

Toucametr (curvimetr)



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[VIEW IN BROWSER](#)

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Summary

A simple curvimeter that measures exactly 10 cm in 1 revolution.

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A simple curvimeter that measures exactly 10 cm in 1 revolution. The curvimeter is equipped with a ratchet mechanism that clicks every 10cm. This way we don't even need to look at it, the click is clearly audible, we can measure even in the dark)

I updated the design, now you can download version 2. Now you don't need any special tools, inserts, or bearings for assembly. All you need is your 3D printer and a little patience during assembly. The design is adapted for 3D printing, no support is required, but it is advisable to calibrate the first layer so that there are no problems with assembly.

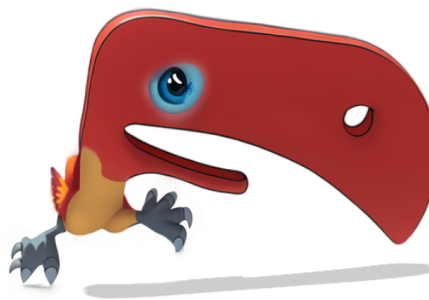
For the V2 you will need:

- 3 screws m3*25mm
- 3 nuts m3
- 2 washers for M3 screws.

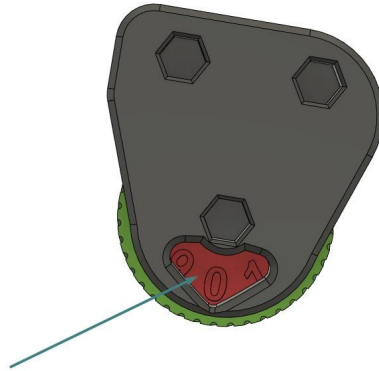
Also in the process of creating the design, I discovered that hidden inside it was such a funny weirdo, like a toucan. Therefore, I decided to call my

version of the curvimeter Toucameter)

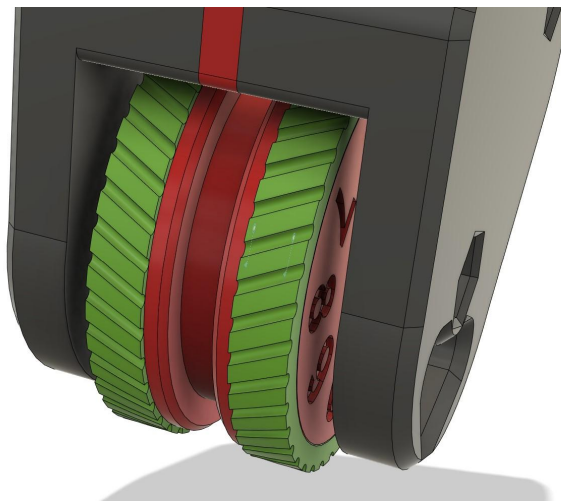
The central ratchet part is printed from Petg , but I think PLA will work too.



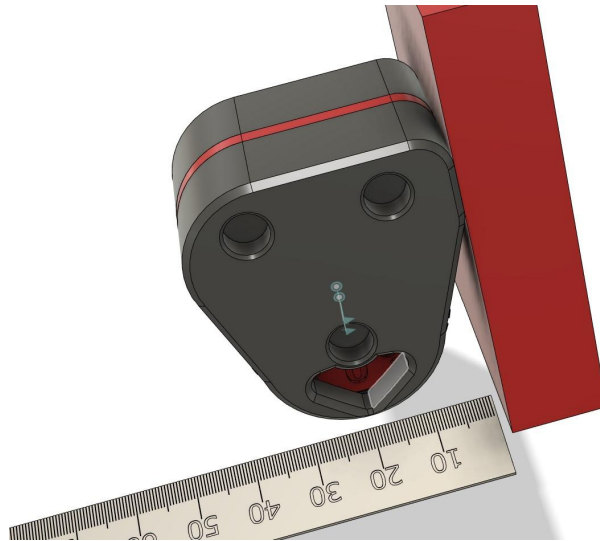
I also added a window with a scale on both sides. Now it doesn't matter which side you look from.



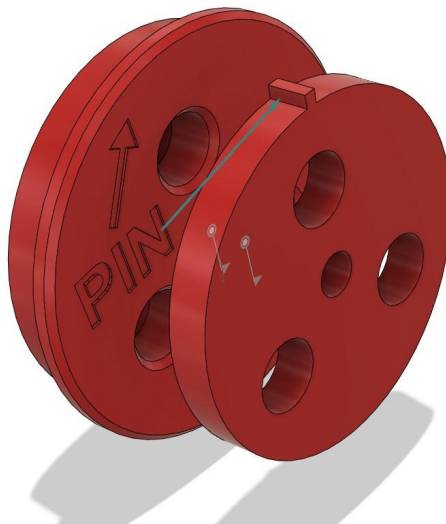
In the new design, it is now possible to install a flexible filament tire on the wheel to improve traction.



There is also one hidden feature. If you lean the back of the Toucameter against the wall, this distance will be exactly 20mm. This will allow you to measure the distance from wall to wall)



Be careful when assembling the wheel, there is a locking pin there, I marked where it should be.



<https://www.buymeacoffee.com/ivangri>


version 1 is outdated:






This version works well on rough surfaces such as leather or fabric. I printed the wheel from **elastane**. I plan to make another version with a FLEXfilament insert that will not slip on the surface and is suitable for everything)

For assembly you will need bearings 686 (6*13*5)* 2pcs
Insert nuts m3*13*od4.2 - 3pcs
Chamfered screws m3*12 3pcs

To make the scale with numbers clearly visible, pause in the slicer on the 2nd layer and change the color.

Model files

 **v2** 5 files

	v2_body.stl
	v2_wheel.stl
	v2_tooca_part.stl
	v2_tires.stl
	v2_pins.stl

 **V1 (outdated)** 3 files

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body1.stl



body_2.stl



body3.stl

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