

## Parametric filament guide



xtrusion

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### Summary

Parametric model of filament guide for Prusa MK3 to fit into the hex slot on top of the Z axis printed part



1.49 hrs



1 pcs



0.20 mm



0.40 mm



PLA



15 g



Prusa  
MK3/S/S+

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This is a parametric model designed on OpenSCAD of a filament guide to be placed in the hex slot of the the top Z axis printed part. It is a remix of the original [filament guide designed by Habony Norbert](#), which works only for 608 bearings. The model allows to customize any design parameter to use any bearing size.

This sort of filament guide is specially handy when using > 2 kg spools that don't fit into the built-in spool holder.

The model has also been improved to get a more robust fit on the top side where the filament goes through.

It is made up of two parts:

- Horizontal bearing holder: it is the part that fits into the hex slot. It holds a bearing that allows rotation of the vertical bearing holder.
- Vertical bearing holder: it is the part that holds the filament. It is inserted into the horizontal bearing and can rotate on the Z axis.

## **Printing configuration**

I printed all the pieces on a Prusa MK3S+ with PLA Prusament Galaxy filament, 0.2 mm layer height and supports. Please, check the assembly 3MF file for reference.

## **3MF and GCode**

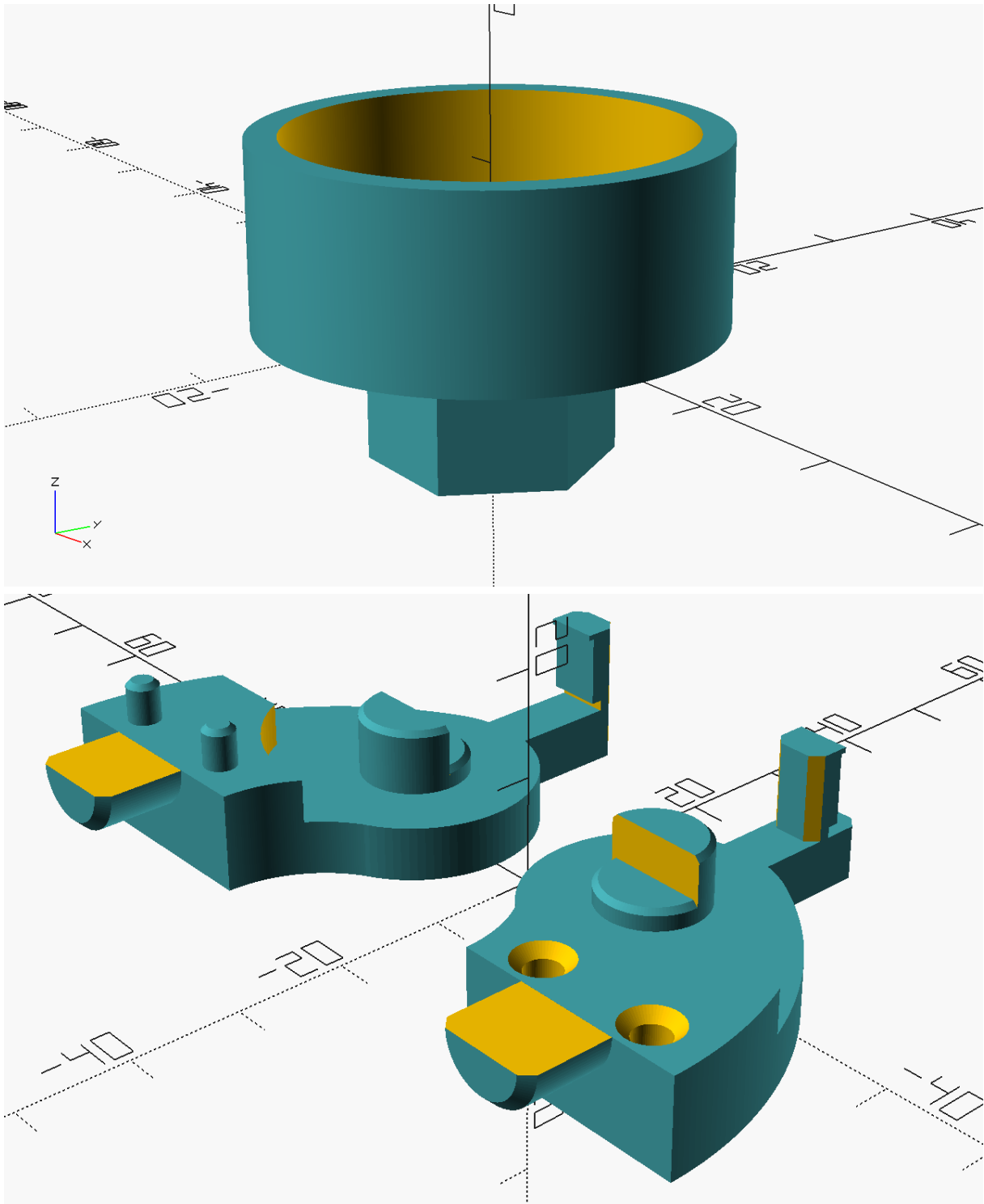
The exported 3MF and GCode files are generated to fit bearing with an outter diameter of 26 mm and an inner diameter of 10 mm. Since the parametric OpenSCAD model is provided, you can tweak these values for any size that you may need.

## **Dependencies**

The OpenSCAD model uses the library “[Chamfers for OpenSCAD](#)” and it must be installed in order to regenerate the model.

## **Git repo**

For latest version and more customization details, please visit the GitHub repository [filament-guide](#).



**This remix is based on**



**Filament guide**  
by Habony Norbert

## Model files



**horizontal-bearing-holder.scad**



**vertical\_bearing\_holder.scad**



**vertical\_bearing\_holder\_bearing\_out\_26\_in\_10.3mf**



**assembly\_out\_26\_in\_10.3mf**



**horizontal-bearing-holder\_bearing\_out\_26\_in\_10.3mf**

## Print files



**assembly\_out\_26mm\_in\_10\_mm\_02mm\_pla\_mk3s\_1h30m.gcode**

⚙ PLA ⚙ 0.40 mm ⚙ 0.20 mm ⌚ 1.49 hrs ⚖ 15 g 🖨 Prusa MK3/S/S+

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

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