

**DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION**

G57EU Revision 3 Fiberglas-Technik Rudolf Lindner GmbH & Co. KG G 103 C TWIN III SL August 08, 2014
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TYPE CERTIFICATE DATA SHEET No. G57EU

This data sheet which is part of Type Certificate No. G57EU prescribes conditions and limitations under which the product for which the Type Certificate was issued meets the airworthiness requirements of the Federal Aviation Regulations.

Type Certificate Holder: Fiberglas-Technik Rudolf Lindner GmbH & Co. KG
Steige 3
D-88487 Walpertshofen
Germany

Type Certificate Holder Record: GROB Aircraft AG transferred TC G57EU to Fiberglas-Technik Rudolf Lindner GmbH & Co. KG on November 02, 2010.

Grob Aerospace GmbH i.l. transferred TC G57EU to Grob Aircraft AG on February 2009.

Grob Aerospace GmbH transferred TC G57EU to Grob Aerospace GmbH i.l. on August 2008.

Burkhart Grob Luft – und Raumfahrt GmbH & Co. KG transferred TC G57EU to Grob Aerospace GmbH on December 2006.

I. Model G 103 C TWIN III SL (Utility Category), approved February 13, 1992.

Engine. Bombardier-ROTAX- Type 505A.

Fuel. See Flight Manual Section 2.4.

Engine Limits.

Max. power	43 HP (31.6 KW)
Max. permitted RPM	6800 RPM
Max. continuous power	43 HP (31.6 KW)
Max. continuous RPM	6400 RPM (For Propeller 1)
Max. continuous RPM	6800 RPM (For Propeller 2)

Propeller and Propeller Limits.

Propeller 1: MT-Propeller-Entwicklung MTV-24-M/158-16
Propeller 2: Technoflug Leichtflugzeugbau KS-1C-158-R-108

Airspeed Limits. (I.A.S.).

Maximum Airspeeds

In Calm Air			
Never exceed (V_{NE})	134 kts	154 mph	248 km/hr
In Rough Air (V_{RA})	94 kts	109 mph	175 km/hr
Maneuvering (V_A)	94 kts	109 mph	175 km/hr
Aero Tow (V_T)	76 kts	87 mph	140 km/hr
Winch Tow (V_W)	76 kts	87 mph	140 km/hr
Min powerplant extension/ retraction (V_{POMIN})	48 kts	56 mph	90 km/hr

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Airspeed Limits. (I.A.S.), cont'd.

Max powerplant extension/
retraction (V_{POMAX}) 59 kts 68 mph 110 km/hr

C.G. Range.

11.02 in. to 19.29 in. (280 mm to 490 mm) aft of datum.

Empty Weight C.G.

See Maintenance Manual Section 7, Page 6.

Empty Weight.

1080 lbs (490 kg).

Datum.

Wing leading edge at the root rib.

Leveling Means.

See Maintenance Manual Section 7, Page 3.

Maximum Weight.

1565 lbs (710 kg).

Minimum Crew.

1 pilot

No. of Seats.

2-fixed seats with Seat 1 located 44.57 in. (1132 mm) forward of datum and Seat 2 located 1.38 in. (35 mm) behind datum.

Baggage.

Maximum 22 lb. (10 kg) at 31.89 in. (810 mm) aft of datum.

Fuel Capacity.

Total contents:	Fuselage tank	8.7 U.S. gal (33 l)
	Wing tank	12.4 U.S. gal (47 l) *
Non-Useable		0.53 U.S. gal (2 l)

* Note: As standard only with Propeller 1.

Control Surface Movements.

Aileron	Up	2.95 ± 0.31 in. (radius 8.46 in)
	Down	1.97 ± 0.20 in.

The radius is the distance measured from the hingeline of the aileron at the inboard edge of the aileron.

Elevator	Up	4.02 ± 0.31 in. (radius 9.45 in.)
	Down	2.91 ± 0.24 in.

The radius is the distance measured from the hingeline of the elevator at the inboard edge of the elevator.

Rudder	Right	9.25 ± 0.39 in. (radius 17.72 in.)
	Left	7.87 ± 0.20 in.

The radius is the distance measured from the hingeline of the rudder at the base of the rudder.

Airbrake

At inner level	Up	5.0 in.
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Rated Load on Winch and Auto Tow (Weak Link).

Maximum 935 daN (2061 lbf.).

Serial Nos. Eligible.

As of Serial # 35001

Import Requirements.

a. The FAA can issue a U.S. airworthiness certificate based on a German Airworthiness Authority Export Certificate of Airworthiness (Export C of A) signed by a representative of the Luftfahrt-Bundesamt (LBA) on behalf of the European Community. The Export C of A should contain the following statement: "The aircraft covered by this certificate has been examined, tested, and found to conform to the type design approved under U.S. Type Certificate No. G57EU and to be in a condition for safe operation."

Import Requirements, cont'd.

b. An airplane maintenance manual in compliance with JAR 22.1529 must be furnished before delivery of the first airplane or issuance of standard certificate of airworthiness whichever occurs later.

Certification Basis.

- 1) 14 CFR Sections 21.29, 21.183(c), and JAR-22 (Joint Airworthiness Requirements for Sailplanes and Powered Sailplanes), dated 27 June 1989 (Change 4 of the English original edition) including "Orange Papers" Amendment 22/90/1 dated 12 February 1991 and Amendment 22/92/1 for propeller 2.

Additional Requirements.

Standards for Structural Substantiation of Sailplane and Powered Sailplane Components Consisting of Glass or Carbon Fiber Reinforced Plastics, Issue May 1986.

Standards for the Substantiation of the Electrical System of Motorgliders, issue 22 November 1990.

Equivalent Level of Safety Findings.

JAR 22.51 (Take-off Speed)

Additional Requirements on Request of the Applicant.

NPA 22G-45, NPA 22D-55

- 2) Noise Requirements:
Lärmschutzforderungen für Luftfahrzeuge (LSL), Issue 1 January 1991.
- 3) Section 611(b) of the FAA Act of 1958.

The German Airworthiness Authority, the Luftfahrt-Bundesamt (LBA), originally type certificated glider Model G103 C TWIN III SL under its Type Certificate Number 869. The FAA validated this product under U.S. Type Certificate Number G57EU. Effective September 28, 2003, the European Aviation Safety Agency (EASA) began oversight of this product on behalf of Germany. The EASA TCDS number is EASA.A.250

Equipment.

The basic required equipment as prescribed in the applicable airworthiness regulations (see Certification Basis) must be installed in the airplane for certification.

Service Information.

Each of the documents listed below must state that it is approved by the European Aviation Safety Agency (EASA) or – for approvals made before September 28, 2003 – by the German Airworthiness Authority (LBA).

- Service bulletins
- Structural repair manuals
- Vendor manuals
- Aircraft flight manuals
- Overhaul and maintenance manuals

The FAA accepts such documents and considers them FAA-approved for type design data unless one of the following conditions exist:

- The documents change the limitations, performance, or procedures of the FAA approved manuals.

The FAA uses the post type validation procedures to approve these documents. The FAA may delegate case-by-case approval to EASA on behalf of the FAA for the U.S. type certificate. If this is the case it will be noted on the document.

Service Information, cont'd.

Available Documents for GROB Model G 103 C TWIN III SL Series:

Flight Manual (POH) G 103 C TWIN III SL, Issue December 1991, and subsequent revisions, LBA approved.

Maintenance Manual G 103 C TWIN III SL, including "LBA Approved" Airworthiness Limitation Section.

Repair Manual G 103 C TWIN III SL

For Engine:

- Manual for ROTAX-Engine Type 505A
- Repair Manual for ROTAX-engine Type 501 and 505
- Spare Parts List for ROTAX Engine Type 505 - 505A, No. 744

For Propeller 1:

- Operation- and Installation Manual No. E-309 Mechanical Variable Pitch Propeller MTV-24-(),
- Overhaul Manual and Parts List No. E-310 for the Mechanical Variable Pitch Propeller

For Propeller 2:

- Operation and Installation Manual No. P3 for the Two Blade Composite Propellers with Fixed Pitch KS 1 G (())(), KS 1 C (())(), LBA approved.

Operating Manual for Tow Releases Series E-85 Nose Tow Release, LBA approved.

Operating Manual for Safety Two Releases Series Europa G 88 Safety Tow Release, LBA approved.

NOTES.

- NOTE 1. The placards listed in Section 9 of the Maintenance Manual GROB G 103 C TWIN III SL must be displayed.
- NOTE 2. Service Life Limited components: See Maintenance Manual Section 11.
- NOTE 3. All components which are exposed to sunlight (with the exception of the areas for registration marks and colored warning paint) must have a white surface.
- NOTE 4. Removed.
- NOTE 5. Motorgliders of this model are certified for flight in accordance with Visual Flight Rules (VFR day).

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