

FEDERAL AVIATION AGENCY

1G1
Revision 8
SCHWEIZER
SGS 1-23
SGS 1-23D
SGS 1-23F
SGS 1-23G
SGS 1-23H
SGS 1-23H-15
September 7, 1961

GLIDER SPECIFICATION NO. 1G1

Manufacturer Schweizer Aircraft Corporation  
County Airport  
Elmira, New York

**I - Model SGS 1-23, 1 PCLM, Approved November 22, 1949; Model SGS 1-23D, 1 PCLM, Approved June 1, 1953; Models SGS 1-23F and SGS 1-23G, 1 PCLM, Approved June 12, 1958; Models SGS 1-23H and SGS 1-23H-15, 1 PCLM, Approved March 13, 1961.**

Model SGS 1-23D same as SGS 1-23 Serial No. 12 and up except for increased maximum weight, wing, aileron, rudder and other minor changes.

Models SGS 1-23F and SGS 1-23G same as SGS 1-23D, Serial No. 25 and up, except for increase in wing span, minor wing detail construction, and incorporation of an enlarged vertical tail surface.

Model SGS 1-23H same as SGS 1-23G except for redesigned dive brakes and revised detachable wing tips. Model SGS 1-23H-15 same as SGS 1-23H except for shorter wing tips to reduce wing span to 15 meters (49 ft. 2 in.). Wing tips: Dwg. 23H-467 for SGS 1-23H and Dwg. 23D-472 for SGS 1-23H-15.

Type	Class I																																
Airspeed limits	<p>Serial Nos. 1 through 11: (See NOTE 2 for eligibility for increased glide and dive and spoiler speeds)</p> <table> <tr><td>Glide or dive</td><td>110 mph True Ind.</td></tr> <tr><td>Airplane tow</td><td>100 mph True Ind.</td></tr> <tr><td>Auto-winch tow</td><td>70 mph True Ind.</td></tr> <tr><td>Spoiler extended</td><td>110 mph True Ind.</td></tr> </table> <p>Serial Nos. 12 and up:</p> <table> <tr><td>Glide or dive</td><td>116 mph True Ind.</td></tr> <tr><td>Airplane tow</td><td>100 mph True Ind.</td></tr> <tr><td>Auto-winch tow</td><td>70 mph True Ind.</td></tr> <tr><td>Spoiler extended</td><td>116 mph True Ind.</td></tr> </table> <p>Serial Nos. 25 and up:</p> <table> <tr><td>Glide or dive</td><td>119 mph True Ind.</td></tr> <tr><td>Airplane tow</td><td>110 mph True Ind.</td></tr> <tr><td>Auto-winch tow</td><td>68 mph True Ind.</td></tr> <tr><td>Spoiler extended</td><td>119 mph True Ind.</td></tr> </table> <p>Serial Nos. 45 and up:</p> <table> <tr><td>Glide or dive</td><td>140 mph True Ind.</td></tr> <tr><td>Airplane tow</td><td>110 mph True Ind.</td></tr> <tr><td>Auto-winch tow</td><td>68 mph True Ind.</td></tr> <tr><td>Dive brake extended</td><td>140 mph True Ind. (terminal velocity)</td></tr> </table>	Glide or dive	110 mph True Ind.	Airplane tow	100 mph True Ind.	Auto-winch tow	70 mph True Ind.	Spoiler extended	110 mph True Ind.	Glide or dive	116 mph True Ind.	Airplane tow	100 mph True Ind.	Auto-winch tow	70 mph True Ind.	Spoiler extended	116 mph True Ind.	Glide or dive	119 mph True Ind.	Airplane tow	110 mph True Ind.	Auto-winch tow	68 mph True Ind.	Spoiler extended	119 mph True Ind.	Glide or dive	140 mph True Ind.	Airplane tow	110 mph True Ind.	Auto-winch tow	68 mph True Ind.	Dive brake extended	140 mph True Ind. (terminal velocity)
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C.G. range	(+12.9) to (+16). Serial Nos. 25 and up: (+12.8) to (+16).																																
Maximum weight	Serial Nos. 1 through 11: 600 lbs. (See NOTE 2 for eligibility for increased weight). Serial Nos. 12 and up: 660 lbs. Serial Nos. 25 and up: 750 lbs.																																

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No. of seats	1 at (-6.5 to -10.5 adjustable)		
Baggage	None		
Control surface movements	SGS 1-23:		
	Elevator	23° Up	23° Down
	Rudder	30° Right	30° Left
	Aileron	36° Up	18° Down
	Spoilers	80° Up	0° Down
	SGS 1-23D:		
	Elevator	25° Up	25° Down
	Rudder	30° Right	30° Left
	Aileron	36° Up	18° Down
	Spoilers	80° Up	0° Down
	SGS 1-23F, SGS 1-23G, SGS 1-23H, and SGS 1-23H-15:		
	Elevator	25° Up	25° Down
	Rudder	28° Right	28° Left
	Aileron	36° Up	18° Down
	Spoilers	80° Up	0° Down
Serial Nos. eligible	(SGS 1-23) 1 through 24. (SGS 1-23D) 25 through 33, 35 and 36. (SGS 1-23F) 34. (SGS 1-23G) 37 and up. (SGS1-23H and SGS 1-23H-15) 45 and up.		
Required equipment	Items 201(a) or (b), 401, 402 (SGS 1-23H, SGS 1-23H-15).		

#### Specifications Pertinent to All Models

Datum	Wing leading edge at root.
Leveling means	Upper surface of stabilizer between front and rear spar near fuselage.
Certification basis	Glider Type Certificate No. 1G1 (CAR 5)
Production basis	Production Certificate No. 101

#### Equipment:

##### Landing Gear

201. Wheel		
(a) 5.00 x 4, Schweizer Model 1B213, with 4-ply rating tire		7 lbs. (+19)
(b) 5.00 x 4, Schweizer Model 1B216, with 4-ply rating tire		No weight change
202. Schweizer circumferential brake		Neglect weight

##### Interior Equipment

401. Airspeed indicator		Neglect weight
402. Shoulder harness installation according to Schweizer Aircraft Corporation Dwg. No. 23B-217		1.5 lbs. (+11)

##### Miscellaneous (not listed above)

601. Double spoilers installed according to Schweizer Aircraft Corporation Dwg. No. 23D-605 and 23D-606. Under wing spoiler movement 0° up 80° down.		1 lb. (+13)
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- NOTE 1. Suitable placards to cover the various pilot weights and positions must be installed in full view of the pilot as determined from the manufacturer's weight and balance report.
- NOTE 2. Serial Nos. 1 through 11 also eligible at 660 lbs. maximum weight with the "Airspeed limits" indicated for Serial Nos. 12 and up, when the elevator is reinforced in accordance with Schweizer Aircraft Corporation's Drawing No. 23D804, change A. Neglect weight change

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