PART STRETCH · MAKER WORKSHOP SHEET

Move a Prusa Mendel belt clamp's holes from 18 mm to 22 mm

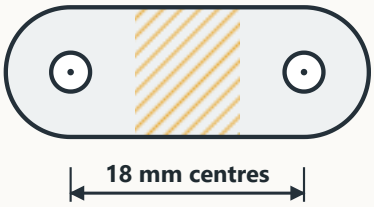
A ten-minute edit you can run and check. The **Part Stretch guest editor** runs in your browser; your STL stays on your device. Blender steps are on the right.

GUEST EDITOR GUIDE

part-stretch-free .pages.dev /spacer

Opens at the mounting-hole exercise. No account, sign-up, or upload.

Original
28 × 10 × 7 mm · holes 18 mm apart



±4 mm stretch band shown in orange

After +4 mm
32 × 10 × 7 mm · holes 22 mm apart



both rims move 2 mm outward · shapes unchanged

Accurate top-view schematic, not to scale. The clamp is 10 mm deep and 7 mm high before and after. Only the middle grows. The guest preset spreads the change evenly: each rim moves 2 mm outward and keeps its shape and size.

1 Run the real example

1. Open the guest guide and find **Move two mounting holes 4 mm farther apart**. Follow **belt clamp example**, then choose **Open this example** in the Part Stretch guest editor. The preset already selects the X band **−4 to 4** and applies **+4 mm**.
2. Verify **Current size** reads **32 × 10 × 7 mm**. If it does not, choose **Change region**, then **Across (X)**, then **Enter exact positions**; set Start **−4**, End **4**, and Change by **4**. The band grows from 8 to 12 mm. No manual entry is needed for the preset.
3. Choose **Download model**. Keep the guide's original belt clamp STL beside it for comparison.

> The band crosses the whole model, so keep it in the plain middle. If a cut crosses a hole or rim, that feature stretches too and the check below will fail.

2 Check the spacing in a slicer

- Open the original STL in your slicer. In top view, use the measure tool along X from the leftmost inside edge of one hole to the same edge of the other. You should get **18 mm**.
- Repeat on the edited STL. You should get **22 mm**. Because the two holes have the same shape, this also gives their centre-to-centre spacing.
- Each hole and each rim keeps its own shape and size. Depth 10 mm, height 7 mm, overall length 28 → 32 mm.
- Slice the edited part. Step through the layers across the widened middle and inspect the walls and both hole outlines before printing.

3 Free Blender alternative

1. Import with Scale 1 and scene units None (1 unit = 1 mm).
2. In Edit Mode, **Mesh → Bisect** at **(−4, 0, 0)** and **(4, 0, 0)**, normal **(1, 0, 0)**. Leave Fill and Clear off.
3. With X-ray on, select all vertices at X ≥ 4 and press **G, X, 4, Enter**. This leaves the left rim fixed but reaches the same 22 mm. Export the clamp as STL; check 32 × 10 × 7 mm.

Bring your own STL

The guest editor is free. If you try your own part, email part-stretch@eager-olive.primitive.email with the size you wanted and what you measured, or where you got stuck. Voluntary; no attachments, account, or sign-up.

Belt clamp: Josef Průša, Prusa Mendel, GPLv3. CAD: github.com/josefprusa/PrusaMendel (tree a1499a9); license: gnu.org/licenses/gpl-3.0.html. Local copy: part-stretch-free.pages.dev/examples/prusa-mendel-source.zip. Sources unchanged.

Workshop exercise only. Not physically printed or fit-tested here; no claim that an edited clamp fits, holds, or is safe. The guest editor is a free preview, not a public beta; no account, payment, upload, or tracking.