B10d (up to) ^①	2 Mill.	
Short-circuit protection	Fuse 6 A gL/gG	
Protection class	II, Insulated	
Ambient temperature	-30 °C ... +80 °C	
Protection class	IP65 conforming to IEC/EN 60529	
Type of connection	Screw connections	
Conductor cross sections	Single-wire 0.5 - 1.5 mm ² or Stranded wire with ferrule 0.5 - 1.5 mm ²	
Enclosure	Thermoplastic, glass fibre-reinforced (UL94-V0)	
Cable entry	3 x M16 x 1.5	
Standards		
VDE 0660 T100, DIN EN 60947-1, IEC 60947-1		
VDE 0660 T200, DIN EN 60947-5-1, IEC 60947-5-1		

① Depending on switching system. See Table on Pages 76-79.

SK



The SK safety position switch is an industry standard and can be used in virtually any application.

Thanks to design safety features conforming to VDE 0660 T200, IEC 60947-5-1 and the test regulations GS-ET 15, the SK is particularly suitable for personal protection applications. Its versatility is enhanced by the variable actuator head and two actuator openings.

Other decisive advantages include:

- **Different actuating forces:**

Corresponding to your specific application, in addition to the standard 10 N, you can also choose an actuating force of 5, 20 or 30 N.

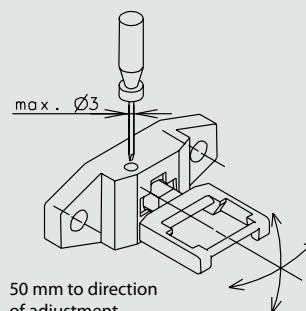
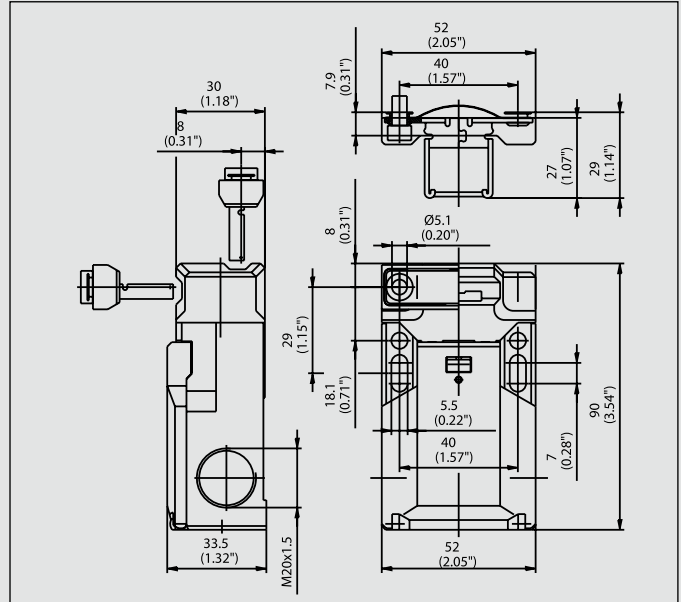
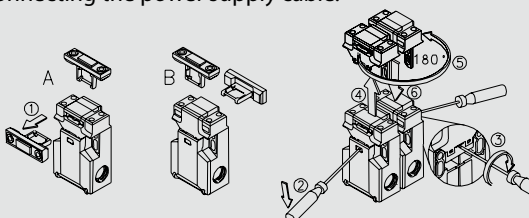
Actuating forces from 30 to 100 N can be realised with the aid of additional components that are mounted on the outside of the switch.

- **Anti-tamper facility:**

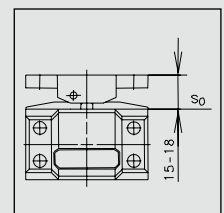
The switching system is protected by multiple coding to ensure enhanced safety of your application.

- **Outstanding handling:**

With the two slots you can easily adjust the SK safety switch and lock it in position by means of the two holes accessible from the top or the two holes accessible from the front. The switch can be wired from three different sides. A transparent cover prevents foreign particles from entering the contact space while connecting the power supply cable.



50 mm to direction of adjustment
Actuator: metal



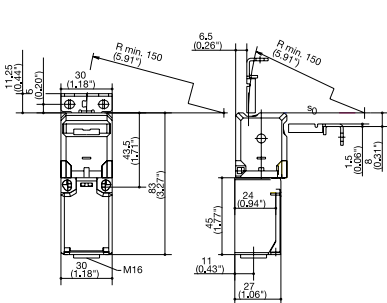
Technical data

Electrical data		
Rated insulation voltage (up to) ^①	U _i max.	400 V AC
Rated operating voltage	U _e max.	240 V
Conventional thermal current (up to) ^①	I _{the}	10 A
Utilization category	AC-15, U _e /I _e 240 V / 1.5 A	
Mechanical data		
Switching frequency	≤ 30/min	
Mechanical service life	1 x 10 ⁶ switching cycles	
B10d (bis zu) ^①	2 Mill.	
Short-circuit protection (up to) ^①	Fuse 10 A gL/gG	
Protection class	II, Insulated	
Ambient temperature	-30 °C ... +80 °C	
Protection class	IP65 conforming to IEC/EN 60529	
Type of connection	Screw connections	
Conductor cross sections	Single-wire 0.5 - 1.5 mm ² or Stranded wire with ferrule 0.5 - 1.5 mm ²	
Enclosure	Thermoplastic, glass fibre-reinforced (UL94-V0)	
Cable entry	3 x M20 x 1.5	
Standards		
VDE 0660 T100, DIN EN 60947-1, IEC 60947-1		
VDE 0660 T200, DIN EN 60947-5-1, IEC 60947-5-1		

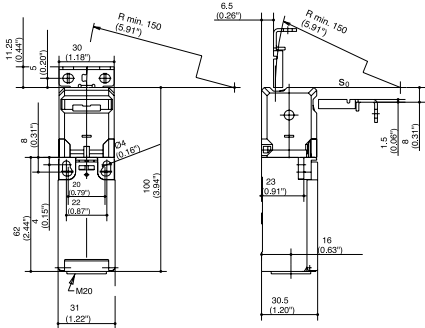
① Depending on switching system. See Table on Pages 76-79.

Safety Switches with Separate Actuator

SKT



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Switching operation	Standard	High actuating force	Radius actuation	Standard	High actuating force	Radius actuation
1 NC / 1 NO contact	6016419059 SKT-U1Z M3			6016819052 SKI-U1Z M3	6016819139 SKI-U1Z FI50 M3	6016819123 SKI-U1Z MRU
1 NC contacts						
2 NC contacts	6016469066 SKT-A2Z M3			6016869056 SKI-A2Z M3		6016869122 SKI-A2Z MRU
1 NC / 1 NO contact Overlapping				6016869058 SKI-UV15Z M3	6016869145 SKI-UV15Z FI50 M3	6016869131 SKI-UV15Z MRU
Approvals	  					

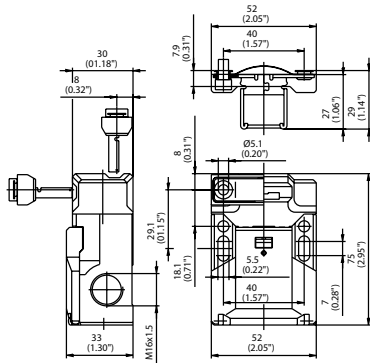
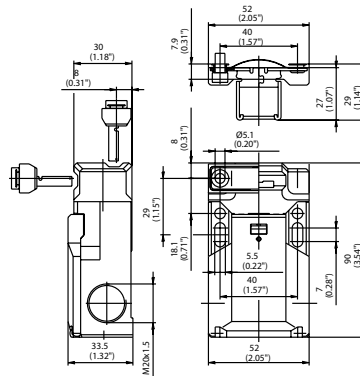
Special features/variants (on request)

- Replacement actuator for:
3112850340

Special features/variants (on request)

- Replacement actuator for:

Standard	3112850340
High actuating force	3112850340
Radius actuation	3911452058

SKC

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Standard	High actuating force	Radius actuation
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6016169039 SKC-A1Z M	6116169016 SKC-A1Z F30 M	6016169087 SKC-A1Z MRU
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Standard	High actuating force	Radius actuation
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6016119016 SK-U1Z M	6116119109 SK-U1Z F30 M	6016119084 SK-U1Z MRU
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6016169036 SK-A2Z M	6016169053 SK-A2Z F30 M	6016169085 SK-A2Z MRU
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6016169026 SK-UV15Z M	6016169061 SK-UV15Z F30 M	6016169086 SK-UV15Z MRU
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Special features/variants

(on request)

- 50 N and 100 N actuating force on request
- Replacement actuator for:

Standard	3911452116
High actuating force	3911451914
Radius actuation	3911452058

Special features/variants

(on request)

- 100 N actuating force on request
- Replacement actuator for:

Standard	3911452116
High actuating force	3911451914
Radius actuation	3911452058

Electrical data

Type 1 switches

Slow-action contact			D					
Switching function	Switching contacts	Designation	U _i	I _{the}	Utilization category	Short-circuit protection	Mechanical service life	B10d
Normally-closed contact	2NC	A2Z	400 V	10 A	AC-15 U _e /I _e 240 V/3 A	Fuse 10 A gL/gG	10 x 10 ⁶	20 mill.
Changeover contact	1NC/1S	U1Z	400 V	10 A	AC-15 U _e /I _e 240 V/3 A	Fuse 10 A gL/gG	10 x 10 ⁶	20 mill.
Changeover contact, overlapping	1NC/1S	UV1Z	400 V	16 A	AC-15 U _e /I _e 240 V/3 A	Fuse 10 A gL/gG	10 x 10 ⁶	20 mill.
Normally-open contact	2S	E2	400 V	10 A	AC-15 U _e /I _e 240 V/3 A	Fuse 10 A gL/gG	10 x 10 ⁶	–

Snap-action contact			D					
Switching function	Switching contacts	Designation	U _i	I _{the}	Utilization category	Short-circuit protection	Mechanical service life	B10d
			–	–	–	–	–	–
Normally-closed contact	2NC	SA2Z	–	–	–	–	–	–
Changeover contact	1NC/1S	SU1Z	400 V	10 A	AC-15 U _e /I _e 240 V/3 A	Fuse 10 A gL/gG	10 x 10 ⁶	20 mill.
Normally-open contact	2S	SE2	–	–	–	–	–	–

Type 2 switches

Slow-action contact			SKT							
Switching function	Switching contacts	Designation	U _i	I _{the}	Utilization category	Short-circuit protection	Mechanical service life	B10d	U _i	I _{the}
Normally-closed contact	1NC	A1Z								
Normally-closed contact	2NC	A2Z	250 V	10 A	AC-15 U _e /I _e 240 V/3 A DC-13 U _e /I _e 250 V / 0.27 A	Fuse 6 A gL/gG	A* 1 x 10 ⁶ B* 1 x 10 ⁵	2 mill.	250 V	10 A
Changeover contact	1NC/1S	U1/U1Z	250 V	10 A	AC-15 U _e /I _e 240 V/3 A DC-13 U _e /I _e 250 V / 0.27 A	Fuse 6 A gL/gG	A* x 10 ⁶ B* 1 x 10 ⁵	2 mill.	250 V	10 A
Changeover contact, overlapping	2NC/1S	UV15Z	250 V	5 A	–	–	–	–	250 V	5 A

*A = Standard; B = Increased actuating force

Slow-action contact			SK							
Switching function	Switching contacts	Designation	U _i	I _{the}	Utilization category	Short-circuit protection	Mechanical service life	B10d	U _i	I _{the}
Normally-closed contact	1NC	A1Z	–	–	–	–	–	–	–	–
Normally-closed contact	2NC	A2Z	250 V	10 A	AC-15 U _e /I _e 240 V/3 A	Fuse 6 A gL/gG	1 x 10 ⁶	2 mill.	–	–
Changeover contact	1NC/1S	U1/U1Z	250 V	10 A	AC-15 U _e /I _e 240 V/3 A	Fuse 10 A gL/gG	1 x 10 ⁶	2 mill.	250 V	10 A
Changeover contact, overlapping	2NC/1S	UV15Z	400 V	5 A	AC-15 U _e /I _e 240 V/1.5 A	Fuse 6 A gL/gG	1 x 10 ⁶	0,2 mill.	–	–

Slow-action contact			ENM2							
Switching function	Switching contacts	Designation	U _i	I _{the}	Utilization category	Short-circuit protection	Mechanical service life	B10d	U _i	I _{the}
Normally-closed contact	1NC	A1Z	–	–	–	–	–	–	–	–
Normally-closed contact	2NC	A2Z	400 V	10 A	AC-15 U _e /I _e 240 V/3 A	Fuse 6 A gL/gG	1 x 10 ⁶	2 mill.	400 V	6 A
Changeover contact	1NC/1S	U1/U1Z	400 V	10 A	AC-15 U _e /I _e 240 V/3 A	Fuse 10 A gL/gG	1 x 10 ⁶	2 mill.	400 V	10 A
Changeover contact, overlapping	2NC/1S	UV15Z	250 V	5 A	AC-15 U _e /I _e 240 V/1.5 A	Fuse 6 A gL/gG	1 x 10 ⁶	2 mill.	–	–

U_i Rated insulation voltage
I_{the} Conventional thermal output from devices in enclosure