



Magnet clutch fidget/ demonstration toy



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Summary

Demonstration of the magnet clutch concept in a fun way to learn or fidget with.



2.61 hrs



6 pcs



0.20 mm



0.40 mm



PLA
PET



21 g



Prusa MINI /
MINI+

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Tags: [toy](#) [tool](#) [magnet](#) [fidget](#) [school](#) [magnets](#) [science](#)
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I recently designed a magnetic clutch for a school project where i made a submarine rubber ducky. One of the things i designed for that project was a magnetic clutch for the movement of the submarine in water. This way the motors inside the submarine would not come in contact with water. And now i decided to use that concept and make a small demonstration/ fidget tool/toy for everyone to enjoy and learn.

To work properly, the poles of the magnets should correspond to the third image.

I used these **magnets** to create this model (5x10mm)

Model files



magnet-clutch.step



display.step



magnet-clutch-propellor-screw.step

Print files



magnet-clutch_02mm_pla_mini_30m.gcode

⚙️ PLA ⚙️ 0.40 mm ⚙️ 0.20 mm ⌚ 0.50 hrs ⚖️ 4 g 🖨️ Prusa MINI / MINI+



magnet-clutch-propellor-screw_02mm_pla_mini_1h2m.gcode

⚙️ PLA ⚙️ 0.40 mm ⚙️ 0.20 mm ⌚ 1.03 hrs ⚖️ 7 g 🖨️ Prusa MINI / MINI+



display_02mm_pla_mini_1h5m.gcode

⚙️ PLA ⚙️ 0.40 mm ⚙️ 0.20 mm ⌚ 1.08 hrs ⚖️ 10 g 🖨️ Prusa MINI / MINI+



magnet-clutch_02mm_petg_mini_30m.gcode

⚙️ PET ⚙️ 0.40 mm ⚙️ 0.20 mm ⌚ 0.50 hrs ⚖️ 3 g 🖨️ Prusa MINI / MINI+



display_02mm_petg_mini_1h5m.gcode

PET 0.40 mm 0.20 mm 1.08 hrs 11 g Prusa MINI / MINI+



magnet-clutch-propellor-screw_02mm_petg_mini_1h2m.gcode

PET 0.40 mm 0.20 mm 1.03 hrs 7 g Prusa MINI / MINI+

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