



TYPE-CERTIFICATE DATA SHEET

No. P.174

For Propeller
KW-1(x) series propellers

Type Certificate Holder
Aleš KŘEMEN
Vodolská 4, Dolínek
250 70 Odolena Voda
Czech Republic

For Models:
KW-10
KW-15



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I. General

1. Type/ Models

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

2. Type Certificate Holder

Aleš KŘEMEN
Vodolská 4, Dolínek
250 70 Odolena Voda
Czech Republic

Design Organisation Approval No.: EASA.AP250

3. Manufacturer

Woodcomp Propellers s.r.o.
Vodolská 4, Dolínek
250 70 Odolena Voda
Czech Republic

4. Date of Application

KW-10	KW-15
16 November 2010	16 November 2010

5. EASA Type Certification Date

KW-10	KW-15
09 September 2011	09 September 2011

II. Certification Basis

1. Reference Date for determining the applicable airworthiness requirements

16 November 2010

2. EASA Certification Basis

2.1. Airworthiness Standards

CS-P Amendment 1 as published with ED Decision 2006/09/R dated 16 November 2006

2.2. Special Conditions

None

2.3. Equivalent Safety Findings

None

2.4. Deviations

None



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 (79 in)

KW-15: Propeller diameter: max. 201 cm (79 in)

5. Weight

KW-10 Propeller Design Configuration

"Constant speed",

propeller spinner incl.: approx. 27,0 kg (59,5 lb)

KW-15 Propeller Design Configuration

"Constant speed",

propeller spinner incl.: approx. 34,0 kg (75 lb)

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.

All governors and propeller control systems must be approved as part of the aircraft installation regardless of manufacturer.

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.4.). 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. Operating Limitations

1. Approved Installations

Propeller/engine/aircraft combinations that have been demonstrated to comply with the requirements of CS-P Subpart D are listed in Aleš KŘEMEN Service Bulletin No. 5. The suitability of a propeller for a given aircraft/engine combination must be demonstrated within the scope of the type certification of the aircraft.

2. Maximum Take Off Power and Speed

KW-10: 243 kW
2700 RPM

KW-15: 265 kW
2700 RPM

3. Maximum Continuous Power and Speed

KW-10: 243 kW
2700 RPM

KW-15: 265 kW
2700 RPM

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. 3, dated 24 April 2019 [*]
Overhaul Manual	TN-11, Rev. 0, dated 03 August 2011 [*]
Service Bulletins	as noted in the current List of Service Bulletins



VI. Notes

1. The EASA approved Airworthiness Limitations Section (ALS) of the Instructions for Continued Airworthiness is published in the applicable "User Manual" document, chapter 14, "Airworthiness Limitations".
2. Propeller designation system:

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

Hub

- 1 KW Aleš KŘEMEN, Vodolská 4, Dolínek, 250 70 Odolena Voda, 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.



SECTION: ADMINISTRATIVE

I. Acronyms and Abbreviations

n/a

II. Type Certificate Holder Record

n/a

III. Change Record

Issue	Date	Changes	TC issue
Issue 01	09 September 2011	Initial Issue	Initial Issue, 09 September 2011
Issue 02	16 September 2019	Amendment to Certification Basis, article II. – Airworthiness Standards: Compliance with CS-P, Subpart D, CS-P 560, Flight Functional Tests shown as defined in document: "Certification Program of KW-1(x) propeller", Doc.No.: CP KW-1(x) (EASA Major Change Approval 10070656)	

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