

## MK3S modular filament holder system



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updated 11. 12. 2022 | published 11. 12. 2022

### Summary

This is a roller bearing modular filament holder system for the mk3s

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I could not find a filament holder that I liked online for the mk3s, so i designed one. I hope you all enjoy it! You can add as many “middle” sections as you like to expand the system.

I used these filament guides:

<https://www.prusaprinters.org/prints/11810-prusa-i3-filament-guide>

UPDATES:

Use the roller\_collar\_v5... Its way betterer.

### Hardware Requirements:

single roller kit:

- 4x M3x12 socket head screws
- 4x 608 bearing (they are super cheap on amazon/ebay/alibaba)

double roller kit:

- 6x M3x12 socket head screws
- 2x M3x8 countersunk flathead screw (you can make due with socket head..)
- 8x 608 bearing (they are super cheap on amazon/ebay/alibaba)

### **Print Instructions:**

I have included the 3mf and pre-made gcodes to print all the parts required to build the kits.

I used Prusament PTEG as well as some generic PTEG. Prusament turned out great. The generic PTEG also did fine.

I used the textured steel plate. (will probably work fine with the smooth one with glue stick)

If you run into issues with adhesion while printing the shafts, try printing them by themselves or by using glue stick.

### **Assembly Instructions:**

Holder arms should be assembled individually before clipping them on the printer.

End Arms:

1. Prepare 2x end shafts, 2x 608 bearings, 2x washers, 1 bracket, 2x roller collars
2. Press the roller collar on the bearing. Its a "press" fit with no tolerance. You can use a flat object and a table to slide the collar over the bearing. ensure the collar is even on both sides.
3. slide the bearing assembly you just made over the end shaft.
4. slide the washer on the end shaft next. the washer provides clearance for the bearing assembly.
5. push the assembled end shaft into the bracket. be sure to align the hole in the shaft with the hole in the bracket.
6. use the m3x12mm socket head screw to pin the shaft in place.
7. repeat steps 2-5 for the 2nd bearing.
8. clip the bracket on the prusa printer. THIS IS A TIGHT FIT. first slide the top of the bracket over the top of the printer frame. push the bracket down to ensure its seated. You can then rotate the end of the bracket down so that the bottom clip snaps into position.

Middle Arm(s):


1. Prepare 2x middle shafts, 4x 608 bearings, 2x washers, 2x middle shaft endcaps, 1 bracket, 4x roller collars

2. Press the roller collar on all four bearings. Its a “press” fit with no tolerance. You can use a flat object and a table to slide the collar over the bearing. ensure the collar is even on both sides.
3. slide 1 bearing assembly you just made over the middle shaft.
4. slide the washer on the middle shaft next. the washer provides clearance for the bearing assembly.
5. push the assembled middle shaft into the bracket. be sure to align the hole in the shaft with the hole in the bracket.
6. use the m3x12mm socket head screw to pin the shaft in place
7. slide another washer on the middle shaft.
8. slide another bearing assembly on the middle shaft
9. use the end cap along with an m3x8mm (6m or 4m or 10m should all work without bottoming out)
10. repeat steps 3-9 for the 2nd bearing assmebly.
11. clip the bracket on the prusa printer. THIS IS A TIGHT FIT. first slide the top of the bracket over the top of the printer frame. push the bracket down to ensure its seated. You can then rotate the end of the bracket down so that the bottom clip snaps into position.

## Model files



**bracket\_v1.stl**

 solid model file



**washer\_v1.stl**

 solid model file



**end\_shaft\_v1.stl**

 solid model file



**middleshaft\_v1.stl**

 solid model file



**middle\_shaft\_endcap\_v1.stl**

 solid model file



**roller-wheel-v5.stl**



**single\_spool\_holder\_kit\_v2.3mf**



**double\_spool\_holder\_kit\_2.3mf**

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