



TYPE CERTIFICATE DATA SHEET Nº EH-2014T05

Type Certificate Holder:

MT-Propeller Entwicklung GmbH
Flugplatzstrasse 1
94348 Atting
GERMANY

EH-2014T05-00

Sheet 01

MT-PROPELLER

MTV-7-()

12 August 2014

Propellers of models described herein conforming with this data sheet, which is part of Type Certificate No. 2014T05, meet the minimum standards for use in certificated aircraft in accordance with pertinent aircraft data sheets and applicable portions of the Brazilian Aeronautical Regulations provided they are installed, operated, and maintained as prescribed by the approved manufacturer's manuals and other instructions.

TYPE	Constant speed, Electrical Control (see Notes 3 and 4)
ENGINE SHAFT	See Note 1
HUB MATERIAL	Aluminum Alloy
BLADE MATERIAL	Laminated wood composite structure, epoxy-fiber glass cover, with leading edge and erosion protection.
NUMBER OF BLADES	3 (three).
HUB	See Note 1.

Hub Eligible (See Note 1)	Blades See Notes 2 & 6	Max. Continuous Power hp (rpm)	Takeoff power hp (rpm)	Diameter Limits m (in)	Blade Twist* Min (MAX)	Approx. Max. Weight kg (lb)
MTV-7-A	-03, -04, -05, -06, -07, -08, -09, -12,	161 (2 800)	161 (2 800)	1.4 to 1.75 (55 to 68.9)	5 (50)	14.5 (32)
MTV-7-C	-16, -23, -28, -31, -49, -51, -106,	180 (2 700)	180 (2 700)	1.4 to 1.6 (55 to 63)		
MTV-7-D	-112, -122, -125, -129, -312	135 (2 500)	135 (2 500)	1.4 to 1.9 (55 to 74.8)		
MTV-7-F						

* The limits of the blade twist are defined between .20 and 1.00 blade radius

CERTIFICATION BASIS Brazilian Type Certificate No. 2014T05 based on the Brazilian Regulation on Aeronautical Certification – RBHA 35, which endorses the 14 CFR Part 35 effective 01 February 1965, Amendments 35-1 to 35-7, inclusive.

TYPE CERTIFICATION

<u>Model</u>	<u>Application</u>	<u>Issued TC</u>
MTV-7-()	25 June 2014	12 August 2014

PRODUCTION BASIS Not Applicable

IMPORT REQUIREMENTS Each propeller imported separately and/or spare parts must be accompanied by an Airworthiness Certificate for Export and/or an Airworthiness Approval Tag, respectively, issued by the primary authority, attesting that the particular propeller and/or parts were submitted to the governmental quality control before delivery and are in conformity with the ANAC approved type design.

NOTES:

NOTE 1 Hub model Designation $\frac{MT}{[1]} \frac{V}{[2]} \frac{-7}{[3]} \frac{-()}{[4]} \frac{-()}{[5]} \frac{-()}{[6]} \frac{-()}{[7]} \frac{-()}{[8]}$, where

[1] MT: Propeller Entwicklung GmbH

[2] V: Variable pitch propeller.

[3] -7: Number of basic model.

[4] Design configuration number

- [5] Letter code for Engine shaft (flange type).
 –A = Motorglider engines 80mm bolt circle dia., 7/16"-20UNF bolts.
 – C = AS-127-D, SAE No. 2 mod., 7/16" mounting bolts.
 – D = ARP 502.
 – F = SAE No.1, 3/8"-24UNF bolts
- [6] Letter code designating counterweights:
 Blank: None or small counterweights for pitch change moments towards low pitch.
 – C= Counterweights for pitch change moments towards high pitch.
- [7] Letter code for reverse provision.
 Blank: no reverse possible.
 – R= reverse position allowed.
 Capital letter: modification which restrict or exclude interchangeability
- [8] Letter code for hub design changes.
 Small letter: modifications which do not affecting interchangeability.
 Capital letter: modifications which restrict or exclude interchangeability.

NOTE 2 Blade Model Designation $\frac{(\quad)}{[1]}$ $\frac{(\quad)}{[2]}$ $\frac{170}{[3]}$ $\frac{-09}{[4]}$ $\frac{-(\quad)}{[5]}$, where:

- [1] Letter code for position of pitch change pin.
 Blank: Position for pitch change forces to decrease pitch.
 C: Position for pitch change forces to increase pitch.
- [2] Sense of rotation (viewed in flight direction):
 Blank: Right hand tractor
 RD: Right hand pusher
 L: Left hand tractor
 LD: Left hand pusher
- [3] Propeller diameter in cm
- [4] Number of blade design, contains construction and aerodynamic data
- [5] Letter code for blade design changes
 Small letter: modifications which do not affect interchangeability of blade set.
 Capital letter: modifications which restrict or exclude interchangeability of blade set.

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- NOTE 3** Pitch control: Pitch control is accomplished by Control Unit P-120-M (manual) or Control Unit P-120-U This is universal (selectable automatic, constant speed & manual control) or Control Unit P-120-A (automatic (constant speed))
For the control units no TBO or life limits are specified. Service is on condition.
- NOTE 4** Feathering and Reversing:
a) Feathering: Electrical control per Control Units P-120-M, P-120-U and P-120-A.
b) Reversing (Airship application only): Electrical control per Control Units P-120-M.
- NOTE 5** Right and left hand Models:
A version of the approved model with opposite hand rotation is approved at the same rating and diameter limitations.
- NOTE 6** Interchangeability:
Not applicable.
- NOTE 7** Accessories:
a) Propeller Spinners: Refer to published list in MT-Propeller Service Bulletin No. 13.
b) Deicing Systems: Refer to published list in MT-Propeller Service Bulletin No. 15.
- NOTE 8** Shank Fairings: Not included or predicted in the design.
- NOTE 9** Special Limits: Not applicable.
- NOTE 10** Special notes:
a) Aircraft installations must be approved as part of the aircraft type certificate and demonstrate compliance with the applicable aircraft airworthiness requirements.
b) All MTV-7 propellers must be operated within the limits of MT-Propeller Operation and Installation Manual No.E-118 and adhere to the TBO-limits shown in Service Bulletin No. 1().
c) Propeller Maintenance, on overhaul, and airworthiness limitations shall be accomplished in accordance with MT-Propeller Overhaul Manual No. E-250 latest revision.
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NOTE 11Service Information:

Each of the documents listed below must state that it is approved by the European Aviation Safety Agency (EASA) or – for approvals made before September 28, 2003 – by the LBA. Any such documents are accepted by the ANAC and are considered ANAC approved.

- a) Service Bulletins;
- b) Structural repair manuals;
- c) Vendor Manuals;
- d) Aircraft flight manuals, and
- e) Overhaul and maintenance manuals.

**HÉLIO TARQUÍNIO JUNIOR**

**Gerente-Geral de Certificação de Produto Aeronáutico
(General Manager, Aeronautical Product Certification)**