

mGrip™

Modular Gripping System

SOFT
ROBOTICS



PROTEIN



PRODUCE



BAKERY

The *mGrip* modular gripping system is a suite of configurable soft grippers and controller products that enables reliable, high-speed picking of traditionally hard to grasp items in the food processing industry. *mGrip* allows robots to safely and efficiently pick and pack food products while also increasing throughput and reducing waste to meet the needs of the rapidly-increasing food industry.

Features and Benefits

- IP69K rated food grade gripper for safe product handling
- Adaptable gripper to pick challenging products with any robot type
- Versatile platform to quickly build production-grade tools in different configurations
- Durable design to perform in demanding environments
- Fast operation to allow multiple picks under a second
- Precise, repeatable control to pick and place products in various forms of packaging

REVOLUTIONARY AUTOMATED PIECE PICKING CAPABILITIES

mGrip Configurations

The modular design of *mGrip* allows for configurable gripper size, shape, and spacing to meet the specific needs of your application.

Parallel *mGrip*

(2, 4, and 6 finger options)



Parallel finger spacing
20mm to 100mm

Circular *mGrip*

(3, 4, 5, and 6 finger options)



Circular finger spacing

3 finger diameter: 30mm to 110mm
4 finger diameter: 45mm to 125mm
5 finger diameter: 55mm to 135mm
6 finger diameter: 75mm to 145mm

Controller Options

All of our grippers are enabled by a Soft Robotics Control Unit (SRCU).

Our high-performance controllers perform at +120 picks per minute and allow for precise programming control of our grippers, optimizing gripper life.



SRCU-Mini Controller*

Our fast and compact controller, perfect for integrator flexibility.

*Available in Universal Robots and FANUC specific configurations.



coDrive Control Unit

Designed for mobile and collaborative applications, the coDrive Control Unit easily mounts inside of your UR cabinet.

mGrip Specifications

Pickable object dimensions	Circular: diameter up to 145mm* Parallel: width up to 100mm* <small>*Able to handle larger sizes upon request</small>
Pickable object weights	Up to 3.4 kg (7.5 lbs)
Achievable application rate	4 Hz* <small>*Application dependent</small>
Tool height	124mm - 184mm
Tool mass	270 g - 1.6 kg* <small>*Dependent on gripper configuration and type</small>
Ingress protection rating	IP69K

Controller Specifications

Controller air requirement	95 psig
Input air quality	ISO 8573-1:2010 [5:5:4]
Controller power requirement	24 VDC \pm 10% @ 0.5 A MAX
Communications protocol	Digital and Analog IO

mGrip and Soft Robotics Control Units are configurable at time of order. *mGrip* kits are offered in both a Standard (Aluminum) and Food Grade (Stainless Steel) option. Food Grade *mGrip* kits are compliant with (EC) 1935/2004 and meet the requirements of the United States FDA Codes of Federal Regulation 21 CFR concerning materials intended for food contact.