Rugged Box (Parameterizable)

Whity

VIEW IN BROWSER

updated 2. 10. 2022 | published 2. 10. 2022

Summary

Fully parameterizable rugged tool box

Hobby & Makers > Organizers

Tags: box case organize organizer rugged ruggedcase seal toolbox water watertight storage storagebox

The design is based on the "Tool box parametric" by Yanev and provides some more options to parameterize it in Fusion 360.

Support my work

If you want to support my work, you can buy me a coffee.

Important

The current STL files in the download section are all V1 only. If you want the newer design, use the Fusion 360 file and customize it as needed (that's recommended anyway, as there are many parameters to adjust)

Updates

24.08.2022:

- V2 release:
  - The front and back ribs are changed a bit to not have the full depth for the full height (see V2 details below). Looks much nicer like this (but V1 is still available)
    - The offset of the chamfer for each of them is configurable individually (...RibChamferOffset Parameters). This way you can make the latch easier to open by lowering the offset, or make it less likely to open by accident by increasing the offset and cover the latch completely.
  - If you wish you can now increase the size of the hinge to make it more sturdy (but I would not recommend it. It's more a hack...)
  - The width of the outer parts of each hinge can now be set to make it more sturdy (only useful when using screws longer than 25 or 30 mm)

18.08.2022:

- Added “FLUKE Edition”
  - **28.08.2022:** Moved to a separate model: https://www.printables.com/model/267524-fluke-rugged-case-with-foam-insert

Changes made

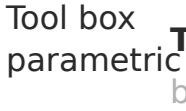
- All parts in one F360 file
- Contains a seal to print in TPU (will not make it 100% water tight)
- Additional parameters:
  - The position of the latches and ribs (distance from the sides)
  - The diameter and length of the screw (to support different sizes / latch widths)
  - The inner chamfer size
  - Separate parameters for the widths of the ribs on the side and for the hinges/latches
  - Several tolerances to fine tune it for your printer

To assemble it you need 6 screws in total. For the provided STL files you will find the correct size in the folder names.

V2 Release

Here you see the main design change of the second version (V1 on the left, V2 on the right):

This remix is based on



Tool box parametric

by Yanev

Model files

Fusion 360 files 2 files

rugged-box-parametric-v2.f3d

Go to "MODIFY" => "Change Parameters" to customize it

rugged-box-parametric-v1.f3d

Go to "MODIFY" => "Change Parameters" to customize it

Size 120 x 70 x 40 (Screw M3x30) (V1 Design!)

4 files

rugged-box-box-120x70x40.stl

rugged-box-lid-120x70x40.stl

rugged-box-latch-120x70x40.stl

rugged-box-seal-120x70x40.stl

Size 150 x 100 x 50 (Screw M3x30) (V1 Design!)

4 files

rugged-box-box-150x100x50.stl

rugged-box-lid-150x100x50.stl

rugged-box-latch-150x100x50.stl

rugged-box-seal-150x100x50.stl

Size 200 x 185 x 60 (Screw M3x30) (V1 Design!)

4 files

rugged-box-box-200x185x60.stl

rugged-box-lid-200x185x60.stl

rugged-box-latch-200x185x60.stl

rugged-box-seal-200x185x60.stl

STEP files

2 files

rugged-box-parametric-v2.step

rugged-box-parametric-v1.step

License