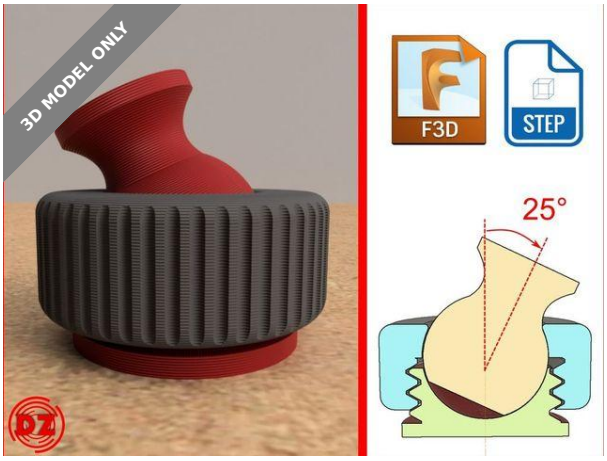


Open Source Universal Ball Joint (to reuse!)

DieZopfe

VIEW IN BROWSER

updated 12. 4. 2022 | published 8. 4. 2022

Summary

PROJECT PRESENTATION I share with you the source files allowing you to make a solid ball and socket connection to...

Hobby & Makers > Other Ideas

Tags: reuse design mechanical fusion360 step opensource file ballandsocket balljoint f3d try croissant ballandsocketjoint ballconnector diezopfe patella rotule

PROJECT PRESENTATION

I share with you the source files allowing you to make a**solid ball and socket connection** to reuse in your designs.

This version is the result of a long series of iterations to find the right design.

This ball joint allows to have a displacement of**25°** from its axis, and at 360°.

I used it in my design of phone support: https://www.thingiverse.com/thing:4694593

This includes**.step files and files from Fusion** (.f3d).

I hope this will help you in your future designs!

Reuse it well!

UPDATE 11/02/2020 (V3 files)

- Better sketch in Fusion 360 with more constraint (will less go messy if chnaging dimensions)
- Larger walls for thebase to avoid printing problems
- Shorter link on the ball joint to reduce overhang
- Bigger displacement (about 30°)

V3 files are 100% compatible with files of the first version

Please note:

I don't customize my designs, to the person, because I share them for free. A global solution is given (adapted to the greatest number), but I can't do it on a case by case basis, without remuneration for the time spent.

Print Settings

Printer Brand:

Creality

Printer:

Ender 3

Rafts:

No

Supports:

No

Resolution:

0.2 (max)

Infill:

20%

Filament: Ice filament PLA Grey and red

Notes:

- Any material does the trick, but pay attention to the interlayer connection. The parts are in the ideal position for 3D printing. A more important filling is recommended for the part "Ball".

Exemple of use

I adapted the patella on this model using screws on the base and on the ball. You can find the entire design on: https://www.thingiverse.com/thing:4750441

I adapted the patella on this model using screws on the base and on the ball.

You can find the entire design on:

Do you think I did a good job?

Feel free to comment what you think of this design and tell me how you use it!

If you want to help me, don't hesitate to visit my paypal. me for the price of a nice croissant !

=> https://paypal.me/DieZopfe

Category: Parts

Model files

ball_v3.step

ball_v3.f3d

screw_v3.stl

screw_v3.step

ball.step

screw.stl

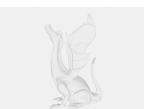
ball-joint_v2.f3d

screw.step

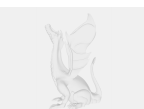
ball.stl

ball_v3.stl

base_v3.stl



base.step



base_v3.step

base.stl

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