

Dental Floss Holder with Tensioner V2

TipTop

VIEW IN BROWSER

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Summary

Dental floss holder with tensioner, optimized version 2.

1.60 hrs	2 pcs	0.15 mm	0.40 mm	PLA PET	12 g	Prusa MK3/S/S+

Household > Bathroom

Tags: holder printinplace bathroom cleaning teeth tooth floss dental dentalhygiene dentalcare

This design represents a dental floss holder that fixes the main problem of almost all floss holders - tensioning! Floss tends to stretch almost immediately, causing handling problems.

My design uses a movable part that serves the function of both holding the floss in place and providing a way to tighten it. Look at the pictures and you will understand how to use it. I use mine daily and it really works exceptionally well for me. Of course, your mileage may vary.... ;-)

I recommend printing in PETG for higher elasticity, 0.15 mm layer height, 40% infill without supports. PLA also works well, but can be a bit more brittle in the long run.

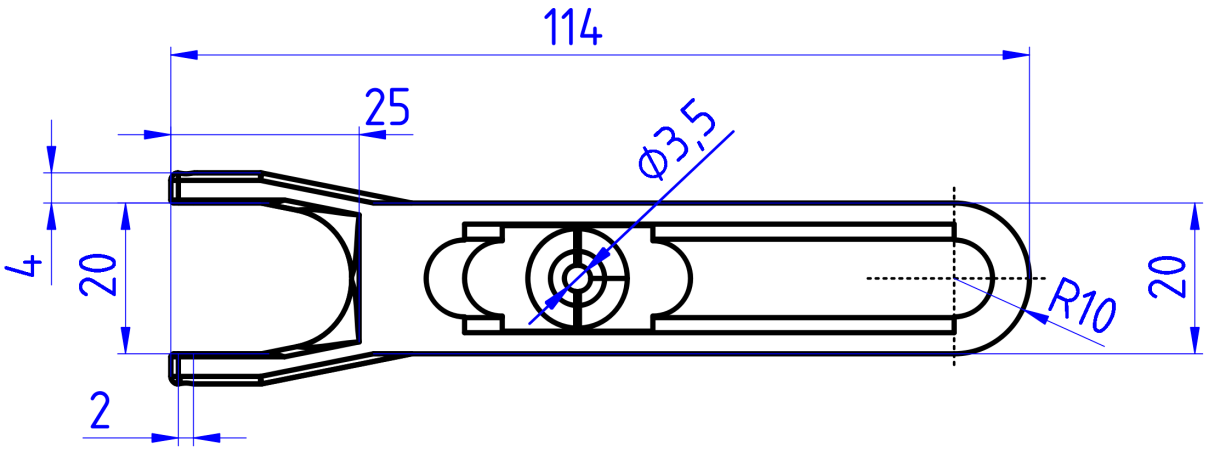
This is a print-in-place design - after printing just wiggle it a bit to release the moving part.

Note: The design is widely tested for nozzle sizes of 0.4 mm or smaller on different printers. For bigger nozzle sizes (e.g. 0.6 mm) I have added a STL file using bigger tolerances for the tightening sled (0.35 mm instead of 0.2 mm) in the file “DentalFlossHolder_0.35-spacing.stl”. Just load it in the provided PETG or PLA Prusa Slicer files, replace the main object and slice it with the given settings.

Required parts:

- 1 x “DentalFlossHolder.stl"
- Dental floss... ;-)

Here is a tech drawing:



Change history:

- **2023-09-24 - Version 2**
  - PETG versions of Prusa Slicer file and GCODE
  - Rounded fork attachment for greatly improved mechanical load-bearing capacity of the forks (optimization of the force lines)
  - Improved version with 40% infill instead of 15% as before
  - Increased center hole for easier insertion of the dental floss
  - Improved layer adhesion for tightening sled knob
- **2022-08-22 - Version 1**
  - Initial version

Model files



dentalflossholder.stl

Regular STL file (0.2 mm spacing)



dentalflossholder_035-spacing.stl

High tolerances STL file (0.35 mm spacing for big nozzle sizes)



dentalflossholder-petg.3mf

Prusa Slicer file for the regular version printed in PETG



dentalflossholder-pla.3mf

Print files



dentalflossholder-petg_015mm_petg_mk3s_48m.gcode

PET 0.40 mm 0.15 mm 0.81 hrs 6 g Prusa MK3/S/S+

PETG version



dentalflossholder-pla_015mm_pla_mk3s_48m.gcode

PLA 0.40 mm 0.15 mm 0.79 hrs 6 g Prusa MK3/S/S+

PLA version

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