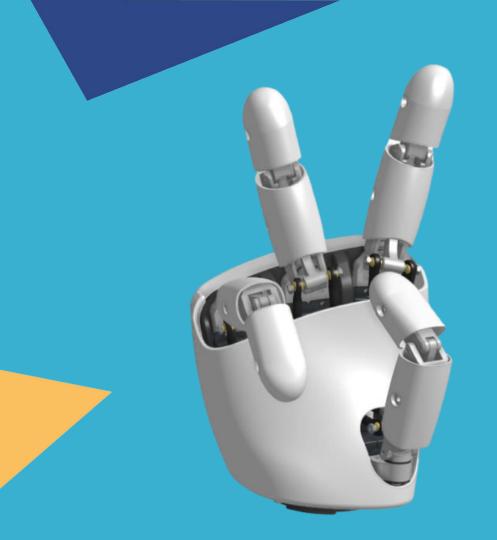


4 fingers 8 dofs 3D printable Open source

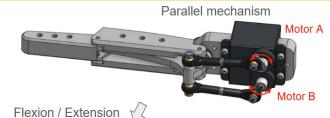
Pollen Robotics SAS Bordeaux, France





#### Finger mechanism

- 2 phalanxes finger
- 2 motors per finger acting in parallel
- Flexion / Extension & Abduction / Adduction
- Mechanical link to fold 2 phalanxes together
- Ball joint connecting rods
- Soft shells covering phalanxes
- 3D printable

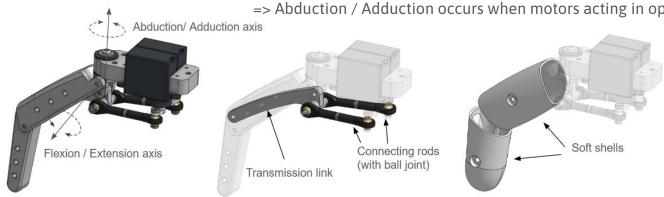






=> Flexion / Extension occurs when motors acting in the same way

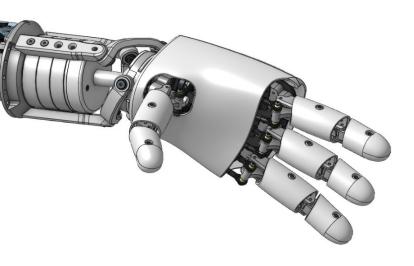
=> Abduction / Adduction occurs when motors acting in opposite way





### Hand design

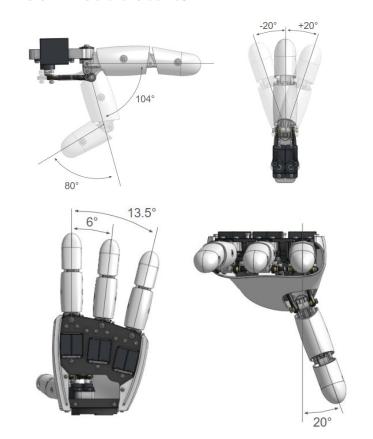
- 4 identical fingers + custom plastic parts
- Thumb opposable with Index finger
- Soft palm (same material as finger soft shell)
- Wrist interface suitable for Reachy2

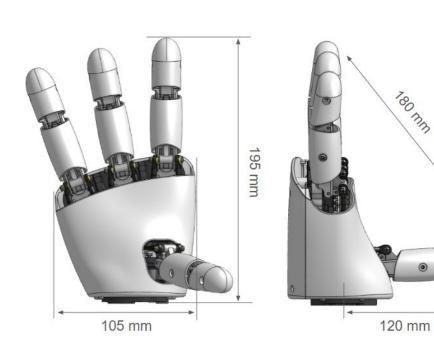






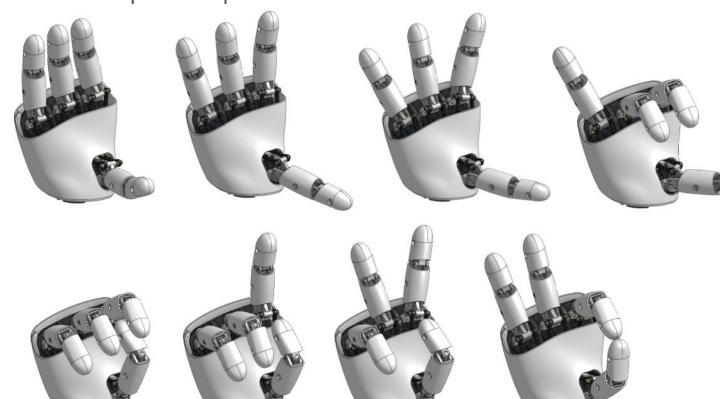
#### Technical details







## Some of possible patterns



... and others



#### Specifications

- x8 smart actuators (feetech SCS0009)
- DC Supply 5V / Max current 3A
- Weight: 400g
- Up to 1Kg payload
- 3D Printed suitable
- Fully open source (will be soon on github)
- Bom cost <200€ (assembly 5 6 hours)

#### It will be easy to:

- Add 5th finger (but will increase overall width)
- Size differently each finger
- Change position of fingers
- Add fingertip sensor (depends of which sensor obviously)
- Change wrist interface

