



## TPU belt & buckle

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### Summary

TPU Belt with rigid (PLA, PTEG) buckle.

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Tags: [buckle](#) [belt](#) [flexible](#) [tpu](#) [wearable](#) [fullyprintable](#)  
[pants](#) [beltbuckle](#)

### TPU Belt with rigid buckle

TPU is my favourite material. It can be sometimes a pain to print, but it has some great qualities and it is well worth the trouble. Its flexible but not stretchy just like leather so thought i would try printing a belt on a spiral so it could fit on my print bed.

Had some fun with the buckle. My goals for designing a buckle were:

- no screws, or other parts (fully printable)
- no glue
- no supports
- as little parts as possible
- easy assembly and disassembly

It came out a bit unorthodox but it works and it looks interesting.

I uploaded 6 different sizes (lengths). I will upload other lengths if some one wants it. :)

**XXS:**

Total length: approx. 79 cm (31 in)

Waist diameter: approx. 50-69 cm (19,5-27 in)

**XS:**

Total length: approx. 92 cm (36 in)

Waist diameter: approx. 60-78 cm (24-31 in)

**Small:**

Total length: approx. 105 cm (41 in)

Waist diameter: approx. 77-97 cm (30-38 in)

**Large:**

Total length: approx. 125 cm (49 in)

Waist diameter: approx. 87-107 cm (34-42 in)

**XL:**

Total length: approx. 135 cm (53 in)

Waist diameter: approx. 107-127 cm (42-50 in)

**XXL:**

Total length: approx. 160cm (63 in)

Waist diameter: approx. 118-142 cm (47-56 in)

All are 32 mm (1,26 in) high and 1,8 mm thick (0,07 in).

**Assembly:**

- Put the "Belt buckle 3" on belt.
- Put the belt on "Belt buckle 1" trough two holes on the end.
- Put the "Belt buckle 2" over and snap everything together.

I've been wearing it for some time now and its great. Behaves similar to leather and goes around body nicely since its naturally curved.

Enjoy!

## Print Settings

### Printer Brand:

Anet

### Printer:

A8

### Supports:

No

### Resolution:

0.1 - 0.3mm

### Notes:

- Print the parts oriented as they are.
- I recommend all parts except "Belt buckle 1" to be printed with brim, since there isn't a lot of surface area on the bottom.
- Print "Belt buckle 1" and "Belt buckle 2" with at least 3 perimeters and some infill.
- Used TPU from a local supplier. Hardness: 89 ShA
- Printed buckle parts with PLA and PETG an both work
- All parts printed with 0.4 mm nozzle

Category: Accessories

## Model files



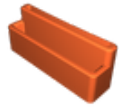
**belt\_buckle\_2.stl**



**belt\_buckle\_1.stl**



**belt\_xxs.stl**



**belt\_buckle\_3.stl**



**belt\_small.stl**



**belt\_xl.stl**



**belt\_xxl.stl**



**belt\_large.stl**



**belt\_xs.stl**

[Find source .stl files on Thingiverse.com](#)

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