

U.S. DEPARTMENT OF TRANSPORTATION  FEDERAL AVIATION ADMINISTRATION  TYPE CERTIFICATE DATA SHEET P	TCDS NUMBER: P31BO  REVISION: ORIGINAL  DATE: JULY 7, 2011  MT PROPELLER COMPANY  MODEL: MTV-17-( )
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Propellers of models described herein conforming with this data sheet (which is part of this Type Certificate No. P31BO) and other approved data on file with the Federal Aviation Administration, meet the minimum standards for use in certified aircraft in accordance with pertinent aircraft data sheets and applicable portions of the Federal Aviation Regulations provided they are installed, operated and maintained as prescribed by approved manufacturer's manual and other approved instructions.

TYPE CERTIFICATE HOLDER      MT-Propeller Entwicklung GmbH  
 Flugplatzstrasse 1  
 D-94348 Atting  
 Germany

TYPE                                      Constant speed, Electrical control (See Notes 3 & 4 )

ENGINE SHAFT                        See Note 1 of this TCDS

HUB MATERIAL                        Aluminum alloy

BLADE MATERIAL                    Laminated wood composite structure, epoxy-fiber glass cover, with leading edge and erosion protection

HUBS:                                    See Note 1 of this TCDS

NUMBER OF BLADES                2 (two)

DESIGN SERIES                        MTV-17-C, -D, -F

HUB-TYPE MTV-17 See Note 1	BLADES See Notes 2 & 6	MAXIMUM CONTINUOUS		<TAKE OFF>		NOMINAL DIAMETER				BLADE TWIST *)		APPROXIMATE WEIGHT	
		HP(kW)	RPM	HP(kW)	RPM	Max	Min	inch	(cm)	inch	(cm)	Min	Max
	-17	161 (120)	2700	161 (120)	2700	74.8	190	60	152	5	50	35	(16)
	-24	161 (120)	2700	161 (120)	2700	74.8	190	60	152	5	50	35	(16)
	-30	161 (120)	2700	161 (120)	2700	74.8	190	60	152	5	50	35	(16)
	-32	161 (120)	2700	161 (120)	2700	74.8	190	60	152	5	50	35	(16)
	-36	161 (120)	2700	161 (120)	2700	74.8	190	60	152	5	50	35	(16)
	-39	161 (120)	2700	161 (120)	2700	74.8	190	60	152	5	50	35	(16)
	-40	161 (120)	2700	161 (120)	2700	74.8	190	60	152	5	50	35	(16)
	-53	161 (120)	2700	161 (120)	2700	74.8	190	60	152	5	50	35	(16)
	-56	161 (120)	2700	161 (120)	2700	74.8	190	60	152	5	50	35	(16)
	-57	161 (120)	2700	161 (120)	2700	74.8	190	60	152	5	50	35	(16)
	-59	161 (120)	2700	161 (120)	2700	74.8	190	60	152	5	50	35	(16)

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

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HUB-TYPE MTV-17 See Note 1	BLADES See Notes 2 & 6	MAXIMUM CONTINUOUS		<TAKE OFF>		NOMINAL DIAMETER				BLADE TWIST *)		APPROXIMATE WEIGHT	
		HP(kW)	RPM	HP(kW)	RPM	Max inch	Max (cm)	Min inch	Min (cm)	Min	Max	lbs.	(kg)
	-100	161 (120)	2700	161 (120)	2700	74.8	190	60	152	5 5	50 50	35	(16)
	-101	161 (120)	2700	161 (120)	2700	74.8	190	60	152	5 5	50 50	35	(16)
	-105	161 (120)	2700	161 (120)	2700	74.8	190	60	152	5 5	50 50	35	(16)
	-113	161 (120)	2700	161 (120)	2700	74.8	190	60	152	5 5	50 50	35	(16)
	-114	161 (120)	2700	161 (120)	2700	74.8	190	60	152	5 5	50 50	35	(16)
	-115	161 (120)	2700	161 (120)	2700	74.8	190	60	152	5 5	50 50	35	(16)
	-117	161 (120)	2700	161 (120)	2700	74.8	190	60	152	5 5	50 50	35	(16)
	-118	161 (120)	2700	161 (120)	2700	74.8	190	60	152	5 5	50 50	35	(16)
	-119	161 (120)	2700	161 (120)	2700	74.8	190	60	152	5 5	50 50	35	(16)
	-301	161 (120)	2700	161 (120)	2700	74.8	190	60	152	5 5	50 50	35	(16)

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

**CERTIFICATION BASIS:**

The U.S. certification basis determined under Section 21.29 of the FAR and Bilateral Airworthiness Agreement between the United States and the Federal Republic of Germany is FAR 35, effective February 1, 1965, Amendments 35-1 to 35-7, inclusive.

Luftfahrt-Bundesamt (LBA) originally type certificated this propeller under certificate number 32.130/74. Effective September 28, 2003, the European Aviation Safety Agency (EASA) began oversight of this product on behalf of Germany.

**TC (IMPORT) NO.**

P31BO

**TC APPLICATION DATE:**

June 28, 2010

**TC ISSUED**

July 7, 2011

**IMPORT REQUIREMENTS:**

To be considered eligible for installation on U.S. registered aircraft, each propeller to be exported to the United States shall be accompanied by a certificate of airworthiness for export or certifying statement endorsed by the exporting cognizant civil airworthiness authority which contains the following language:

(1) This propeller conforms to its United States type design (Type Certificate Number P31BO) and is in a condition for safe operation.

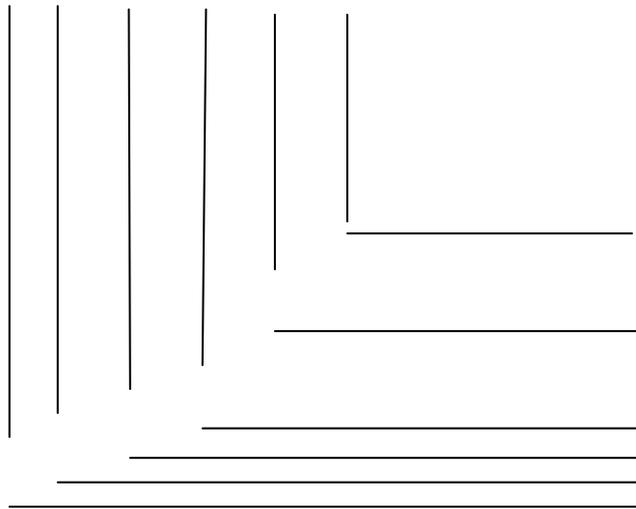
(2) This propeller has been subjected by the manufacturer to a final operational check and is in a proper state of airworthiness. Reference FAR Section 21.500 which provides for the airworthiness acceptance of engines or propellers manufactured outside the U.S. for which a U.S. type certificate has been issued. Additional guidance is contained in FAA Circular 21-23, Airworthiness Certification of Civil Aircraft, Engines, Propellers, and Related Products, Imported into the United States.

Advisory

NOTES

NOTE 1: HUB MODEL DESIGNATION:

MT V - 17 - C - ( ) ( )



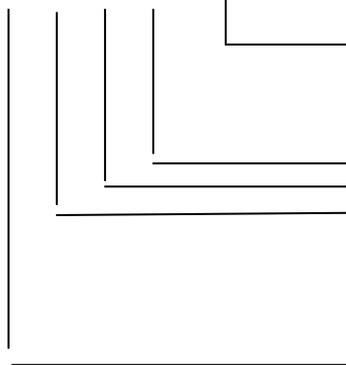
Small letter: modifications which do not affect interchangeability  
 Capital letter: modifications which restrict or exclude interchangeability  
 Blank = No or small counterweights for pitch change forces towards fine pitch  
 C: Counterweights for pitch change forces towards high pitch  
 Flange Type \*  
 Number of basic model  
 Variable pitch propeller  
 MT-Propeller Entwicklung GmbH

\* Flange

- C = AS-127-D, SAE No. 2 mod., 7/16" mounting bolts
- D = ARP 502
- F = AS-127-D, SAE No. 2 mod., 3/8" mounting bolts

NOTE 2: BLADE MODEL DESIGNATION:

( ) ( ) 183 - 59 ( )



Small letter: modifications which do not affect interchangeability of blade sets  
 Capital letter: modifications which restrict or exclude interchangeability of blade sets  
 Number of blade design, contains construction and aerodynamic data  
 Propeller diameter in cm  
 Sense of rotation (viewed in flight direction)  
 Blank: right-hand tractor  
 RD: right-hand pusher  
 L: left-hand tractor  
 LD: left-hand pusher  
 Position of pitch change pin  
 Blank: Position for pitch change forces to decrease pitch  
 C: Position for pitch change forces to increase pitch

## NOTES CONTINUED

- NOTE 3: Pitch Control: Pitch control is accomplished by Control Unit P-120-M (manual) or Control Unit P-120-U (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: (a) Feathering: Electrical control per Control Units P-120-M, P-120-U and P-120-A  
(b) Reversing: Not applicable
- NOTE 5: Right & 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: See NOTE 1.
- NOTE 7: Accessories: (a) Propeller Spinners: According to FAA-approved list published in MT-Propeller Service Bulletin No. 13  
(b) Deicing Systems: According to FAA-approved list published in MT-Propeller Service Bulletin No. 15.
- NOTE 8: Shank fairings: Not applicable
- 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-17 propellers must be operated within the limits of MT-Propeller Operation and Installation Manual No. ATA 61-01-18 (E-118) and adhere to the TBO-limits shown in Service Bulletin No. 1 ( ).  
(c) Propeller Maintenance, or overhaul, and airworthiness limitations shall be accomplished in accordance with MT-Propeller Overhaul Manual No. ATA 61-12-50 (E-250), latest revision.
- NOTE 11: Service 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 FAA and are considered FAA approved.
- Service bulletins,
  - Structural repair manuals,
  - Vendor manuals,
  - Aircraft flight manuals, and
  - Overhaul and maintenance manuals.

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