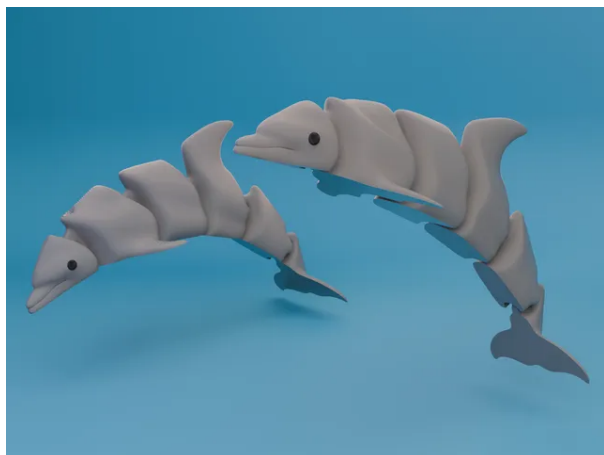




Articulated Dolphin

 **Jopek Design**

[VIEW IN BROWSER](#)

updated 30. 11. 2024 | published 30. 11. 2024

Summary

Print in place, articulated Dolphin



2.41 hrs



1 pcs



0.20 mm



0.40 mm



PLA



22 g



Prusa
MK3/S/S+

[Toys & Games](#) > [Action Figures & Statues](#)

Tags: [toy](#) [animal](#) [ocean](#) [sea](#) [articulated](#) [printinplace](#)
[fish](#) [dolphin](#) [sealife](#)



Model parameters

Dimensions (LxWxH)

162,5 x 59,4 x 47 mm (100% scale)

Basic information

A new, fourth, addition to my Articulated Sea Life collection, I hope you will like it :)

The model is divided into 6 movable articulated segments, which grant the model with lifelike movement, and a high range of flexibility.

The model was designed to print as easily, and as reliably, as possible. No post processing, or tweaking needed. Just download, slice, print, and have fun!

The model is using a second generation of linkage system, which was designed to be downscaling, and bigger layer heights friendly. The holes in the linkage system have been changed from a circular shape into an oval, which introduces more play on the top and bottom parts of the link, meaning, that the filament can droop much more, without causing any problems with mobility of the links. This means, that you can downscale the model much more, than it's predecessors! And as a cherry on the top, the new links are tougher than ever before! This will be handy to anyone, who is using a brittle filament, or going crazy with scaling experiments.

Files information

You can choose from total of 3 files: **.3mf** (recommended); **.stl** (for slicer compatibility issues); and **.gcode** (for MK3S+, pre-sliced, ready to print)

This design is a part of the Articulated Sea Life collection by me. You can check out other designs from this collection [here](#).

The Articulated Sea Life collection is a live project, and I'm continuously adding new designs, anytime I get an interesting idea, or a suggestion. The designs are also updated, if any changes or tweaks have to be made. Feedback, suggestions and ideas are welcome!



Print settings

Material

PLA

Layer height

$\leq 0,2$ mm

or

$> 0,2$ mm + variable layer height

Infill

$> 10\%$

Support

None. The model was designed not to require any support material.

Scaling

Possible, however, If your machine isn't calibrated properly, has accuracy problems, or if you're dealing with filament issues, downscaling isn't recommended. When downscaling, proceed cautiously, and don't go too small, unless you want to risk mobility related issues. When printing a downscaled version, adjust layer height in proportion to the scale.

But be careful, if you're printing a downscaled version, the dorsal fin is quite small, and it's sticking out quite a lot, so it might not have enough time to cool down while printing. To eliminate this issue, print at least two instances of the model, or add a simple tower with the same height as the model. This will force the nozzle to move away from the fin, and allow it to cool down properly.

Orientation

Default, laid flat on the belly

Adhesion aid

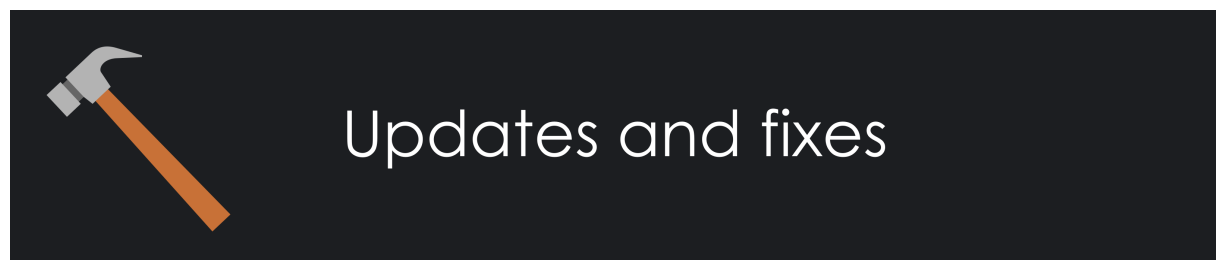
Not necessary, contact area with the buildplate should be sufficient. If your print surface suffers from poor adhesion, consider using some adhesive spray, or other kind of adhesion booster. Using brim is possible, but not recommended, as it would be difficult, and inconvenient to remove afterwards.

Other settings/ideas

To make the model look even cooler, add a filament change into your gcode, and print the belly in a different color.

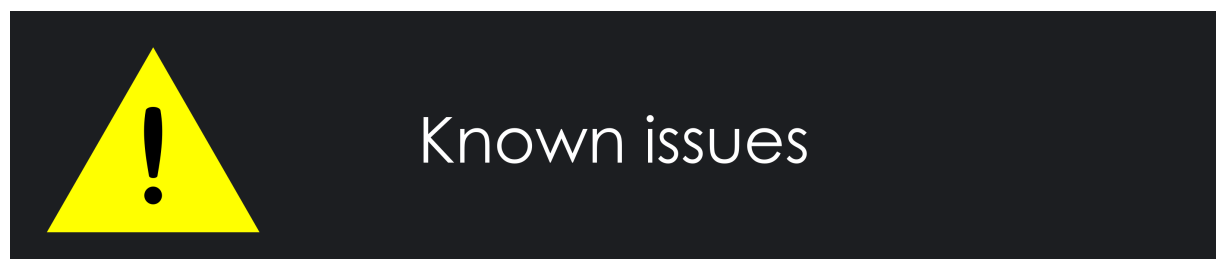
In this section, you can find a list of all updates and fixes, which were introduced to the model along the way. Each update will be explained thoroughly, so that you know, which issue was every specific update addressing. If you're having any problems with the model, you can check here, if a new, revised version of the model, has already been released, in a response to your problem, or not.

If you run into any issues with the model, please pay a visit to a section of known issues, which can be found just below the Updates and fixes. If you won't find your specific problem in there, don't hesitate to contact me via dm.



7/1/2023 - Added .stl version of the model to solve compatibility issues with some slicers, which don't (yet) offer .3mf files support. Both, .3mf and .stl versions are identical, but the .3mf version is more storage efficient, and carries additional useful data for your slicer, so if your software of choice supports both file formats, go for the .3mf version. To make the files easily distinguishable, and to help to avoid confusion, the .stl version is placed in a separate folder named **"stl version"**. This update was released just to deal with .3mf file slicer compatibility issues, and it doesn't introduce any changes to the model itself.

11/30/2024 - Fixed a non-functioning link in the model description



There currently aren't any known issues/work in progress. If you run into any, please contact me via dm.

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Model files



stl version

1 file

articulateddolphin.stl



articulateddolphin.3mf



Print files

articulateddolphin_02mm_pla_mk3s_2h24m.gcode



⊗ PLA ⊕ 0.40 mm ≡ 0.20 mm ⌚ 2.41 hrs ⚖ 22 g 🖨 Prusa MK3/S/S+

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