

I. General

1. Type/Models

KW-1(x) / KW-10, KW-15

2. Type Certificate Holder

Aleš KŘEMEN
Alšova 118
250 70 Odolena Voda - Dolínek
Czech Republic

Design Organisation Approval No.: EASA.AP250

3. Manufacturer

Aleš KŘEMEN
Alšova 118
250 70 Odolena Voda - Dolínek
Czech Republic

4. Date of Application

KW-10 and KW-15: 16 November 2010

5. Reference Date for determination of the applicable requirements

16 November 2010

6. Certification Date

KW-10 and KW-15: 09 September 2011

II. Certification Basis

1. Airworthiness Standards

CS-P Amendment 1 as published with ED Decision 2006/09/R dated 16 November 2006 except for the paragraph CS-P 560 as allowed by CS-P 10(b), see chapter VI.1.

III. Technical Characteristics

1. Type Design Definition

Each design configuration is defined by a main assembly drawing and an appropriate parts list.

The KW-10 propeller model covers the following design configurations.
Design Configuration "Constant Speed"
Drawing No. 10-100-000 dated 03 August 2011 (*1)
Above mentioned drawing contains Parts List

The KW-15 propeller model covers the following design configurations.
Design Configuration "Constant Speed"
Drawing No. 15-100-000 dated 03 August 2011 (*1)
Above mentioned drawing contains Parts List

(*1) effective is the declared issue or a later approved revision.

2. Description

KW-1(x) series propeller is 3-blade variable pitch with a hydraulically operated blade pitch change constant speed mechanism. The hub is milled out of aluminium alloy and the blades are made of wood with glass or carbon composite covering layer. The leading edge of the blade is protected by the metal stamping.

3. Equipment

Spinner: according to Aleš KŘEMEN Service Bulletin No. 2
Governor: according to Aleš KŘEMEN Service Bulletin No. 3

4. Dimensions

KW-10: Propeller diameter: max. 201 cm
KW-15: Propeller diameter: max. 201 cm

5. Weight

Propeller-Design Configuration
KW-10 "Constant Speed": approx. 27 kg
KW-15 "Constant Speed": approx. 34 kg

6. Hub/Blade-Combinations

Hub	Blade-Type
KW-10	-001, -002, -003
KW-15	-011, -012, -013

7. Control System

Propeller governors as listed in Aleš KŘEMEN Service Bulletin No. 3.

8. Adaptation to Engine

Adaptation to engine as listed in Aleš KŘEMEN Service Bulletin No. 4.

9. Direction of Rotation

Direction of rotation (viewed in flight direction) as identified by a letter-code in the propeller designation. (see chapter VI.3.). The left-hand version of an approved propeller model is approved at the same rating and diameter as listed for the right-hand model.

IV. Operational Limits

1. Propeller Speed:

max. 2700 min⁻¹

2. Max. Take-Off Power:

KW-10: 243 kW

KW-15: 265 kW

3. Max. Continuous Power:

KW-10: 243 kW

KW-15: 265 kW

4. Propeller Pitch Angle:

Maximum pitch change range 32° - measured at 75% radius station

V. Operating and Service Instructions

User's Manual	UM-02, Rev.1, dated 03 August 2011 [*]
Overhaul Manual	TN-11, Rev. 0, dated 03 August 2011 [*]
Service Bulletins	as noted in the current List of Service Bulletins

[*] or later approved revision

VI. Notes

1. This Propeller has been certificated in accordance with CS-P Subparts A, B and C. Compliance with the requirements of Subpart D, which is specific to each aircraft installation, has not yet been demonstrated.
2. The EASA approved Airworthiness Limitations Section of the Instructions for Continued Airworthiness is published in the applicable "User Manual" document, chapter 6.1 "Airworthiness Limitations".
3. Propeller designation system:

HUB / BLADE
KW - xx - () - () - () - () - () - () / () - () - ()
1 2 3 4 5 6 7 8 / 9 10 11

HUB:

- 1 KW Aleš KŘEMEN Co., Alšova 118, 250 70 Odolena Voda – Dolínek, Czech Republic
- 2 No. of propeller model
- 3 Code letter for propeller category:
A - Automatic Propeller
F - Fixed Pitch Propeller
G - Ground Adjustable Propeller
V - Variable Pitch Propeller
- 4 Code letter for blade pitch change system:
H – Hydraulic
E – Electric
M – Mechanical
- 5 Number of blades installed
- 6 Code letter for feathering system: F – Feather position installed
0 – No feather position possible
- 7 Code letter for reverse provision: R – Reverse position installed
0 – No reverse position possible
- 8 Code letter for flange type listed in Aleš KŘEMEN Service Bulletin No. 4

BLADE :

- 9 Code letter for blade design and installation:
R: - Right-hand tractor
RP: - Right-hand pusher
L: - Left-hand tractor
LP: - Left-hand pusher

- 10 Propeller diameter in cm
- 11 No. of blade type (contains design configuration and aerodynamic data) according to the certified hub/blade-combinations.
