European Aviation Safety Agency

EASA

TYPE-CERTIFICATE DATA SHEET

Number : P.105
Issue : 02
Date : 26 September 2013
Type : MT-Propeller Entwicklung GmbH
5400 series propellers

Models
5404
5406

List of effective Pages:

Page	1	2	3	4	5												
Issue	2	2	2	2	2												

I. General

1. Type / Models

5400 / 5404, 5406

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

5404, 5406: 10 May 2010

5. Reference Date for Determination of the Applicable Requirements

10 May 2010

6. Certification Date

5404, 5406: 22 July 2011

II. Certification Basis

1. EASA Certification Basis:

1.1 Airworthiness Standards:
5404, 5406: CS-P Amendment 01, dated 16 November 2006

1.2 Special Conditions:
None

1.3 Equivalent Safety Findings:
None

1.4 Deviations:
None

1.5 EASA environmental protection requirements:
None applicable for propellers

III. Technical Characteristics

1. Type Design Definition

The 5400 series propeller models are defined by a main assembly drawing and an associated parts list:

Model 5404 “Steel Hub – SAE No. 20 Spline”
Drawing No. P-1199-B dated 09 May 2011 (*1)
Parts List No. S-188-A dated 21 February 2011 (*1)

Model 5406 “Steel Hub – SAE No. 30 Spline”
Drawing No. P-1185-D dated 09 May 2011 (*1)
Parts List No. S-186-C dated 09 May 2011 (*1)

Note:

(*1) Or later approved revision. Following a revision, the Drawing No. or the Parts List No. includes the corresponding revision letter, e.g. from P-1199-B in P-1199-C.

2. Description

2-blade ground-adjustable-pitch propeller with a steel hub for a SAE No. 20 or SAE No. 30 spline engine shaft. Aluminum alloy blades with a SAE No. 1 blade shank.

3. Equipment

None

4. Dimensions

Propeller diameter: 244 cm to 305 cm

5. Weight

Maximum: approx. 46 kg

6. Hub/Blade-Combinations

Hub	Blades
5404, 5406	1C1-( ), A1C1-( ), 11C1-( ), A11C1-( )

7. Control System

None

8. Adaptation to Engine

5404: SAE No. 20 Spline
5406: SAE No. 30 Spline

9. Direction of Rotation

Clockwise, Aft Looking Forward

IV. Operational Limits

1. Approved Installations:

Propeller/engine/aircraft combinations that comply with the requirements of CS-P Subpart D and the corresponding limitations are listed in MT-Propeller Service Bulletin No. 16. (see also note VI.3.)

2. Maximum Take Off Power and Speed

	Max. Take Off Power (kW)	Max. Take Off Speed (rpm)	Diameter (cm)
5404, 5406	336 (450 hp)	2300	244 to 305 cm

3. Maximum Continuous Power and Speed

	Max. Continuous Power (kW)	Max. Continuous Speed (rpm)	Diameter (cm)
5404, 5406	336 (450 hp)	2300	244 to 305 cm

4. Propeller Pitch Angle

Ground adjustable from +5° up to +35° measured at 75% radius station

V. Operating and Service Instructions

Operation, Installation and Maintenance Manual for 5400 Series Ground Adjustable Propeller with Metal Blades	No. E-1984
Overhaul Manual for 5400 Series Ground Adjustable Propeller with Metal Blades	No. E-1985
Standard Practice Manual	No. E-808
Service Bulletins, Service Letters, Service Instructions	as published by MT-propeller

VI. Notes

1. The EASA approved Airworthiness Limitations Section of the Instructions for Continued Airworthiness is published in the applicable "Operation, Installation and Maintenance Manual" document, chapter 1. "General and Airworthiness Limitations Section".

2. The overhaul intervals recommended by the manufacturer are published in MT-Propeller Service Bulletin No. 1.

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

4. Propeller designation system:

	Hub		/	Blade	
5404	-	( )	/	A1C1	-( )
1		2	/	1	2

Hub

1 5404: Steel Hub, Blade Shank Size SAE No. 1, Engine Shaft Size SAE No. 20
5406: Steel Hub, Blade Shank Size SAE No. 1, Engine Shaft Size SAE No. 30

2 Letter code for hub design changes:
- small letter for changes which do not affect interchangeability
- capital letter for changes which affect interchangeability

Blade

1 Identification of blade design

2 Diameter reduction in inch from basic diameter
