



**Moscow Aviation Institute**  
(National Research University)

# AV-15-D2



**REVERSIBLE PROPELLER**

[www.oskbes.ru](http://www.oskbes.ru)



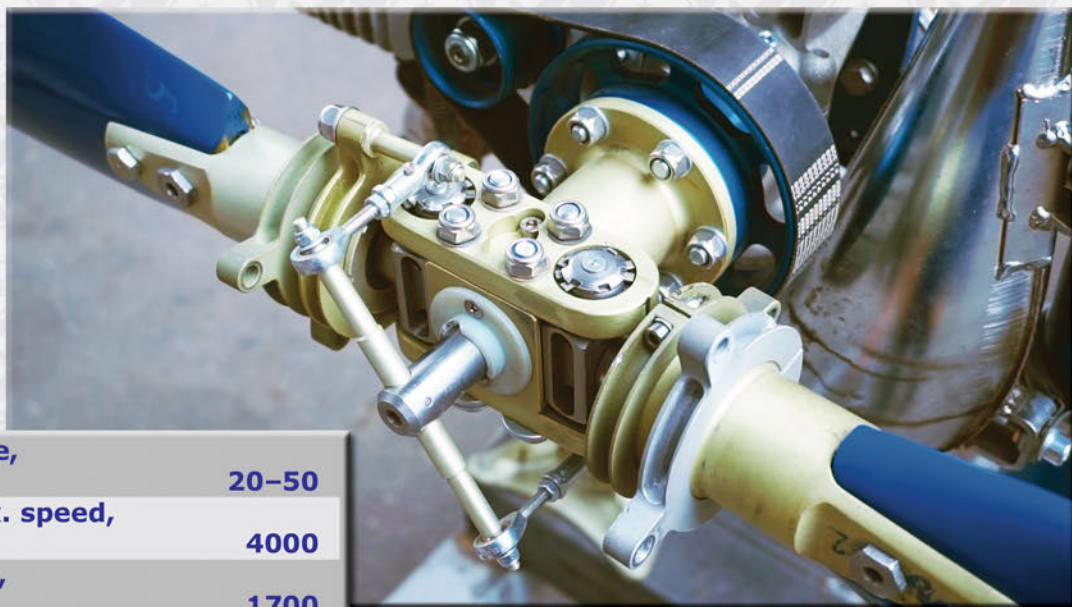
# AV-15-D2

## VARIABLE-PITCH REVERSIBLE PROPELLER

**AV-15-D2** variable-pitch propeller is designed to create the forward and reverse thrust. Specially designed blades allow realizing the value of reverse thrust up to 50% from the forward one.

Unlike traditional propellers, **AV-15-D2** has an increased operation speed of the pitch control system. The minimal full reversing time of the blades is 0.5 seconds. This enables it to control and stabilize the aircraft with multi-engine powerplant. To exclude the vibrations at the transient mode and at oblique flow, each blade is mounted on a hinge with an axis perpendicular to the axis of rotation of the propeller.

The design of **AV-15-D2** propeller allows to mount different types of blades without disassembling the hub. The actuator is mounted outside the propeller hub, which makes it possible to use a wide range of actuators, depending on the required control parameters.



Engine performance, h. p.	20–50
Recommended max. speed, 1/min	4000
Maximum diameter, mm	1700
Blade pitch angle, deg.	-15...+15
Full reversing time of the blades, sec	from 0.5
Pitch control actuator stroke, mm	26
Pitch control force, kgf	from 6
Weight (without pitch control, D=1.35 m)	4.2
Static thrust, kgf*	forward – 60 reverse – 30

### Propeller developer — OSKBES MAI

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\* with *Simonini mini 2 plus piston engine*

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