

**DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION**

1G1
Revision 10
K & L Soaring, LLC
SGS 1-23
SGS 1-23D
SGS 1-23F
SGS 1-23G
SGS 1-23H
SGS 1-23H-15
November 29, 2010

GLIDER SPECIFICATION NO. 1G1

Type Certificate Holder K & L Soaring, LLC
5996 State Route 224
Cayuta, New York 14824

Type Certificate Holder Record Schweizer Aircraft Corporation
County Airport
Elmira, New York 14902

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	Serial Nos. 1 through 11: (See NOTE 2 for eligibility for increased glide and dive and spoiler speeds)		
	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.	
	Serial Nos. 12 and up:		
	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.	
	Serial Nos. 25 and up:		
	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.	
	Serial Nos. 45 and up:		
	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)	
C.G. range	(+12.9) to (+16). Serial Nos. 25 and up: (+12.8) to (+16).		

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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.
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. (SGS 1-23H 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	None

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)
- 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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