

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. In its rugged plastic housing, it represents an economically priced alternative to the BERNSTEIN GC Series with remote release.

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

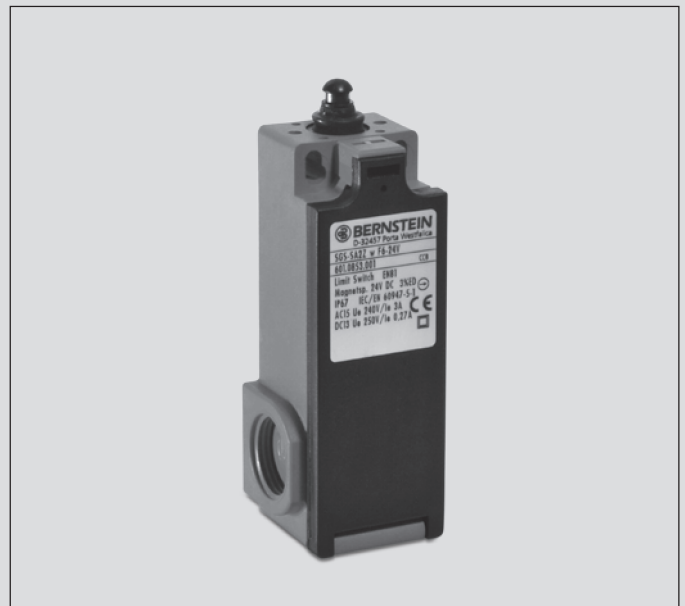
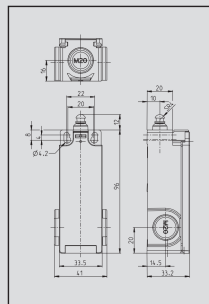
By correspondingly checking the NC contacts with positive opening action, an evaluator circuit is able to disconnect the power supply to a drive controller and shut down the machine.

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_{th} 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	5×10^4 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