# DEPARTMENT OF TRANSPORTATION FEDERAL AVIATION ADMINISTRATION

G13EU Revision 1 FLUG- & FAHRZEUGWERKE AG HBV DIAMANT DIAMANT 16.5

## 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

## 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

Baggage None

Control Surface Movements Elevator UP 10° Down 10°

Rudder Right 30° Left 30°

Aileron

21° 9° Flaps neutral UP Down 2° Flaps up UP 21° Down Down 15° UP 17° Flaps down UP 10° Down 15° Flaps

## 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")

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## II Model DIAMANT 16.5 approved 1 July, 1969 (cont'd)

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  $10^{\circ}$  Down  $10^{\circ}$ 

Rudder Right 30° Left 30° Aileron 21° 90 Flaps neutral UP Down Flaps down UP 15° Down 15° UP 23° 4° Flaps up Down 15° Flaps UP 12.5° Down

#### **Data Pertinent to all Models**

Serial Nos. Eligible The Swiss Federal Air Office Certificate of Airworthiness for Export endorsed as noted

below under "Import Requirements" must be submitted for each individual glider for

which application for certification is made.

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 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) For Model Diamant 16.5:

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.

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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 Fahrzeuwerke AG, Altenrhein.

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