KRAKEGG / Stage 01 Final Prototype

Bill of Materials

01. SOFT ROBOTICS FINGERS

_3D printed moulds
_casting silicone (Eco-Flex 00-50):
https://www.amazon.com/Smooth-Ecoflex-00-50-Platinum-Silicone/dp/B00GJ80HIC
_syringe + needle

02. CONNECTION TO ROBOTIC ARM

_3D printed connection plate
_bolts
_screws & nuts
_Connector rivets

03. HARDWARE

Connection to the robot (to ABB 140 in this case):
_microcontroller (arduino uno or similar):
https://www.amazon.com/RoboGets-Compatible-ATmega328P-Microcontroller-Electronics/dp/B01N4LP86I
_octocoupler:
https://www.amazon.com/Converter-Optocoupler-Isolator-Maluokasa-DST-1R4P-N/dp/B07NNP4H7S
_relay:
https://www.amazon.com/Nilight-Automotive-Harness-Interlocking-Socket/dp/B0748F1JK4

Control air pressure:
_2 way solenoid valve:
https://www.amazon.com/4inch-Normally-Closed-Electric-Solenoid/dp/B00ON8XFSO
_air compressor:
https://www.amazon.com/AstroAI-Portable-Compressor-Inflator-Protection/dp/B078LYX5YF
_force touch sensor:
https://www.amazon.com/Sensitive-Resistor-Pressure-Diameter-Resistance-Type/dp/B07MP4RL9Q

General:
_jumper cables & jumper extension wires:
https://www.amazon.com/Elegoo-EL-CP-004-Multicolored-Breadboard-arduino/dp/B01EV70C78
_breadboard:
https://www.amazon.es/Protoboard-contactos-Breadboard-prototipos-soldadura/dp/B00JGFDKBQ/

_12V power supply:
https://www.amazon.com/Switching-Universal-Regulated-Transformer-Computer/dp/B07C2WBR1L
_Mounting plate or Project Box

Tools:

_Soldering iron
_Wire strippers
_Tweezers
_Screwdriver
_3D printer