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## How to waterproof an underwater drone?

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Hey there,

In 2018, when we were building our **very first underwater drone**, one question was the most important. **How to make it waterproof?** We didn't figure out how to do that until 2020. Why? Because we **tried to make 3D prints waterproof.** 

Let me save you some time - **3D prints will never be waterproof**. At least not reliably waterproof to more than 30m underwater. So what's the solution?



Prototypes we worked on at the time - all of them were leaking

You can either try to waste a lot of time trying to 3D print a waterproof body or you can be smart about it.

Our advice is - don't try to reinvent waterproofing, it has been done before. Just get yourself an acrylic pipe, put all of the electronics inside of it - and find a solution to seal the ends of it.



**CPS 5 electronics** 

Now, like we did in the CPS 5, you can then design a fancy body around the electronics pipe to make it pretty and hydrodynamic.

But how do we manage to seal the the ends of the pipe, in the CPS 5?

We developed our own method for sealing the ends of an acrylic pipe. If you don't know what it is yet - find out in the course! "How does CPS 5 work" lesson (chapter 1) should clear all your doubts. Check it out here:

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Cheers,

Piotrek, CPSdrone

**PS:** Tommorow, I'll share the one of the most important issues people face when building an underwater drone. Stay tuned!

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