



## Fidget Gear Ring with inside knurling



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## Summary

A fidget print-in-place herringbone planetary gear ring; this one has diamond knurling on outer and inner side.

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Since a variant of my fidget gear rings with knurling on the inside was occasionally requested, I made this one with diamond knurling outside and inside. It is available in 4 'odd' sizes: 15mm, 17mm, 19mm and 21mm inside diameter.

Also see [my other fidget rings](#) (including a bracelet).

### Printing:

0.4mm nozzle, 0.2mm layer height (or less), **random seams**,  
(I also use 3 walls and single perimeter on top surfaces disabled)

These rings have tight tolerances, and, depending on printer and filament, might work smoothly from the start, need some force to loosen up and some breaking in, or be fused together and not work at all. Silk filament seems to be prone to fusing.

Try reducing the extrusion multiplier (flow ratio) if fused (or maybe set XY size compensation to a slightly negative value, like -0.03).

The second image shows a low-waste non-Prusa multicolor print with low waste of filament by reducing the flush volume to 0 and instead flush into an additional ring. Prusa multi-material has low waste anyways.

## Model files



**gear-ring-double-diamond-15.stl**



**gear-ring-double-diamond-17.stl**



**gear-ring-double-diamond-19.stl**



**gear-ring-double-diamond-21.stl**

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