



TYPE CERTIFICATE DATA SHEET Nº EP-2012T06-00

Type Certificate Holder:

DG FLUGZEUGBAU GmbH
Otto-Lilienthal-Weg 2
Bruchsal D-76646
GERMANY

EP-2012T06-00
Sheet 01

DG FLUGZEUGBAU
DG-1000S
DG-1000M

13 March 2012

This data sheet, which is part of Type Certificate No. 2012T06, prescribes conditions and limitations under which the product, for which the Type Certificate was issued, meets the airworthiness requirements of the Brazilian Aeronautical Regulations.

I - Model DG-1000S Glider (Utility and Aerobatic Category), approved 14 March 2012.

AIRSPED LIMITS (IAS)	Never Exceed (V_{NE}):	
	3 000 m	270 km/h (146 kias)
	4 000 m	256 km/h (138 kias)
	5 000 m	243 km/h (131 kias)
	6 000 m	230 km/h (124 kias)
	7 000 m	217 km/h (117 kias)
	8 000 m	205 km/h (111 kias)
	Maneuvering (V_A)	185 km/h (100 kias)
	Rough air speed (V_{RA})	185 km/h (100 kias)
	Max. landing gear operating speed (V_{LO})	185 km/h (100 kias)
	Max. Aero-tow speed (V_T)	185 km/h (100 kias)
	Max. Winch-launch speed (V_w)	150 km/h (81 kias)
CG RANGE (Landing gear extended)	Forward limit: 190 mm aft datum Rearward limit: 440 mm aft datum	
CG RANGE (Empty weight)	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	630 kg Aerobatic Category 750 kg Utility Category (retractable main wheel)	
WEAK LINK FOR TOWING (WINCH AND AEROTOW)	Maximum 1 100 daN	
MINIMUM CREW	1 pilot	

MAXIMUM OCCUPANTS	2
MAXIMUM BAGGAGE	15 kg
WATER CAPACITY (ballast)	In the wings : 160 kg In the fin: 6,2 kg
CONTROL SURFACE MOVEMENTS	Elevator: Up 27° Down 21° Rudder: Right 29° -1° Left 29°-1° Aileron: Up 25° Down 12° For values in mm and tolerances see Maintenance Manual
SERIAL NUMBER ELIGIBLE	All Serial Numbers
IMPORT ELIGIBILITY	<p>A Brazilian Certificate of Airworthiness may be issued on the basis of on an EASA Export Certificate on Airworthiness (or a third country Export Certificate on Airworthiness, in case of used aircraft imported from such country), including the following statement:</p> <p>“The aircraft covered by this certificate has been inspected, tested, and found to be in conformity with the Brazilian approved type design as defined by the Brazilian Type Certificate no. 2012T06 and in condition of safe operation”.</p> <p>The ANAC Report H.10-2460-00, dated 14 March 2012 or further revisions, contains the Brazilian requirements for the acceptance of these airplanes. (See note 4)</p>
CERTIFICATION BASIS	<p>Brazilian Type Certificate No. 2012T06 issued on 14 March 2012 based on the RBAC 21.29, 21.17(b) and Joint Airworthiness Requirements for Sailplanes and Powered Sailplanes (JAR 22), Change 5, issued October 28. 1995.</p> <p>Special Conditions: None</p> <p>Exemptions: None</p> <p>Equivalent Safety Level Findings: JAR 22.207(c).</p>
REQUIRED EQUIPMENT	The basic required equipment, as prescribed in the applicable airworthiness regulations (see Certification Basis) must be installed in the airplane.

NOTES:

- NOTE 1** Weight and balance. Current weight and balance data together with list of equipment included in certificate empty weight, and loading instructions, when necessary, must be provided for each glider at the time of original certification.
- NOTE 2** Markings and placards. The placards listed in the flight manual must be displayed. A complete listing of placards is in the instructions for continued Airworthiness (Maintenance Manual)
- NOTE 3** Continuing Airworthiness. Airworthiness limitation of the DG-1000S is incorporated in section 0.4 of the EASA approved Maintenance Manual.
- NOTE 4** The differences of the Brazilian airplanes in relation to the basic EASA type design are summarized below:
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The Brazilian Airplane Flight Manual Cover page.

- NOTE 5** All parts exposed to sun radiation – except the areas for markings and registration must have a white color surface
- NOTE 6** Approved for VFR-flight in daytime
- NOTE 7** Major structural repairs must be accomplished at ANAC certified repair station in accordance with Repair Manual for Sailplanes and Motorgliders DG-1000

II - Model DG-1000M MotorGlider (Utility Category), approved 14 March 2012.

ENGINE	SOLO 2625 02i (EM 2012T03)		
FUEL	AVGAS 100LL Mixed with self mixing Super quality two stroke oil - specification JASO FC or FD or higher quality. Mixing ratio 1:50.		
ENGINE LIMITS	Maximum power	Start	50 KW / 68 PS
		Continuous	50 KW / 68 PS
	Max. Engine RPM	6600 1/min	
	Max. Continuous RPM	6600 1/min	
	Max. cylinder head temperature		95°C
	Reduction gear (with 5 V-belts approx)		1:2,8
FUEL QUANTITY	41 liters (Total) 1 liters (unusable)		
OIL	Self mixing Super quality two stroke oil - specification JASO FC or FD or higher quality		
PROPELLER AND PROPELLER LIMITS	Binder Flugzeug und Motorenbau GmbH BM-G1-160-R-120-1 (EH 2012T04) Diameter 1.6 m		
AIRSPPEED LIMITS (IAS)	Never Exceed (V_{NE}):		
	3 000 m		270 km/h (146 kias)
	4 000 m		256 km/h (138 kias)
	5 000 m		243 km/h (131 kias)
	6 000 m		230 km/h (124 kias)
	7 000 m		217 km/h (117 kias)
	8 000 m		205 km/h (111 kias)
	Maneuvering (V_A)		185 km/h (100 kias)
	Rough air speed (V_{RA})		185 km/h (100 kias)
	Max. landing gear operating speed (V_{LO})		185 km/h (100 kias)
	Max. Aero-tow speed (V_T)		185 km/h (100 kias)
	Max. Winch-launch speed (V_W)		150 km/h (81 kias)
	Max. speed with powerplant extended (V_{PE})		185 km/h (100 kias)
	Max. speed to extend and re-tract the power-plant (V_{PO})		100 km/h (54 kias)
	Never exceed speed in case the landing gear is not locked (V_{LE})		150 km/h (81 kias)

CG RANGE (Landing gear extended)	<p>With powerplant installed: Forward limit: 320 mm aft datum Rearward limit: 440 mm aft datum</p> <p>With powerplant removed: Forward limit: 200 mm aft datum Rearward limit: 440 mm aft datum</p>									
DATUM	Wing leading edge at wing root rib									
LEVELING MEANS	Aft fuselage boom slope 1000:33 (tail down)									
MAXIMUM WEIGHT	790 kg 600 kg Non-lifting Parts									
WEAK LINK FOR TOWING (WINCH AND AEROTOW)	Maximum 1 100 daN									
MINIMUM CREW	1 pilot									
MAXIMUM OCCUPANTS	2									
MAXIMUM BAGGAGE	15 kg									
BALLAST	Water ballast in the wings : 160 kg Trim ballast box in the fin: 12 kg Trim ballast box in the front cockpit: 5 kg per box (total 10 kg)									
CONTROL SURFACE MOVEMENTS	<table border="0"> <tr> <td>Elevator:</td> <td>Up 27°</td> <td>Down 21°</td> </tr> <tr> <td>Rudder:</td> <td>Right 29° -1°</td> <td>Left 29°-1°</td> </tr> <tr> <td>Aileron:</td> <td>Up 25°</td> <td>Down 12°</td> </tr> </table> <p>For values in mm and tolerances see Maintenance Manual</p>	Elevator:	Up 27°	Down 21°	Rudder:	Right 29° -1°	Left 29°-1°	Aileron:	Up 25°	Down 12°
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Environmental Standards: ICAO Annex 16, Volume 1, Part II, Chapter X

REQUIRED EQUIPMENT

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

NOTES:

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- NOTE 2** Markings and placards. The placards listed in the flight manual must be displayed. A complete listing of placards is in the instructions for continued Airworthiness (Maintenance Manual)
- NOTE 3** Continuing Airworthiness. Airworthiness limitation of the DG-1000M is incorporated in section 0.4 of the EASA approved Maintenance Manual DG-1001M.
- NOTE 4** The differences of the Brazilian airplanes in relation to the basic EASA type design are summarized below:
The Brazilian Airplane Flight Manual Cover page.
- NOTE 5** All parts exposed to sun radiation – except the areas for markings and registration must have a white color surface
- NOTE 6** Approved for VFR-flight in daytime
- NOTE 7** Major structural repairs must be accomplished at ANAC certified repair station in accordance with Repair Manual for Sailplanes and Motorgliders DG-1000
- NOTE 8** The DG-1000M may be operated with the engine removed or the engine inoperable. Refer to flight Manual and Maintenance Manual.



HÉLIO TARQUÍNIO JÚNIOR

**Gerente Geral de Certificação de Produto Aeronáutico
(General, Manager Aeronautical Product Certification)**
