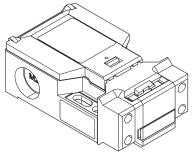
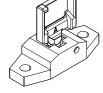


# Safety switch

Series SK

Description **SK-U1Z M6** Article number **6116119318** 





1) Safety switch (10 x)

2 Actuator (10 x)

Components	Description	Article number	Technical Data	
① Safety switch	SK-U1Z	6016119181	see page 2 - 4	
② Actuator	BETÄTIGER M6	6016999195	see page 5	

#### Notes

1 packaging unit consists of 10 safety switches and 10 actuators. Article number from Engel: 02211-0488

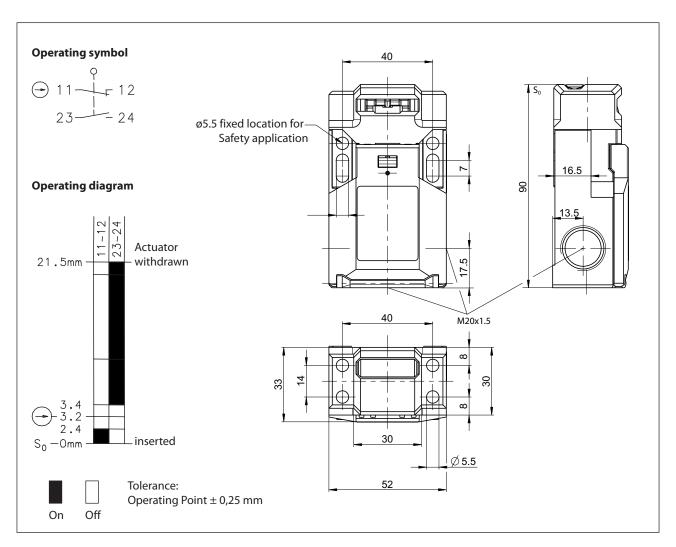
**BERNSTEIN AG** . Hans-Bernstein-Straße 1 . 32457 Porta Westfalica . www.bernstein.eu



# Safety switch

Series SK

Description **SK-U1Z** Article number **6016119181** 



Electrical Data		
Rated insulation voltage	U <sub>i</sub>	250 V AC
Conv. thermal current	l <sub>the</sub>	10 A
Utilization category		AC-15, U <sub>e</sub> /I <sub>e</sub> 240 V / 3 A DC-13, U <sub>e</sub> /I <sub>e</sub> 24 V / 4 A
Direct opening action	$\Theta$	according to IEC/EN 60947-5-1, Annex K
Short-circuit protective device		Fuse 10 A gG
Protection class		II
Electrical life (90%)		$8.0 \times 10^{5}$ switching cycles (at DC-13; 24 V; le2 = 1.0 A at frequency 60/min)



Mechanical data	
Enclosure	Polyamid PA6 GF FR (UL94-V0)
Cover	Polyamid PA66/6 GF FR (UL94-V0)
Extraction force	10 N
Ambient air temperature	-30 °C +80 °C
Contact type	1 NC, 1 NO (Zb)
Mechanical life	1 x 10 <sup>6</sup> switching cycles
Switching frequency	≤ 30 / min.
Assembly	2 x M5
Connection	4 screw connections (M3,5)
Conductor cross-sections	0,5 1,5 mm <sup>2</sup> (solid or stranded wire with ferrules)
Cable entrance	3 x M20 x 1,5
Weight	≈ 0,12 kg
Installation position	operator definable
Protection type	IP65 acc. to IEC/EN 60529

Characteristics for functional safety	
B10 <sub>d</sub> - NC contact	$2 \times 10^6$ switching cycles (at DC-13; 24 V; $I_{e2} = 0.1 \text{ A}$ )
B10 <sub>d</sub> - NC contact	$1.9 \times 10^6$ switching cycles (at DC-13; 24 V; le2 = 1.0 A at frequency 60/min)
B10 <sub>d</sub> - NO contact	$0.5 \times 10^6$ switching cycles (at DC-13; 24 V; $I_{e2} = 0.1 \text{ A}$ )

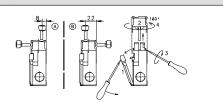
#### **Actuation**

Turning the cap (pos A/B) allows 4 different directions of drive.

Cover (1) has to be opened before turning the cap (2).

Insert the screwdriver into the gap between housing and cap and turn until the cap snaps off.

Remove the cap, turn it 180° (4), latch it into the housing and close the cover.



Standards	
	DIN EN 60947-5-1
	DIN EN ISO 13849-1
	DIN EN ISO 14119

EU Conformity	
	acc. to directive 2006/42/EC (Machinery Directive)

UK Conformity	
Supply of Machinery (Safety) Regulations 20	08, 2008 No. 1597

Approvals	
TÜV Rheinland, Product Safety	
<sub>c</sub> CSA <sub>us</sub> A300 (same polarity)	
CCC	

### **Technical Data**



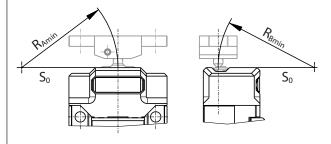
#### Notes

The specified degree of protection (IP code) of the safety switch only applies when the cover is closed and an at least equivalent cable gland with corresponding cable or corresponding cable coupling is used.

The arrangement and fastening of the safety switch and actuator must be carried out in accordance with DIN EN ISO 14119. With radius actuation, the mechanical service life may be reduced.

The minimum radii can be found in the data sheet of the respective actuator or in the operating and mounting instructions of the switchgear and apply to a pivot point on the level of the upper edge of the enclosure  $S_0$ .

The actuator slot that is not used must be closed by the cover.



 $R_{\text{Amin}}$  and  $R_{\text{Bmin}}$  depend on the actuator. Applies accordingly also to lateral retraction directions.

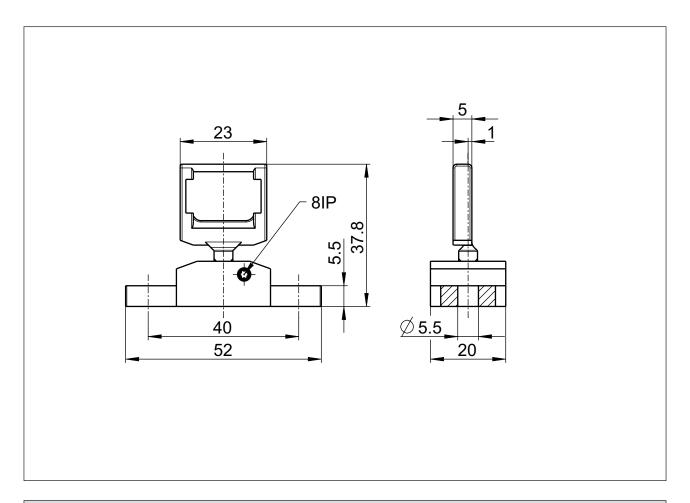


### **Actuator**

## Series SK

Description BETÄTIGER M6

Article number **6016999195** 



Mechanical Data	
Actuator / Enclosure / Cam	Stainless steel
Minimum actuating radius	R <sub>Amin</sub> , R <sub>Bmin</sub> in adjustment directions = 150 mm
Extraction forces	up to 30 N