

Bistable Safety Switch with Remote Release



SGS

The SGS is a bistable safety switch with remote release facility. Once switched, the SGS remains in this position until it is manually reset at the plunger or via an external button. A built-in solenoid actuator controls the release action.

The SGS can be used wherever an intentional (manual or electrical) reset function is required:

- In lift construction
- In door and gate systems
- In wind power stations
- Wherever safety is of prime importance

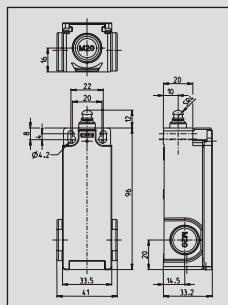
By correspondingly checking the NC contacts with positive opening action, an evaluator circuit is able to disconnect the power supply to a drive controller and shut down the machine.

SGS applications include

- Lift pre-switching (speed limiter)
- Monitoring of emergency release function
- Machine construction applications where specific reset after operation is required
- Use in areas difficult to access
- Remote monitoring and reset over large distances

Features:

- Plunger indicates switch status
- Plunger groove for manual reset
- 2 versions: 230 V AC and 24 V DC
- Reset via built-in solenoid actuator
- 3 cable outlets M20 x 1.5
- Switching functions: 2 NC contacts
- TÜV EN 81 approval
- Other actuators from the standard range on request



Technical data

Electrical data	
Protection class	II, Insulated
Switching elements	
Rated insulation voltage	U_i 250 V AC
Thermal current	I_{the} 10 A
Utilisation category	AC-15, U_e / I_e 240 V / 3 A DC-13, U_e / I_e 250 V / 0.27 A
Minimum switching voltage	24 V
Minimum switching current	5 mA
Positive opening	☺ conforming IEC/EN 60947-5-1, Addendum K
Short-circuit protection	Fuse 4 A gL/gG
Electromagnet	
Without free-wheeling diode	
Thermal class	B (130 °C)
Rated operating voltage	U_e 24 V DC / 230 V AC (depending on type)
Rated operating current	I_e 2.3 A / 0.23 A AC
Duty factor	ED 3 %
Minimum ON time	T_i 0.2 s
Maximum ON time	T_e 0.5 s
Minimum OFF time	T_p 17 s
Mechanical data	
Enclosure	Glass fibre-reinforced thermoplastic, self-extinguishing
Cover	Glass fibre-reinforced thermoplastic, self-extinguishing
Actuation	Plunger (thermoplastic)
Approach speed	V_{max} 0.5 m/s
Ambient temperature	-25 °C bis +50 °C
Contact type	2 NC contacts (Zb) / NC contacts, 1NO contacts (Zb)
Switching principle	Snap action system, bistable
Mechanical service life	5 x 10 ⁴ switching cycles
B10d	0,1 Mio.
Bolt	2 x M4 / 2 x M5 for safety applications
Type of connection Switching element	Screw connections
Conductor cross sections	Single-wire 0.5 ... 1.5 mm ²
Type of connection Electromagnet	2 x butt connector similar to DIN 46341 (crushing zone 0,5 – 1,5 mm ²)
Cable entry	3x M20x1,5
Installation position	Any
Contact opening	4 x >2 mm
Protection class	IP65 conforming to IEC/EN 60529
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 81-1	

Product selection

Supply voltage reset 24 Volt			
Switching operation	Actuating force 3 N		Actuating force 6 N
1NC / 1NO	-	-	-
2NC	6010853002	SGS-SA2Z W F3 24 V	6010853001 SGS-SA2Z W F6 24 V

Supply voltage reset 230 Volt			
Switching operation	Actuating force 3 N		Actuating force 6 N
1NC / 1NO	-	-	6010153027 SGS-SU1Z W F6 230 V
2NC	6010853004	SGS-SA2Z W F3 230 V	6010853003 SGS-SA2Z W F6 230 V