

DEPARTMENT OF TRANSPORTATION  
FEDERAL AVIATION ADMINISTRATION

P56GL Revision 10 Hartzell HC-B4M March 1, 2007
---

TYPE CERTIFICATE DATA SHEET NO. P56GL

Propellers of models described herein conforming with this data sheet (which is part of Type Certificate No. P56GL) 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.

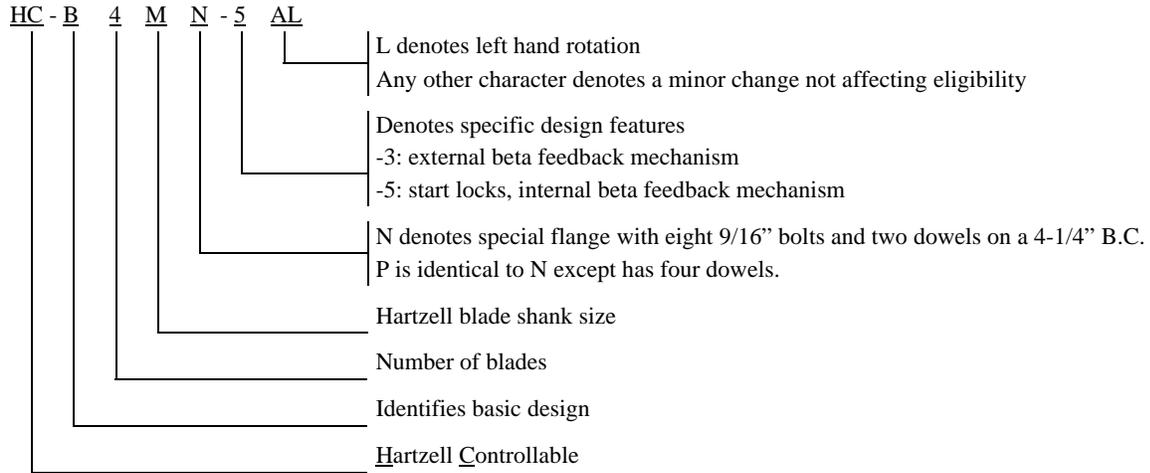
Type Certificate Holder	Hartzell Propeller Inc. Piqua, OH 45356
Type	Constant speed; hydraulic (see Notes 3 and 4)
Engine shaft	Special flange: (see Note 1)
Hub material	Alloy steel
Blade material	See below
Number of blades	Four
Hub models	HC-B4MN-5, HC-B4MP-3 (see Notes 1 and 4)

Blades (see Note 2)	Maximum Continuous		Takeoff		Diameter Limits (see Note 2)	Approx. Max. Wt. Complete (For Reference Only) (see Notes 3 and 7)	Blade Construction (See Note 10)
	HP	RPM	HP	RPM			
<u>HC-B4MP-3</u>							
M10476-0 to M10476-10	1200	1700	1200	1700	105" to 95" (-0 to -10)	192 lb.	Aluminum Alloy
M10877	1173	1700	1173	1700	109.5"	171 lb.	Aramid Composite
M10877S	1173	1700	1173	1700	109.5"	173 lb.	Aramid Composite
<u>HC-B4MN-5</u>							
M10585+4 to M10585-0	900	1591	940	1591	110" to 106" (+4 to -0)	170 lb.	Aramid Composite
M9990-0 to M9990-10	1040	2000	1040	2000	100" to 90" (-0 to -10)	185 lb.	Aluminum Alloy

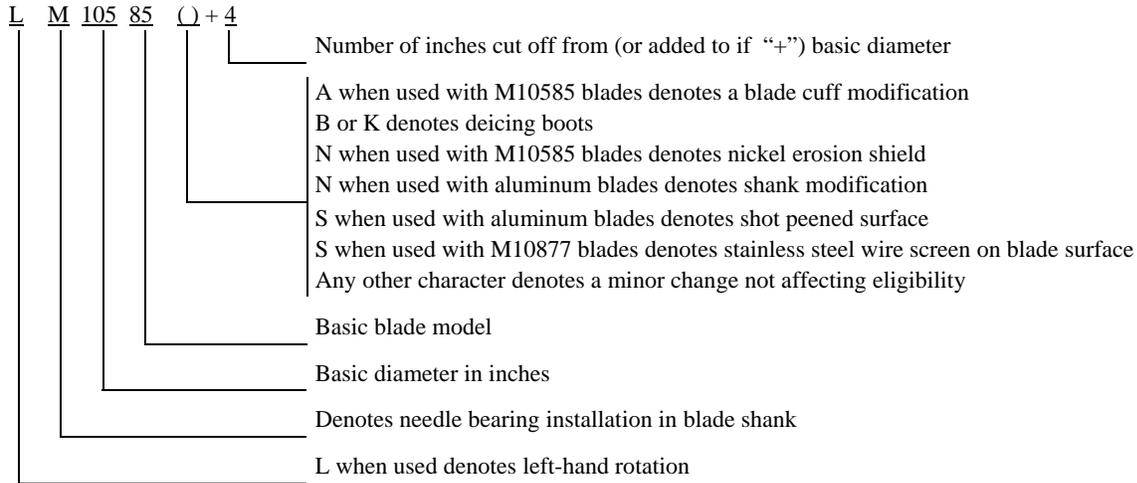
Certification Basis:	14 CFR Part 35 effective May 2, 1977, with amendments 35-1 through 35-4. Type Certificate No. P56GL issued September 12, 1978. Date of application for Type Certificate May 5, 1978.  The following models were approved to the original certification basis: HC-B4MN-5  Models added, updated or revised in accordance with 14 CFR Part 35 effective October 14, 1980 with amendments 35-1 through 35-5 include the following: HC-B4MP-3  Models added, updated or revised in accordance with 14 CFR Part 35 effective August 18, 1990 with amendments 35-1 through 35-6 include the following: HC-B4MN-5
----------------------	---

Production Basis:	Production Certificate no. 10
-------------------	-------------------------------

Note 1: Hub Model Designation (See Notes 4 and 5)



Note 2: Blade Model Designation (See Notes 5 and 6)



Note 3: Pitch Control (weight of pitch control extra) (See Notes 4 and 10)

- (a) All propeller models have counterweighted blades and use oil to decrease pitch.
- (b) All governors and propeller control systems must be approved as part of the aircraft installation regardless of manufacturer.
- (c) Maximum control pressure: 500 psig.

Note 4: Feathering

- (a) The -3 and -5 models incorporate feathering and unfeathering features.

Reversing

- (a) The -3 and -5 models are approved for installation as reversing propellers with appropriate reversing controls.

Note 5: Left-Hand Models (See Notes 1 and 2)

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

Note 6: Interchangeability (See Note 2)

- (a) Blades with the suffix “N” in the basic model number may replace those without an “N” either individually or as a set. Likewise, blades with the suffix “S” in the basic model number may replace those without an “S” either individually or as a set. When the aircraft Type Certificate or Supplemental Type Certificate specifies blades with the letters “N” or “S” in the basic model number, those characters must be retained in all replacement blade models.

For example: Blades with neither “N” nor “S” may be replaced by “N”, “S” or “NS” blades,  
“N” blades may be replaced by “NS” blades,  
“S” blades may be replaced by “NS” blades.

- (b) Refer to Hartzell Service Letter HC-SL-30-260 for ice protection system component interchangeability.

Note 7: Accessories

- (a) Propeller spinner (weight of spinner extra)
  - (1) Approved with Hartzell and other manufacturers’ spinners when listed on Hartzell type design data.
- (b) Propeller deice (weight of deice system extra)
  - (1) Approved with Goodrich electrical deicing kit 77-XXX, 67-XXX, 65-XXX, 5EXXXX-X, or 7EXXXX-X when the specific kit number is listed on Hartzell type design data and installed in accordance with Goodrich report no. ATA 30-60-07.
  - (2) Approved with ice protection equipment when listed on Hartzell type design data.

Note 8: Shank Fairings The M10585 blade incorporates a shank fairing.

Note 9: Special Limits Not applicable.

Note 10: The propeller installation must be approved as part of the aircraft type certificate to demonstrate compliance with the applicable aircraft airworthiness requirements.

Propeller models listed herein consist of basic hub and blade models. Most propeller models include additional characters to denote minor changes and specific features as explained in Notes 1 and 2. Refer to the aircraft Type Certificate Data Sheet for the specific propeller model applicable to the installation.

Propellers with composite blades must be evaluated for bird impact resistance prior to approval on any type aircraft. Hartzell Propeller must perform tests and/or analyses based on aircraft configuration and operating conditions to determine the potential hazard as a result of a bird impact.

Note 11: Retirement Time

- (a) Life limits and mandatory inspections.
  - (1) Airworthiness limitations, if any, are specified in Hartzell Manual 118( ) or Service Letter 61( ).

Note 12: Special Notes

- (a) Refer to Hartzell Manual no. 202( ) for overspeed and overtorque limits.
- (b) Refer to Hartzell Service Letter HC-SL-61-61( ) for overhaul periods.

END