



Herringbone Eccentric cycloidal fidget model

A Aviv Halevi

[VIEW IN BROWSER](#)

updated 13. 2. 2022 | published 13. 2. 2022

Summary

A new fidget toy based on the eccentric cycloidal drive.

[Toys & Games](#) > [Other Toys & Games](#)

This model is based on the eccentric cycloidal drive.

for this model you would need:

4x 608 bearings(the same ones that are in fidget spinners and skate board wheels).

2x m3 screws that are no more than 30mm long.

and all 5 of the printed files.

To assemble the model you would first need to cut the extra material that is on the inside of the big gear, then press the bearings into the big gear and into the frame parts.

after that you need to put the knob and pinion part into the frame (be aware that the pinion and the big gear can only be fitted together in one orientation, if you are having trouble getting both of them to mesh and fit, try flipping the big gear).

finally, you can connect both of the frame sides, push the pinion supporting plug into the last empty bearing and screw in the screws.

this model is designed to be printed without supports. you also don't need a raft or a brim.

i recommend printing this model at 0.2mm layer height or finer.

Happy printing!

Model files



eccentric-cycloidal-pinion-bearing-support-plug.stp



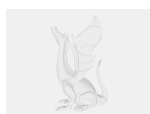
eccentric-cycloidal-pinion-bearing-support-plug.stl



eccentric-cycloidal-frame-female.stl



eccentric-cycloidal-frame-male.stl



eccentric-cycloidal-frame-male.stp



eccentric-cycloidal-pinion-knob.stl



eccentric-cycloidal-frame-female.stp



eccentric-cycloidal-big-gear.stl



eccentric-cycloidal-pinion-knob.step



eccentric-cycloidal-big-gear.step

License

This work is licensed under a
[Creative Commons \(4.0 International License\)](https://creativecommons.org/licenses/by-nc/4.0/)



Attribution-NonCommercial

- ✗ | Sharing without ATTRIBUTION
- ✓ | Remix Culture allowed
- ✗ | Commercial Use
- ✗ | Free Cultural Works
- ✗ | Meets Open Definition