



universal Z-braces

a ailingut

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Summary

Z braces that use threaded rods, should fit any printer built with aluminum extrusions. (CR-10, Sovol SV03, etc)

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originally designed for the Sovol SV03, those braces should fit any cartesian printer using aluminum extrusions (most Creality printers), the only thing that needs to be changed between different printers is the length of the threaded rods.

those are the ones used by Frankly built, he's a really cool guy.

they are officially recognized by SOVOL and are soon to be on their blog.

instructions:

you'll need two 3/8" threaded rods (or the metric equivalent) cut to fit your printer. you'll also need 8 nuts that fit the rods, I got nylon nuts because they hold better against vibrations but regular nuts should work fine.

finally, you'll need 4 M4 nuts, 4 M4x25 screws, 8 M4x12 screws, and 8 M4 T-nuts (like the ones used to connect filament holders to the extrusion) to connect everything.

after printing the parts, use the m4x12 screws and T-nuts to connect the "extrusion-connection" parts to the aluminum extrusion at the top and the front of the printer, try to have them line up and make sure the print bed doesn't hit them when moving forward.

use the regular M4 nuts inside the rod connector and M4x25 inside the extrusion connector part to connect them, don't thread them too strong as you'll need to undo this step later. point the rod connector parts toward each other and lay the threaded rod on top to find out the length needed for it and cut. make sure to measure twice, cut once!

disconnect the rod connector parts and place the nuts corresponding to the threaded rods inside, it's ok if it's not too snug. insert the threaded rod through the hole at the top of the part and screw it into the nut. if using silicone nuts, this will be hard so use some tools to hold everything.

finally, insert an m4x25 screw into each "extrusion-connection" part and a regular m4 nut into the "rod-connection" connected to the rods. insert the M4x25 screws into the "rod-connection" with the side of the nuts facing outwards and you should be done!

please feel free to write any question you have about the assembly process, it may sound complicated but when you have all of the parts in front of you, it should become clear.

lengths for the rods:

SV03 - ~60.5cm

feel free to send me a message or write in the comments any length that works for your printer and ill add it above for others to use.

Model Files (.stl, .3mf, .obj, .amf)

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extrusion-connection.stl

updated 27. 12. 2021

293.7 KB



rod-connection.stl

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191.9 KB





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