DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION

G35EU
DG Flugzeugbau GmbH
LS 1-f
Revision 1
April 26, 2012

TYPE CERTIFICATE DATA SHEET NO. G35EU

This data sheet which is a part of type certificate No. G35EU 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	DG Flugzeugbau GmbH Otto-Lilienthal-Weg 2 D 76646 Bruchsal Germany
Type Certificate Holder Record:	Rolladen Schneider OHG transferred TC G35EU to DG Flugzeugbau GmbH on July 18, 2006.

I - Model LS 1-f, approved September 21, 1976

Airspeed limits (I.A.S.)	Never Exceed (Vne)	250 km/h	155 mph	135 kts
	In rough air (Vb)	250 km/h	155 mph	135 kts
	Maneuvering (Va)	170 km/h	106 mph	92 kts
	Aero-tow (Vt)	170 km/h	106 mph	92 kts
	Winch tow (Vw)	130 km/h	81 mph	70 kts
	Dive brakes	250 km/h	155 mph	135 kts
	Landing gear (Vl)	250 km/h	155 mph	135 kts

C.G. range	220 mm (+8.7 in) to 420 mm (+16.5 in) aft of datum.
Empty weight C.G.	See Flight Manual
Datum	Leading edge of wing at wing root
Leveling means	Under side of fuselage boom placed horizontal.
Maximum weight	390 Kg (860 lb) including water ballast.
No. of seats	1, adjustable seat back, with seat location at stations 590 mm (+23.62 in.) forward of datum.
Water Ballast	Two wing water bags, each 45 liters (45 kg)(99 lb.) at station 174 mm (+6.85 in.) aft of datum.
Fixed Ballast	None
Baggage	26 lb. in baggage compartment station 174 mm (+6.85 in.) aft of datum.

Control surface movements	Elevator	Up	2.87	±	0.2 in.	(radius 5.71 in.)
		Down	2.20	±	0.2 in.	(radius 5.71 in.)
	Aileron	Up	2.76	±	0.2 in.	(radius 6.61 in.)
		Down	1.46	±	0.2 in.	(radius 6.61 in.)

Rudder	Right	7.28	±	0.39 in.	(radius 14.25 in.)
	Left	7.28	±	0.39 in.	(radius 14.25 in.)
Dive Brake	Up	5.1	±	0.12 in.	
			-	0.47 in.	

Radius measured as a chord at root rib with movement measured at trailing edge.

(See Service Manual portion of Airplane Flight Manual)

Rated Load for Winch and Auto Tow (Weak Link).

500 kg (1100 lb.)

Serial Numbers Eligible

See Import Requirements

Certification Basis

FAR 21.23 and FAR 21.29 effective February 1, 1965.
Type Certificate No. G35EU, issued September 21, 1976.
Date of Application for Type Certificate September 25, 1975.

The German Airworthiness Authority, the Luftfahrt-Bundesamt (LBA), originally type certificated this glider under its Type Certificate Number 262. The FAA validated this product under U.S. Type Certificate Number G35EU. 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.095.

Validation Basis

Type Certificate No. G35EU was issued in accordance to FAR 21.29(a)(1) in validation of the Luftfahrt-Bundesamt (LBA) certification of compliance to the Federal Republic of Germany Glider Airworthiness Requirements dated 1966.

Import Requirements

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. G35EU and to be in a condition for safe operation."

Equipment

The basic required equipment as prescribed in the applicable airworthiness regulations (see Certification Basis) must be installed in the glider for certification. (As listed in Flight Manual, Page 18) the following equipment must be installed.

1. Non-cloud flying
   Airspeed indicator
   Altimeter
   Magnetic compass
2. Cloud flying
   Turn and slip
   Variometer
3. LS 1-f Flight Manual containing Flight and Service Manual approved by the Luftfahrt-Bundesamt (LBA) West Germany.

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.

NOTES

NOTE 1. Current weight and balance report including list of equipment in certificated empty weight, and loading instructions, when necessary, must be provided for each glider at the time of original certification.

NOTE 2. A. The following placards must be installed in full view of the pilot:

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

Never Exceed (Vne)	250 km/h	155 mph	135 kts
Rough air (Vb)	250 km/h	155 mph	135 kts
Maneuvering (Va)	170 km/h	106 mph	92 kts
Aero-tow (Vt)	170 km/h	106 mph	92 kts
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Dive brakes	250 km/h	155 mph	135 kts
Landing gear (Vl)	250 km/h	155 mph	135 kts

2. Maximum weight 390 kg (860 lb.) including water ballast.

3. LS 1-f Check List
This sailplane must be operated in compliance with operating limitations as stated in the form of markings placards and flight manual.
   a. Lock main pins
   b. Lock horizontal tail
   c. Connect ailerons
   d. Connect divebrakes
   e. Connect chute static line
   f. Lock divebrakes
   g. Test controls
   h. Lock canopy
   i. Check release

4. No aerobatic maneuvers approved.

B. Other markings and placards.

1. Maximum baggage load 26 lb.
2. Cockpit signs (See Flight Manual).

NOTE 3. All external portions of the glider exposed to sunlight must be painted white except for wingtips, nose of fuselage and rudder.

NOTE 4. Maintenance, Inspection and Repairs must be accomplished in accordance with Rolladen Schneider OHG LS 1-f Flight and Service Manual.

NOTE 5. Major repairs must be accomplished at FAA certificated repair stations rated for composite aircraft structure work or by a certified mechanic, in accordance with DG Flugzeugbau GmnH (or Rolladen Schneider OHG) repair methods approved by the FAA or by other methods approved by the FAA.

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