

**MINISTÉRIO DA AERONÁUTICA
DEPARTAMENTO DE PESQUISAS E DESENVOLVIMENTO
CENTRO TÉCNICO AEROESPACIAL**

TYPE CERTIFICATE DATA SHEET Nº EH-9809

Type Certificate Holder:

SENENICH PROPELLER MANUFACTURING CO., INC.
14 Citation Lane
Lititz, Pennsylvania PA 17543
USA

EH-9809

Sheet 01

SENENICH

76EM

October 98

Propellers of models described herein conforming with this data sheet, which is part of Type Certificate No. 9809, 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	Fixed-Pitch Metal
ENGINE SHAFT	See Note 1
HUB MATERIAL	Aluminum Alloy
BLADE MATERIAL	Aluminum Alloy
NUMBER OF BLADES	Two

HUB ELIGIBLE 76EM

Basic Model (See Note 1)	Max. Continuous & Takeoff Power		Standard Pitch in	Diameter Limits		Approx. Max. Weight Compl.	
	hp	rpm		m	in	Kg	lb
76EM8	180	2700	68 - 52	1.93	76	15.65	34.5

CERTIFICATION BASIS CAR 14 as amended to December 15, 1956**TYPE CERTIFICATION**

76EM8	Application 07 May 1998	Issued TC 26 Oct. 1998
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PRODUCTION BASIS Production Certificate No. 1NE

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 FAA, attesting that the particular propeller and/or parts were submitted to the governmental quality control before delivery and are in conformity with the CTA approved type design.

NOTES**NOTE 1** Model Designation: M 76 E M8 S5 0 50

- M Designates metal propeller. Not included on propellers with Serial No. 5805 & up, which are otherwise the same.
- 76 Basic diameter in inches.
- E Designates blade design.
- M8 Designates hub configuration.
"M8" or "MM" - for installation on SAE No. 2 (Ref. AS 127)) flanged shaft with 1/2" diameter attaching bolts and 3/4" diameter drive bushings.
- S5 Designates a 6/4 or 1 1/2 inch spacer thickness. "S" when used with "MM" hub configuration shown below, "MM", is equivalent to S5 spacer.
- 0 Designates cut-off in inches from basic diameter.
- 50 Pitch in inches at the .75 Radius station. Designates design change

NOTE 2 Hub Drilling and Dimensions

Hub Drilling

No. Holes : 6
 Diameter Holes: 33/64"
 Diameter Bolt Circle: 4-3/4"

Hub Dimensions

Hub Diameter 6"
 Dimensions Thick.: 3-9/16"

NOTE 3 Installation:

These models are for installation on flanged propeller shaft ends (See Note 1). Installation is to be made with special steel bolts which are furnished or specified by the propeller manufacturer in accordance with the associated propeller assembly drawing. See Note 4 for spacer designations and Note 5 for approved spacer lengths.

(a) Propeller Model 76EM8 is installed on SAE No. 2 shaft with 1/2 inch diameter attaching bolts and 3/4 inch diameter drive bushings.

NOTE 4 Spacers

Sensenich spacer models are identified by flange code (See Note 1) and spacer thickness designation based on 1/4 inch multiples. See Note 5 for approved spacer lengths.

NOTE 5 Special Limits

Table of Propeller-Engine Combinations

Approved Vibrationwise for Use on Normal Category Single-Engine Tractor Aircraft

The maximum and minimum propeller diameters that can be used from a vibration standpoint are shown below. No reduction below the minimum diameter listed is permissible since this figure includes the diameter reduction allowable for repair purposes.

Propeller Model	Engine Model	Max. Dia. (Inches)	Min. Dia. (Inches)	Placards
76EM8, Spacers 0 to 4.0 inches, incl	Lycoming O-360 Series with Hollow Crankshafts (Excludes engines with suffixes having a digit "4" or higher in the second position.) 180 hp and 2700 rpm	76	76	Avoid continuous operation between 2150 and 2350 rpm
76EM8, Spacers 0 to 4.0 inches, incl	Lycoming O-360 Series with Solid Crankshafts (Engines with suffixes having a digit "4" or higher in the second position.) 180 hp and 2700 rpm	76	76	None

NOTE 6 Special Notes.

The work "eligible" as used herein does not signify approval. For approval, compliance with the applicable aircraft airworthiness requirements is necessary.

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(Chief, Divisão de Homologação Aeronáutica)****Maj.-Brig.-do-Ar REGINALDO DOS SANTOS****Diretor do Centro Técnico Aeroespacial
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