# DEPARTMENT OF TRANSPORTATION FEDERAL AVIATION ADMINISTRATION

G25EU Revision 2 PILATUS B4-PC11 B4-PC11A B4-PC11AF March 16, 1977

# TYPE CERTIFICATE DATA SHEET G25EU

This data sheet which is a part of type certificate No. G25EU 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 Pilatus Aircraft Limited Stans, Switzerland

## I - Model B4-PC11, Standard Category Sailplane, approved September 1, 1972.

Airspeed Limits (CAS)

Never Exceed (Vne)	130 kts	(149 mph)
Maneuvering (Va)	78 kts	(90 mph)
Airplane Tow (Vat)	78 kts	(90 mph)
Auto-winch Tow (Vwt)	70 kts	(81 mph)
Dive Brakes (Spoilers)	130 kts	(149 mph)

#### II. Model B4-PC11A, Acrobatic Category Sailplane, approved March 16, 1977.

(Same as B4-PC11 except with increased downward elevator deflection and rudder modified in accordance with Pilatus Drawing No. 113.40.11.001(g) or Pilatus Document No. 01575. See Data pertinent to all models and notes for limitations and required equipment.)

## III. Model B4-PC11AF, Acrobatic Category Sailplane (including flick-snap maneuvers), approved March 16, 1977.

(Same as B4-PC11A except with reinforced fuselage rear structure in accordance with Pilatus Drawing No. 112.35.11.136/137(e) or Pilatus Document No. 01582. See Data pertinent to all models and notes for limitations and required equipment.)

#### DATA PERTINENT TO ALL MODELS

Airspeed Limits (CAS)

	B4-PC11	B4-PC11A	B4-PC11AF
Never Exceed (Vne)	130 kts	130 kts	130 kts
	(149 mph)	(149 mph)	(149 mph)
Maneuvering (Va)	78 kts	88 kts	88 kts
	(90 mph)	(101 mph)	(101 mph)
Airplane Tow (Vat)	78 kts	88 kts	88 kts
	(90 mph)	(101 mph)	(101 mph)
Auto-winch Tow (Vwt)	70 kts	70 kts	70 kts
	(81 mph)	(81 mph)	(81 mph)
Dive Brakes (Spoilers)	130 kts	130 kts	130 kts
	(149 mph)	(149 mph)	(149 mph)
Flick (Snap) Maneuvers	-	-	81 kts
			(93 mph)

C.G. range (+11.0 in.) to (+16.5 in.) (30% to 45% M.A.C.) at all weights.

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Empty weight C.G. range None

Datum Wing leading edge near root.

Leveling means Slope of rear top surface of fuselage between stations 1512 mm (59.5 in.) and 2772 mm

(109.1 in.): 1000 to 80.

Maximum weight 770 lb.

No. of seats 1 (Adjustable from 20.9 in. to 24.0 in.)

Ballast Pilatus standard ballast weight (at 143.7 in.) including attachment bolt and nut:

(a) lb., small weight only(b) 10 lb., large weight only.

(c) 14 lb., large and small weight combined.

Control surface movements Elevator UP 3.94 ± 0.2 in. Measured as a chord segment at

B4-PC11 DOWN 2.75  $\pm$  0.2 in. middle of elevator.

B4-PC11A & AF DOWN 3.35  $\pm$  0.2 in. Rudder RIGHT 9.05 + 0.4 in. Measured as a chord segment on

LEFT 9.05 + 0.4 in. lower end rib.

Aileron UP  $4.72 \pm 0.2$  in. Measured as a chord segment on

DOWN 2.28 + 0.2 in. inboard rib.

Spoiler UP 6.50 + 0.2 in.

Weak Links for Towing 1100 lb.  $\pm$  110 lb. max.

Serial Nos. eligible A Swiss Federal Air Office (FAO) Certificate of Airworthiness for Export endorsed as

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

for which application for standard airworthiness certification is made.

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 Swiss Federal Air Office

(FAO), 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 G25EU and is in condition for

safe operation."

Certification Basis FAR 21.29 and FAR 21.23, effective February 1, 1965.

Type Certificate G25EU, issued September 1, 1972.

Date of Application for Type Certificate B4-PC11, July 5, 1971.

Validation Basis Type Certificate G25EU was issued pursuant to FAR 21.29(a)(1)(ii) in validation of the

Swiss Federal Air Office (FAO) certification of compliance with the Federal Republic of Germany "Airworthiness Requirements for Sailplanes" Edition: February 1966, (Swiss Certification Basis) which were found to provide a level of safety equivalent to the

aforementioned FAA certification basis.

Equipment The basic required equipment as prescribed in the applicable airworthiness regulations

(see Certification Basis) must be installed in the glider for standard airworthiness

certification.

In addition the following equipment must be installed:

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Equipment (Cont'd)	1.	Instruments (non-cloud flying)	B4-PC11	B4-PC11A	B4-PC11AF
		(a) Airspeed indicator marked as follows:	-	-	-
		Red Radial	130 kts	130 kts	130 kts
			(149 mph)	(149 mph)	(149 mph)
		Yellow Arc	130-78 kts	130-88 kts	130-88 kts
			(149-90 mph)	(149-101 mph)	(149-101 mph)
		Green Arc	78-36 kts	88-36 kts	88-36 kts
			(90-42 mph)	(101-42 mph)	(101-42 mph)
		(b) Altimeter	-	-	-
		(c) Magnetic compass	-	-	-
	2.	Additional Instruments req for cloud flying: (a) Turn and bank indicator	'd		
		(b) Variometer	-	- -	-
	3.	Additional equipment req'd for acrobatics:  (a) Accelerometer marked as follows			
		Red Radials at	+6.32g -4.32g	+7.0g -4.7g	+7.0g -4.7g
		(b) Pedal straps	-	-	-
	4.	Swiss FAO "Approved Flig	ght Manuals and (	Operating Manuals"	

for Model B4-PC11 Doc. No. 23-11-00-01473 for Model B4-PC11A Doc. No. 23-11-00-01574E for Model B4-PC11AF Doc. No. 23-11-00-01574E including Supplement Doc. No. 01580E

for all Models Supplement Doc. No. 01533E

- NOTE 1. Current weight and balance report including list of equipment in certificated empty weight, and loading instructions when necessary, must be provided for each glider at the time of original airworthiness certification.
- The following placards must be installed in full view of the pilot: NOTE 2.
  - (a) "This glider must be operated in compliance with the Operating Limitations stated in the form of placards, markings, and manuals."
  - (b) "Cloud flying: Permitted only when the following instruments are installed:
    - (1) Airspeed Indicator
    - (2) Altimeter
    - (3) Magnetic Compass
    - (4) Turn and Bank Indicator
    - (5) Variometer"

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NOTE 2 (Cont'd) (c) "Approved Aerobatic Maneuvers:

	Figures	Entry Speed	Expected Acceleration
		kts	
	Lazy eight	92	+2g
	Steep spiral	65	+3g
	Looping positive	97	+3g
	Wing over	97-103	+2.5g
	Roll off the top	97	+3g
	(Immelmann)		-
	Climbing half roll	75	+2g
	Roll controlled	75-86	-
	Inverted flight	65	-1g
	Tail slide	97	+2.5g
	Looping negative, starting from	38	-2.5g
	normal attitude		
	Looping negative, starting from		
	inverted flight	108	-2.5g
	Spin	See Flight Manual	
	Flick (snap) roll	70	+4g"
(d)	"Night flying is prohibited."		
(e)		B4-PC11	B4-PC11A and AF
	"Never exceed speed	130 kts	130 kts
	Maneuvering speed	78 kts	88 kts
	Airplane tow speed	78 kts	88 kts
	Auto-winch tow speed	70 kts	70 kts
	Dive brakes extended	130 kts	130 kts"
(f)	"Maximum weight: 770 lb."		

- NOTE 3. Conversion from Model B4-PC11 to Model B4-PC11A in accordance with Pilatus Document No. 01575. The modification denoted in Pilatus Document No. 01582 is required to convert the Model B4-PC11A to Model B4-PC11AF.
- NOTE 4. Information essential for the proper maintenance, inspection and repair of the glider is contained in the Pilatus Model B4-PC11 Maintenance and Repair Manual, Doc. No. 23- 11-00-01482.

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