TYPE-CERTIFICATE
DATA SHEET

No. IM.P.185

for Propeller
W68T2 series propeller

Type Certificate Holder
Sensenich Wood Propeller Company, Inc.

2008 Wood Court
Plant City, Florida 33563
USA

For Models:
W68T2ER
W68T2ER2
W68T2ET
# 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** .......................................................................................... 4  
  1. State of Design Authority Certification Basis .................................................... 4  
  2. Reference Date for determining the applicable airworthiness requirements .... 4  
  3. EASA Certification Basis .................................................................................... 4  
  3.1. Airworthiness Standards ................................................................................. 4  
  3.2. Special Conditions (SC) ................................................................................ 4  
  3.3. Equivalent Safety Findings (ESF) .................................................................. 4  
  3.4. Deviations ....................................................................................................... 4  
  
**III. Technical Characteristics** .............................................................................. 4  
  1. Type Design Definition ....................................................................................... 4  
  2. Description .......................................................................................................... 5  
  3. Equipment .......................................................................................................... 5  
  4. Dimensions ......................................................................................................... 5  
  5. Weight ................................................................................................................ 5  
  6. Hub / Blade Combinations ................................................................................ 5  
  7. Control System .................................................................................................... 5  
  8. Adaptation to Engine ......................................................................................... 5  
  9. Direction of Rotation ......................................................................................... 5  
  
**IV. Operating Limitations** ................................................................................... 5  
  1. Approved Installations ....................................................................................... 5  
  2. Maximum Take Off Power and Speed ................................................................. 5  
  3. Maximum Continuous Power and Speed ............................................................. 6  
  4. Propeller Pitch Angle ......................................................................................... 6  
  
**V. Operating and Service Instructions** ................................................................ 6  
  
**VI. Notes** .............................................................................................................. 6  

**SECTION: ADMINISTRATIVE** ........................................................................... 8  
  I. Acronyms and Abbreviations ............................................................................. 8  
  II. Type Certificate Holder Record ........................................................................ 8  
  III. Change Record ................................................................................................ 8
I. General

1. Type / Models
W68T2 series / W68T2ER, W68T2ER2, W68T2ET

2. Type Certificate Holder
Sensenich Wood Propeller Company, Inc.
2008 Wood Court
Plant City, Florida 33563
USA

3. Manufacturer
Sensenich Wood Propeller Company, Inc.

4. Date of Application
10 April 2020

5. EASA Type Certification Date
17 August 2020

II. Certification Basis

1. State of Design Authority Certification Basis
Refer to FAA TCDS No. P00022AT

2. Reference Date for determining the applicable airworthiness requirements
30 March 2018

3. EASA Certification Basis

3.1. Airworthiness Standards
CS-P Amendment 1, dated November 16, 2006

3.2. Special Conditions (SC)
None

3.3. Equivalent Safety Findings (ESF)
None

3.4. Deviations
None

III. Technical Characteristics

1. Type Design Definition
Drawing Number: W68T2E Series Aircraft Propeller
2. Description
Two-blade, fixed pitch, wooden (birch) propeller. The laminations are bonded with high-strength waterproof resorcinol glue.

3. Equipment
None

4. Dimensions
Diameter: 173 cm (68")
See note 3.

5. Weight (At initial certification)
4 kg (8.8 lb.)

6. Hub / Blade Combinations
N/A

7. Control System
N/A

8. Adaptation to Engine
See note 2.

9. Direction of Rotation
Right, viewed in flight direction

IV. Operating Limitations

1. Approved Installations
See note 2.
The suitability of a propeller for a particular engine and airframe combination must be demonstrated within the scope of the type certification of the aircraft.

2. Maximum Take Off Power and Speed

<table>
<thead>
<tr>
<th></th>
<th>Max. Take Off Power (kW)</th>
<th>Max. Take Off Speed (propeller rpm)</th>
<th>Diameter (cm)</th>
</tr>
</thead>
<tbody>
<tr>
<td>W68T2ER</td>
<td>86 (115 hp)</td>
<td>2551</td>
<td>173</td>
</tr>
<tr>
<td>W68T2ER2</td>
<td>86 (115 hp)</td>
<td>2551</td>
<td>173</td>
</tr>
<tr>
<td>W68T2ET</td>
<td>86 (115 hp)</td>
<td>2551</td>
<td>173</td>
</tr>
</tbody>
</table>
3. Maximum Continuous Power and Speed

<table>
<thead>
<tr>
<th>Model</th>
<th>Max. Continuous Power (kW)</th>
<th>Max. Continuous Speed (propeller rpm)</th>
<th>Diameter (cm)</th>
</tr>
</thead>
<tbody>
<tr>
<td>W68T2ER</td>
<td>86 (115 hp)</td>
<td>2551</td>
<td>173</td>
</tr>
<tr>
<td>W68T2ER2</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>W68T2ET</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

4. Propeller Pitch Angle
From 122 cm (48”) up to 193 cm (76”) measured at 75% radius station.

V. Operating and Service Instructions

<table>
<thead>
<tr>
<th>Manuals</th>
<th>Instructions for Continued Airworthiness (ICA)</th>
<th>Supplemental Airworthiness Instructions for Bonded Metal Erosion Shields</th>
</tr>
</thead>
<tbody>
<tr>
<td>WOOD-CF-REV-B.DOC 7-29-15</td>
<td>WOOD-CF-REV-B.DOC 7-29-15</td>
<td>WOOD-CF-REV-B.DOC 7-29-15</td>
</tr>
</tbody>
</table>

VI. Notes

1. The EASA approved Airworthiness Limitations Section of the Instructions for Continued Airworthiness is published in the applicable "Wood Propellers: Installation, Operation, & Maintenance" document.

2. Installation:
Installation of wooden propellers on flanged crankshafts must include a front plate of approximately the same area and thickness as the flange and AN bolts conforming to MIL-B-6812.
   a. Propeller Model W68T2ER is installed on Rotax 101.6 mm flanged shaft or spool spacer. Bolts may also be metric class CL8.8 or CL10.9.
   b. Propeller Model W68T2ER2 is installed on Rotax 101.6 mm flanged shaft or spool spacer. Bolts may also be metric class CL8.8 or CL10.9.
   c. Propeller Model W68T2ET is installed on Rotax 101.6 mm flanged shaft or spool spacer with 0.552” diameter drive bushings. Bolts may also be metric class CL8.8 or CL10.9.
Propeller is approved for spool type extensions up to and including 12 cm (4.72”).
3. Propeller Designation

W 68 T2 E T 70 ()
1 2 3 4 5 6 7

1 Designates wooden propeller
2 Basic diameter in inches
3 Diameter reduction in inches by telescoping stations
4 Blade design
5 Hub configuration:
   “R” = installation on Rotax 101.6 mm flanged shaft or spool spacer
   “R2” = installation on Rotax 101.6 mm flanged shaft or spool spacer
   “T” = installation on Rotax 101.6 mm flanged shaft or spool spacer with 14 mm (0.552”)
   diameter drive bushings
6 Geometric pitch in inches at 75% radius station
7 Designates minor change not affecting interchangeability or eligibility
   “G” or “J” = glass synthetic fabric tipping
   “M” = metal erosion shield
   “U” = synthetic leading edge
SECTION: ADMINISTRATIVE

I. Acronyms and Abbreviations
Max.  Maximum  
N/A  Not Applicable

II. Type Certificate Holder Record
N/A  Not Applicable

III. Change Record

<table>
<thead>
<tr>
<th>TCDS Issue</th>
<th>Date</th>
<th>Changes</th>
<th>TC Issue Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Issue 01</td>
<td>17 August 2020</td>
<td>Initial Issue</td>
<td>Initial Issue, 17 August 2020</td>
</tr>
</tbody>
</table>

-END-