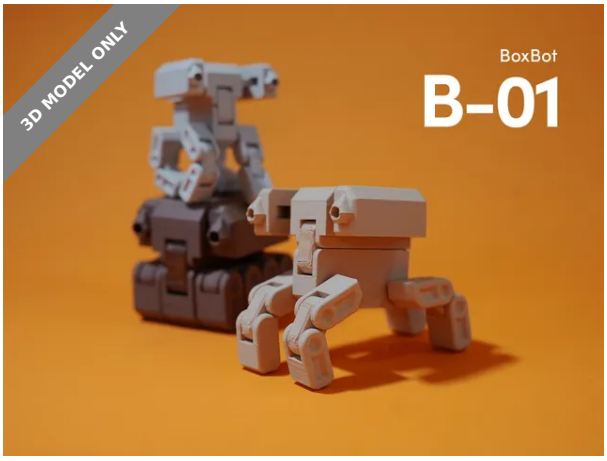


Print-in-Place Robot | BoxBot B-01

PrintLab

VIEW IN BROWSER

updated 15. 1. 2025 | published 15. 1. 2025

Summary

BoxBot B-01 is the first in a series of print-in-place robot figurines that fold up into cubes.

Toys & Games > Action Figures & Statues

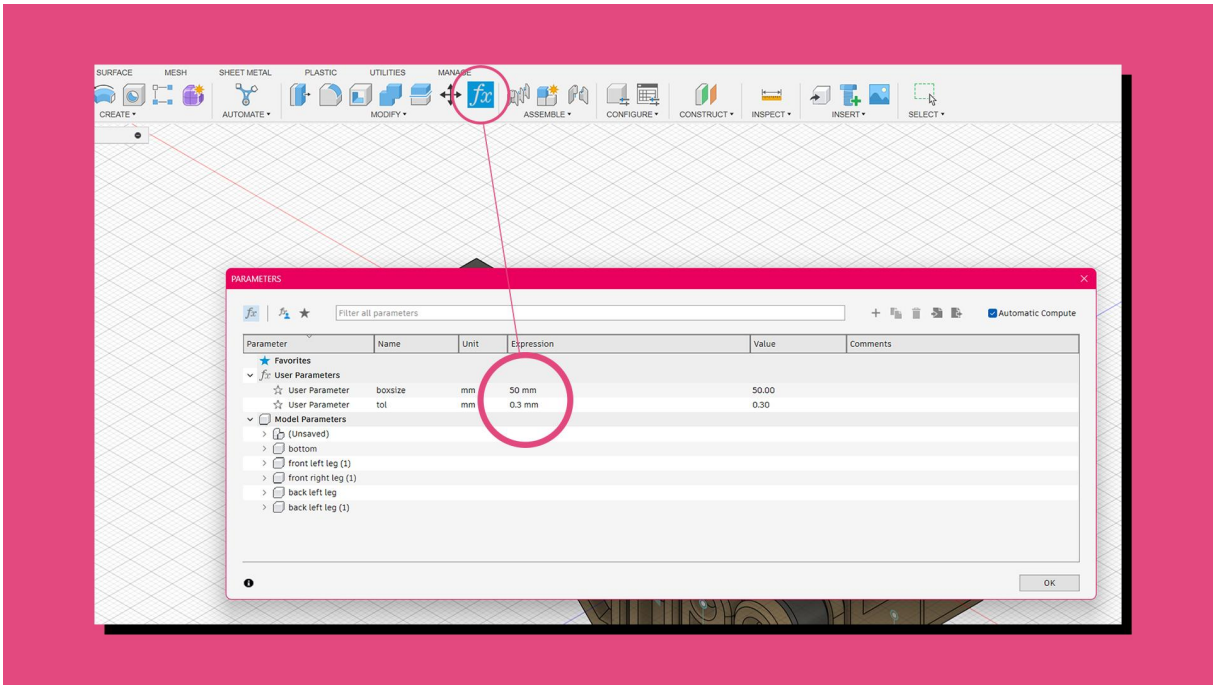
Tags: toy box robot miniature mechanism hinge printinplace gun folding mecha

BoxBot B-01 is the first in a series of print-in-place robot figurines that fold up into cubes. The model features 10 3D printed hinges that operate 4 moveable legs and 2 cannons that fold out from the robot's main body. The print requires no support material but a knife may be required to separate the cannons from the body. Check out the assembly video below.

Scaling

STL files are available for 3 different sizes, ranging from 40-60mm cubes. Additionally, B-01 was designed parametrically in Autodesk Fusion, which means you can open up the f3d model file and change the 'boxsize' parameter to adjust its overall size to whatever you please. The 'tol' parameter can be also be changed for tighter or looser joints. If scaling the model, please ensure you change the parameters rather than simply scaling the STL files. For best results, we recommend printing the model

within the 40-80mm cube range. If you require any assistance, please email hello@weareprintlab.com. And please feel free to edit the f3d file to create unique designs - we'd love to see this!



BoxBot Origins

The BoxBot series stemmed from PrintLab's online course on 3D printed mechanisms, where you can learn how to use Tinkercad or Autodesk Fusion to design various mechanism cubes. Our aim was to design a model that showcased the possibilities with 3D printed mechanisms in a fun and creative way. Check out the design process video below and to view the course, head here - https://weareprintlab.com/projects/mechanism-cubes/.

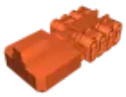
--

About PrintLab

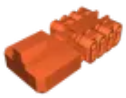
PrintLab is an online platform that offers courses, tools, and certifications in 3D CAD and 3D printing. Our mission is to empower educators, students, and makers with industry-recognised skills and credentials, while guiding them in designing meaningful products along the way – whether it’s assistive technology, sustainable homeware, or many other innovative solutions enhanced by the customisation of 3D printing.

Learn more and start a free trial of PrintLab: https://weareprintlab.com/

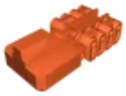
Model files



b-01-40mm.stl



b-01-50mm.stl



b-01-60mm.stl

b-01.f3d

License

This work is licensed under a
Creative Commons (4.0 International License)

Attribution—Noncommercial—Share Alike

✖ | Sharing without ATTRIBUTION
✔ | Remix Culture allowed
✖ | Commercial Use
✖ | Free Cultural Works
✖ | Meets Open Definition