Printables by JOSEF PRUSA



Print In Place Rotating Hearts Bracelet

GeekMomProjects

VIEW IN BROWSER

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Summary

This hinged bracelet has rotating hearts which spin within each link. It can be worn straight off the print bed.

8.00 hrs	4 pcs	0.10 mm	0.40 mm	PLA	28 g	Prusa MINI / MINI+

Fashion > Other Fashion Accessories

Tags: jewelry rotating hinge printinplace pla bracelet hearts valentines links rotate

A great print for Valentine's Day! The uploaded models of the bracelet have two sizes:

- 6 links (approximately 190 mm, 7.5")
- 7 links (approximately 215 mm, 8.5")

You can remix the model to add more links or change the heart to a different shape in the Tinkercad file, available here: https://www.tinkercad.com/things/jwJag9bzftI

I found the moving parts (links bending and hearts rotating) worked easily straight off of the print bed with almost no pressure required, but different filaments (all PLA) responded a bit differently, with some sticking a bit more than others.

I printed this model at 0.1 mm layer height, with 20% infill and all the default slicer settings. I wouldn't make the layers any thicker than 0.1mm that for a print with such small detail. It may be worth trying smaller layers if your moving parts stick together. Because it's a flat print that covers a large area, good adhesion is important. A layer of glue stick on the print bed worked well, but be careful when detaching the print not to pull too hard on the joints. I found that bending each link up one at a time loosened the next link in the chain.

The model with the self-closing clasp can be worn as is, straight off the print bed , or you can print the model with magnetic closure, which is easier to fasten with one hand. The magnetic clasp requires the hardware listed below.

- (2) M2 flathead screws (5 or 6 mm long)
- (2) M2 nuts
- (2) countersunk 1⁄4" diameter, 1/8" high magnets of opposite polarity. The easiest place to find pairs sold in opposite polarity is K&J magnetics: https://www.kjmagnetics.com/proddetail.asp?prod=R422CS-P&cat=15

See images for details of attaching the magnets. The M2 nuts drop into the vertical slots on top of the clasp halves, and the screw secures the magnet into the round depression in the front of each clasp half.

Model files



rotatinghearts6linksselfclosure.3mf

3D printed closure, no hardware required. 6 links (approximately 190 mm, 7.5")



rotatinghearts6linksselfclosure.stl

3D printed closure, no hardware required. 6 links (approximately 190 mm, 7.5")



rotatinghearts6linksmagnetclosure.3mf

Magnetic closure requires hardware. 6 links (approximately 190 mm, 7.5")



rotatinghearts6linksmagnetclosure.stl

Magnetic closure requires hardware. 6 links (approximately 190 mm, 7.5")



rotatinghearts7linksselfclosure.3mf

3D printed closure, no hardware required. 7 links (approximately 215 mm, 8.5")



rotatinghearts7linksselfclosure.stl

3D printed closure, no hardware required. 7 links (approximately 215 mm, 8.5")



rotatinghearts7linksmagnetclosure.3mf



rotatinghearts7linksmagnetclosure.stl

Print files



rotatinghearts6linksselfclosure_01mm_pla_mini_2.gcode

PLA 0.40 mm 0.10 mm 2.42 hrs 8 g Prusa MINI / MINI+

3D printed closure, no hardware required. 6 links (approximately 190 mm, 7.5")



rotatinghearts6linksmagnetclosure_01mm_pla_mini.gcode

PLA 0.40 mm 0.10 mm 2.44 hrs 8 g Prusa MINI / MINI+

Magnetic closure requires hardware. 6 links (approximately 190 mm, 7.5")



rotatinghearts7linksmagnetclosure_01mm_pla_mini.gcode

PLA 0.40 mm 0.10 mm 2.78 hrs 10 g Prusa MINI / MINI+



rotatinghearts7linksselfclosure_01mm_pla_mini_2.gcode

PLA 0.40 mm 0.10 mm 2.78 hrs 10 g Prusa MINI / MINI+

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