



## hedgehog



Mysha

[VIEW IN BROWSER](#)

updated 18. 11. 2022 | published 18. 11. 2022

## Summary

Hedgehog, fridge magnet.



1.24 hrs



1 pcs



0.20 mm



0.40 mm



PLA



14 g



Prusa  
MK3/S/S+

[Household](#) > [Kitchen](#)

Tags: [decoration](#) [animal](#) [magnet](#) [magnetic](#) [autumn](#) [fall](#)  
[fridgemagnet](#) [hedgehog](#) [noteholder](#) [refridgeratormagnet](#)  
[manualmulticolor](#)

## Just a hedgehog like a fridge magnet.

A friend asked me to make another fridge magnet, this time based on a picture of a paper hedgehog. Again, she took a picture of it somewhere on the window while walking through the city.



### How I proceeded:

I cleaned the image, converted it to curves, extruded the third dimension to the required height in Fusion360, then exported the model to STL.

**Holes for magnets are solved using a slicer (PrusaSlicer), by adding an object with a negative volume.** This way I don't have to edit the model as such (STL), only in the file (3MF) I adjust the size of the objects with negative volume in the slicer to the size of the inserted magnets (plus a bit for tolerance gap of about 0.15 mm) and generate a new gcode for printing. I glued the magnets from below in the prepared hole with a drop of glue.

**STL file = only basic model without holes for magnets** (the model itself is larger - for printing, it is better to adjust it to 24.96% / 24.96% / 100%)

**3MF file = contains a model from STL file plus holes for magnets** (by me preset for 5x5x2 mm magnets with about 0.8 mm of the magnet extending backwards beyond the model - they lift better, but can sometimes scratch the surface if they are not really smooth), color change (M600) around the layer at 3.40 mm and next at 3.60 mm, some small area with slowing down the print and PLA recycling logo from the bottom :-). Model print size is approx. 100 mm / 85 mm / 4 mm and takes about 14.6 g / 4.9 m of filament.

### Some basic printing tips:

layer height: 0.20 mm

nozzle: 0.40 mm

perimeters: 3

infill: approx. 15%, gyroid

color change (M600): around the layer at 3.40 mm and next at 3.60 mm

If you are using PrusaSlicer, the default profile "0.20 mm QUALITY" will work.

# Model files



## hedgehog\_1\_v2.stl

☐ only basic model without holes for magnets



## hedgehog\_1\_v2.3mf

☐ contains a model from STL file plus holes for magnets (and others, see main description)

# Print files



## hedgehog\_1\_v2\_02mm\_pla\_mk3s\_1h15m.gcode

🌀 PLA   📏 0.40 mm   ≡ 0.20 mm   ⌚ 1.24 hrs   ⚖️ 14 g   🖨️ Prusa MK3/S/S+

☐ 2 pcs of holes for magnets 5x5x2 mm, color change (and others, see main description)

# License ©



This work is licensed under a  
[Creative Commons \(4.0 International License\)](#)

**Attribution—Noncommercial—Share Alike**

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