Update

Alev Orfi June 15, 2017

Materials

- Fused deposition modelling (FDM)
 - Not waterproof
 - Easily accessible
- Stereolithography
 - Waterproof
 - Expensive
- FDM and polyurethane combination

Coanda Valves

- Allows for quick direction changes
- Much smaller deadzone than the pump
- Allows linear control of output force
 - PWM controlled

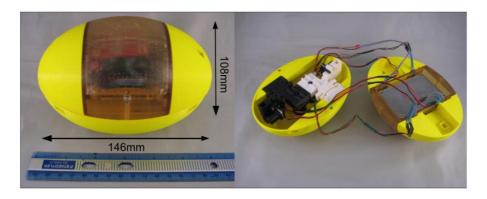
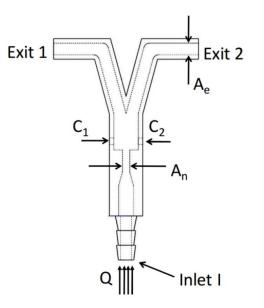
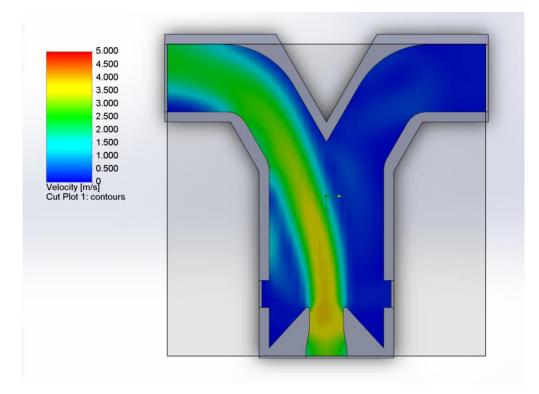
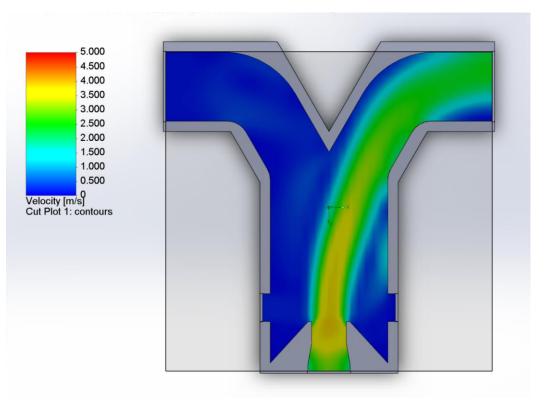


Fig. 12. Photographs of the prototype robot and its internal components.

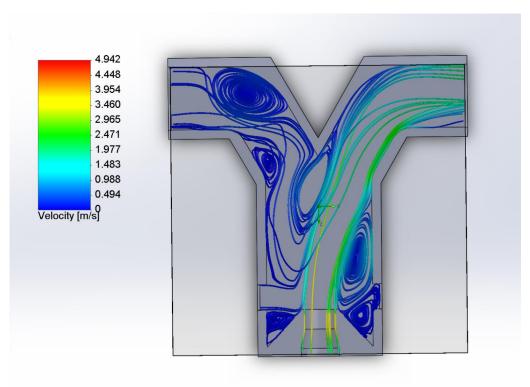


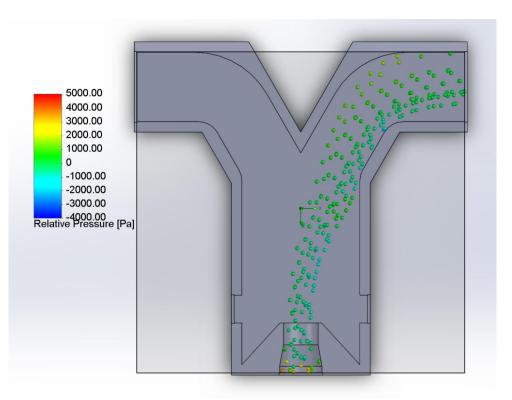
Velocity Cut Plots





Flow Trajectories





M400 Micropump

- 2.5 by 4 cm
- Free flow rate of around 2500ml/min



General Layout

• around14 by 8 cm

