

DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION

P59GL
Revision 4
Hartzell
HA-A2V, HA-A2MV
November 14, 1997

TYPE CERTIFICATE DATA SHEET NO. P59GL

Propellers of models described herein conforming with this data sheet (which is part of Type Certificate No. P59GL) and other approved data on file with the Federal Aviation Administration meet the minimum standards for use in certificated aircraft in accordance with pertinent aircraft data sheets and applicable portions of the Federal Aviation Regulations provided they are installed, operated and maintained as prescribed by the approved manufacturer's manuals and other approved instructions.

Type Certificate Holder	Hartzell Propeller Inc. Piqua, OH 45356
Type	Ground Adjustable
Engine Shaft	SAE #20 spline
Hub material	Alloy steel
Blade material	Aluminum alloy
Number of blades	Two
Hub models	HA-A2V20-1, HA-A2MV20-1 (see NOTE 1)

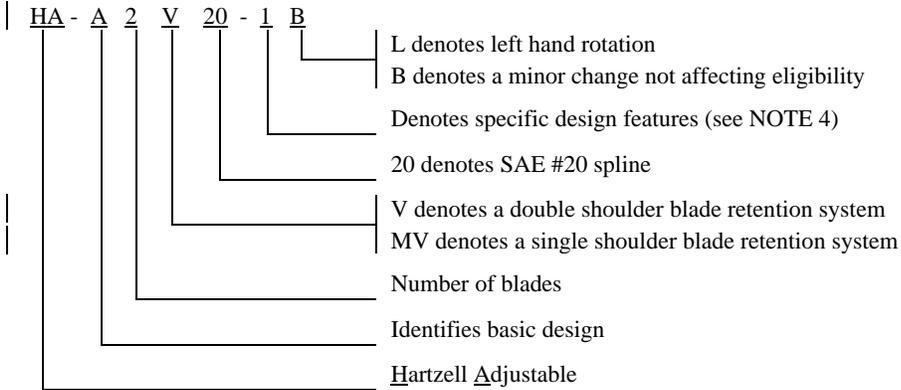
Blades (see NOTE 2)	Maximum Continuous		Takeoff		Diameter Limits (see NOTE 2)	Approx. Max. Wt. Complete (For Reference Only) (See NOTES 3 and 7)
	HP	RPM	HP	RPM		
V7636D-0 to V7636D-8	225	3000	225	3000	76" to 68" (-0 to -8)	64.0 lb.
V8433-0 to V8433-12	260	2625	260	2625	84" to 72" (-0 to -12)	67.0 lb.
V8433S-0 to V8433S-12	260	2625	260	2625	84" to 72" (-0 to -12)	67.0 lb.
V8833-0 to V8833-10	260	2600	260	2600	88" to 78" (-0 to -10)	68.0 lb.
V9333D-0 to V9333D-13	260	2400	280	2400	93" to 80" (-0 to -13)	72.0 lb.
V10133D-0 to V10133D-3	260	2180	260	2180	101" to 98" (-0 to -3)	77.0 lb.
V10133D-3 to V10133D-6	280	2180	280	2180	98" to 95" (-3 to -6)	77.0 lb.

Certification Basis: HA-A2V20 models: FAR Part 35 with amendments 35-1 and 35-2 effective Apr. 3, 1967.
HA-A2MV20 models: FAR Part 35 with amendments 35-1 through 35-6 effective Aug. 18, 1990.
Type Certificate No. P59GL issued March 12, 1980 under Delegated Option Authorization
Procedures of Part 21 Subpart J of the Federal Aviation Regulations.
Date of application for Type Certificate: February 25, 1980

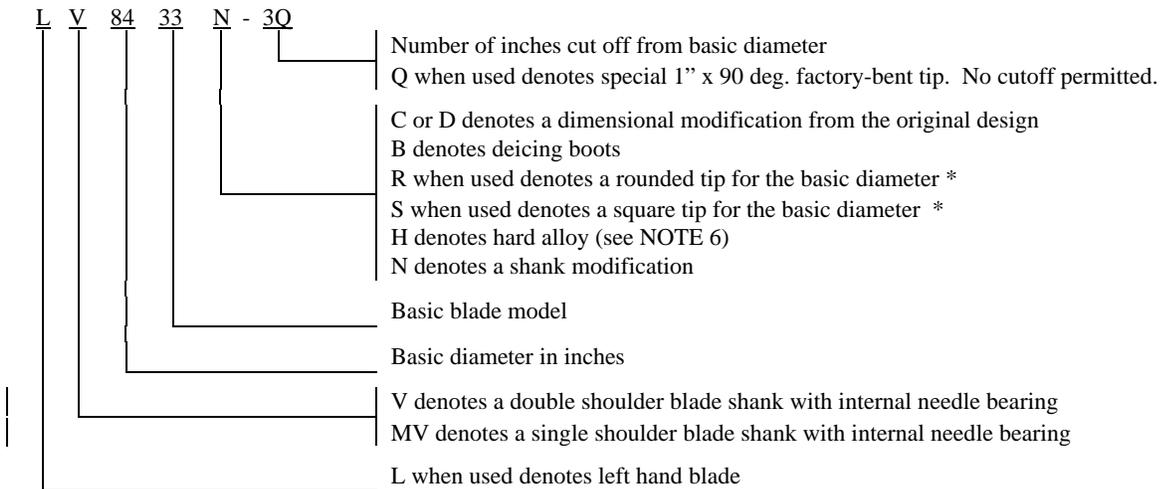
Production Basis: Production Certificate no. 10

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NOTE 1. Hub Model Designation



NOTE 2: Blade Model Designation



* Some blades which use square or round tip shapes may not contain the letters "S" or "R" in their model designation. These characters are used to distinguish blades when two or more tip shapes are available at the same diameter.

NOTE 3. Pitch Control. Ground Adjustable

NOTE 4. (a) Feathering Not Applicable

(b) Reversing Not Applicable

NOTE 5. Left-Hand Models

The left-hand version of an approved propeller model is approved at the same rating and diameter as listed for the right-hand model. See NOTES 1 and 2.

NOTE 6. Interchangeability

- (a) Blades
 - (1) Blade models 8433 and 8433S are interchangeable.
 - (2) Hard alloy blades may be substituted for the corresponding blade model on seaplanes and amphibious aircraft only.
 - (3) Blades with an "N" suffix, such as (M)V8433N, are interchangeable with corresponding blades without the "N" suffix, provided that all blades in the same propeller are identical.
 - (4) Blades with "M" prefix, such as MV8433N, can be substituted for corresponding blades without the "M" prefix provided that all blades in the same propeller are identical and that the hub model also contains the characters "MV". Blades without the "M" prefix cannot be substituted for those with the "M" prefix.
- (b) Propellers
 - (1) In the model designation HA-A2(V,MV)(), the "MV" may be substituted for "V", however "V" may not replace "MV".

NOTE 7. Accessories

- (a) Propeller anti-icing
 - (1) Approved with fluid feed shoes or Icx boots installed in accordance with Hartzell Special Instruction no. 59.
 - (2) Approved with Hartzell fluid feed equipment on propeller models for which equipment is available.
- (b) Propeller deicing
 - (1) Approved with Goodrich electrical deicing kit 77-XXX, 67-XXX or 65-XXX when installed in accordance with BF Goodrich Report no. ATA 30-60-07.
 - (2) Approved with Goodyear Ice Guards (electrical propeller deicer) when installed in accordance with instructions outlined in Goodyear Report no. AP-147 dated October 23, 1961.
- (c) Propeller spinner
 - (1) Approved with Hartzell spinners. (weight of spinner extra)

NOTE 8. Shank Fairings Not applicableNOTE 9. Special Limits Not applicableNOTE 10. Special Notes

Propeller installation must be approved as part of the aircraft Type Certificate and demonstrate compliance with the applicable aircraft airworthiness requirements.

NOTE 11. Retirement Time

- (a) Life Limits and Mandatory Inspections
 - (1) Airworthiness limitations, if any, are specified in Hartzell Manual 114().

END