**Open Source Ventilator**

**Physical Layout**

V1.0; Robert Benedict, March 25, 2020; Kent, Ohio, USA

Based on the initial assumptions here is a proposed physical layout with connections noted. Please propose better solutions when you see them.

Assumptions:

* 1” PVC air flow pipe
* Lawn sprinkler solenoid control valves for Inspiration and Exhalation
* Single pressure sensor
* Control module with sense line, control lines and UI
* Passive valves for Anti-Asphyxia, Over-Pressure and PEEP
* Passive valves 3D printed
* Passive valves and sensor mounted on 1” PVC T bodies

Modules and connections not specified so far

* Connection to Blender
* Connection to medical ventilation tube
* HEPA exhaust filter

Layout drawing on next page

