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

## **TYPE CERTIFICATE DATA SHEET № EH-9808**

Type Certificate Holder:

SENSENICH PROPELLER MANUFACTURING CO., INC.

14 Citation Lane Lititz, Pennsylvania PA 17543 **USA**  EH-9808

Sheet 01

**SENSENICH** 

74D

October 98

Propellers of models described herein conforming with this data sheet, which is part of Type Certificate No. 9808, 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

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HUB	FI	ICI	RI	F
пил	P.	ALC T	ш	7 2

74D

Basic Model (See Note 1)	& Ta	ontinuous akeoff ower	Standard Pitch	Diameter Limit	s Approx. Max. Weight Compl. (Max. Diam.)
	hp	rpm	in	m in	Kg lb
74DM6	165	2800	68 - 48	1.88 74	14.70 32.4
74DM7	165	2800	68 - 48	1.88 74	14.70 32.4
74DR	165	2800	68 - 48	1.88 74	13.38 29.5
74DC	165	2800	68 - 50	1.88 74	14.11 31.1

**CERTIFICATION BASIS** 

CAR 14 effective March 5, 1952, as amended by 14-1 effective May 16, 1953.

TYPE CERTIFICATION

Aplication Issued TC 74D 07 May 1998 26 Oct. 1998

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 74 D M S5 2 60 \_\_.

M	Designates metal propeller.
	Not included on propellers with Serial No. 26474 & up, which are
	otherwise the same.
74	Basic diameter in inches.
D	Designates blade design.
M	Designates hub configuration:
	"C" - for installation on SAE ARP-502 flange shaft.
	"M" or "M6" - for installation on SAE No. 2 flange shaft using
	3/8" diameter attaching bolts and 5/8" diameter drive bushings.
	"R" - for installation on SAE No. 3 flange shaft.
	Suffix numbers for hubs (as applicable) only stamped on propellers
	with Serial Number 26476 and up.
S5	Designates a 5/4 or 1 1/4 inch spacer thickness.
2	Designated cut-off in inches from basic diameter.
60	Pitch in inches at the .75 radius station.
<u>.</u>	Designates design change.

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# NOTE 2 <u>Hub Drilling and Dimensions</u>

	74DM6	74DM7	74DR	74DC
Hub Drilling				
No. Holes:	6	6	8	6
Diameter Holes:	25/64"	29/64"	25/64"	33/64"
Diameter Bolt Circle:	4-3/4"	4-3/4"	5-1/4"	4"
<b>Hub Dimensions</b>				
Hub Diameter	6"	6"	6-1/2"	5-1/2"
Dimensions Thick.:	3-7/16"	3-7/16"	3-7/16"	3-7/16"

#### **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 appropriate propeller assembly drawing. See Note 4 for spacer designations and Note 5 for approved spacer lengths.

- a. Propeller Model 74DC is installed on SAE ARP-502 flanged shaft.
- b. Propeller Model 74DR is installed on SAE No. 3 flanged shaft.
- c. Propeller Model 74DM6 is installed on SAE No. 2 flanged shaft with 3/8 inch diameter attaching bolts and 5/8 inch diameter drive bushings.
- d. Propeller Model 74DM7 is installed on SAE No. 2 flanged shaft with 7/16 inch diameter attaching bolts and 5/8 inch diameter drive bushings.

# NOTE 4 Spacers.

Sensenich spacer models are identified by flange code (See Note 1) and spacer thickness designated based on multiples of 1/4 inch. 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
74DM6, 74DM7 Spacers 0 to 3.5 inches incl.	Lycoming O-320 Series 160 hp @ 2700 rpm or less.	74	72	None
74DM6, 74DM7 Spacers 0 to 3.5 inches incl.	Lycoming O-290-D, -D2 and -D2B Series	74	72	None

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74DC	Franklin 6A4-150-B4	74	72	Avoid continuous operation between 2150 & 2250 rpm on ground and in flight
74DR	Franklin 6A4-165-B3	74	72	Avoid continuous operation between 2150 & 2250 rpm on ground and in flight
74DC	Franklin 6A4-165-B4	74	72	Avoid continuous operation between 2150 & 2250 rpm on ground and in flight.
74DR	-1 Continental C-125-2	73	71	None
74DR	Continental C-145 Series and Continental O-300-A, -B, 145 hp @ 2700 rpm or less.	74	72	None
74DC	Continental O-300-C,-D and -E, 145 hp @ 2700 rpm or less	<b>)</b> , 74	72	None
74DC	Continental IO-346-A 165 hp @ 2700 rpm or less.	74	74	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.

LUIZ ALBERTO C. MUNARETTO – Ten.-Cel.-Av.

Chefe da Divisão de Homologação Aeronáutica (Chief, Divisão de Homologação Aeronáutica)

Maj.-Brig.-do-Ar REGINALDO DOS SANTOS

Diretor do Centro Técnico Aeroespacial (Director, Centro Técnico Aeroespacial)