

DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION

P44GL
Revision 13
Hartzell
HC-B5M
March 4, 2015

TYPE CERTIFICATE DATA SHEET NO. P44GL

Propellers of models described herein conforming with this data sheet (which is part of Type Certificate No. P44GL) 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 Aluminum Alloy

Number of blades Five

Hub models HC-B5MP-3, HC-B5MP-5, HC-B5MA-2, HC-B5MA-3, HC-B5MA-5 (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)
	HP	RPM	HP	RPM		
<u>HC-B5MP-3</u>						
M10282+6 to M10282-0	1120	1700	1198	1700	111.3" to 104.7" (+6 to -0)	220 lb.
M10282-0 to M10282-6	1120	1700	1120	1700	104.7" to 98.7" (-0 to -6)	215 lb.
M10876-0 to M10876-6	1327	1700	1500	1700	111.2" to 105.2" (-0 to -6)	230 lb.
M11276-0 to M11276-10	1327	1700	1500	1700	115.2" to 105.2" (-0 to -10)	254 lb.
<u>HC-B5MP-5</u>						
M11276-0 to M11276-10	1327	1700	1500	1700	115.2" to 105.2" (-0 to -10)	254 lb.
M11692-0 to M11692-10	1250	1591	1250	1591	118.7" to 108.7" (-0 to -10)	273 lb.
<u>HC-B5MA-3</u>						
M11276-0 to M11276-10	1650	1700	1650	1700	115.2" to 105.2" (-0 to -10)	254 lb.
M11296-0 to M11296-10	1650	1700	1650	1700	115.2" to 105.2" (-0 to -10)	255 lb.
M11691-0 to M11691-10	1650	1700	1650	1700	118.7" to 108.7" (-0 to -10)	261 lb.
<u>HC-B5MA-2</u>						
M9128-0 to M9128-6	1600	2000	1600	2000	94" to 88" (-0 to -6)	221 lb.

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		
<u>HC-B5MA-5</u>						
M11276-0 to M11276-10	1650	1700	1650	1700	115.2" to 105.2" (-0 to -10)	254 lb.
M11692-0 to M11692-10	1650	1552	1650	1552	118.7" to 108.7" (-0 to -10)	273 lb.
M11693-0 to M11693-10	1650	1552	1650	1552	118.7" to 108.7" (-0 to -10)	275 lb.

Certification Basis: 14 CFR Part 35 effective February 1, 1977 with amendments 35-1 and 35-2 thereto.
 Type Certificate No. P44GL issued Nov. 13, 1975
 Date of application for T.C.: Dec. 10, 1973; revised Mar. 8, 1974

The following models were included under the original certification basis:
 HC-B5MP-3

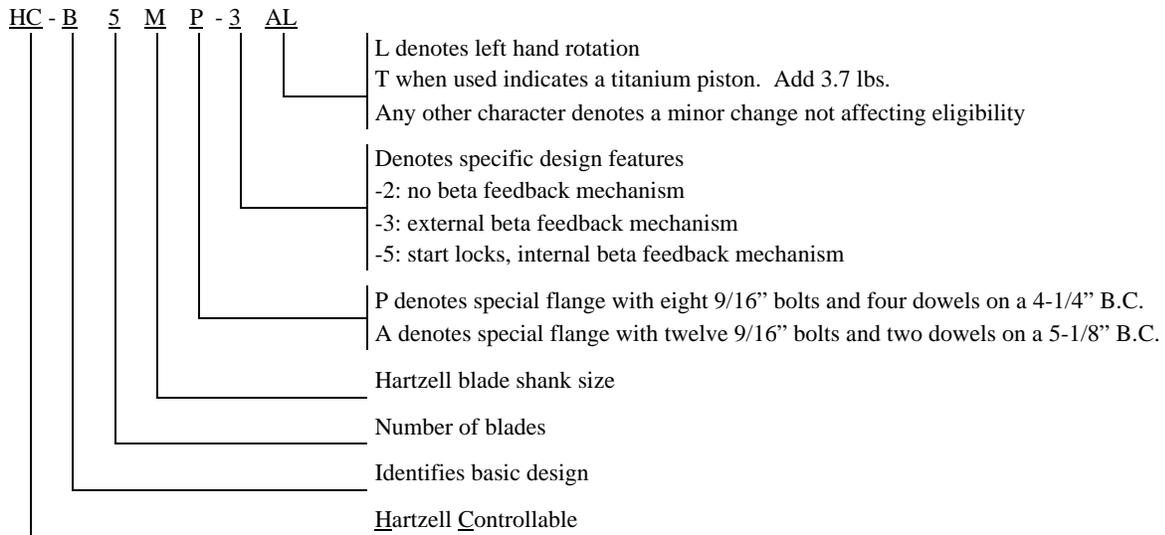
The following models were added, updated or revised in accordance with 14 CFR Part 35 with amendments 35-1 through 35-4 effective May 2, 1977:
 HC-B5MP-3

The following models were added, updated or revised in accordance with 14 CFR Part 35 with amendments 35-1 through 35-5 effective October 14, 1980:
 HC-B5MP-3, HC-B5MP-5, HC-B5MA-3

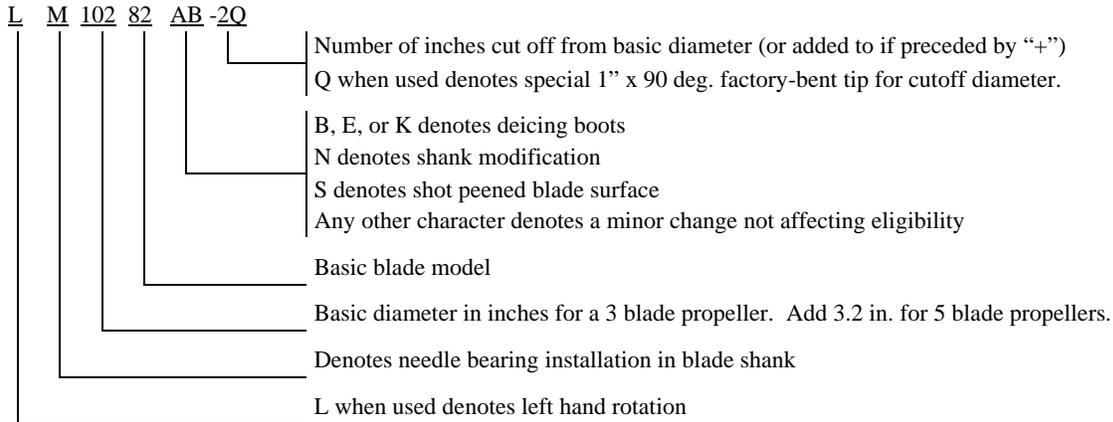
The following models were added, updated or revised in accordance with 14 CFR Part 35 with amendments 35-1 through 35-6 effective August 18, 1990:
 HC-B5MP-3, HC-B5MP-5, HC-B5MA-2, HC-B5MA-3, HC-B5MA-5

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.
- (d) The Hartzell propeller model HC-B5MA-2() with M9128() blades is controlled by an integrated control system which is part of the engine type design. The propeller model HC-B5MA-2() with M9128() blades complies with the propeller airworthiness requirements when used with the Pratt & Whitney PT6A-68/3 and PT6A-68T engines. Any change to the engine, including its control system, which affects or may affect the propeller approval must be substantiated to demonstrate that the propeller as integrated with the changed engine, including its control system, still complies with the propeller certification basis. Also, any change to the engine resulting from a change to the propeller must be substantiated to demonstrate that the changed engine still complies with the engine certification basis.

Note 4: Feathering

- (a) The -2, -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.
- (b) The -2 models do not reverse.

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.
 - (2) All propeller spinners must be approved as part of the aircraft installation regardless of manufacturer. (See Note 10)
- (b) Propeller ice protection system (weight of ice protection equipment extra)
 - (1) Propeller models listed in this data sheet are approved for use with propeller ice protection equipment listed in Hartzell Manual 159 or in other Hartzell type design data.
 - (2) All propeller ice protection equipment must be approved as part of the aircraft installation regardless of manufacturer. (See Note 10)

Note 8: Shank Fairings Not applicable.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 standards.

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.

Note 11: Retirement Time

- (a) Life limits and mandatory inspections.
 - (1) Airworthiness limitations, if any, are specified in Hartzell Manual 132().

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