One Stop Shop for Collaborative Applications

All the tools you need at one place to automate more







Collaborative applications are the future of automation, enabling rapid deployment, easy changeovers, and safe operation alongside human workers. As the robots themselves become commodities, manufacturers gain true value from innovative collaborative applications that are enabled by a full range of Plug & Produce grippers, sensors, vision, and the software that drives them.

We offer the industry's broadest range of end-of-arm tooling and software solutions for collaborative applications, using a unified mechanical interface that helps manufacturers automate quickly and efficiently. Our innovative, manufacturer-focused approach saves you time and money so you can get on with the business of production.

We are excited to show you what you can accomplish with flexible, cost-effective collaborative applications.

Enrico Krog Iversen, CEO OnRobot



About OnRobot

OnRobot was born a global company in June 2018 with the merger of Danish On Robot, Hungarian OptoForce and American Perception Robotics. Danish company Purple Robotics was welcomed into the fold a short time later. The IP assets belonging to Blue Workforce were acquired in April 2019. Each company was known for developing unique technologies for collaborative applications and together they represent a formidable catalogue of the industry's best tools. The tools include grippers, sensors, tool changers and software that enable small and medium sized manufacturers to automate their processes like never before – quickly, efficiently and cost-effectively.

Any robot you choose. One **OnRobot** system.

Save integration time and simplify deployment with our complete solution.



*If your robot arm is not represented above, contact your local partner for information on compatibility on other robot brands.

ANY APPLICATION

– What do you want to automate?

Now you can automate processes that were previously too complicated



One Simple OnRobot System

One Interface

One Training

One Person to Call

• One Stop Shop for collaborative applications. We provide all the tools you need at one place so you can automate more.

• Multiple tools, robots and applications - for multiple returns. Save cost and increase productivity with flexible automation tools.

 One system, zero complexity. Save time and grow your business fast with unified programming and easy redeployment.

SAVES YOU TIME AND MONEY

Deployment

Training

Flexibility



RG2/RG6

Plug & Produce grippers for multiple purposes

RG2 TECHNICAL SPECIFICATIONS

General Properties	Minimum	Maximum	Unit
Payload Force Fit	-	2 4.4	[kg] [lb]
Total stroke (adjustable)	0 0	110 4.33	[mm] [inch]
Gripping force (adjustable)	3	40	[N]
Gripping speed	38	127	[mm/s]
Gripping time	0.06	0.21	[s]
IP Classification	IP54		

RG6 TECHNICAL SPECIFICATIONS

General Properties	Minimum	Maximum	Unit
Payload Force Fit	-	6 13,2	[kg] [lb]
Total stroke (adjustable)	0 -	160 6.3	[mm] [inch]
Gripping force (adjustable)	25	120	[N]
Gripping speed	51	160	[mm/s]
Gripping time	0.05	0.15	S
IP Classification	54		

POWER UP PRODUCTION

- Flexible grippers can be used for a **wide** range of part sizes and shapes.
- Plug & Produce design reduces deployment time from a day to an hour.
- Easy deployment with out-of-the box grippers reduces programming time by 70%

Applications:







Machine Tending

ing & Palletizing

embly

Pick & Place



Plastic



Grab & Go – gentle but firm gripping inspired by nature

GECKO TECHNICAL SPECIFICATIONS

General Properties						
Workpiece Material	Polished Steel	Acrylic	Glass	Sheet Metal		
Maximum payload (x2 safety factor)	6.5kg 13.2 lb	6.5kg 13.2 lb	5.5kg 13.2 lb	5.5kg 8.8 lb	[kg] [lb]	
Preload required for max adhesion	140				[N]	
Detachment time	300 msec				[msec]	
Holds workpiece on power loss?	yes					
Pads						
Pad Change-out interval	150 000 to 200 000 cycles for HIGH preload[cycles]200 000 to 250 000 cycles for LOW preload[cycles]				[cycles]	
Manual Cleaning	Isopropyl alcoho	ol and lint free	e cloth			
Robotic cleaning system	Cleaning Station					
Sensors						
	Pre-load sensor		Ultrason	ic Range se	пѕог	
Range	40 N - 140N 9 lb - 31 lb		0	260 [mm] 10 [inch]	[N][mm] [lb][inch]	
Еггог	7% 2%					
IP	42					

POWER UP PRODUCTION

- No compressed air requirement saves maintenance costs and provides faster payback in as little as 5 months.
- Precise, no-mark gripper technology increases productivity in Pick & Place tasks.
- Innovative gecko technology **enables** gripping of flat, porous objects such as PCBs to extend automation capabilities.
- No requirement for external air supply reduces noise and dust.



Applications:

Packaging & Palletizing Pick & Place

Awards for the Gecko Gripper:

• IERA Award

- Hannover Messe 2019 Robotics Award
- Silver Edison Award for Innovation in Robotics
- Global Robotics Expo Innovation Award for Robotics



chrobot Gecko GECKO GRIPPER

Can be used with products of various sizes and materials, including:



Plastic





Metal Glossy Packaging

y Wood

Glass



Pick & Collaborate – helping hand with a sense of touch

The world's first gripper that can detect objects using built-in force/torque and proximity sensors.

RG2-FT TECHNICAL SPECIFICATIONS

General Properties	Minimum	Maximum	Unit
Payload Force Fit	-	2 4.4	[kg] [lb]
Total stroke (adjustable)	0 0	100 3.93	[mm] [inch]
IP Classification	IP54		

Force Senso Properties	r	Fxy	Fz	Тху	Tz	Units
Nominal cap (N.C.)	acity	20	40	0.7	0.5	[N] [Nm]
Noise free re tion	esolu-	0.1	0.4	0.008	0.005	[N] [Nm]

POWER UP PRODUCTION

- Accurate sensing improves production quality **by reducing defect rate as much** as 60% in delicate Pick & Place processes.
- Easy-to-program sensing **allows robot** to act like an operator's third arm, with human-like part hand-offs.
- Ability to automate insertion tasks **that** weren't previously possible can reduce operation costs by 40%.

Applications:





Assembly





Palletizing



Machine Tending

Pick & Place

Packaging &

Quality Testing and Inspection

RG2-FT

Can be used with products of various sizes and materials, including:

Metal









onrobot

Plastic

Cardboard

Wood

Glass



Grab & Go - flexible, adjustable electrical vacuum gripper

VG10 TECHNICAL SPECIFICATIONS

General Properties	Minimum	Maximum		Unit
Vacuum	5 % -0.05 1.5	80 % -0.810 24		[Vacuum] [Bar] [inHg]
Air flow	0	12		[Nl/min]
Payload	0 0	10 [kg] 22 [lb]		
Recommended workpiece size	10x10 0.5x0.5	500x500 20x20		[mm] [inch]
Vacuum cups	1	16		[pcs.]
Gripping time	-	0.35	-	[s]
Releasing time	-	0.20 -		[s]
Vacuum pump	Integrated, electric BL	DC		
Arms	4, adjustable by hand, 2	2 vacuum chann	iels	
IP Classification	IP54			
Dimensions (folded)	105 x 146 x 146 [mn 4.13 x 5.75 x 5.75 [inc			-
Dimensions (unfolded)	105 x 390 x 390 [mr 4.13 x 15.35 x 15.35 [inc			
Weight	1.70 [kg 3.75 [lb]			

POWER UP PRODUCTION

- Out-of-the-box deployment plug into the robot arm and configure the gripper to fit the product – provides fast productivity and ROI.
- No external air supply required **reduces maintenance costs and speeds deployment.**
- Dual gripping functionality **enables shorter** cycle time.

Applications:





Packaging & Palletizing

Pick & Place

VG10

Ch robot

Can be used with products of various sizes and materials, including:







Plastic Metal

Glossy Packaging



Touch & Go – automation made simple with a sense of touch

HEX-E QC TECHNICAL SPECIFICATIONS

General Properties	6-Axis Force/Torque Sensor		Unit		
	Fxy	Fz	Тху	Tz	
Nominal Capacity (N.C)	200	200	10	5.5	[N] [Nm]
Single axis deformation at N.C (typical)	± 1.7 ± 0.067	± 0.3 ± 0.011	± 2.5 ± 2.5	± 5 ± 5	[mm] [°] [inch] [°]
Resolution (Noise- free)	0.2	0.8	0.01	0.002	[N] [Nm]
IP Classification	67				
Dimensions	50 x 71 x 93 1.97 x 2.79 x 3.66			[mm] [inch]	

HEX-H QC TECHNICAL SPECIFICATIONS

General Properties	6-Axis Force/Torque Sensor		Unit		
	Fxy	Fz	Тху	Tz	
Nominal Capacity (N.C)	200	200	20	13	[N] [Nm]
Single axis deformation at N.C (typical)	± 0.6 ± 0.023	± 0.25 ± 0.009	± 2 ± 2	± 3.5 ± 3.5	[mm] [°] [inch] [°]
Resolution (Noise-free)	0.5	1	0.036	0.008	[N] [Nm]
IP Classification	67				
Dimensions	50 x 71 x 93 1.97 x 2.79 x 3.66			[mm] [inch]	

POWER UP PRODUCTION

- Flexible sensor extends automation **possibilities** to processes that weren't previously possible.
- Out-of-the-box integration reduces deployment time for precise insertion tasks from months to days.
- High-accuracy sensor technology **provides 95% better quality in insertion and assembly tasks.**
- Sensor-based applications speed cycle time by up to 60% to produce more with the same number of employees.
- Easy programming gets even **complex polishing tasks up and running in less than a day.**

Applications:







Surface Finishing

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hing Pick & Place

Assembly

Quality Testing and Inspection

HEX Force/Torque SENSOR

Can be used with products of various sizes and materials, including:







robot

Plastic

Wood

Glass



Quick Changer & Dual Quick Changer Bracket

With the Dual Quick Changer, you can now use two tools in one cycle, achieving higher utilization of your robots.



Our tools in action

RG2 Gripper

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For picking and placing items up to 2kg Maximum stroke 110mm

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robot

RG6 Gripper

For when you need a bigger grip - 160mm stroke and payload of 6kg

RG2-FT Gripper

For high-precision assembly applications where fingertip sensitivity is required

Gecko Gripper

For perforated or more fragile objects Leaves no mark on the surface Payload up to 6.5 kg

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YASKAWA

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todor Đ

VG10 Electrical Vacuum Gripper

For larger objects or applications where two parts should be moved separately Payload up to 10kg

Chrobot

HEX Sensor

For high precision insertion tasks. Handles variation like a pro Surface finishing, gluing

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Find an OnRobot partner near you

We sell our products through a global network of valued partners – who have the tools, software, inspiration and training to develop any collaborative application their customers can imagine. Find a partner near you at https://onrobot.com/en/partners. **Business Card**