

# Safety switch

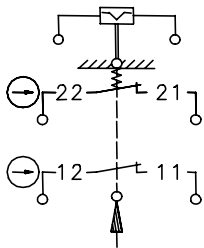
## Series SGS

Description **SGS-SA2Z W F3 230V**

Article number **6010853004**

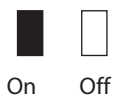
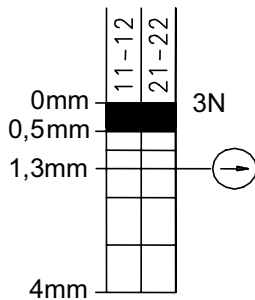
### Operating symbol

Termination electromagnet with contact position

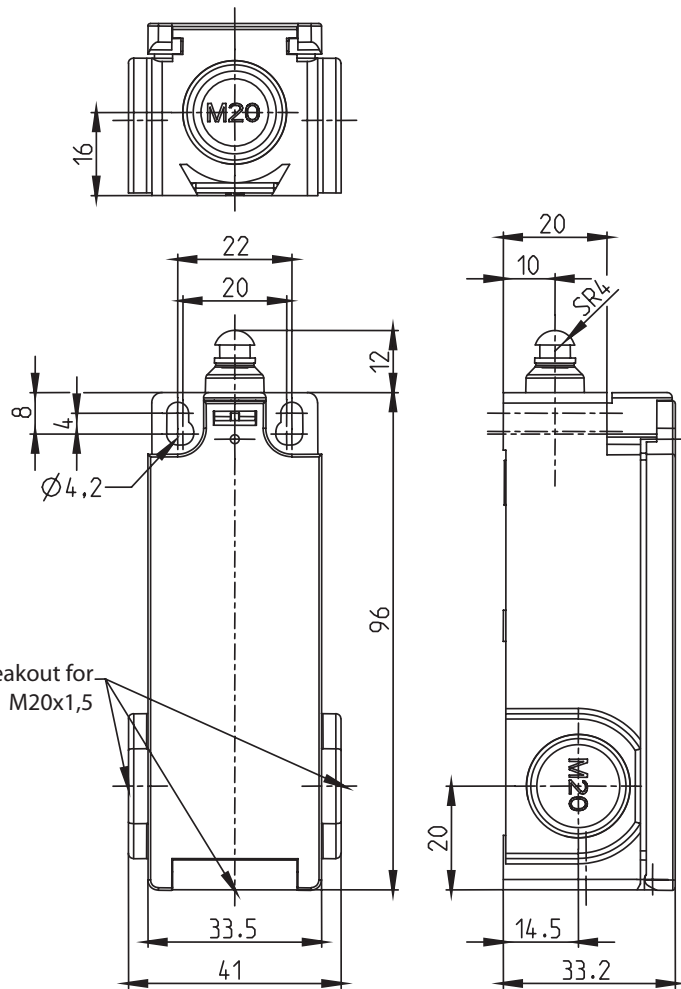


### Operating diagram

(Return by E-magnet)



Tolerances:  
 Operating point  $\pm 0,3$  mm;  
 Operating force  $\pm 2$  N



**Fixed positioning for safety applications**  
**Mounting screw M5 according to DIN EN ISO 4762**

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
Min. Current		5 mA
Direct opening action	⊖	according to IEC/EN 60947-5-1, Annex K
Short-circuit protective device		Fuse 4 A gG
Electro magnets		
		with recovery diode
Temperature class		B (130 °C)
Rated operational voltage	$U_e$	230 V AC
Operational voltage range	$U_B$	-15 % ≤ $U_e$ ≤ +10 %
Rated operational current	$I_e$	0,23 A -15 %
On-Time	ED	3 %
Min. On-Time	$T_i$	0,2 s
Max. On-Time	$T_e$	10 s
Min. Off-Time	$T_p$	180 s

Mechanical data		
Enclosure		Thermoplastic GV self-extinguishing
Cover		Thermoplastic GV self-extinguishing
Actuating		Plunger (thermoplastic)
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 <sup>4</sup> 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 <sup>2</sup> Litz wire with ferrules: 0,5 ... 1,5 mm <sup>2</sup>
Connection - Electro magnets		2x butt connector similar to DIN 46341 (crushing zone 0,5 – 1,5 mm <sup>2</sup> )
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 <sup>5</sup> cycles

Actuation	
Actuation only in plunger direction	

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)

Approvals	
	TÜV SÜD
	cCSAus A300 (same polarity)
	CCC

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