PRODUCT INFORMATION

HOFFMANN PROPELLER

# HO-V123

## HYDRAULICALLY CONTROLLED

SAFETY, PERFORMANCE, AFFORDABILITY AND SERVICE

# HO-V123

## Hydraulically controlled

For applications with engines from Lycoming, Continental, Franklin and Porsche, we have manufactured our 3-blade propeller with a hub made of forged aluminium and blades made of wood composite with glass fibre reinforced plastic or carbon fibre sheathing.

The leading edges of the blades are optionally reinforced with aluminium or PU.

to maintain a constant selected speed, an oil pressure regulator acts on the propeller piston to increase the pitch.

If the oil pressure is reduced, the blades automatically move in the "small pitch" direction In the event of an oil pressure loss, the propeller remains in the "start position" and the speed can be adjusted using the throttle Similar toa fixed pitch propeller.

For special applications Such as aerobatics, a system with oil pressure is used to reduce the pitch. In this case, centrifugal weights Are employed to increase the pitch.

Another variant is the HO-V123 ( )-S, which is also equipped with a sail position.

The propeller uses oil pressure to reduce pitch and centrifugal weights as well as a spring to increase pitch up to the sail position. In the event of a loss of oil pressure, the propeller blades automatically move to the "sail position" stop.

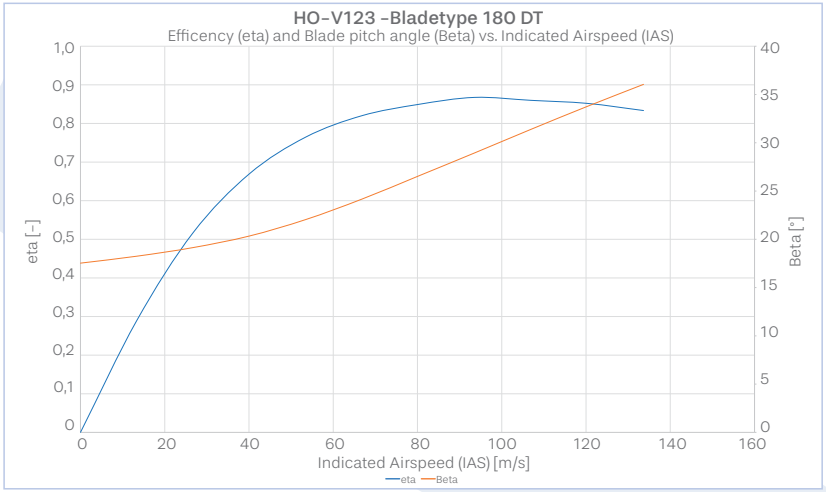
The maximum adjustment travel is limited by internal mechanically adjustable stops. To transition the propeller from the "sailing position" to the normal operating position, a hydraulic accumulator is required to store oil pressure. This pressure is used to move the blades out of the sailing position. When energizedthe propeller begins to turn and can start the engine.

A so-called "start lock" prevents an unintentional "sail position" when the engine is intentionally switched off on the ground. A static speed of at least 700 RPM is required to unlock the "start lock".

The data listed are only guide values. The only binding values for the propeller are those specified in the equipment data sheet No.: P.058 EASA.

Type certifications: FAA-P5EU

| TECHNICAL DATA | |
|---|---|
| $P_{max}$ | 239 KW |
| $n_{max}$ | 2800 1/min |
| Number of blades: | 3 |
| Diameter max: | 90 inch |
| Pitch change range: | about 115 deg |
| Weight: | About 55 lbs |
| Polar moment of inertia: | About 6500 lbs in $^2$ |
| Governor: | Woodward 210xxx Serie,<br>McCauley, Hartzell, Jihostroj |



# 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

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