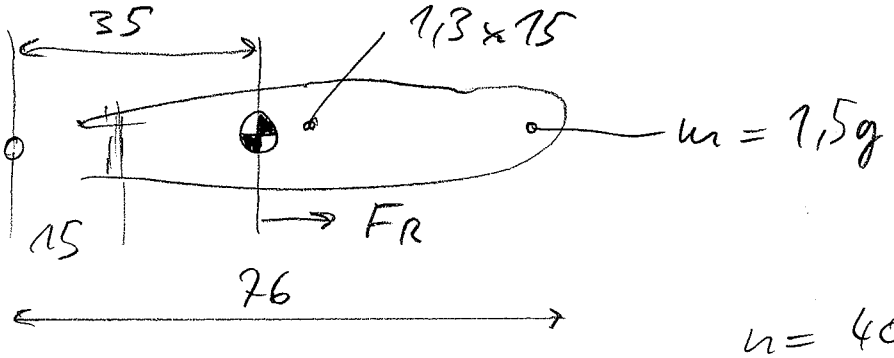

$n = 40'000$ u/min

$\omega = 4189$

$F_R = \omega^2 \cdot r \cdot m = 4189^2 \cdot 0{,}035 \cdot 0{,}0075$

$F_R = 921\,N$ ($P_{Motor} = 2{,}27\,PS$)

$P_{Motor} = 1{,}67\,kW$ $P = F \cdot v \Rightarrow F = \frac{P}{v}$

$F_V = \frac{1670}{83} = 20\,N$

$\rightarrow \frac{F_V}{F_R} = 2{,}17\,\%$ ← Kritisch für Ω

Speedpopeller F2A ge8.9.2.08