


# Parametric Cable Grommet

Blizzard

VIEW IN BROWSER

updated 22. 7. 2024 | published 22. 7. 2024

## Summary

Customizable cable grommet with a nifty closing mechanism to cover cable holes of any size with lots of pre-made sizes.

Household > Office

Tags: table parametric wall cable cables desk desktop spinner spin fusion360 customizable power cord cover adjustable organization grommet cablemanagement wire organize spinny powercord hole passthrough wires holesaw kabeldose kabel closeable cablepassthrough kabeldurchfuerung kabeldurchlass

A cable grommet that can be used to cover holes drilled with a hole saw to pass cables through it. As it is parametric, even if your desired size is not available, you can just change the parameters to fit your hole diameter and depth exactly! After drilling the hole, put the printed ring into it, route your cables through it, snap the bottom and top disks together, and then snap the disks into the ring. The disks fit snugly and don't fall out on their own. You can swing the top disk to cover as much of the hole as needed,

hiding the hole and preventing dust from entering. It can be used with tables, desks, shelves, and other furniture.

**If you like what I'm doing, please give it a like consider joining my club or buying me a coffee! 😀**




## Printing settings

All parts print in the default model orientation without supports. Print each part of a given size once.

Please note the diameter of the ring is the **exact** size the ring will be printed. So if you want a bit of a looser fit (or you know your printer runs prints a little bit larger usually), simply scale down all parts slightly in the slicer or change the parameters.

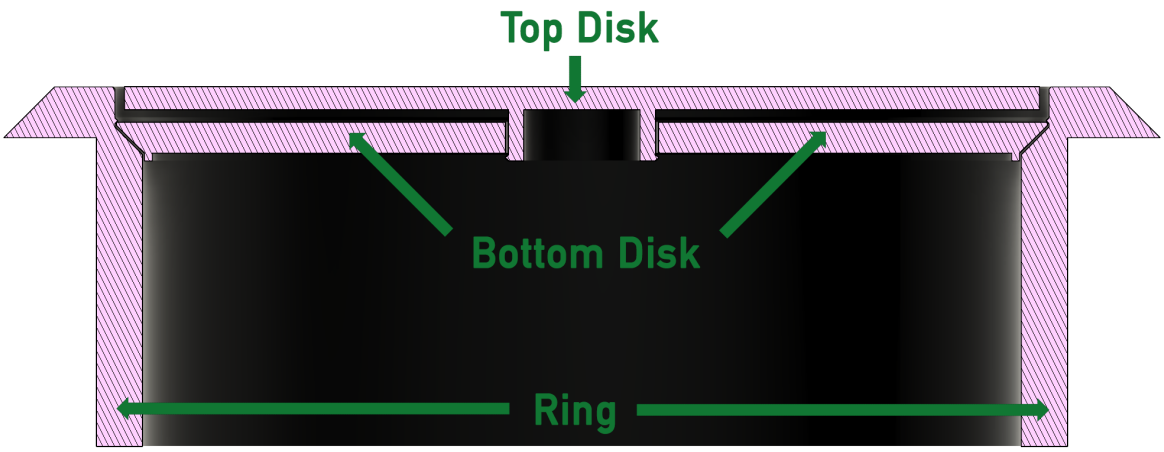
The depth of the part that goes into the hole in all of the pre-made sizes is 20 mm, if you need it to be shorter, you can slice some of the length off in your slicer. If you need it to be longer, have a look at the “Parameters” section.

I recommend a layer height of 0.20 mm, but others should work as well.

## Assembly

Just snap the two disks together, put the ring into the hole, pass the cables through the ring, and then snap the disks into the ring and twist the top disk to close it and you're done! You can also take out the disks with some force should you need to add/remove cables to make it easier and then snap them back into the ring.

This is how the grommet is meant to be assembled and how it should look from a side-section view:




### Parameters

You can modify this design in Fusion 360 (the free version is enough) using parameters to make it fit a variety of different hole diameters and depths. Download the Fusion 360 design file, open it, and then you can change the parameters by clicking on **Solid → Modify → Change Parameters**.

The only two parameters you will likely need to change are:

- hole_diameter → set it to the diameter of the hole saw / hole you drilled, in mm
  - If you prefer a tighter fit, set it to the exact diameter the hole has (or a bit larger, if your printer tends to print smaller)
  - If you prefer a looser fit, set it 1-2 mm lower than the diameter of the hole
- hole_depth → set it to the depth of the hole you drilled, in mm

The model will adjust automatically to fit. There are more parameters available where most of them are described, in case you need to change other things. Feel free to ask in the comments if you have any questions or want to request sizes you feel are common that I haven't covered yet.

## Model files

**Design Files** 2 files

**cable_grommet.f3d**

Fusion 360 Design File to adjust parameters

**cable_grommet.step**

STEP file for use in other 3D modeling software

## Diameter of 25.4 mm (1 inch)

3 files



**cable_grommet_ring_25.stl**



**cable_grommet_bottom_disk_25.stl**



**cable_grommet_top_disk_25.stl**

## Diameter of 38 mm

3 files



**cable_grommet_ring_38.stl**



**cable_grommet_bottom_disk_38.stl**



**cable_grommet_top_disk_38.stl**

**Diameter of 50 mm (~2 inches)** 3 files



**cable_grommet_ring_50.stl**



**cable_grommet_bottom_disk_50.stl**



**cable_grommet_top_disk_50.stl**

**Diameter of 60 mm** 3 files



**cable_grommet_ring_60.stl**



**cable_grommet_bottom_disk_60.stl**



**cable_grommet_top_disk_60.stl**

**Diameter of 64 mm** 3 files



**cable_grommet_ring_64.stl**



**cable_grommet_bottom_disk_64.stl**



**cable_grommet_top_disk_64.stl**



**Diameter of 76.2 mm (3 inches)** 3 files



**cable_grommet_ring_76.stl**



**cable_grommet_bottom_disk_76.stl**



**cable_grommet_top_disk_76.stl**



**Diameter of 95 mm** 3 files



**cable_grommet_ring_95.stl**



**cable_grommet_bottom_disk_95.stl**



**cable_grommet_top_disk_95.stl**



**Diameter of 101.6 mm (4 inches)** 3 files



**cable_grommet_ring_101.stl**



**cable_grommet_bottom_disk_101.stl**



**cable_grommet_top_disk_101.stl**



**Diameter of 127 mm** 3 files



**cable_grommet_ring_127.stl**



**cable_grommet_bottom_disk_127.stl**



**cable_grommet_top_disk_127.stl**

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