

Safety switch

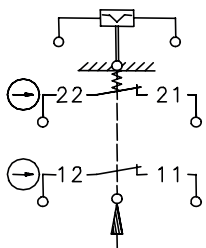
Series SGS

Description **SGS-SA2Z AK F3 24V**

Article number **6110888013**

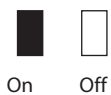
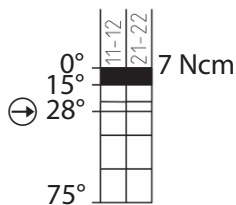
Operating symbol

Termination electromagnet with contact position

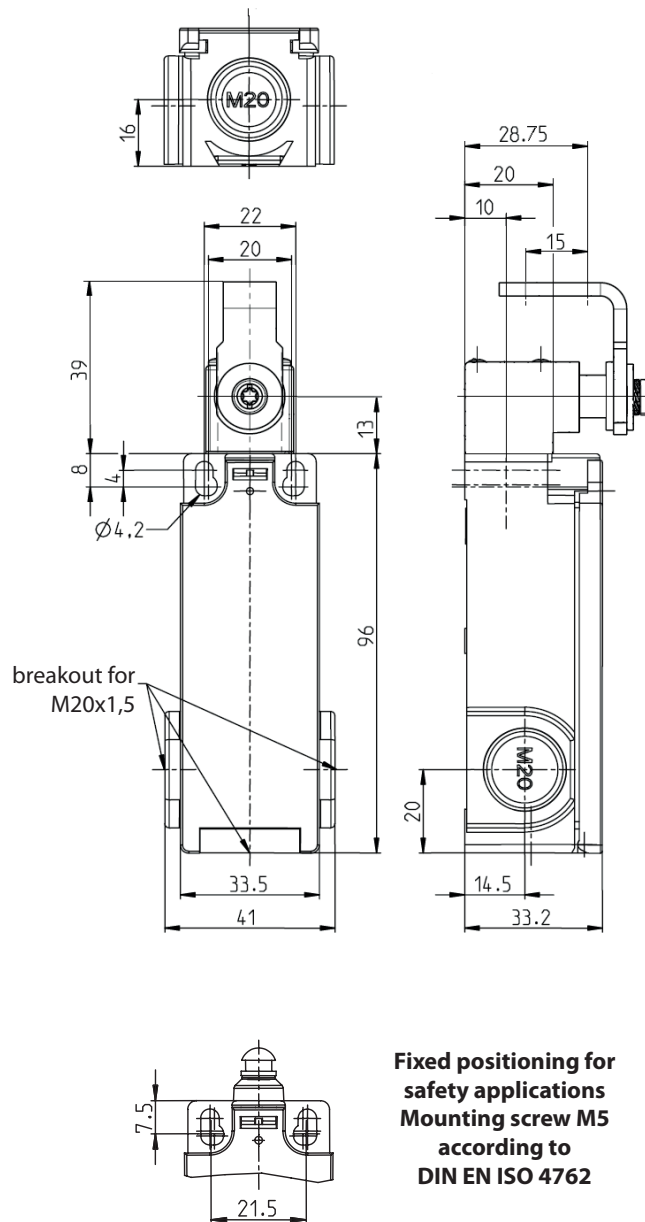


Operating diagram

(Return by E-magnet)



Tolerances:
 Operating point $\pm 3,5^\circ$;
 Operating force $\pm 30\%$



Elektrische Daten		
Electrical data	II, totally insulated	
Protection class		
Contact elements	U_i	250 V AC
Rated insulation voltage	I_{the}	10 A
Conv. thermal current	AC-15, U_e / I_e 240 V / 3 A	
Utilization category	DC-13, U_e / I_e 250 V / 0,27 A	
Min. Voltage	24 V	12 V
Min. Current	5 mA	20 mA
Direct opening action	⊖	according to IEC/EN 60947-5-1, Annex K
Short-circuit protective device	Fuse 4 A gG	
Electro magnets		
without recovery diode		
Temperature class	B (130 °C)	
Rated operational voltage	U_e	24 V DC
Operational voltage range	U_B	-15 % ≤ U_e ≤ +10 % +10 % < U_e ≤ +25 %
Rated operational current	I_e	2,3 A -15 % 2,3 A -15 %
On-Time	ED	3 % 2 %
Min. On-Time	T_i	0,2 s 0,2 s
Max. On-Time	T_e	10 s 0,5 s
Min. Off-Time	T_p	180 s 27 s

Mechanical data		
Enclosure	Thermoplastic GV self-extinguishing	
Cover	Thermoplastic GV self-extinguishing	
Actuating	Lever arm housing, lever (st)	
Velocity for actuating	V_{max}	0,5m/s
Ambient air temperature	-25 °C ... +50 °C	
Contact type	2 NC (Zb)	
Switching principle	Magnetic snap action, bistable	
Mechanical life	5 x 10 ⁴ operating cycles	
Assembly	2 x M4 / 2 x M5 for safety applications	
Connection - contact elements	4 screw terminals (M3,5)	
Conductor cross-sections	Solid: 0,5 ... 1,5 mm ² Litz wire with ferrules: 0,5 ... 1,5 mm ²	
Connection - Electro magnets	2x butt connector similar to DIN 46341 (crushing zone 0,5 – 1,5 mm ²)	
Cable entrance	3x M20x1,5 breakout, left, right and upside	
Installation position	Operator definable	
Contact opening	4 x >2 mm	
Protection type	IP65 acc. to IEC/EN 60529	

ID for safety engineering	
B10d	1 x 10 ⁵ cycles

Actuation
By loosening the 4 screws the actuation assembly can be rotated in 90 degree increments such that 4 actuation directions are possible. The actuation assembly is to be again fastened to the housing using the 4 screws.

Standards	
	VDE 0660 T100, DIN EN 60947-1, IEC 60947-1
	VDE 0660 T200, DIN EN 60947-5-1, IEC 60947-5-1
	DIN EN ISO 13849-1
	DIN EN 81-1, 81-2; 81-20

EU Conformity	
	acc. to directive 2014/35/EU (Low-Voltage-Directive)

Notes	
The degree of protection (IP code) specified applies solely to a property closed cover and the use of an equivalent cable gland with adequate cable.	
The switch may not be used as a mechanical stop.	