TCDS No.: P.030 V 520 series propellers
Issue: 02 Date: 15 December 2022



TYPE-CERTIFICATE DATA SHEET

No. P.030

for

V 520 series propellers

Type Certificate Holder

Avia Propeller Ltd.

Beranových 65/666 199 00 Praha 9 - Letňany Czech Republic

For Models: V 520



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I. General

1. Type / Model

V 520

2. Manufacturer

Avia Propeller Ltd. Beranových 65/666 199 00 Praha 9 - Letňany Czech Republic

3. Date of Application

V 520	
13.10.1965	

4. EASA Type Certification Date

V 520	
21.3.1966	

Type certification of the V 520 series propeller model has been covered previously by Czech Republic Type certificate No.66-01.

II. <u>Certification Basis</u>

1. State of Design Authority Certification Basis

Czech Republic

2. Reference Date for determining the applicable airworthiness requirements

13 October 1965

3. EASA Certification Basis

3.1. Airworthiness Standards

British Civil Airworthiness Requirements (BCAR), dated 1.7.1962, Issue 5

Note:

Application was made to CAA - Czech Republic (former Czechoslovakia) before EASA was established. The applicable airworthiness standards were established in accordance with the rule in Czech Republic (former Czechoslovakia) at the time of application.

3.2. Special Conditions

None



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3.3. Equivalent Safety Findings

None

3.4. Deviations

None

III. <u>Technical Characteristics</u>

1. Type Design Definition

The V 520 propeller model covers the following design configuration. Design configuration is defined by a main assembly drawing and an appropriate parts list.

V 520

Design Configuration "Constant Speed"

Drawing No. V520-0000 dated May 21, 2009 (*1)

Parts List No. R-V520-0000 dated May 21, 2009 (*1)

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

2. Description

2-blade variable pitch propeller with a hydraulically operated blade pitch change mechanism providing the operation mode "Constant Speed". The hub is milled out of steel and blades are milled out of aluminum alloy.

3. Equipment

Governor: according to Avia Propeller Service Bulletin No. 3

4. Dimensions

Propeller diameter: max. 270 cm

5. Weight

Propeller-Design Configuration "Constant Speed": approx. 49 kg

6. Hub / Blade-Combinations

Hub	Blade-Type
V 520-2101	V520-1

7. Control System

Propeller governor as listed in Avia Propeller Service Bulletin No. 3.

8. Adaptation to Engine

Special splined shaft.



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9. Direction of Rotation

Left-hand tractor (viewed in flight direction).

IV. **Operating Limitations**

1. Maximum Take Off Power and Speed

258 kW at 1930 min⁻¹

2. Maximum Continuous Power and Speed

258 kW at 1930 min⁻¹

3. Propeller Pitch Angle

From +11° to +25° with mechanical pitch stop measured at reference station From +11° to +41° without mechanical pitch stop measured at reference station

V. Operating and Service Instructions

Operation and Installation Manual	P/N E-1638 Date of Latest Issue/Revision Issue 1, May 22, 2009 (*)
Overhaul Manual	P/N E-1639 Date of Latest Issue/Revision Issue 1, May 22, 2009 (*)
Overhaul Manual for Metal Blades	P/N EN-1370 Date of Latest Issue/Revision Issue 2, March 17, 2009 (*)
Service Bulletins	as noted in the current List of Service Bulletins

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

VI. Notes

- **1.** The suitability of the propeller for a given aircraft/engine-combination must be demonstrated within the scope of the type certification of the aircraft.
- **2.** The overhaul intervals recommended by the manufacturer are listed in Avia Propeller Service Bulletin No. 1.

The EASA approved Airworthiness Limitations Section of the Instructions for Continued Airworthiness is published in the applicable "Propeller Operation and Installation Manual" document, chapter 0. "Airworthiness Limitations".

3. EASA Type Certificate and Type Certificate Data Sheet No.P.030 replace CAA - Czech Republic Type Certificate and Type Certificate Data Sheet No.66-01.



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SECTION: ADMINISTRATIVE

I. Acronyms and Abbreviations

n/a

II. Type Certificate Holder Record

n/a

III. Change Record

TCDS Issue	Date	Changes	TC issue
Issue 01	02 June 2009	Initial Issue	Initial Issue, 02 June 2009
Issue 02	15 December 2022	Addition of a sentence to Note 2 in Chapter VI. Notes: The EASA approved Airworthiness Limitations Section of the Instructions for Continued Airworthiness is published in the applicable "Propeller Operation and Installation Manual" document, chapter 0. Airworthiness Limitations. (Major Change Approval 10080701)	