



Springy Spool Hub (customizable)



mmOne

[VIEW IN BROWSER](#)

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Summary

A spool hub that uses very little material and can be customized in OpenSCAD



0.55 hrs



1 pcs



0.20 mm



0.40 mm



PLA



4 g



Prusa
MK3/S/S+

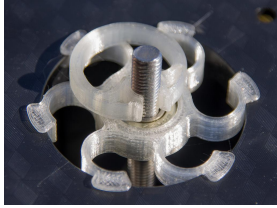
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Tags: [parametric](#) [spool](#) [spring](#) [customizable](#) [accessory](#)
[608](#) [3dprinter](#) [openscad](#) [hub](#) [basics](#) [parametricdesign](#)

This is a spool hub that uses very little material and locks into the spool with spring force. It can be easily modified in OpenSCAD. (See below)

The design shows that even PLA can be used to create quite robust springs as long as they are long, relatively thin and printed with perimeters only.

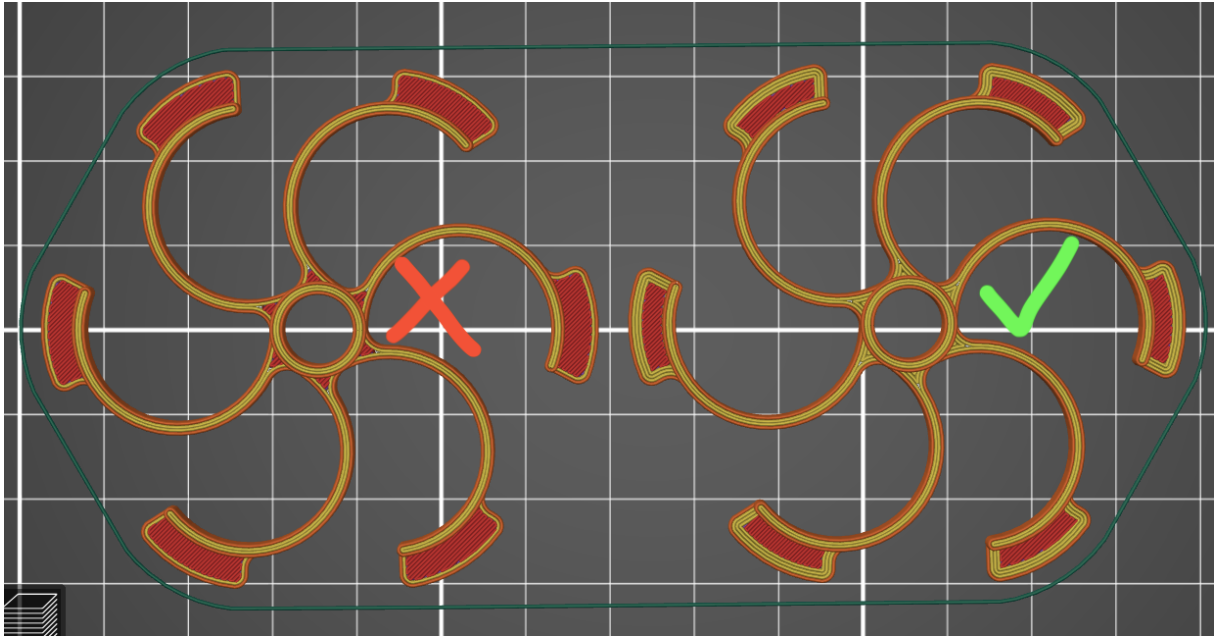
I have exported the model in a view different diameters both for a 8mm axis as well as for 608 type bearings. The mm dimensions in the filenames are the uncompressed size of the hub. So select one that is a bit larger than your spool hole for good clamping.



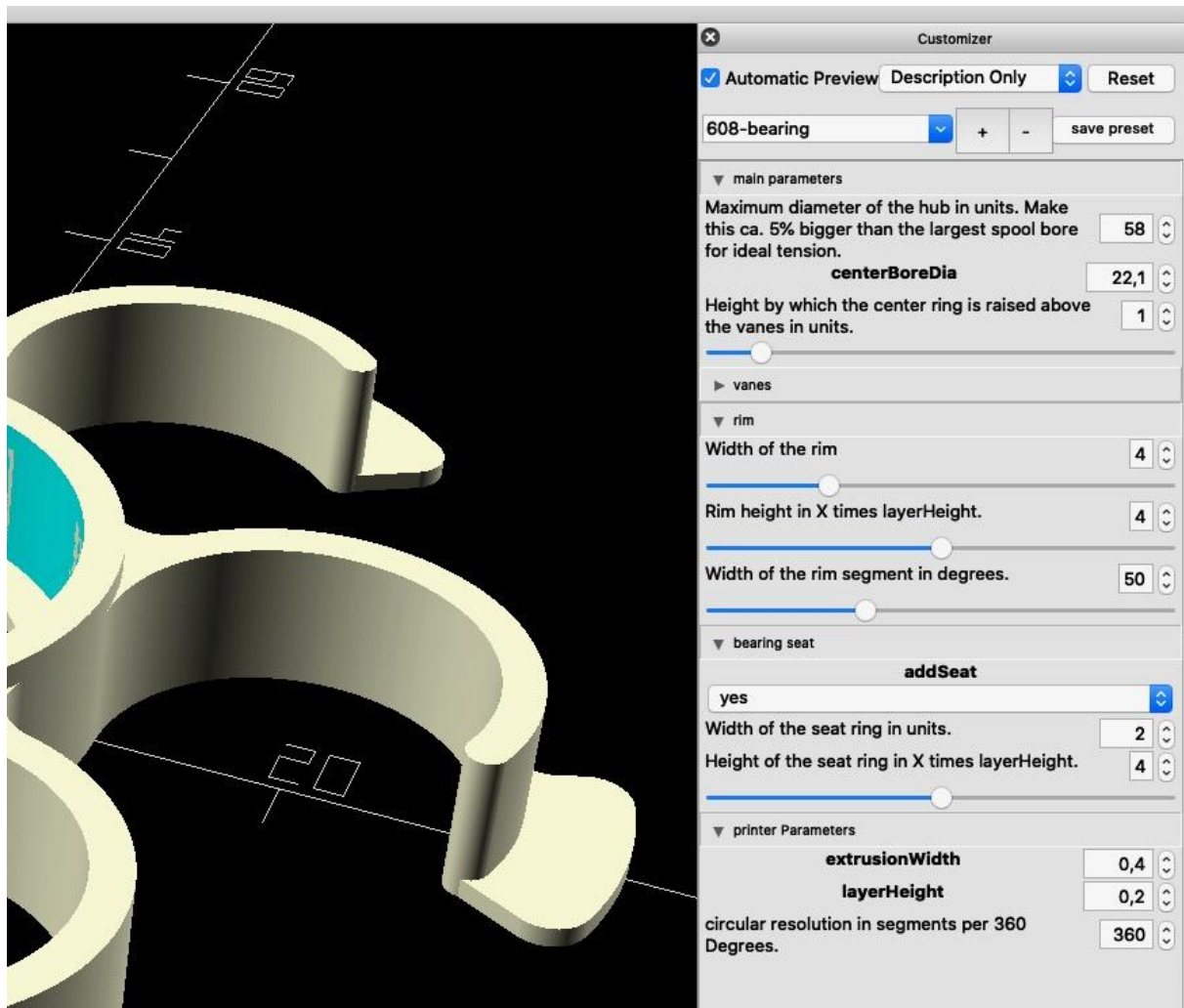
This customizable ring clip is very useful in connection with the hub: **Spring Clip**

Slicing

Slice with enough perimeters to fill the root of the vane like displayed on the right. This creates a stronger part compared to having infill there like on the left



Customizing in OpenSCAD



To create your own version download the free [OpenSCAD](#) application that is available for Linux, macOS and Windows.

Download the **“springy-hub.scad”** file, open it, and if not already the case display the “Customizer” tab by selecting the entry in the “Window” menu.

All customizable parameters for this model are documented in the user interface.

Select “Render” and then export your generated model.

If you adapt the hub to your spool sizes make the diameter bigger than the maximum hole size you want it to fit. As a rule of thumb about 5% plus. This guarantees that the springs have enough tension to lock it in.

Happy Printing & Customizing

This remix is based on

Springy
Spool
Hub
(customizable)

Springy Spool Hub (customizable)
by mmOne

Model files



OpenSCAD

1 file



springy-hub.scad

☐ The source OpenSCAD file for customizing.



pregenerated for 8mm axis

7 files



springy-hub-50-mm.stl



springy-hub-52-mm.stl



springy-hub-54-mm.stl



springy-hub-56-mm.stl



springy-hub-58-mm.stl



springy-hub-60-mm.stl



springy-hub-62-mm.stl



pregenerated for 608 bearing

7 files



springy-hub-50-mm.stl



springy-hub-52-mm.stl



springy-hub-54-mm.stl



springy-hub-56-mm.stl



springy-hub-58-mm.stl



springy-hub-60-mm.stl



springy-hub-62-mm.stl

Print files



springy-hub-58-mm_02mm_pla_mk3s_29m.gcode

🌀 PLA 🌀 0.40 mm 🌀 0.20 mm 🕒 0.55 hrs 📊 4 g 🖨️ Prusa MK3/S/S+

[Find source .stl files on Thingiverse.com](#)

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