

## One Stop Shop for End-of-Arm Tooling

OnRobot provides all types of gripping and sensing solutions for industrial automation



# We deliver savings, You increase your profit

OnRobot provides state of the art gripping and sensing technologies for companies interested in industrial automation. You can find all types of sensing systems for collaborative applications like assembly, surface finishing, pick and place, machine tending or testing.

It has never been easier to deploy your intelligent robot. With deployment time reduced by 30%, OnRobot products are the easy choice in short lead time projects and environments where robots are often re-deployed.

OnRobot develops gripping and sensing systems that not only operate efficiently. By using the true Plug&Produce OnRobot solutions, you get the ultimate installation and programming convenience and re-deployment has never been faster.

## Gripping and sensing systems designed for the ultimate installation and programming convenience



# Product overview



**RG2  
GRIPPER**



**RG6  
GRIPPER**



**DUAL  
GRIPPER**



**RG2-FT  
GRIPPER**



**HEX-E, HEX-H F/T  
SENSOR**



**GECKO  
GRIPPER**



**VG10  
VACUUM GRIPPER**



**QUICK  
CHANGER**



# RG2 AND RG6 GRIPPERS

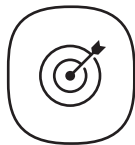
## Plug&Produce grippers for higher ROI

- ✓ No external cables
- ✓ Adjustable gripper mounting
- ✓ Gripping feedback
- ✓ Automatic payload and TCP calculation
- ✓ Depth compensation
- ✓ Customizable fingertips
- ✓ Dual gripper

RG2/RG6 collaborative grippers are true Plug & Produce solutions. The fast installation and simple programming reduce your deployment time by 30%.



### APPLICATIONS



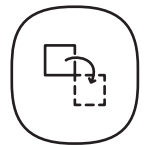
Machine  
Tending



Packaging &  
Palletizing



Assembly



Pick & Place

### TECHNICAL DETAILS

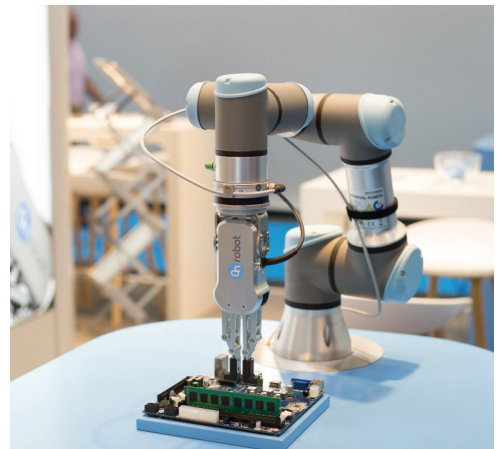
PARAMETER	RG2	RG6
Payload	2 kg	6 kg
Gripping Force (1N resolution)	3-40 N	25-120 N
Total Stroke (1mm resolution)	110 mm	160 mm
Stroke Time (0-110/40-20)	950 ms / 200 ms	950 ms / 200 ms
Product Weight	650 g	1000 g
Feedback	Force (3-40 N) and width (0-110 mm) detection	Force (25-120 N) and width (0-160 mm) detection

Compatible with **Universal Robots**



# Deploy intelligent robots And automate more

OnRobot products open new automation possibilities and enable automation of tasks not previously possible. With the OnRobot products and comprehensive software packages, you get access to numerous pre-programmed industrial applications. Adding intelligence to robot arms brings them closer to the abilities of human sensing and opens new automation possibilities.







# HEX-E, HEX-H F/T SENSOR

Automation made simple  
by a sense of touch

## OPTOFORCE TECHNOLOGY

- ✓ Comprehensive software package
- ✓ No programming skills are needed
- ✓ Functions like center pointing, insertion, hand guiding or path recording
- ✓ Precise presence detection
- ✓ Keep constant force while moving
- ✓ Adds the sense of touch to your robot



The pre-programmed OnRobot force sensing applications and the intuitive user interface ensure a quicker integration and easier operation with the sense of touch.

### APPLICATIONS



Assembly



Surface Finishing:  
Deburring, Grinding, Polishing



Quality Testing &  
Inspection

### TECHNICAL DETAILS

PARAMETER	HEX-E - HIGH PRECISION	HEX-H - LOW DEFORMATION
Size	Ø70x37.5 mm	Ø70x37.5 mm
Rated Fx, y, z (all directions)	200 N	200 N
Rated Torque	Tz: 6,5 Nm Txy: 10 Nm	Tz: 13 Nm Txy: 20 Nm
Resolution (Noisefree)	Fxy: 0,2 N Fz: 0,8 N	Fxy: 0,5 N Fz: 1 N
Rated Deformation	Fxy: ±1,7 mm Fz: ±0,3 mm	Fxy: ±0,6 mm Fz: ±0,25 mm

Compatible with **Universal Robots, KUKA**

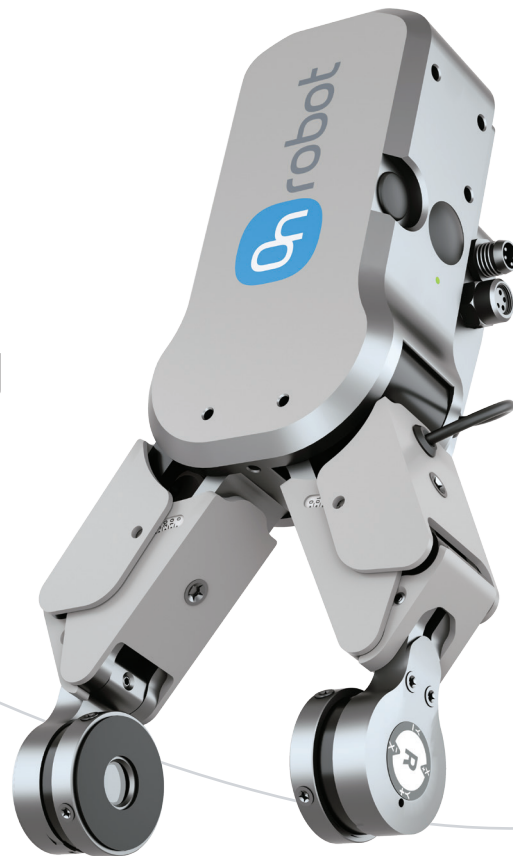


# RG2-FT GRIPPER

## See and touch objects with intelligent gripping

- ✓ Gripper with F/T sensor at the fingertips
- ✓ Detects workpiece using proximity sensor
- ✓ Detects risk of slipping before it happens
- ✓ Precise & simple depth compensation
- ✓ Integrated force-controlled insertion software
- ✓ Force/Torque sensor for enabling precise machine tending, assembly jobs and collaborative operations

You can automate high precision assembly tasks with OnRobot RG2-FT. The in-built 6 axis F/T sensors at the fingertips provide extremely accurate gripping for better production quality.



### APPLICATIONS



Assembly



Pick & Place



Machine  
Tending

### TECHNICAL DETAILS

GENERAL PROPERTIES	MINIMUM		TYPICAL	MAXIMUM
Total stroke	0 mm		-	98 mm
Finger position resolution	-		0.1 mm	-
Gripping force (adjustable)	3 N		-	40 N
FORCE SENSOR	Fxy	Fz	Txy	Tz
Nominal capacity (N.C)	20 N	40 N	0.7 Nm	0.5 Nm
Noise free resolution	0.1 N	0.4 N	0.008 Nm	0.005 Nm
PROXIMITY SENSOR	MINIMUM		TYPICAL	MAXIMUM
Resolution	-		2 mm	-

Compatible with **Universal Robots, KUKA**



# GECKO GRIPPER

## Attach like a gecko and automate more

- ✓ Grabs with gecko-style adhesive
- ✓ Picks up flat objects without air system
- ✓ Can lift solid or porous objects
- ✓ Instantaneous gripping
- ✓ Integrated load sensor for precise gripping
- ✓ Proximity sensor – part presence

The nature inspired OnRobot gecko technology makes it possible to attach and lift any kind of flat and smooth surfaces. Fast and easy gripping technology for pick & place applications.

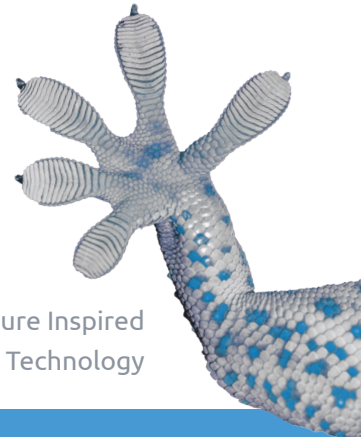
### APPLICATIONS



Packaging &  
Palletizing



Pick & Place



Nature Inspired  
Technology

### TECHNICAL DETAILS

#### MAXIMUM PAYLOAD IN KG

Food grade environment

#### POLISHED STEEL / ACRYLIC/ GLASS/ SHEET METAL

4.1 / 4.1 / 3.3 / 3.1

Other environments - with Cleaning System

1.6 / 1.6 / 1.3 / 1.3

#### SPECIFICATION OR FEATURE

#### VALUE / COMMENTS

##### GRIPPER

Holds part on power loss?

Yes

Proximity sensor range

0-260 mm

Pre-load required for maximum adhesion

125 N

##### PAD

Change-out interval

100,000 cycles

Compatible with **Universal Robots, Kawasaki, FANUC**





# VG10 Vacuum Gripper

Handle a variety of objects in many different sizes without air supply

- ✓ No external cables or air supply
- ✓ Dual grip with individual vacuum channels
- ✓ Flexible adjustment of suction cup arms
- ✓ Configurable suction cups
- ✓ Vacuum sensors feedback

The VG10 is specially designed for collaborative robot applications. A true Plug & Produce solution, the VG10 works straight out of the box and into your production line in less than 30 minutes.



## APPLICATIONS



Packaging &  
Palletizing



Pick & Place



Machine  
Tending

## TECHNICAL DETAILS

### PARAMETER

Arm can handle workpieces between	10x10mm to 500x500mm
Dual grip with two individual vacuum channels	
Payload	up to 10 kg
Adjustable vacuum	0-80%
Support	24V I/O and MODBUS RTU RS485
Vacuum pump	Integrated, electric BLDC
Vacuum cups	1-16 pcs
Arms	4
Gripping time	0.35s
Release time	0.20s
IP	54
Weight	1,7kg

Compatible with **Universal Robots**

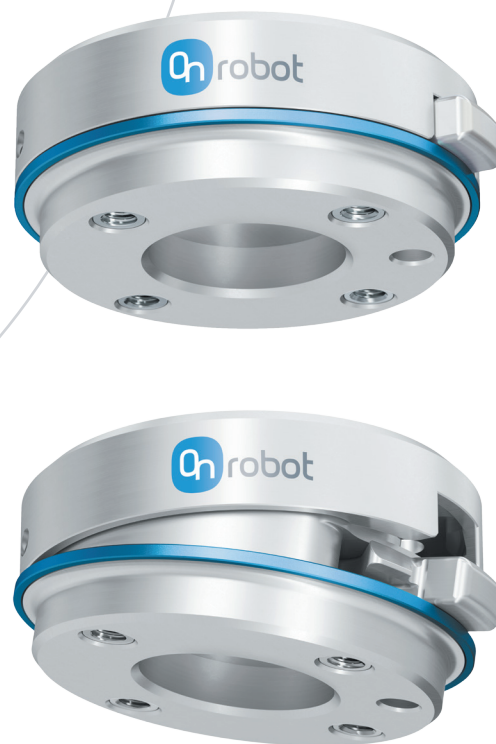


# QUICK CHANGER

- ✓ Easy and fast change of tools
- ✓ Fully collaborative with no sharp edges
- ✓ Redundant locking mechanism
- ✓ High repeatability
- ✓ Lowest weight and height in class

Patented, reliable and with easy-to-use locking mechanism, extra safety locking structure and locking springs, make the Quick Changer a unique product, ideal for all collaborative robot applications.

With the Quick Changer you will have the easiest and fastest tool changer with everything you need within the box.



## TECHNICAL DETAILS

### PARAMETER

Repeatability	+/- 0.02 mm
ISO Type	9409-1
Compatible	50-4-M6
Payload	10kg

Compatible with **Universal Robots**



# Rosborg, Denmark

## Case story

At Rosborg Greenhouse, collaborative End-of-Arm Tooling have optimized productivity and reduced monotonous work. When dealing with growing demand and seasonal fluctuations, Rosborg Greenhouse decided on using RG6 to automate the processes that dealt with growing and packing herbs. With an easily adjustable force, the grippers can gently pick and package the herbs, without squeezing or damaging. The flexibility of the gripper makes it possible for Rosborg to add different size, shapes and weight products to the same packing line.

"We were looking for a gripper to lift herbs and flowers gently without squashing them. We chose an R6G gripper because of its wide and gentle grip, as well as precise and flexible abilities" explains Henning Jørgensen.

- ✓ So intuitive that staff can easily re-deploy
- ✓ Reduced monotonous work
- ✓ Wide and gentle grip
- ✓ Precise and flexible abilities
- ✓ Fast ROI
- ✓ Production doubled during peak seasons without losing profit

Read the case story in full at [onrobot.com](https://onrobot.com)



# Contact your local distributor

OnRobot End-of-Arm Tooling are sold through a network of certified distribution partners.  
Find your local distributor at [onrobot.com/distributors](http://onrobot.com/distributors)

Local distributor

[sales@onrobot.com](mailto:sales@onrobot.com)  
[www.onrobot.com](http://www.onrobot.com)



OnRobot A/S  
Teglvaerksvej 47H  
5220 Odense SØ  
Denmark  
+45 53 53 57 37