

DEPARTMENT OF COMMERCE  
CIVIL AERONAUTICS ADMINISTRATION

3P2  
Revision 1  
Hartzell  
HC-52X20  
Series Propellers  
April 11, 1949

PROPELLER SPECIFICATION

Propellers of models described herein conforming with these specifications and approved data on file with the Civil Aeronautics Administration are rated as airworthy for use in certificated aircraft in accordance with pertinent aircraft specifications and applicable portions of 3.4 and 4.4 of the Civil Air Regulations.

Manufacturer Hartzell Propeller Company  
Piqua, Ohio

Model HC-52X20

Limits Dependent on blade model installed. Metal blade limits dependent upon satisfactory vibrational stress characteristics of propeller-engine combination. (The eligibility of propellers for use with engine airplane combinations is shown on the aircraft specifications.)

Pitch Two position, automatic snap-acting. Pitch range is 12°.

Blade shank size 3.577 diameter, special (Hartzell "X")

Engine shaft SAE #20 spline

Hub material Alloy steel

Blade material Aluminum alloy and special fabric base plastic with stainless steel or brass tipping.

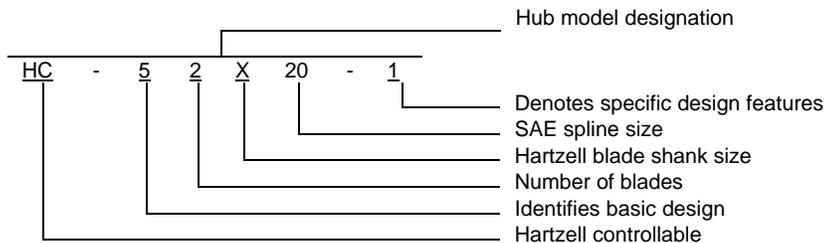
Number of blades Two

Hub model eligible HC-52X20-1

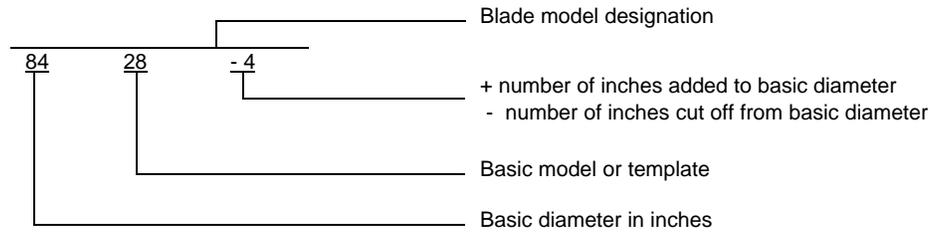
Blades Eligible (See Note 2)	Maximum <u>Continuous</u>		<u>Take-Off</u>		Dia. Limits	Weight Complete (Max. Dia.)
	HP	RPM	HP	RPM		
8433-0 to 8433-6 (metal blades)	185	2300	205	2600	84" to 78" (-0 to -6)	61 lbs.
8428+2 to 8428-6 (plastic blades)	215	2600	215	2600	86" to 78" (+2 to -6)	59 lbs.

Certification basis Type Certificate No. 3P2  
Production basis Production Certificate No. 10

NOTE 1. Hub Model Designation. Hub model designation denotes type, basic model, blade shank size, shaft size, and special variations. For example:



NOTE 2. Blade Model Designation. The basic blade model designation number consists of four digits. The first group of two digits denotes the diameter of the propeller in inches. The second group of two digits denotes the basic model number of templates used. A plus or minus number added to the blade model designation denotes the amount of inches added to or cut off from the basic diameter.



NOTE 3. Pitch Control. None. Two position automatic snap-acting pitch control mechanism.

NOTE 4. Feathering. Not applicable.

NOTE 5. Left-Hand Models. The left hand version of an approved model propeller is eligible at the same rating and diameter as listed for the right hand model. It is designated by an "L" preceding the blade model designator.

NOTE 6. Interchangeable blades. None

NOTE 7. Accessories. None

NOTE 8. Shank Fairings. Not applicable

NOTE 9. Special Limits. Propeller to be installed and operated in accordance with limitations shown on aircraft specification and approved Hartzell service instructions.

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