



TYPE-CERTIFICATE DATA SHEET

No. EASA.P.501

for Propeller
MTV-4
Series

Type Certificate Holder
MT-Propeller Entwicklung GmbH

Flugplatzstraße 1
94348 Atting
Germany

For Models:
MTV-4-1



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TABLE OF CONTENTS

I. General	4
1. Type / Models	4
2. Type Certificate Holder	4
3. Manufacturer	4
4. Date of Application	4
5. EASA Type Certification Date	4
II. Certification Basis	5
1. Reference Date for determining the applicable airworthiness requirements:	5
2. EASA Certification Basis	5
2.1. Airworthiness Standards	5
2.2. Special Conditions (SC): None	5
2.3. Equivalent Safety Findings (ESF): None	5
2.4. Deviations: None	5
III. Technical Characteristics	5
1. Type Design Definition	5
2. Description	5
3. Equipment	6
4. Dimensions	6
5. Weight	6
6. Hub / Blade Combinations	6
7. Control System	6
8. Adaptation to Engine	6
9. Direction of Rotation	6
IV. Operating Limitations	7
1. Approved Installations	7
2. Maximum Take Off Power and Speed	7
3. Maximum Continuous Power and Speed	7
4. Propeller Pitch Angle	7
V. Operating and Service Instructions	7
VI. Notes	8
SECTION: ADMINISTRATIVE	10
I. Acronyms and Abbreviations	10
II. Type Certificate Holder Record	10
III. Change Record	10



I. General

1. Type / Models

MTV-4 / MTV-4-1

2. Type Certificate Holder

MT-Propeller Entwicklung GmbH
Flugplatzstraße 1
94348 Atting
Germany

Design Organisation Approval No.: EASA.21J.020

3. Manufacturer

MT-Propeller Entwicklung GmbH

4. Date of Application

MTV-4-1: 04 May 2010

5. EASA Type Certification Date

MTV-4-1: 20 Oct 2023

(see also Note 5)



II. Certification Basis

1. Reference Date for determining the applicable airworthiness requirements:

04 May 2010

2. EASA Certification Basis

2.1. Airworthiness Standards

CS-P amendment 1, dated 16 November 2006, Subpart A, B, C

2.2. Special Conditions (SC): None

2.3. Equivalent Safety Findings (ESF): None

2.4. Deviations: None

III. Technical Characteristics

1. Type Design Definition

The MTV-4 propeller consists of one design configuration defined by a main assembly drawing and associated parts list as per the following table:

Design Configuration	Assembly Drawing	Parts List
MTV-4-1-T/50-C-F/(L)335-141 Constant Speed + Feather	P-1158-(x)	S-185-(x)
Note: There is one version of hub flange available, this being T/50: T/50: Flange mount for adapter to SAE No. 50 spline		

2. Description

The MTV-4-1-() is a 4-blade variable pitch propeller with a hydraulically operated blade pitch change mechanism providing the operation modes “Constant Speed” and “Feather”. The hub is milled out of aluminum alloy and has an integrated steel spacer flange for the SAE No. 50 spline engine shaft. The Propeller is equipped with removable wooden blades. The blade material is a laminated wood composite structure coated in composite fiber reinforced epoxy. The leading edge of the wood composite blades are equipped with an erosion protection device. Optionally the propeller may have a spinner installed.



3. Equipment

Spinner: refer to MT-Propeller Service Bulletin No. 13
Governor: refer to MT-Propeller Service Bulletin No. 14
Ice Protection: refer to MT-Propeller Service Bulletin No. 15

The equipment listed in SBs No.13, 14 and 15 is not included in the certified Type Design. Related propeller equipment must be approved as part of the aircraft installation regardless of manufacture.

4. Dimensions

Blade diameter: 200 cm to 335 cm

5. Weight

Depending on Propeller-Design Configuration

“Constant Speed”: approx. 193 kg
“Constant Speed, Feather”: approx. 193 kg

6. Hub / Blade Combinations

For all design configurations listed under III.1 the following wooden blades are applicable:

-141

7. Control System

Propeller governors as listed in MT-Propeller Service Bulletin No. 14.

8. Adaptation to Engine

There is one version of hub flange available:
T/50: Flange mount for adapter to SAE No. 50 spline

9. Direction of Rotation

Direction of rotation (viewed in flight direction) as identified by a letter-code in the propeller designation (see VI.4.)



IV. Operating Limitations

1. Approved Installations

The suitability of a propeller for a given aircraft/engine combination must be demonstrated within the scope of the type certification of the aircraft. See also Note 5.

2. Maximum Take Off Power and Speed

Diameter (cm)	Maximum Take Off Power (kW)	Maximum Take Off Speed (rpm)
200-335	1641	1355

3. Maximum Continuous Power and Speed

Diameter (cm)	Maximum Continuous Power (kW)	Maximum Continuous Speed (rpm)
200-335	1641	1355

4. Propeller Pitch Angle

From 0° up to +90° measured at 75% radius station

V. Operating and Service Instructions

Manuals	
Operation and Installation Manual for hydraulically controlled variable pitch propeller MTV-4-1-()	No. E-1903 (*)



Instructions for Continued Airworthiness (ICA)	
Operation and Installation Manual for hydraulically controlled variable pitch propeller MTV-4-1-()	No. E-1903 (*)
Overhaul Manual and Parts List for hydraulically controlled variable pitch propeller MTV-4-()	No. E-1904 (*)
Overhaul Manual for Composite Blades (also applicable to wooden blades)	No. E-1290 (*)
Standard Practice Manual	No. E-808 (*)
Service Bulletins, Service Letters, Service Instructions	As published by MT-Propeller

(*) latest revision of

VI. Notes

1. The EASA approved Airworthiness Limitations Section (ALS) of the Instructions for Continued Airworthiness is published in the applicable "Operation, Installation and Maintenance Manual" document, chapter 10.0 "Airworthiness Limitations Section". This ALS section is empty because no life limit is necessary for these models.
2. This propeller incorporates a start pitch lock which may prevent propeller feathering below a given propeller speed.
3. The overhaul intervals recommended by the manufacturer are listed in MT-Propeller Service Bulletin No. 1.



4. Propeller designation system:

				Hub				/	Blade						
MT	V	-	4-1	-	()	()	()	-	()	/	()	335	-	141	()
1	2		3		4	5	6	7	/	1	2		3	4	

Hub

- 1 MT-Propeller Entwicklung GmbH
- 2 Variable pitch propeller
- 3 Identification of propeller type
- 4 Letter code for flange type:
- T/50: Flange mount for adapter to SAE No. 50 spline
- 5 Letter code for counterweights:
- blank = no or small counterweights for pitch change forces to decrease pitch
- C = counterweights for pitch change forces to increase pitch
- 6 Letter code for feather provision:
- blank = no feather position possible
- F = feather position allowed
- 7 Letter code for hub design changes:
- small letter for changes which do not affect interchangeability
- capital letter for changes which affect interchangeability

Blade

- 1 Letter code for direction of rotation and installation:
- blank = right-hand tractor
- RD = right-hand pusher
- L = left-hand tractor
- LD = left-hand pusher
- 2 Propeller diameter in cm
- 3 Identification of blade design
- 4 Letter code for blade design changes:
- small letter for changes which do not affect interchangeability of blade set
- capital letter for changes which affect interchangeability of blade set

5. This Propeller has been certificated in accordance with CS-P, Amdt 1 Subparts A, B and C. Compliance with the requirements of Subpart D, which is specific to each aircraft installation, has not yet been demonstrated.



SECTION: ADMINISTRATIVE

I. Acronyms and Abbreviations

Not applicable.

II. Type Certificate Holder Record

As per I.2

III. Change Record

TCDS Issue	Date	Changes	TC Issue Date
Issue 01	20 October 2023	Initial issue	Initial Issue, 20 October 2023

-END-

