

**DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION**

G15CE
Revision 2
DG Flugzeugbau GmbH
DG-1000S
June 20, 2011

TYPE CERTIFICATE DATA SHEET No. G15CE

This data sheet, which is part of Type Certificate No. G15CE 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

I. Model DG-1000S, Glider, Utility and Aerobatic Category, approved July 24, 2002

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|-------------------------------|-----------------------------------|-------------------------|--------------------|--------------------|
| <u>Airspeed Limits (IAS).</u> | V_{NE} (never exceed) | | | |
| | | 10,000 feet | 168mph | 270 km/h 146 knots |
| | | 13,000 feet | 159mph | 256 km/h 138 knots |
| | | 16,000 feet | 151mph | 243 km/h 131 knots |
| | | 20,000 feet | 143mph | 230 km/h 124 knots |
| | | 23,000 feet | 135mph | 217 km/h 117 knots |
| | | 26,000 feet | 128mph | 205 km/h 111 knots |
| | | V_{RA} (in rough air) | 115 mph | 185 km/h 100 knots |
| | V_A (maneuvering) | 115 mph | 185 km/h 100 knots | |
| | V_{LO} (Landing Gear operating) | 118 mph | 190 km/h 103 knots | |
| | V_T (Aero-tow) | 115 mph | 185 km/h 100 knots | |
| | V_W (Winch launch) | 93 mph | 150 km/h 81 knots | |

C.G. Range. 7.48 in. to 17.32 in. (190 to 440 mm) aft of Datum.

Empty Weight C.G. See Flight Manual. (Record of Weight and Balance)

Datum. Wing leading edge at wing root

Leveling Means. Aft fuselage boom slope 1000:33 (tail down)

Maximum Weight. 1389 lbs (630 Kg) Aerobatic Category
1653 lbs (750 Kg) Utility Category (Retractable Main Wheel)
1389 lbs (630 Kg) Utility Category (Fixed Main Wheel)

Weak Link for Towing (Winch, Autotow, and Aerotow)
Maximum 2200 lbs (10,000 N) \pm 10% (\pm 220 lbs or 1000 N)

No. of Seats. Two

Maximum Baggage. 33 lbs (15 kg)

Water Capacity. Each wing 21.2 U.S. gal (80 liter)
Fin Ballast 1.64 U.S. gal (6.19 liter)

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Control Surface Movements.

Aileron Up 25° 2.8 ± 0.08 in. (71 ± 2 mm)
 Down 12° 1.34 ± 0.08 in. (34 ± 2 mm)
 Measured 6.46 in. (164 mm) from hinge line (at the aileron root)

Elevator: Up 27° 3.07 ± .04 in. (78 ± 1 mm)
 Down 21° 2.44 ± .04 in. (62 ± 1 mm)
 Measured 6.61 in. (168 mm) from hinge line

Rudder: 29° 6.45 ± 0.1 in. (163 ± 2 mm) to the right and left.
 Measured 13 in. (330 mm) behind hinge line.

Serial Nos. Eligible.

See Import Requirement

Certification Basis.

- 1) FAR 21.23, 21.29 and 21.50 effective February 1, 1965 including Amendment 21-1 through 21-53.
- 2) Joint Airworthiness requirements for Sailplanes and Powered Sailplanes (JAR-22) Change 5, dated October 28, 1995. Equivalent Level of Safety to JAR 22.207(c).
- 3) Exemption No. 4988 to 14CFR45, Effective April 20, 1964, Amendments 45-1 through 45-16, Section 45.11(a) and (d) (External Identification Plate), pursuant to 14CFR11, Effective November 10, 1962, Amendments 11-1 through 11-36, Section 11.25 and 11.27.
- 4) Date of Application for Type Certificate February 12, 1998.

The German civil airworthiness authority (LBA) originally type certificated this glider under its type certificate Number 413. The FAA validated this product under U.S. Type Certificate Number G15CE. 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.072.

Import Requirements.

The FAA can issue a U.S. airworthiness certificate based on an NAA 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 comply with U.S. airworthiness regulations 14 CFR Part 21.17(b) approved under U.S. Type Certificate No. G15CE and to be in a condition for safe operation.'

All model DG-1000S gliders are eligible for a U.S. Standard Airworthiness Certificate, if all import requirements of this TCDS are satisfied.

The U.S. airworthiness certification basis for aircraft type certificated under 14CFR21 section 21.29 exported from countries other than the country of manufacturer (e.g. third party country) is section 21.183(d).

Equipment.

The basic required equipment as prescribed in the applicable airworthiness regulations (see Certification Basis) must be installed in the glider for certification. In addition, the DG-1000S Flight Manual, LBA-approved dated March 2002, is required.

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 Luftfahrt Bundesamt (LBA).

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

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

- 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 on a case-by-case basis to EASA to approve 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 data together with list of equipment included in the certificated empty weight, and loading instructions, when necessary, must be provided for each glider at the time of original certification.

NOTE 2.

The placards listed in the flight manual must be displayed. A complete listing of placards is in the Instructions for Continued Airworthiness Manual (Maintenance Manual).

NOTE 3.

Airworthiness Limitations of the DG-1000S is incorporated in Section 0.4 of the Maintenance Manual, dated March 2002, and is FAA-approved. It specifies mandatory replacement times, and structural repair procedures. These airworthiness limitations may not be changed without FAA approval.

NOTE 4.

All external portions of the glider exposed to sunlight must be painted white except the surfaces for the registration Nos. and anti-collision paint as specified by the manufacturer.

NOTE 5.

Major structural repairs must be accomplished at FAA certificated repair stations or by a certified mechanic rated for composite aircraft structure work, in accordance with DG Flugzeugbau GmbH repair methods approved by FAA.

NOTE 6.

Information essential for the proper operation, maintenance and inspection of the glider is contained in the Model DG-1000S Flight Manual and Maintenance Manual.

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