Non-ROV Device Design

The Go-BGC float is made with 2” PVC that is 35cm long. The float is separated into two separate sections, the top and bottom. The top section is dry and houses the electronics such as the Arduino nano, 9V battery, 5A fuse, and pressure release plug. The bottom half is waterlogged and has the bilge pump motor which allows the float to move up and down. The two sections are separated by an acrylic disc sealed with holes drilled for wires and is waterproofed with epoxy. To control ascent and descent the float controlled by an Arduino, will be on run on a timer to control the motor. The float runs on a 9-volt battery.

Fuse Calculations (Float)
Motor 3A each x 1 = 3A
Total 3A x 150% = 4.5A
Fuse used 5A

(Left: Float SID) Right: GO-BGC Float (Photo by Zor Waters)