

**DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION**

G13EU
Revision 2
FLUG- & FAHRZEUGWERKE AG
HBV DIAMANT
DIAMANT 16.5
March 1, 2012

TYPE CERTIFICATE DATA SHEET NO. G13EU

This Data Sheet which is a part of type certificate No. G13EU 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 Flug- und Fahrzeugwerke AG
 Altenrhein
 9422 S T A A D
 Switzerland

Type Certificate Ownership Record

- (1) **This TC was considered not valid by the state of design on March 27, 2007, and has been replaced by European Aviation Safety Agency (EASA) Specific Airworthiness Specification (SAS) numbers EASA.SAS.A.044 (for the HBV Diamant) and EASA.SAS.A.042 (for the Diamant 16.5), March 1, 2012. Only standard airworthiness certificates issued prior to March 27, 2007 are valid.**
- (2) **Future unsafe conditions existing in the aircraft may result in the revocation of the airworthiness certificates of the aircraft if there is no entity to comply with 14 CFR § 21.99(a), "Required design changes."**
- (3) **Replacement parts may not be available in the future.**

I. Model HBV DIAMANT, approved June 7, 1967

Air Speed Limits (IAS)	Glide or dive		145 knots		
	Airplane tow		81 knots		
	Auto-winch tow		81 knots		
	Spoilers extended		145 knots		
C. G. Range	(+10") to (+15.4")				
Datum	Wing leading edge at root rib				
Leveling Means	Tangent on wing rib at root				
Maximum Weight	660 lbs.				
No. of Seats	1				
Baggage	None				
Control Surface Movements	Elevator	UP	10°	Down	10°
	Rudder	Right	30°	Left	30°
	Aileron				
	Flaps neutral	UP	21°	Down	9°
	Flaps up	UP	21°	Down	2°
	Flaps down	UP	17°	Down	15°
	Flaps	UP	10°	Down	15°

Page No.	1	2	3
Rev. No.	2	2	1

II Model DIAMANT 16.5 approved 1 July, 1969

Model Diamant 16.5 same as HBV Diamant except for redesigned wing.

Air Speed Limits (IAS)	Glide or dive	130 knots	
	Airplane tow	80 knots	
	Auto-winch tow	80 knots	
	Spoilers extended	130 knots	
C.G. Range	(±9.5") to (±16.0")		
Datum	Wing leading edge at root rib		
Leveling Means	The fuselage reference line BL, which is parallel to a line defined by the following points: Point "A" on the upper fuselage surface centerline at the aft edge of the canopy, and point "B" 1 3/8 inches above the upper fuselage surface centerline 40 inches aft of point "A".		
Maximum Weight	Without water ballast:	860 lbs	
	With water ballast in the wings:	900 lbs	
Number of seats	1		
Baggage	None		
Control surface movements	Elevator	UP 10°	Down 10°
	Rudder	Right 30°	Left 30°
	Aileron		
	Flaps neutral	UP 21°	Down 9°
	Flaps down	UP 15°	Down 15°
	Flaps up	UP 23°	Down 4°
	Flaps	UP 12.5°	Down 15°

Data Pertinent to all Models

Serial Nos. Eligible	Only those aircraft serials holding a standard airworthiness certificate issued prior to March 1, 2012 are eligible.
Certification Basis	FAR 21.29 - FAR 21.23, FAA Basic Glider Criteria Handbook of 1962. Type Certificate No.G13EU issued June 7, 1967 Date of Application for Type Certificate: June 6, 1966
Import Requirements	None eligible after March 1, 2012. Previous to this date: A U.S. Airworthiness Certificate may be issued on the basis of a Certificate of Airworthiness for Export signed by a representative of the Swiss Federal Air Office, containing the following statement: "The glider covered by this certificate has been examined and found to comply with FAR 21.23, FAA Basic Glider Criteria Handbook of 1962 and conforms to Type Certificate No.G13EU."
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 following is required: a) <u>For Model Diamant 16.5:</u> Swiss Federal Air Office approved Sailplane Flight and Maintenance Manual Report No.FV-818.

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

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

Model HBV "DIAMANT"

- a) "Cloud flying": Permitted only when the following instruments are installed:
1. Sensitive Altimeter
 2. Variometer
 3. Compass
 4. Electric Turn and Bank
 5. Clock
- b) "No acrobatic maneuvers including spins approved".
- c) "When flying in rough air do not exceed 90 knots".
- d) "Night flying is prohibited".

Model DIAMANT 16.5

- a) This sailplane must be operated in compliance with the Approved Sailplane Flight Manual.

Footnote:

All placard required in the Approved Sailplane Flight Manual must be installed in the appropriate locations.

NOTE 3: All external portions of the glider exposed to sunlight must be painted white. Registration and Competition numbers must be painted blue-gray, or in any other light colours.

NOTE 4: Maintenance, inspections and repairs must be accomplished in accordance with Swiss Federal Air Office approved Flug- and Fahrzeugwerke AG, Flight and Maintenance Manual, Report No. FV-812 for the Model HBV DIAMANT and Report No. FV-818 for the Model DIAMANT 16.5; and Repair Manual, Report No. FV-816, for the Model HBV DIAMANT and Model DIAMANT 16.5 dated May 27, 1968.

NOTE 5: Major repairs must be performed in accordance with repair methods approved by the Flug- and Fahrzeugwerke AG, Altenrhein.

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