

**DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION**

G32EU
Glaser-Dirks
DG-100
July 14, 1976

TYPE CERTIFICATE DATA SHEET NO. G32EU

This data sheet which is a part of type certificate No. G32EU 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 Glaser-Dirks Flugzeugbau GmbH
 752 Bruchsal 4,
 Im Schollengarten 19-20
 West Germany

I - Model DG-100 approved July 14, 1976.

Airspeed limits (I.A.S.)	<table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 20%;">Never exceed (Vne)</td> <td style="width: 20%;">260 km/h.</td> <td style="width: 20%;">162 mph</td> <td style="width: 20%;">140 kts</td> </tr> <tr> <td>Max. speed in rough air (Vb)</td> <td>260 km/h.</td> <td>162 mph</td> <td>140 kts</td> </tr> <tr> <td>Maneuvering (Va)</td> <td>165 km/h.</td> <td>103 mph</td> <td>89 kts</td> </tr> <tr> <td>On aero-tow (Vt)</td> <td>165 km/h.</td> <td>103 mph</td> <td>89 kts</td> </tr> <tr> <td>On winch tow (Vw)</td> <td>130 km/h.</td> <td>81 mph</td> <td>70 kts</td> </tr> <tr> <td>Landing gear extended</td> <td>165 km/h.</td> <td>103 mph</td> <td>89 kts</td> </tr> <tr> <td>Spoilers</td> <td>260 km/h.</td> <td>162 mph</td> <td>140 kts</td> </tr> </table>	Never exceed (Vne)	260 km/h.	162 mph	140 kts	Max. speed in rough air (Vb)	260 km/h.	162 mph	140 kts	Maneuvering (Va)	165 km/h.	103 mph	89 kts	On aero-tow (Vt)	165 km/h.	103 mph	89 kts	On winch tow (Vw)	130 km/h.	81 mph	70 kts	Landing gear extended	165 km/h.	103 mph	89 kts	Spoilers	260 km/h.	162 mph	140 kts
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C.G. range	7.86 in. to 14.37 in. (199.6 mm to 365 mm) aft of datum.																												
Empty weight C.G. range	See Flight Manual.																												
Datum	Wing leading edge at wing root.																												
Leveling means	Slope of rear top surface of fuselage boom between stations 100 to 3.67 tail down (See Flight manual, Service Manual, Page 20).																												
Maximum weight	418 kg. (922 lb.) including water ballast.																												
No. of seats	One adjustable seatback pilot's C.G. range most forward at 117 kg. (258 lb.) payload 492 mm (19.4 in.) most rearward at 75 kg. (165 lb.) payload 537 mm (21.1 in.)																												
Ballast Fixed	Station 1171 mm; 46.1 in. forward of datum (See Flight Manual) Max. 6.6 kg. (14.6 lb.)																												
Water Ballast	Two water ballast tanks at station 200 mm (7.9 in.), each 10 1/2 gal., 40 kg. (88 lb.) or 26 gal., 50 kg. (110 lb.)																												
Baggage	30 kg. (66 lb.) at station 230 mm (9.1 in.) aft of datum.																												
Control surface movements	<table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 20%;">Stabilizer</td> <td style="width: 20%;">Up</td> <td style="width: 20%;">139 ± 2 mm (5.5 ± 1/16 in.) up from datum</td> </tr> <tr> <td></td> <td>Down</td> <td>66 ± 2 mm (2.6 ± 1/16 in.) up from datum</td> </tr> <tr> <td></td> <td>Neutral</td> <td>87 ± 2 mm (3.4 ± 1/16 in.) up from datum</td> </tr> </table> See Service Manual for measuring datum line location. Measuring distance from hinge line: 181 mm (7.3 in.)	Stabilizer	Up	139 ± 2 mm (5.5 ± 1/16 in.) up from datum		Down	66 ± 2 mm (2.6 ± 1/16 in.) up from datum		Neutral	87 ± 2 mm (3.4 ± 1/16 in.) up from datum																			
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	Rudder	To either side 243 ± 10 mm (9.6 ± 3/8 in.) Measuring distance from hinge line: 460 mm (18.1 in.)		
	Aileron	Up	102 ± 5 mm (4.0 ± 3/16 in.)	
		Down	46 ± 5 mm (1.8 ± 3/16 in.)	
			Measuring distance from hinge line: 188 mm (7.4 in.)	
	Spoilers	Out	140 mm min. (5.5 ± 3/16 in.)	
		In	0 mm	
	Trim Tab	At neutral (stab neutral) tab control is 3 mm (1.8 in.) from full aft trim position.		
Weak Link for (Rated Load on) Winch & Aero Two.	500 kg. (1100 lb.)			
Serial Nos. eligible	See Import Requirements.			
Certification basis	FAR 21.23 and FAR 21.29 effective February 1, 1965. Type Certificate No. G32EU issued July 14, 1976. Date of Application for Type Certificate: October 3, 1975.			
Validation Basis	Type Certificate was issued in accordance to FAR 21.29(a)(1) in validation of the Luftfahrt-Bundesamt (LBA) certification of compliance with the Federal Republic of Germany Glider Airworthiness Requirements (LFS) dated February 1966.			
Required Equipment	The basic required equipment as prescribed in the applicable airworthiness regulations (as listed in Flight Manual) must be installed in the glider for standard airworthiness certification. In addition the following equipment must be installed: - Instruments (non-cloud flying) - Airspeed indicator - Altimeter - Magnetic compass - Additional instruments for cloud flying - Turn and slip indicator - Variometer - DG-100 Flight Manual (Containing Flight and Service Manual), approved by the Luftfahrt-Bundesamt.			
Import Requirements	A U.S. Standard Airworthiness Certificate may be issued on the basis of a Certificate of Airworthiness for Export signed by a representative of the Luftfahrt-Bundesamt (LBA) of the Federal Republic of Germany, containing the following statement: "The glider covered by this certificate has been examined, tested, and found to conform to the type design approved under FAA Type Certificate No. G32EU and is in condition for safe operation".			

NOTE 1.

Weight: Current weight and balance report including the list of equipment in certificated empty weight, and loading instructions when necessary must be provided at the time of original certification.

NOTE 2.

A.

The following placards and markings must be displayed in full view of the pilot:

(1)

Maximum airspeeds

Never exceed (Vne)	260 km/h.	162 mph	140 kts
In rough air (Vb)	260 km/h.	162 mph	140 kts
Maneuvering (Va)	165 km/h.	103 mph	89 kts
On aero-tow (Vt)	165 km/h.	103 mph	89 kts
On winch tow (Vw)	130 km/h.	81 mph	70 kts
Landing gear extended	165 km/h.	103 mph	89 kts
Spoilers	260 km/h.	162 mph	140 kts

- (2) Gross weight 418 kg. (922 lb.) including water ballast.
If the pilot's weight with the parachute is below 75 kg. (165 lb.) ballast weight must be installed in the trim weight holder or in the seat. (See Flight Manual).
- (3) Operating Limitations
The sailplane must be operated in compliance with the operating limitations as stated in the form of markings, placards and Flight Manual.
Cloud flying is only permitted when the following instruments are installed:
airspeed indicator, altimeter, magnetic compass, turn and slip indicator and variometer.
Approved aerobatics maneuvers
- | | |
|---|--------------------------|
| Maneuver | Recommended entry speed |
| Looping, chandelle, stall turn | 170 km/h. 106 mph 92 kts |
| Spin | Use slow deceleration |
| Maximum load factor - at maneuvering speed: +5.3/-2.65 at never exceed speed: +4.0/-1.5 | |

All aerobatics maneuvers including spins must be accomplished in accordance with the approved DG-1000 Flight Manual.

Night flying is prohibited.

- B. Other markings or placards
- | | |
|-----------------------|---------------------------------|
| Near the tow coupling | Rated load 500 kg (1100 lb.) |
| Above the main wheel | 2.5 Kg/cm ² (36 psi) |
| Above the tail wheel | 2.0 Kg/cm ² (28 psi) |

NOTE 3. Inspections, Maintenance, Repairs and Repainting must be accomplished in accordance with Glaser-Dirks DG-100 Flight Manual, Service Manual Section.

NOTE 4. For painting exterior surfaces use only two component paints with ultra-violet protection as listed in Repair Manual.

NOTE 5. Repairs must be performed in accordance with repair methods approved by Glaser-Dirks Flugzeugbau Company. For major repair Glaser-Dirks should be contacted.

.....END.....