

I. General**1. Type / Variants**

AS2F1-1, AS2F1-2, AS2F1-3

2. Type Certificate Holder

Alexander Schleicher GmbH & Co. Segelflugzeugbau
 Alexander-Schleicher-Straße 1
 36163 Poppenhausen Wasserkuppe
 Germany

Alternative Design Organisation Approval: AP138

3. Manufacturer

Alexander Schleicher GmbH & Co. Segelflugzeugbau

4. Date of Application

AS2F1-1	AS2F1-2	AS2F1-3	
19 January 1999	17 July 2002	22 September 2008	

5. Certification Date

AS2F1-1	AS2F1-2	AS2F1-3	
05 October 2000	12 April 2005	29 January 2009	

Note: EASA Type Certification of propeller model AS2F1-1 has been covered previously by German Type Certificate No. 32.110/26

II. Certification Basis**1. Reference Date for determination of the applicable requirements**

January 19, 1999

2. Certification Basis**2.1 Airworthiness Requirements**

JAR-22 Change 5 dated October 28, 1995, Subpart J

2.2 Special Conditions (SC)

None

2.3 Exemptions

None

2.4 Equivalent Safety Finding (ESF)

None

III. Technical Characteristics

1. Type Design Definition

Type Design Definition Propeller AS2F1-1, Issue No. 1 dated September 15, 2000 (*)

Type Design Definition Propeller AS2F1-2, Issue No. 1 dated January 07, 2005 (*)

Type Design Definition Propeller AS2F1-3, Issue No. 1 dated October 06. 2008 (*)

(*) = or later approved revisions

2. Description

One-piece 2-blade fixed pitch propeller constructed of composite materials, blade leading edge optionally equipped with an erosion protection tape.

3. Equipment

None

4. Dimensions

according to the particular data in the propeller designation (see chapter VI.3.)

propeller AS2F1-1

- diameter: from 120 cm up to max. 155 cm

- blade-pitch at 0.75 R: from 60 cm up to max. 120 cm

propeller AS2F1-2

- diameter: from 100 cm up to max. 120 cm

- blade-pitch at 0.75 R: from 30 cm up to max. 60 cm

propeller AS2F1-3

diameter: from 80 cm up to max. 100 cm

blade-pitch at 0.75 R: from 28 cm up to max. 80 cm

5. Weight

propeller AS2F1-1: approx. 2,1 kg

propeller AS2F1-2: approx. 1,0 kg

propeller AS2F1-3: approx. 1,0 kg

6. Hub/Blade-Combinations

not applicable (one-piece propeller)

7. Control System

not applicable (fixed pitch propeller)

8. Adaptation to Engine

Hub drilling according to the particular data in the propeller designation (see chapter VI.3.)

9. Sense of Rotation

Sense of rotation (viewed in flight direction) corresponding to the particular letter in the propeller designation (see chapter VI.3.)

IV. Operational Limits**1. Propeller Speed:**

propeller AS2F1-1:	max. 3000 min ⁻¹
propeller AS2F1-2:	max. 4500 min ⁻¹
propeller AS2F1-3:	max. 5400 min ⁻¹

2. Driving Power

propeller AS2F1-1:	max. 70 kW
propeller AS2F1-2:	max. 20 kW
propeller AS2F1-3:	max. 20 kW

3. Driving Torque

propeller AS2F1-1:	max. 355 Nm
propeller AS2F1-2:	max. 152 Nm
propeller AS2F1-3:	max. 48 Nm

V. Operating and Service Instructions

Operating- and Service Instructions for propeller AS2F1-1, Issue February 2000 (*)
 Operating- and Service Instructions for propeller AS2F1-2, Issue December 2004 (*)
 Operating- and Service Instructions for propeller AS2F1-3, Issue October 2008 (*)
 (*) = or later approved revision

VI. Notes

- The suitability of a propeller for a certain aircraft/engine-combination must be demonstrated within the scope of the type certification of the aircraft.
- The overhaul intervals recommended by the manufacturer are listed in A. Schleicher Service Bulletin No. 2.
- Propeller designation system

AS 2 F 1 - 1 / L 120 - 65 - N2
 1 2 3 4 5 6 7 8 9

- AS = Alexander Schleicher GmbH & Co.
- number of blades
- F = fixed pitch propeller
- No. of propeller model
- No. of variant of the propeller model
- code letter(s) for propeller sense of rotation / functioning
 R = right-hand turning / tractor
 L = left-hand turning / tractor
 RD = right-hand turning / pusher
 LD = left-hand turning / pusher
- propeller diameter in "cm"
- blade pitch in "cm" measured at 0.75 blade radius

- 9 code for particular propeller characteristics
N1 = Hub drilling type N1: six 8 mm holes on a 100 mm hole circle
N2 = Hub drilling type N2: five 8,1 mm holes on a 57 mm hole circle
4. The propeller models are only certified for use in powered sailplanes and Very Light Aeroplanes.
