PRODUCT INFORMATION

HOFFMANN PROPELLER

NEW

HO-V723

CONSTANT SPEED PROPELLER, HYDRAULICALLY CONTROLLED

SAFETY, PERFORMANCE, AFFORDABILITY AND SERVICE

HO-V723

Constant speed propeller, Hydraulically controlled

The HO-V723( ) propeller is a three bladed single acting fully hydraulically controlled "constant speed" propeller. The hub is made from forged aluminum alloy to fit to the Rotax 912( ) to 916( ) engines. Different flanges are also available. The blades are "wood-composite" with FRP-covering and leading edge guard.

In the normal operating range, the pre-selected propeller RPM is maintained constant by a propeller governor. This propeller uses oil pressure to increase pitch. The travel of the propeller blades is limited by mechanical stops.

In the event of an oil pressure failure the propeller blades automatically return to the "low pitch" stop and the propeller can be used as a "fixed-pitch" unit. The propeller RPM must be adjusted and controlled by the throttle only, but the flight may be continued.

For special applications the propeller uses oil pressure to reduce pitch. In this case counterweights must be used to turn the propeller blades towards high pitch. In the event of oil pressure failure, the propeller blades automatically move to the mechanical "high pitch" stop.

The HO-V723( )-S propeller– is a three bladed single acting fully hydraulically controlled "constant speed" propeller with feathering position.

The pre -selected propeller RPM will be kept constant in the normal operating range by a propeller governor. This propeller uses oil pressure to decrease pitch and counterweights as well as the spring force to increase the pitch until "feathering". In the event of oil pressure failure, the propeller blades automatically move to the "feathering" position. The travel of the propeller blades is limited by internal mechanical adjustable hard stops. To un-feather the propeller during flight a hydraulic accumulator, that stores oil under pressure is needed. This oil supply is released to un-feather the propeller. The propeller starts to rotate and the engine can be restarted.

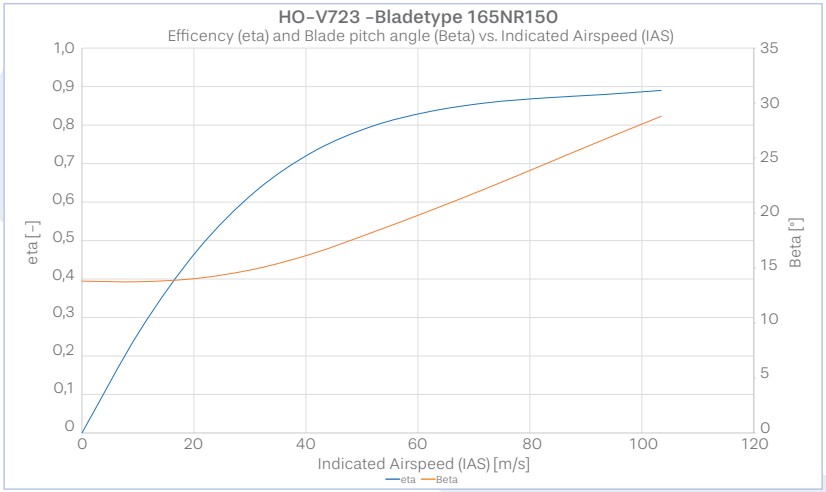
To prevent feathering during normal engine shutdown on the ground the propeller is equipped with a spring loaded "start lock". To disengage the locks the static RPM must be at least 700 RPM or above.

The mentioned data are only standard values.

TECHNICAL DATA	
P_{max}	117 KW
n_{max}	2555 1/min
Number of blades:	3
Diameter Range:	61-73 inch
Maximum turn rate:	0,785 rad/s
Maximum pitch change range:	80° degree
Weight:	About 22 lbs
Moment of inertia*1:	≈ 3417 lbs. in²
Governor:	Oil pressure to increase and decrease pitch governors are used. The governor suitability must be verified for the intended aircraft and in the final installation.

WHAT'S NEW OF HO-V723?

1. one-piece hub design fully sealed
2. reduced number of parts
3. Special thread for optimized force distribution
4. New innovative sealant for blade retention system
5. Blade retention lock of CFRP
6. Strong spring for reliable pitch control



Hoffmann Propeller
right in front
of the aircraft

HOFFMANN PROPELLER

- Solutions for General Aviation Hovercraft, Vintage Aircraft, UAV. Aerobatic, Wind Tunnel & various other applications
- Manufacture, maintenance and service of fixed, adjustable and variable pitch propellers made of wood
- Sales, Maintenance, and Service for Leading Propeller and Governor Manufacturers (such as Hartzell, McCauley, Woodward, and others)
- Since 1955 Experience in propeller development and propeller overhaul
- EASA and FAA approved shop

HOFFMANN PROPELLER Gmbh & Co. KG
Küpferlingstr. 9
D 83022 Rosenheim
T +49(0) 8031-1878-0
Info@hoffmann-prop.com
www.hoffmann-prop.com

INSTAGRAM

WEBSITE