



Operating instructions for the propellers

H25K 140m R-E-13-2 (folding propeller)

***H25K 130m R-E-13-2 (folding propeller)
and***

H25F 130m R-E-13-2 (rigid propeller)





Datasheet of the propeller H25K 140m R-E-13-2 and H25K 130m R-E-13-2

Introduction:

The propellers H25K 140m R-E-13-2 and H25K 130m R-E-13-2 were constructed by our developing partner Dr. Ing. Werner Eck and are produced by the Helix company in license for Geiger Engineering. The hub of the propeller is made of high-strength aluminium and has an integrated folding mechanism which ensures a synchronic folding process.



Please carefully read through this owner's manual and the safety instructions before the first starting.

- **Note:** Please mind that a rotating propeller is a danger to life and limb of humans and animals. Always preclude that anyone can get injured by the propeller.

1. Be aware of the following safety instructions before starting:



Before every use of the propellers, the blades and the hub have to be checked for damages. If damage is suspected, immediately post the propellers to the manufacturer for inspects or repairs.



The running propeller has to be protected carefully from any contact with loose or rigid particles, the ground or higher grass. After such an incident, the blades and the hub have to be checked accurately for damages and in case of doubts, be posted back to the manufacturer for inspects and repairs.



Any dangers to life and limb of humans and animals have to be precluded while using the propeller.



The maximum rotation speed of the propeller with a diameter of 1.4m is 2200 1/min. The maximum rotation speed of the propeller with a diameter of 1.3m is 2300 1/min. Make sure that the maximal rotation speeds are not exceeded at any time.



Datasheet of the propeller H25K 140m R-E-13-2 and H25K 130m R-E-13-2

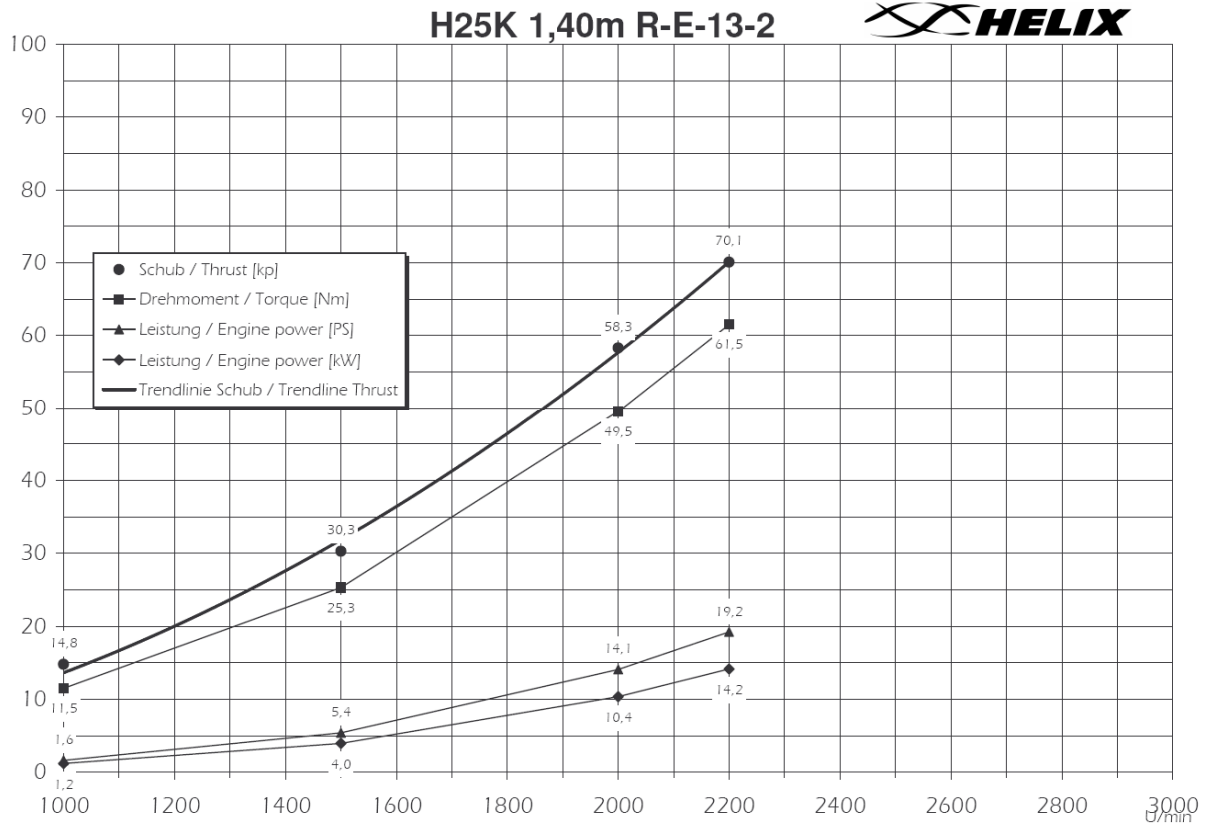
2. Intended usage of the propellers:

- The rotation of the propellers creates a thrust in the air which can be used to drive an ultra-light aircraft.
- The propellers are designed for driving a multipolar electric motor like the HPD 10 with marginal torsional vibrations. The use with other driving motors especially combustion motors can lead to an immediate or a gradual destruction of the propeller.
- The propeller has to be accelerated softly during the start-up process until the blades are in working position (outspread). This prevents hard strikes to the end stops of the hub. The soft acceleration requires definitely programmed acceleration and deceleration ramps of the drive.
- Be extremely aware of the maximum rotation speeds. A higher rotation speed can destroy the propeller or the hub because of the high centrifugal forces. The maximum rotation speed of the propeller with a diameter of 1.4m is 2200 1/min, the one of the propeller with a diameter of 1.3m is 2300 1/min.



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3. Technical specifications:



7. Service

In case of a fault or damage(s), post the devices and a formulation of the problem(s) to the manufacturer:

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