DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION

G03CE
Alexander Schleicher GmbH
ASH 26
ASH 26E

January 30, 1997

TYPE CERTIFICATE DATA SHEET No. G03CE

This data sheet, which is part of Type Certificate No. G03CE 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: Alexander Schleicher GmbH & Co. Segelflugzeugbau
Huhnrain 1
D-36161 Poppenhausen/Wasserkuppe
Germany

1. Model ASH 26 Glider, Utility Category, approved January 30, 1997

		mph	km/h	knots
Airspeed Limits (IAS).	V_{NE} (never exceed)	168	270	146
	V_{RA} (in rough air)	114	184	99
	V_A (maneuvering)	114	184	99
	V_T (Aero-tow)	99	160	86
	V_W (Winch launch)	81	130	70
	V_{FE} ($+23^o$)	99	160	86
	($+38^o$)	168	140	76
	V_{LO} (Landing Gear operating)	114	184	99

V_{NE} Speed limit High Altitude:

Altitude MSL (ft.)	V_{NE} IAS km/h	kts
< 10,000	270	146
< 16,500	230	124
< 23,000	210	113
< 29,500	185	100
< 36,000	165	89
< 42,500	140	76

Center of Gravity (C.G.) Range: Forward Limit: 0.95 ft (0.29 m) aft of datum
Aft Limit: 1.35 ft (0.4 m) aft of datum

Empty Weight C.G. Range: Refer to Maintenance Manual, page 6.6.

Datum.	Wing leading edge at wing root rib
Leveling Means.	Wedge 1000:31 on rear end of fuselage tail boom top edge, horizontal
Maximum Weight.	525 kg (1158 lbs). Max, permissible mass of non-lifting parts 344 kg (758.5 lbs)
Minimum Crew	One pilot
No. of Seats.	One
Maximum Baggage.	See ASH 26 Maintenance Manual
Water Capacity.	150 kg
Control Surface Movements.	Aileron at flap setting 0 degrees: Up -0.63 ± 0.12 in. (-16 ± 3 mm) Down 0.16 ± 0.12 in. (4 ± 3 mm) Measurement radius 1.75 in. (44.5 mm) from hinge line Elevator: Up -1.02 ± 0.12 in. (-26 ± 3 mm) Down 1.02 + 0.24/-0.12 in. (26 +6/-3 mm) Measurement radius 2.95 in. (75 mm) from hinge line Rudder: ±5.67 ±0.2 in. (±150 ± 5 mm) to the right and left. Measurement radius 11.02 in. (280 mm) from hinge line. Wing flaps: Flap setting - 1.5º Up: -0.12 ± 0.08 in (-3 ± 2 mm) Flap setting 0º 0 in. (0 mm) Flap setting L=+38º Down: 3.5 ± 0.2 in. (89 ± 5 mm) Measurement radius 4.59 in. (116.5 mm) from hinge line
Weak Link	Ultimate strength For winch tow 825 daN For aerotow 825 daN

2. Model ASH 26E Self Launching Powered Glider, Utility Category, approved January 30, 1996

Engine.	Mid-West Aero Engines Ltd. Model AE 50R
Fuel.	AVGAS 100LL (Premium 94 RON or unleaded)
Engine Limits.	Take off power: 50 BHP at 7500 r.p.m. Max. Continuous power: 46 HP at 6900 r.p.m.
Propeller and Propeller Limits.	KS 1 C 154 R 108 Diameter range maximum 60.83 in. (1545 mm) minimum 60.43 in. (1535 mm)

		mph	km/h	knots
Airspeed Limits (IAS).	V_{NE} (never exceed)	168	270	146
	V_{RA} (in rough air)	114	184	99
	V_A (maneuvering)	114	184	99
	V_T (Aero-tow)	99	160	86
	V_W (Winch launch)	81	130	70
	V_{FE} (WK 1)	168	270	146
	(WK 2)	168	270	146
	(WK 3)	168	270	146
	(WK 4)	99	160	86
	(WK 5)	87	140	76
	WK = Wing Flaps			
	$V_{PO\ MAX}$ (Max Speed for extending and retracting propeller)	75	120	65
	$V_{PO\ MIN}$ (Min Speed for extending and retracting propeller)	56	90	49
	V_{LO} (Landing Gear operating)	114	184	99
	Maximum Speed with Propeller Extended	114	184	99

V_{NE} Speed Limit High Altitude:

Altitude MSL (ft.)	V_{NE} IAS km/h	kts
< 10,000	270	146
< 16,500	230	124
< 23,000	210	113
< 29,500	185	100
< 36,000	165	89
< 42,500	140	76

Center of Gravity (C.G.) Range: Forward Limit: 0.95 feet aft of datum
Aft Limit: 1.35 feet aft of datum
Reference ASH 26 Flight Manual, page 6.8, dated July 95.

Empty Weight C.G. Range: Reference Maintenance Manual, Diagram of Empty Mass C.G. Position, Section 6.2, Figures 6.4-1 and 6.4-2, pages 6.6 and 6.7, dated January 1995.

Note: When the empty weight C.G. falls within the range given, complete computations of critical fore and aft C.G. positions are unnecessary. Range is not valid for nonstandard arrangements.

Datum.: Wing leading edge at wing root rib

Leveling Means.: Wedge 1000:31 on rear end of fuselage tail boom top edge, horizontal

Maximum Weight. 525 kg (1158 lbs).
Max, permissible mass of non-lifting parts 344 kg (758.5 lbs)

Minimum Crew One pilot

No. of Seats. One

Maximum Baggage. See ASH 26E Maintenance Manual

Fuel Capacity. Fuselage tank 4.23 U.S.Gal (16.0 l)
Each wing tank (optional) 3.97 U.S. gal (15.0 l)

Water Capacity. 150 kg

Control Surface Movements. Aileron at flap setting 0 degrees:
Up -0.63 ± 0.12 in. (-16 ± 3 mm)
Down 0.16 ± 0.12 in. (4 ± 3 mm)
Measurement radius 1.75 in. (44.5 mm) from hinge line

Elevator: Up -1.02 ± 0.12 in. (-26 ± 3 mm)
Down 1.02 + 0.24/-0.12 in. (26 +6/-3 mm)
Measurement radius 2.95 in. (75 mm) from hinge line

Rudder: ±5.67 ±0.2 in. (±150 ± 5 mm) to the right and left.
Measurement radius 11.02 in. (280 mm) from hinge line.

Wing flaps: Flap setting - 1.5º
Up: -0.12 ± 0.08 in (-3 ± 2 mm)
Flap setting 0º
0 in. (0 mm)
Flap setting L=+38º
Down: 3.5 ± 0.2 in. (89 ± 5 mm)
Measurement radius 4.59 in. (116.5 mm) from hinge line

Weak Link Ultimate strength For winch tow 825 daN
For aerot tow 825 daN

Common information

Serial Nos. Eligible. See Import Requirement

Certification Basis.

1) FAR 21.17, 21.23, 21.29 and 21.50 effective February 1, 1965 including Amendment 21-1 through 21-71.

2) Joint Airworthiness requirements for Sailplanes and Powered Sailplanes (JAR-22) Change 4 dated May 17, 1987, including Orange Papers 22/90/1, 22/91/1, and 22/92/1, and the requirements described in AC21.17-2.

3) Exemption No. 4988 to 14CFR45, Effective April 20, 1964, Amendments 45-1 through 45-16, section 45.11(a) and (d) "External Identification plate".

4) Finding of Equivalent Level of Safety pursuant to Section 21.21(b)(1), for JAR22.207(c) "Stall Warning".

5) Date of Application for: ASH 26 Type Certificate October 25, 1995
ASH 26E Type certificate September 22, 1995

German Type Certificate No. 383 for ASH 26 issued September 22, 1995
German Type Certificate No. 883 for ASH 26E issued August 7, 1995

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 Luftfahrt-Bundesamt (LBA) containing the following statement: "The aircraft covered by this certificate has been examined, tested and found to conform to the type design approved under FAA Type Certificate G03CE and is in condition for safe operation."

Equipment.

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

Minimum Equipment:

For ASH 26

1 Airspeed indicator up to 300 km/h range
1 Altimeter
1 Magnetic direction indicator (Compass)
1 Four part safety harness (Symmetric)
1 Rear view mirror
1 Parachute or back cushion (at least 3.25 in. (8 cm) thick when compressed)
1 Flight manual, LBA approved July 1995

For ASH 26E

1 Airspeed indicator up to 300 km/h range
1 Altimeter
1 Magnetic direction indicator (Compass)
1 Four part safety harness (Symmetric)
1 ILEC engine control unit
1 Rear view mirror
1 Parachute or back cushion (at least 3.25 in. (8 cm) thick when compressed)
1 Flight manual, LBA approved July, 1995

Service Information.

"Service bulletins, structural repair manuals, vendor manuals, aircraft flight manuals, and overhaul and maintenance manuals, which contain a statement that the document is LBA approved, are accepted by the FAA and are considered FAA approved. These approvals pertain to the type design only."

NOTES

NOTE 1. Current weight and balance data together with list of equipment included in the certificated empty weight, and loading instructions, when necessary, must be provided for each glider at the time of original certification.
For the ASH 26E, the certificated empty weight and corresponding center of gravity locations must include the following:

Unusable fuel of .3 U.S. gal (0.7 liter)

NOTE 2. The placards listed in LBA approved ASH 26 or ASH 26E Instructions for Continued Airworthiness Manual must be displayed.

NOTE 3. The ASH 26 Flight Manual, dated July, 1995 is FAA approved.
The ASH 26E Flight Manual, dated July, 1995 is FAA approved.
Airworthiness limitations contained there-in may not be changed without FAA approval.

Instructions for Continued Airworthiness are FAA-approved. They specifiy mandatory replacement times, and structural repair procedures. The airworthiness Limitations contained there-in may not be changed without FAA approval.

For the ASH 26
Maintenance Manual, dated January, 1995,
Repair Manual, dated February 1983, including Amendment dated xxx 1994

For the ASH 26E
Maintenance Manual, dated January, 1995,
Repair Manual, dated February 1983, including Amendment dated July 1994

NOTE 4. All external portions of the powered glider exposed to sunlight must be painted white except the surfaces for the registration Nos. and anti-collision paint as specified by the manufacturer.

NOTE 5. Major structural repairs must be accomplished at FAA certificated repair stations rated for composite aircraft structure work, in accordance with Alexander Schleicher Instructions for Continued Airworthiness.

NOTE 6. Information essential for the proper operation, maintenance and Inspection of the ASH 26 or ASH 26E glider is contained in the appropriate Alexander Schleicher Flight Manual and Instructions for Continued Airworthiness .

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