



TYPE CERTIFICATE DATA SHEET Nº EP-2012T15

Type Certificate Holder:

Alexander Schleicher GmbH & Co. Segelflugzeugbau
Alexander Schleicher str. 1
36163 Poppenhausen (Wasserkuppe)
Germany

EP-2012T15

Sheet 01

SCHLEICHER

ASW 28

ASW 28-18

10 October 2012

This data sheet, which is part of Type Certificate No. **2012T15**, 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 ASW 28 (Utility Category), approved 10 October 2012.

AIRSPEED LIMITS	Never Exceed Speed (V_{NE}):	270 km/h
	Maneuvering Speed (V_A):	200 km/h
	Rough Air Speed (V_{RA}):	200 km/h
	Max. Aerotow Speed (V_T):	170 km/h
	Max. Winch-Launch Speed (V_W):	140 km/h
	Max. Landing Gear Operat. Speed (V_{LO}):	200 km/h
DIMENSIONS	Span	15.0 m
	Length	6.59 m
	Height	1.3 m
	Wing Area	10.5 m ²
CG RANGE	222 mm to 345 mm (aft of datum point)	
DATUM	Wing leading edge at root rib.	
LEVELING MEANS	Upper side of fuselage boom placed at slope 1000:49.	
WEIGHT	Max. Mass with Water Ballast:	525 kg
	Max. Mass of Non-Lifting Parts:	260 kg
MINIMUM CREW	One Pilot	
No OF SEATS	One	
WEAK LINKS (Ultimate Strength)	Max. 660 daN for winch launching	
	Max. 660 daN for aerotow	
	Max. 660 daN for autotow	

REQUIRED EQUIPMENT

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

- a. Min. equipment
 1. Airspeed indicator up to 300 km/h
 2. Altimeter
 3. Four-point harness (symmetrical)

For additional equipment refer to Maintenance Manual

LAUNCHING HOOKS

1. Sicherheitskupplung Europa G 73 -LBA Datasheet No. 60.230/2
2. Sicherheitskupplung Europa G 72 -LBA Datasheet No. 60.230/2
3. Sicherheitskupplung Europa G 88 -LBA Datasheet No. 60.230/2
4. Bugkupplung E 72 - LBA Datasheet No. 60.230/1
5. Bugkupplung E 75 - LBA Datasheet No. 60.230/1
6. Bugkupplung E 85 - LBA Datasheet No. 60.230/1

OPERATIONAL CAPABILITY

VFR Day.

Cloud flying and limited aerobatic maneuvers according to the specifications in the Flight Manual without water ballast.

LIFETIME LIMITATIONS

Refer to Maintenance Manual.

DEFLECTION OF CONTROL SURFACES

Refer to Maintenance Manual.

SERIAL NUMBER ELIGIBLE

28001 to 28499, with exception of 28071.

IMPORT ELIGIBILITY

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:

“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. 2012T15 and in condition of safe operation”.

CERTIFICATION BASIS

Brazilian Type Certificate No. 2012T15 issued on 10 October 2012 based on the RBAC 21.29, 21.17(b), amdt. 01, and:

- a. JAR-22, Change 5, issued 28-Oct-1995;
- b. That defined by LBA letter M 531-423/00, dated 28 December 2000;
- c. Standards for Structural Substantiation of Sailplane and Powered Sailplane Components Consisting of Glass or Carbon Fibre Reinforced Plastics, issued July 1991;
- d. Additional Requirements for the Installation of a Water Ballast System in the Vertical Tail for the Purpose of Balancing a Nose Down Moment Caused by Water Ballast in the Wing, issued August 1991;
- e. JAR NPA D-46 Seats and Safety Harnesses;
- f. JAR NPA D-64 Headrests.

Special Conditions: None

Exemptions: None

Equivalent Safety Findings: 22.335(f) - V_D Determination

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 Section 9 of Maintenance Manual.
- NOTE 3** Continuing Airworthiness.
The inspections, maintenance, repairs and painting shall be performed in accordance with the ASW 28 Maintenance and Repair Manuals instructions.
- NOTE 4** The differences of the Brazilian airplanes in relation to the basic EASA type design are summarized below:
1. The Brazilian Airplane Flight Manual cover page must be included.
2. Markings and placards related to baggage compartments must be in Portuguese (or English and Portuguese).
3. Only altimeters which present barometric setting units of "mbar" or "hpa" may be installed.
- NOTE 5** All parts exposed to sun radiation – except the areas for markings and registration – must have a white color surface.
- NOTE 6** Major structural repairs must be accomplished at ANAC certificated repair station, in accordance with Alexander Schleicher ASW 28 Repair Manual.

II - Model ASW 28-18 (Utility Category), approved 10 October 2012.

AIRSPPEED LIMITS	Never Exceed Speed (V_{NE}):	270 km/h	
	Maneuvering Speed (V_A):	200 km/h	
	Rough Air Speed (V_{RA})	200 km/h	
	Max. Aerotow Speed (V_T)	170 km/h	
	Max. Winch-Launch Speed (V_W)	140 km/h	
	Max. Landing Gear Operat. Speed (V_{LO})	200 km/h	
DIMENSIONS	Span	15.0 m	18.0 m
	Length	6.59 m	6.59 m
	Height	1.3 m	1.3 m
	Wing Area	10.5 m ²	11.88 m ²
CG RANGE	For 15m span version 227 mm to 406 mm (aft of datum point).		
	For 18m span version 233 mm to 406 mm (aft of datum point).		
DATUM	Wing leading edge at root rib.		
LEVELING MEANS	Upper side of fuselage boom placed at slope 1000:49.		
WEIGHT		Span 15m	Span 18m
	Max. Mass with Water Ballast:	525 kg	575 kg
	Max. Mass of Non-Lifting Parts:	285 kg	285 kg
	Max. Mass for Aerobatic/Cloud Flying:	405 kg	419 kg

MINIMUM CREW	One Pilot
No OF SEATS	One
WEAK LINKS (Ultimate Strength)	Max. 825 daN for winch launching Max. 825 daN for aerotow Max. 825 daN for autotow
REQUIRED EQUIPMENT	<p>The basic required equipment, as prescribed in the applicable airworthiness regulations (see Certification Basis) must be installed in the airplane.</p> <p>a. Min. equipment</p> <ol style="list-style-type: none">1. Airspeed indicator up to 300 km/h2. Altimeter3. Four-point harness (symmetrical) <p>For additional equipment refer to Maintenance Manual.</p>
LAUNCHING HOOKS	<ol style="list-style-type: none">1. Sicherheitskupplung Europa G 73 -LBA Datasheet No. 60.230/22. Sicherheitskupplung Europa G 72 -LBA Datasheet No. 60.230/23. Sicherheitskupplung Europa G 88 -LBA Datasheet No. 60.230/24. Bugkupplung E 72 - LBA Datasheet No. 60.230/15. Bugkupplung E 75 - LBA Datasheet No. 60.230/16. Bugkupplung E 85 - LBA Datasheet No. 60.230/1
OPERATIONAL CAPABILITY	<p>VFR Day.</p> <p>Cloud flying and limited aerobatic maneuvers according to the specifications in the Flight Manual with restricted maximum mass.</p>
LIFETIME LIMITATIONS	Refer to Maintenance Manual.
DEFLECTION OF CONTROL SURFACES	Refer to Maintenance Manual.
SERIAL NUMBER ELIGIBLE	28501 to 28999
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. 2012T15 and in condition of safe operation”.</p>
CERTIFICATION BASIS	<p>Brazilian Type Certificate No. 2012T15 issued on 10 October 2012 based on the RBAC 21.29, 21.17(b), amdt. 01, and:</p> <ol style="list-style-type: none">a. JAR-22, Change 5, issued 28-Oct-1995;b. That defined by LBA letter M 531-423/00, dated 28 December 2000;c. Standards for Structural Substantiation of Sailplane and Powered Sailplane Components Consisting of Glass or Carbon Fibre Reinforced Plastics, issued July 1991;d. Additional Requirements for the Installation of a Water Ballast System in the Vertical Tail for the Purpose of Balancing a Nose

Down Moment Caused by Water Ballast in the Wing, issued August 1991;

- e. JAR NPA D-46 Seats and Safety Harnesses;
- f. JAR NPA D-64 Headrests.

Special Conditions: None
Exemptions: None
Equivalent Safety Findings: 22.335(f) – V_D Determination

NOTES:

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- NOTE 4** The differences of the Brazilian airplanes in relation to the basic EASA type design are summarized below:
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 3. Only altimeters which present barometric setting units of “mbar” or “hpa” may be installed.
- NOTE 5** All parts exposed to sun radiation – except the areas for markings and registration – must have a white color surface.
- NOTE 6** Major structural repairs must be accomplished at ANAC certificated repair station, in accordance with Alexander Schleicher ASW 28-18 Repair Manual.



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