



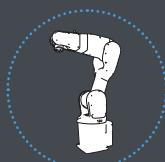
One Stop Shop for Collaborative Applications

Bringing the benefits of robotic automation
to manufacturers of all sizes

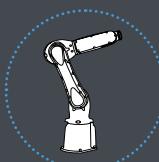


One System, Zero Complexity, Unlimited Opportunities

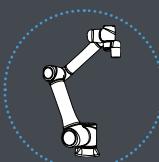
**Save integration time and simplify
deployment with our complete solution.**



ABB



Kawasaki



Techman



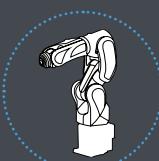
Fanuc



Kassow



Yaskawa



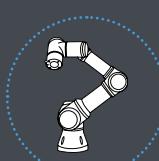
Nachi



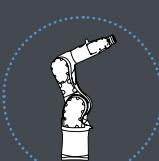
Doosan



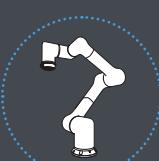
Epson



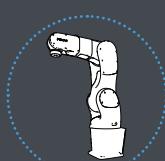
Universal
Robots



Kuka



Hanwha



Denso



Your robot*

QUICK CHANGER



Fits all robots



DUAL QUICK CHANGER

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



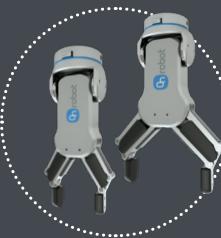
2FG7



2FG14



3FG15



RG2/RG6



Soft Gripper



Gecko Gripper



VG10



OnRobot
Sander



OnRobot
Screwdriver



HEX



OnRobot Eyes



VGC10



VGP20



2FGP20



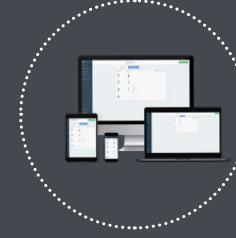
Lift100



D:PLOY
CNC



D:PLOY
Palletizing



D:PLOY
Packaging



D:PLOY
Transferring



D:PLOY

The next big leap in automation

The field of automation has grown tremendously over the last decades. Although many manufacturers have embraced automation, high barriers to implementation remain, especially among small and medium-sized companies. Deploying robotic applications on the manufacturing floor is still far too complex, time-consuming, and inflexible. With D:PLOY, this is a thing of the past. By reducing the complexity of robotic application deployment, manufacturers can finally reap the benefits of automation. The deployment will be faster, easier, and more affordable.

Finally reap the benefits of robotic automation and stay ahead of competition

- ~ D:PLOY breaks down automation barriers so you can automate faster, easier, and without risk
- ~ With dramatic time savings of up to 90% on deployment and re-deployment, automation comes at a lower cost and more attractive ROI
- ~ Reap the benefits of automation and solve your labor shortage problems, improve productivity, relieve operators from unwanted tasks, and stay ahead of the competition
- ~ Take control of your automation journey by making changes to the application yourself when production requirements change, and ensure minimum downtime

ONLINE
ONSITE
UP TO 90%
TIME SAVINGS

The D:PLOY platform combines hardware and software to deliver solutions that address various robotic applications. Today, D:PLOY supports the following applications, with more to follow.



D:PLOY
CNC



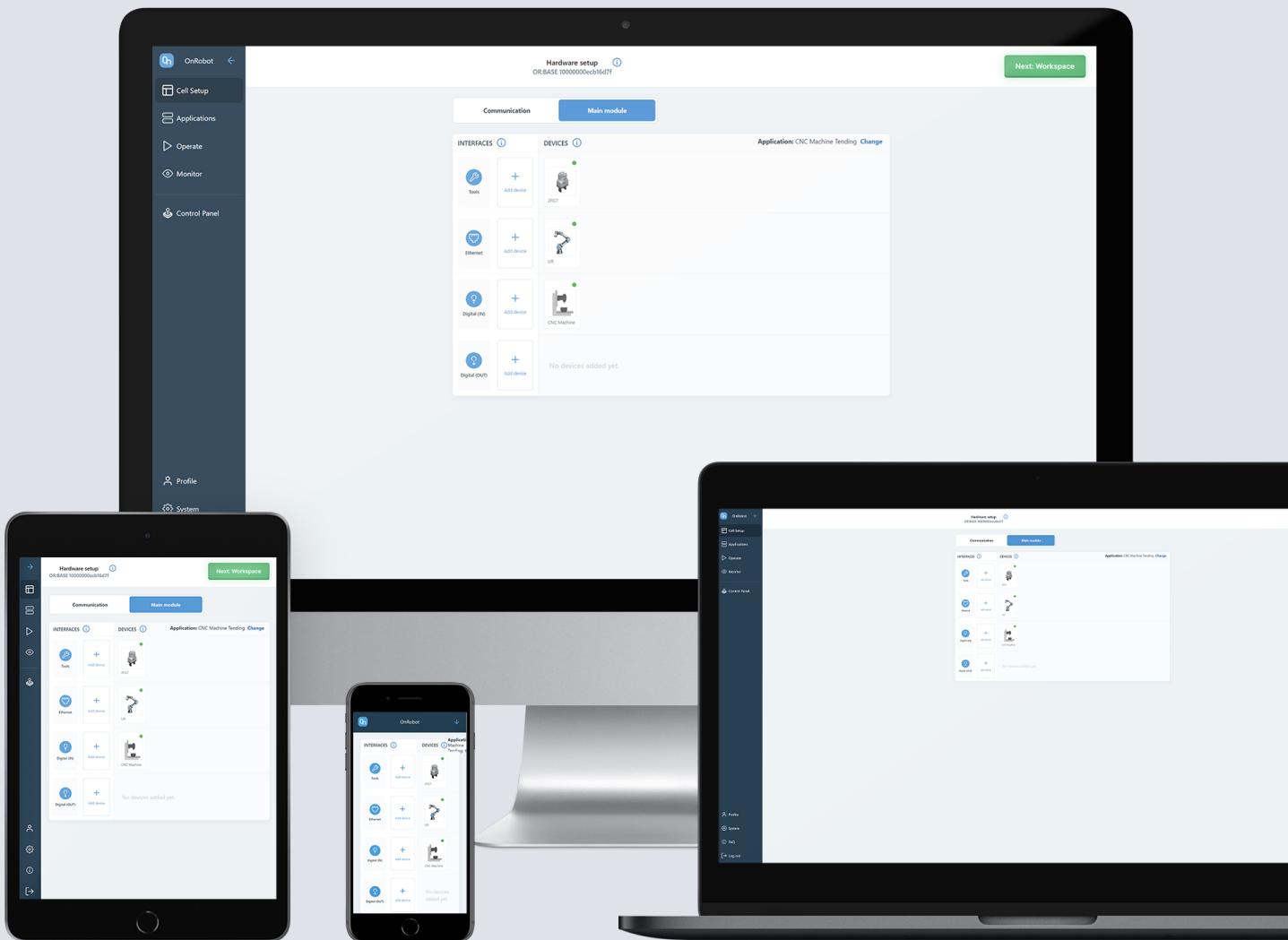
D:PLOY
Palletizing



D:PLOY
Packaging



D:PLOY
Transferring





Automate faster, easier, and without risk

D:PLOY offers an unprecedented reduction in robotic cell deployment time and complexity, resulting in dramatic time savings of up to 90% over conventional approaches.

D:PLOY helps bring down overall automation costs by reducing deployment and re-deployment time. Manufacturers will see faster, lower-cost implementation for better ROI, while gaining control over ongoing automation changes.



Take control of your automation journey

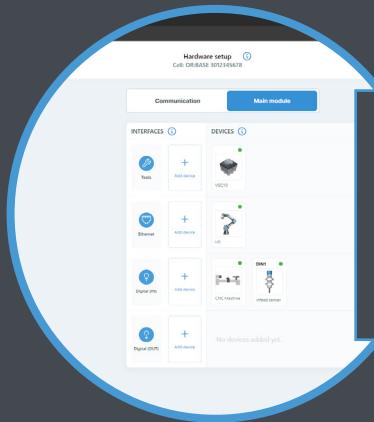
When production requirements change, D:PLOY gives you the flexibility to quickly re-deploy the application, for example when introducing a new part.

- Save time and money on re-deployments
- Make changes to the application yourself when you need it
- Access monitoring data on and off-site for improving productivity and reducing downtime

How D:PLOY works

The powerful D:PLOY platform allows you to build complete applications directly on the manufacturing floor in a few simple steps, with zero programming and zero simulations.

To get started, install the OR:BASE and cell components and configure your robot. Simply scan the QR codes provided to connect your device (e.g., tablet) to the OR:BASE, and then to login to D:PLOY.



1 Cell setup

Automatically discovers most of the installed hardware and configures interfaces, providing immediate control over them.



2 Workspace

Automatically generates a collision-free path depending on the obstacles defined.

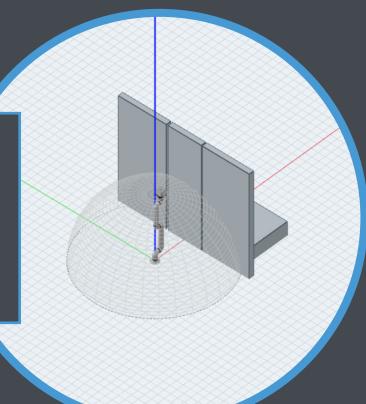
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2

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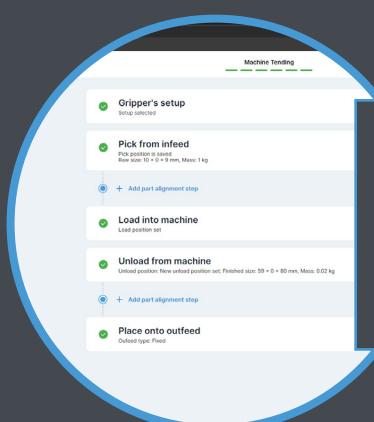
4

5



Application setup

Automatically generates all the program logic, signals exchange, events handling, and path planning of the robot for the entire application based on a few inputs.



Operate and monitor

Operate with ease and gain insights into performance indicators – all in real-time and with limited configuration needed.



Re-deploy

D:PLOY delivers the flexibility and re-deployment speed to respond quickly to changes in production requirements.



Versatile electric gripper for palletizing heavy cardboard boxes, open boxes and other containers that cannot be gripped with vacuum



TECHNICAL SPECIFICATIONS

| Finger Grip Properties | Minimum | Typical | Maximum | Unit |
|--|---------------------------|------------|---------|--------|
| Payload | - | - | 20 | [kg] |
| | - | - | 44.1 | [lb] |
| Total stroke | - | 260 | - | [mm] |
| | - | 10.24 | - | [inch] |
| Grip width range | 170 | - | 430 | [mm] |
| | 6.69 | - | 16.93 | [inch] |
| Gripping repeatability | - | +/- 0.5 | - | [mm] |
| | - | +/- 0.0197 | - | [inch] |
| Gripping force | 80 | - | 400 | [N] |
| Gripping speed | 16 | - | 180 | [mm/s] |
| Gripping time (incl. brake activation) | - | 600 | - | [ms] |
| Hold workpiece if power loss? | Yes | | | |
| Motor | Integrated, electric BLDC | | | |
| IP Classification | 54 | | | |
| Dimensions | 400 x 121.6 x 188 | | | [mm] |
| | 15.75 x 4.79 x 7.4 | | | [inch] |
| Weight | 3.5 | | | [kg] |
| | 7.72 | | | [lb] |

| Vacuum Grip Properties | Minimum | Typical | Maximum | Unit |
|---|-------------------------------------|---------|---------|-----------|
| Vacuum | 5 | - | 60 | [%Vacuum] |
| | - 0.05 | - | - 0.607 | [Bar] |
| | 1.5 | - | 17.95 | [inHg] |
| Air flow | 0 | - | 12 | [L/min] |
| Payload (with delivered attachments) | - | - | 2.5 | [kg] |
| | - | - | 5.51 | [lb] |
| Vacuum cups | 1 | - | 4 | [pcs] |
| Gripping time (measured with vacuum target 40%) | - | 0.25 | - | [s] |
| Release time | - | 0.4 | - | [s] |
| Vacuum pump | Integrated, electric BLDC | | | |
| Dust filters | Integrated 50 µm, field replaceable | | | |



POWER UP PRODUCTION

- Highly versatile palletizing gripper with wide stroke and customizable arms to handle heavy or open boxes, shelf-ready products and other containers that can't be gripped with vacuum
- Integrated vacuum gripper handles slip sheets without changing the gripper or requiring other handling method
- Off-the-shelf gripper saves significant engineering effort and shortens deployment time
- Electric gripper offers fast out-of-the-box deployment without the complexity and costs of external air supply

VGP20

Industry's most powerful
electric vacuum gripper



POWER UP PRODUCTION

- Industry's most powerful electric vacuum gripper saves up to 90% over pneumatic grippers
- Ideal for palletizing cardboard boxes and other irregular shapes and porous surfaces
- Highly versatile gripper with unlimited customization fits any application
- Built-in intelligence and multichannel functionality ensure failsafe, flexible operation
- Complete out-of-the-box vacuum gripper offers fast, easy deployment with any leading robot

TECHNICAL SPECIFICATIONS

| General Properties | Minimum | Typical | Maximum | Unit |
|--|------------------------------------|---------------------|-------------------|----------|
| Vacuum | 5% | - | 60% | [Vacuum] |
| | -0.05 | - | -0.607 | [Bar] |
| | 1.5 | - | 17.95 | [inHg] |
| Air Flow in total | 0 | - | 48 | [L/min] |
| Air flow on each channel | 0 | - | 12 | [L/min] |
| Payload (with default attachments) | - | 10 ⁽¹⁾ | 20 ⁽²⁾ | [kg] |
| | - | 22.04 | 44.09 | [lb] |
| Vacuum cups | 1 | 16 | 16 | [pcs.] |
| Gripping time (measured with vacuum target 40%) | - | 0.25 ⁽³⁾ | - | [s] |
| Releasing time | - | 0.4 ⁽³⁾ | - | [s] |
| Noise level ⁽⁴⁾ | - | 67 | 71 | [dB(A)] |
| Vacuum pump | Integrated, electric BLDC | | | |
| Dust filters | Integrated 50µm, field replaceable | | | |
| IP Classification | IP54 | | | |
| Dimensions | 264 x 184 x 92 | | | [mm] |
| | 10.39 x 7.24 x 3.62 | | | [inch] |
| Weight | 2.55 | | | [kg] |
| | 5.62 | | | [lb] |



Long-stroke, high-payload
elevator enables a wide range
of palletizing tasks



POWER UP PRODUCTION

- Long-stroke elevator creates 7th axis for leading robot arms to enable a wide range of future-proofed palletizing tasks
- High-payload elevator with minimal deflection ensures precise positioning of boxes – even at high speeds
- Robust design for reliable, long product life under all typical manufacturing conditions
- Integrated safety features with TÜV-certified stop functionality to facilitate collaborative deployment
- Out-of-the-box integration with OnRobot palletizing solution shortens deployment time

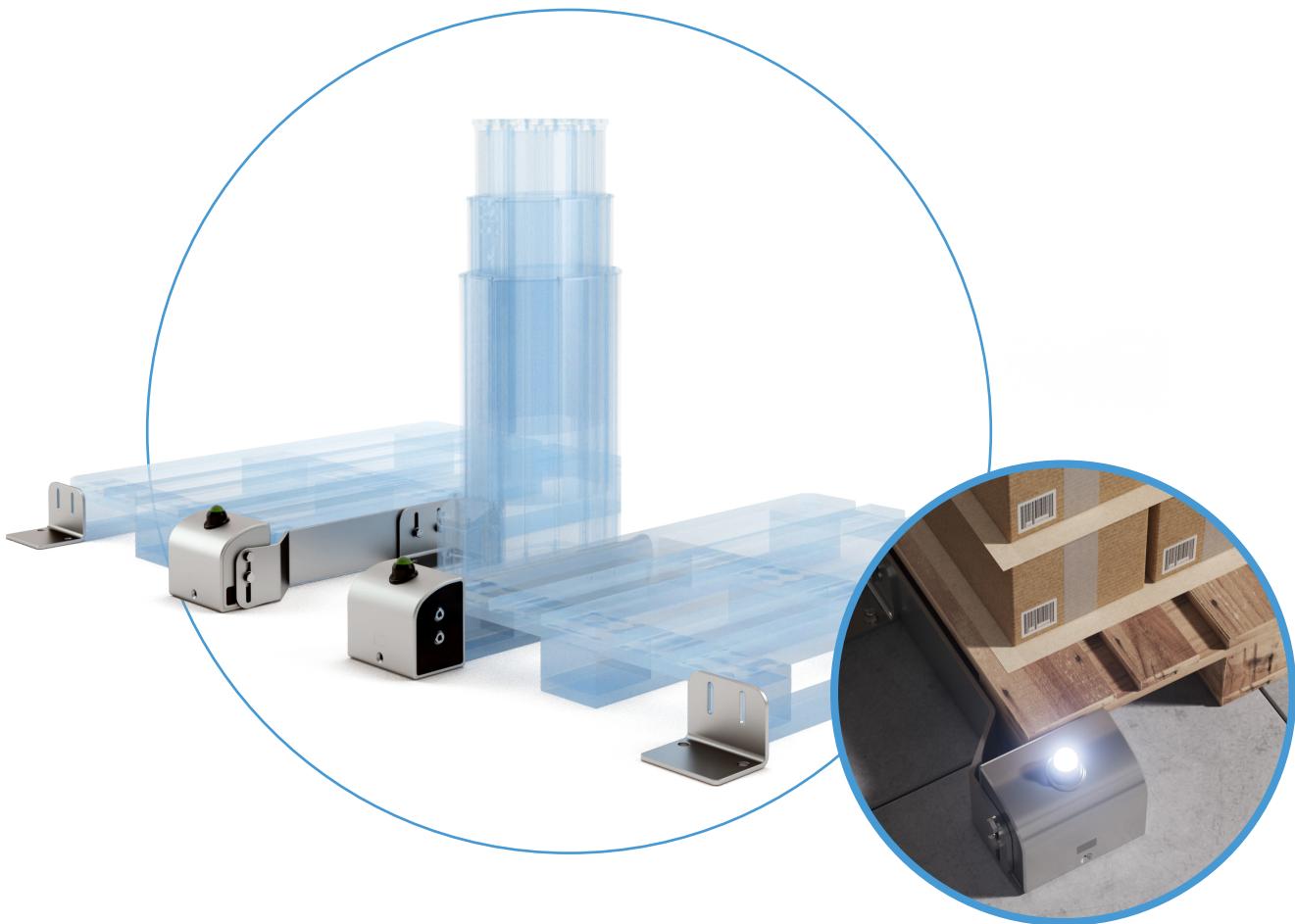
TECHNICAL SPECIFICATIONS

| General Properties | Minimum | Typical | Maximum | Unit |
|----------------------------|----------------------|---------|----------------------|--------|
| Payload | 0 | - | 100 | [kg] |
| | 0 | - | 220 | [lb] |
| Height above floor | 730 | - | 1630 | [mm] |
| | 28.74 | - | 64.17 | [inch] |
| Stroke of lift | 0 | - | 900 | [mm] |
| | 0 | - | 35.43 | [inch] |
| Lift speed | 0 | - | 100 | [mm] |
| | 0 | - | 3.39 | [inch] |
| Weight | 86 | | | [kg] |
| | 189.6 | | | [lb] |
| Dimensions [L x W x D] | 730 x 325 x 492 | - | 1630 x 325 x 492 | [mm] |
| | 28.74 x 12.8 x 19.37 | - | 64.17 x 12.8 x 19.37 | [inch] |
| Interfaces / Communication | Modbus | | | |
| Storage temperature | 0 | - | 60 | [°C] |
| | 32 | - | 140 | [°F] |
| IP Classification | IP54 | | | |



Pallet Station

Off-the-shelf fixture helps with pallet positioning for more reliable palletizing jobs



POWER UP PRODUCTION

- Durable, floor-mounted pallet fixture that ensures consistent pallet positioning and can withstand hits from stackers and trucks
- Includes a built-in sensor for detecting pallet presence
- Off-the-shelf fixture saves significant engineering effort and shortens deployment time
- Durable floor mounted pallet fixtures designed to ensure consistent positioning.

TECHNICAL SPECIFICATIONS

| General Properties | Minimum | Typical | Maximum | Unit |
|----------------------------|---------------------|---------|-----------------|--------|
| Sensor activation zone | 0 | - | 6 | [mm] |
| | 0 | - | 0.236 | [inch] |
| Weight | 17 | | | [kg] |
| | 34.5 | | | [lb] |
| Dimensions [L x W x D] | 828 x 428.5 x 207.5 | - | 828 x ∞ x 207.5 | [mm] |
| | 32.6 x 16.87 x 8.17 | - | 32.6 x ∞ x 8.17 | [inch] |
| Pallet sizes | All sizes * | | | |
| Interfaces / communication | I/O | | | |
| Storage temperature | 0 | - | 60 | [°C] |
| | 32 | - | 140 | [°F] |
| IP Classification | IP54 | | | |

Parallel gripper for tight spaces
and demanding payloads



POWER UP PRODUCTION

- Complete, easy-to-program, collaborative parallel gripper gets to work fast in a wide range of applications
- Strong parallel gripper is easy to deploy in tight spaces and handles even demanding payload requirements
- Get fast ROI with a single flexible, intelligent, and precise gripper that can be easily customized and adapted for many different tasks
- Ready for use almost anywhere, with IP67 rating for harsh environments and ISO Class 5 certification for cleanroom use

TECHNICAL SPECIFICATIONS

| General Properties | | | Minimum | Typical | Maximum | Unit | |
|-------------------------------|----------|------------------|---------------------------------------|----------------------|--------------|--------------|--|
| Payload Force Fit | | | - | - | 7 [15.5] | kg [lb] | |
| Payload Form Fit | | | - | - | 11 [24.3] | kg [lb] | |
| Total stroke | | | - | 38 | - | mm | |
| Grip Width range | External | Fingers inwards | 1 [0.039] | - | 39 [1.53] | mm [inch] | |
| | | Fingers outwards | 35 [1.37] | - | 73 [2.87] | mm [inch] | |
| | Internal | Fingers inwards | 11 [0.43] | - | 49 [1.92] | mm [inch] | |
| | | Fingers outwards | 45 [1.77] | - | 83 [3.26] | mm [inch] | |
| Gripping force | | | 20 | - | 140 | N | |
| Gripping speed | | | 16 | - | 450 | mm/s | |
| Gripping repeatability | | | - | +/-0.1 [+/-0.004] | - | mm [inch] | |
| Hold workpiece if power loss? | | | Yes | | | | |
| IP Classification | | | IP67 | | | | |
| Dimensions [L, W, D] | | | 144 x 90 x 71 [5.67 x 3.54 x 2.79] | | | mm [inch] | |
| Weight | | | 1.14 [2.4] | | | kg [lb] | |



2FG14

Powerful electric parallel gripper



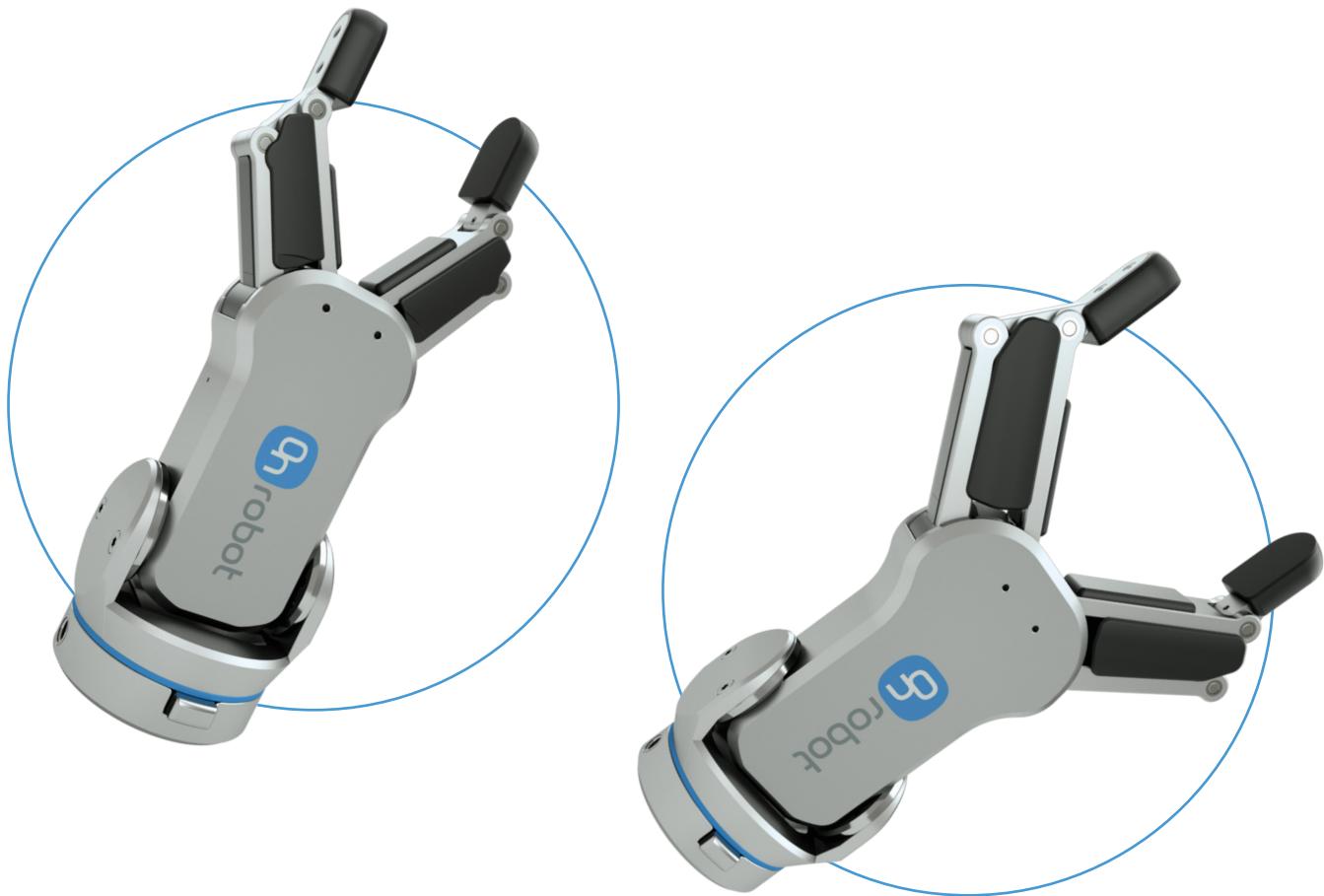
POWER UP PRODUCTION

- Effortlessly handle larger and heavier parts with the powerful 2FG14, boasting double the force and eight times the torque of its predecessor.
- Enhanced torque offers unparalleled flexibility in designing custom fingers, easily adaptable to your unique application requirements.
- Robust design ensures consistent and reliable performance even in demanding industrial settings, offering durability that powers your operations forward.
- Double gripping power for increased productivity across applications, ensuring you get the most out of your robot payload and application.

TECHNICAL SPECIFICATIONS

| General Properties | | | Minimum | Typical | Maximum | Unit | |
|--|----------|------------------|------------------|---------|---------|--------|--|
| Payload Force Fit | | | - | - | 14 | [kg] | |
| Payload Form Fit | | | - | - | 20 | [kg] | |
| Total stroke | | | - | 50 | - | [mm] | |
| Grip Width range | External | Fingers inwards | 5 | - | 55 | [mm] | |
| | | Fingers outwards | 55 | - | 105 | [mm] | |
| | Internal | Fingers inwards | 17.6 | - | 67.6 | [mm] | |
| | | Fingers outwards | 67.6 | - | 117.6 | [mm] | |
| Gripping repeatability | | | - | +/- 0.1 | - | [mm] | |
| Gripping force | | | 40 | - | 280 | [N] | |
| Gripping force tolerance | | | - | - | +/-10 | [N] | |
| Gripping speed | | | 16 | - | 100 | [mm/s] | |
| Gripping time (including brake activation) | | | - | 200 | - | [ms] | |
| Hold workpiece if power loss? | | | Yes | | | | |
| IP Classification | | | IP67 | | | | |
| Dimensions [L, W, D] | | | 155.2 x 115 x 70 | | | [mm] | |
| Weight | | | 1.45 | | | [kg] | |





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%



RG2 TECHNICAL SPECIFICATIONS

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

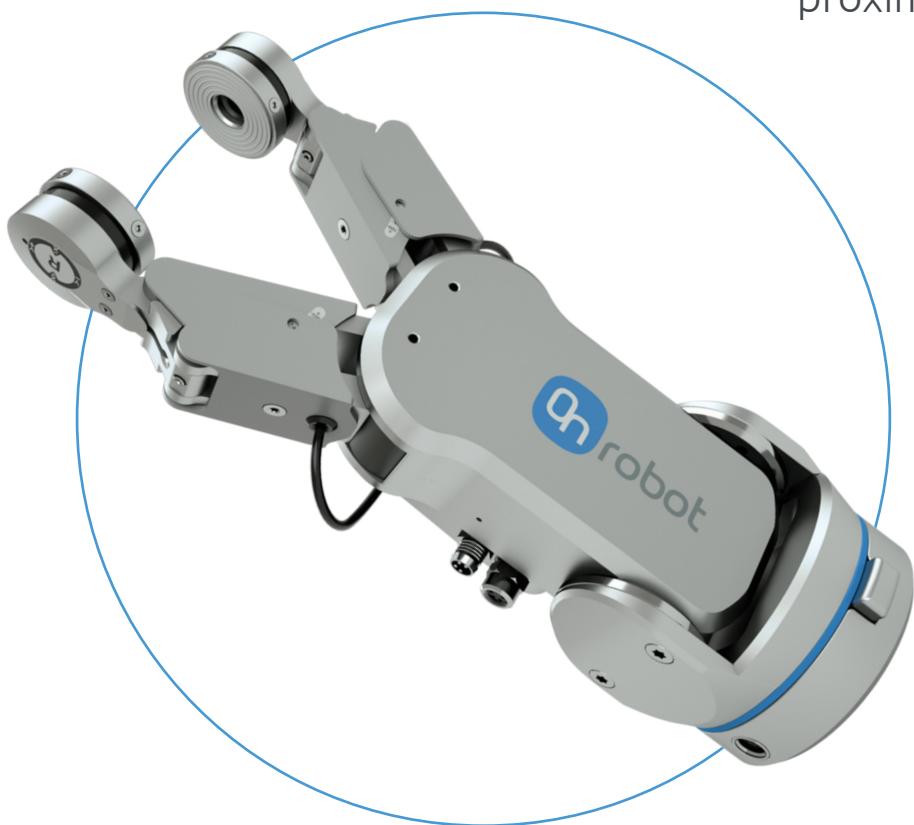
RG6 TECHNICAL SPECIFICATIONS

| General Properties | Minimum | Maximum | Unit |
|-----------------------------|---------|---------|--------|
| Payload Force Fit | - | 6 | [kg] |
| | - | 13,2 | [lb] |
| Total stroke (adjustable) | 0 | 160 | [mm] |
| | - | 6.3 | [inch] |
| Gripping force (adjustable) | 25 | 120 | [N] |
| Gripping speed | 51 | 160 | [mm/s] |
| Gripping time | 0.05 | 0.15 | s |
| IP Classification | IP54 | | |

RG2-FT

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.



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%.

RG2-FT TECHNICAL SPECIFICATIONS

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

| Force Sensor Properties | Fxy | Fz | Txy | Tz | Units |
|-------------------------|-----|-----|-------|-------|----------|
| Nominal capacity (N.C.) | 20 | 40 | 0.7 | 0.5 | [N] [Nm] |
| Noise free resolution | 0.1 | 0.4 | 0.008 | 0.005 | [N] [Nm] |





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 | 15 33 | [kg] [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 BLDC | | |
| Arms | 4, adjustable by hand, 2 vacuum channels | | |
| IP Classification | IP54 | | |
| Dimensions (folded) | 105 x 146 x 146 4.13 x 5.75 x 5.75 | | [mm] [inch] |
| Dimensions (unfolded) | 105 x 390 x 390 4.13 x 15.35 x 15.35 | | [mm] [inch] |
| Weight | 1.62 3.57 | | [kg] [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.



VGC10

Compact vacuum gripper
for all your needs



POWER UP PRODUCTION

- Flexible electric vacuum gripper with unlimited customization fits all your application needs
- Small, lightweight gripper is perfect for tight spaces but with plenty of power for objects up to 15kg
- No external air supply needed for reduced maintenance costs and faster deployment

VGC10 TECHNICAL SPECIFICATIONS

| General Properties | Minimum | Typical | Maximum | Unit |
|----------------------------|---------------------------------------|---------|----------------------|-----------------------------|
| Vacuum | 5 % -0.05 1.5 | - - | 80 % -0.810 24 | [Vacuum] [Bar] [inHg] |
| Air flow | 0 | | 12 | [NL/min] |
| Payload | 0 | - | 15 33 | [kg] [lb] |
| Recommended workpiece size | Unlimited, depends on custom arms | | | |
| Vacuum cups | 1 | - | 7 | [pcs.] |
| Gripping time | - | 0.35 | - | [s] |
| Releasing time | - | 0.20 | - | [s] |
| Vacuum pump | Integrated, electric BLDC | | | |
| Arms | Replaceable, customizable | | | |
| Dust filters | Integrated 50µm, field replaceable | | | |
| IP Classification | IP54 | | | |
| Dimensions (folded) | 101 x 100 x 100 3.97 x 3.94 x 3.94 | | | [mm] [inch] |
| Weight | 0.814 1.79 | | | [kg] [lb] |





POWER UP PRODUCTION

- Electric magnetic gripper offers fast out-of-the-box deployment without the complexity and costs of external air supply
- Built-in intelligence with easily adjustable force and part detection ensures reliable handling of a wide range of part sizes and weights
- Fast, compact and customizable gripper to fit all your application needs
- Ensure safe and reliable operation by maintaining grip even after power loss or emergency stop



TECHNICAL SPECIFICATIONS

| General Properties | Minimum | Typical | Maximum | Unit |
|--|---------------------------|---------|---------|---------|
| Payload | 0.001 | - | 10 | [kg] |
| | 0.002 | - | 22.046 | [lb] |
| Workpiece size required for full force | Ø 65.4 | - | - | [mm] |
| | Ø 2.574 | - | - | [inch] |
| Magnetism resolution | - | 100 | - | [steps] |
| Gripping time (including brake activation) | - | 300 | - | [ms] |
| Hold workpiece if power is lost? | Yes | | | |
| Storage temperature | 0 | - | 55 | [°C] |
| | 32 | - | 131 | [°F] |
| Motor | Integrated, electric BLDC | | | |
| IP Classification | IP67 | | | |
| Dimensions [Ø, L] | 71 x 80.2 | | | [mm] |
| | 2.8 x 3.24 | | | [inch] |
| Weight | 0.8 | | | [kg] |
| | 1.763 | | | [lb] |

Gecko Gripper

SP1/SP3/SP5



TECHNICAL SPECIFICATIONS

POWER UP PRODUCTION

- Compact, lightweight Gecko Gripper requires no cables, electricity, air, or programming for cost-effective, plug-and-play performance
- Innovative adhesive gripper for flat, smooth, or perforated objects automates tasks that were previously not possible
- No-mark gripping even for shiny surfaces means no cleaning step is required, saving time and improving productivity
- No requirement for external air supply reduces noise and dust, lowers maintenance costs, and speeds deployment

| General Properties | | | | Unit |
|--------------------------------|---------|---|---------------|-------------|
| Maximum payload | SP1 | 1 / 2.2 | | [kg] / [lb] |
| | SP3 | 3 / 6.6 | | [kg] / [lb] |
| | SP5 | 5 / 11 | | [kg] / [lb] |
| Preload required | Minimum | SP1: 2.8 SP3: 8.2 SP5: 11.6 | | [N] |
| | Medium | SP1: 8.2 SP3: 23.4 SP5: 33 | | [N] |
| | Maximum | SP1: 13.3 SP3: 38.6 SP5: 54.4 | | [N] |
| Detachment time | | 100-1000 (dependent on robot speed) | | [msec] |
| Holds workpiece on power loss? | | Yes. How long? Potentially days if well centered and undisturbed | | |
| IP Classification | | IP42 | | |
| Dimensions (HxW) | | 69 x 71 / 2.7 x 2.8 | [mm] / [inch] | |
| Weight | SP1 | 0.267 / 0.587 | | [kg] / [lb] |
| | SP3 | 0.297 / 0.653 | | [kg] / [lb] |
| | SP5 | 0.318 / 0.7 | | [kg] / [lb] |

| Pads general properties | | | Unit |
|-------------------------|---|--|----------|
| Material | Proprietary silicone blend | | |
| Wear properties | Depends on surface roughness | | |
| Change-out interval | ~200.000 | | [cycles] |
| Cleaning systems | 1) OnRobot cleaning station 2) Silicone roller 3) Isopropyl Alcohol and lint-free cloth | | |
| Cleaning interval | variable | | |
| Recovery | 100% | | |



Explore new automation possibilities with certified food-grade soft gripper



TECHNICAL SPECIFICATIONS

POWER UP PRODUCTION

- Explore new possibilities for food and beverage automation with certified food-grade soft gripper
- Easily handle a wide array of irregular shapes and delicate objects with flexible silicon-molded gripper
- Safely handle fragile and delicate objects for higher production quality and reduced waste
- No external air supply means no dust, no noise, no complexity, and no additional costs

| General Properties | Minimum | Typical | Maximum | Unit |
|---------------------------------|---|------------|-------------------------|---------------|
| Material | Two-component silicone rubber | | | |
| Food approval | FDA 21 CFR 177.2600 & EC/EU - 1935/2004 | | | |
| Operation cycles | 2.000.000 | | | |
| Operation temperature | -20 / -4 | | 80 / 176 | [C] / [F] |
| SG-tool attachment mechanism | Quick-lock and Smart-lock | | | |
| Weight Base Part | 0.77 / 1.69 | | | [kg] / [lb] |
| SG-a-H / SG-a-S | | | | |
| Max payload | - | - | 2.2 / 1.5 4.85 / 3.3 | [kg] / [lb] |
| Work range, Grip dimensions (A) | 11 / 0.43 | - | 75 / 2.95 | [mm] / [inch] |
| Work range, Grip depth (B) | - | 38 / 1.496 | - | [mm] / [inch] |
| Soft part (SG-a-S) (C) | - | 16 / 0.63 | - | [mm] / [inch] |
| Dimensions (HxØmax) | 76x112 / 3 x 4.4 | | | [mm] / [inch] |
| Weight (smart lock included) | 0.168 / 0.37 | | | [kg] / [lb] |
| SG-b-H | | | | |
| Max payload | - | - | 1.1 / 2.42 | [kg] / [lb] |
| Work range, Grip dimensions (A) | 24 / 0.94 | - | 118 / 4.65 | [mm] / [inch] |
| Work range, Grip depth (B) | - | 40 / 1.57 | - | [mm] / [inch] |
| Dimensions (HxØmax) | 77x109 / 3.03 x 4.29 | | | [mm] / [inch] |
| Weight (smart lock included) | 0.172 / 0.379 | | | [kg] / [lb] |



OnRobot Screwdriver

Smart screwdriving solution
for multiple processes



POWER UP PRODUCTION

- Smart screwdriver easily automates multiple screwdriving processes with no downtime for manual changeovers
- Get the job done right — consistently and faster — with dynamic force control and intelligent error detection
- Expand your collaborative automation possibilities with built-in protective functions
- Get fast and easy deployment with automatic screw-feeding system and OnRobot's easy One System setup for any leading robot

TECHNICAL SPECIFICATIONS

| General Properties | | Minimum | Typical | Maximum | Unit |
|---------------------------------|--------------------------------------|-------------|-------------|----------------|---------------|
| Screw size range | | M1.6 | - | M6 | |
| Torque range | | 0.15 / 0.11 | - | 5 / 3.68 | [Nm] / [lbft] |
| Torque accuracy | If torque < 1.33Nm/0.98lbft | - | 0.04 / 0.03 | - | [Nm] / [lbft] |
| | If torque > 1.33Nm/0.98lbft | - | 3 | - | [%] |
| Output speed | | - | - | 340 | [RPM] |
| Screw length within full safety | | - | - | 35 / 1.37 | [mm] / [inch] |
| Shank stroke (screw axis) | | - | - | 55 / 2.16 | [mm] / [inch] |
| Shank preload (adjustable) | 0 | 10 | 25 | | [N] |
| Safety feature force | 35 | 40 | 45 | | [N] |
| Motor (x2) | Integrated, electric BLDC | | | | |
| IP Classification | IP54 | | | | |
| Dimensions | 308x86x114 12.1x3.4x4.5 | | | [mm] [inch] | |
| Weight | 2.5 / 5.51 | | | [kg] / [lb] | |
| Screw presenter sizes | M1.6 ; M2 ; M2.5 ; M3 ; M4 ; M5 ; M6 | | | | |



Complete surface finishing solution with fast and easy setup reduces complexity



POWER UP PRODUCTION

- Powerful and durable electric sander requires no compressed air, significantly reducing running and maintenance costs
- Cost-effective Grit Changer allows automatic switching between sanding grits without operator intervention for increased efficiency
- Flexible tool can be used on a wide range of part geometries and materials
- Sensing capabilities ensure precise adaptation to surface variations or part misalignment, improves product quality and consistency while reducing scrap
- Eliminates operator fatigue and hazards for easy compliance with local health and safety regulations

TECHNICAL SPECIFICATIONS

| General Properties | Minimum | Typical | Maximum | Unit |
|---------------------------------------|--|---------|------------|-----------|
| Pad diameter | - | - | 127 [5] | mm [inch] |
| Pad height | - | - | 9.5 [0.37] | mm [inch] |
| Orbit size | - | - | 5 [3/16] | mm [inch] |
| Rotation speed | 1,000 | - | 10,000 | RPM |
| Ped type (3M: 20353) | Clean Sanding Disc Pad | | | |
| Pad media type | Hookit™ | | | |
| Pad weight | 0.1 [0.22] | | | kg [lb] |
| Weight | 1.2 [2.645] | | | kg [lb] |
| IP rating | IP54 | | | |
| Dimensions (outer) | 87 x 123 x 214 [3.42 x 4.84 x 8.42] | | mm [inch] | |
| Operating Conditions | Minimum | Typical | Maximum | Unit |
| Sanding power | - | 150 | - | W |
| Operation voltage | External voltage | - | 30 | V |
| | External power | - | 150 | W |
| | Tool connector voltage | - | 24 | V |
| | Tool connector power | - | 2.4 | W |
| Operation temperature | 0 [32] | - | 50 [122] | °C [°F] |
| Noise level at 10,000 RPM (3,000 RPM) | - | 74 [44] | - | [dB] |



HEX Force / Torque SENSOR

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



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.

HEX-E QC TECHNICAL SPECIFICATIONS

| General Properties | 6-Axis Force/Torque Sensor | | | Unit | |
|--|------------------------------------|------------------|----------------|------------|------------------------|
| | Fxy | Fz | Txy | 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 | Txy | 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] |



Adding vision to robotic applications has never been easier



POWER UP PRODUCTION

- Adding vision to robotic applications has never been easier, with one-picture calibration, fast programming and seamless gripper integration
- Flexible, adaptable vision system with on-robot or external mounting is ideal for almost any collaborative application
- Inspect objects using color and contour detection — with or without a robot, and ensure consistent quality

- Affordable, efficient 2.5D vision offers depth perception for varying heights or stacked objects
- Easily sort, pick and place unstructured applications with high reliability using any robot arm
- One-shot detection for multiple objects minimizes cycle time
- Automatic landmark enables dynamic working environments and mobile robot setups

TECHNICAL SPECIFICATIONS



| Camera Characteristics | | Unit |
|---|---|-------------------|
| Interface | | USB-C 3.x |
| Output Resolution | 1280 x 720 | [px] |
| Working distance | 400-1000 [15.75 – 39.37] | mm [inch] |
| Operating Temperature | 0 – 35 [32 – 95] | °C [°F] |
| IP rating | IP 54 | |
| Weight | 0.260 [0.57] | kg [lb] |
| Eyes Features | | Unit |
| Type of vision system | 2.5 D | |
| Minimum part size | 10x10 or 15 diameter [0.39x0.39 or 0.59 diameter] | |
| Applications Supported | Detection, Sorting, Inspection, Landmark | |
| Mounting options supported | Robot and External | |
| Reconfigurability when Robot mounted | 12 configurations (4 x 3) | |
| | Around robot's flange | Tilt orientations |
| | 0 - 90 - 180 - 270 | [degrees] |
| Detection Repeatability | < 2 [< 0.078] | |
| Detection Accuracy (typical) measured at 500 mm | External Mount | Robot Mount |
| | 2 [0.078] | 2 [0.078] |
| Minimum Inspection Defect Size | 5 [0.197] | |
| Landmark accuracy ** | Waypoint distance from Landmark | Minimum error |
| | 200 [7.874] | 0.2635 [0.0104] |
| | 500 [19.68] | 0.6586 [0.0259] |
| | 1000 [39.37] | 1.3173 [0.0519] |
| | Typical error | Maximum error |
| | 0.6596 [0.0260] | 0.9500 [0.0374] |
| | 1.6490 [0.0649] | 2.3750 [0.0935] |
| | 3.2981 [0.1298] | 4.7500 [0.1870] |
| | | mm [inch] |



3FG15

Flexible, large-stroke
3-finger gripper



POWER UP PRODUCTION

- Flexible production - large-stroke optimizes CNC lathe-tending for multiple part sizes with a single 3-finger gripper
- Accurate centric positioning drives higher quality, consistency, and output with minimal programming
- Strong, stable grip and 3 contact points makes gripper fast and easy to redeploy for multiple processes
- Accomplish more with customizable fingertips to flexibly grip a wide range of part sizes and shapes

TECHNICAL SPECIFICATIONS

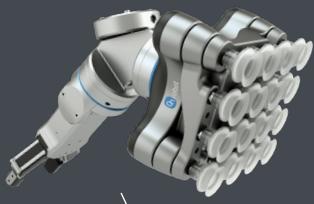
| General Properties | | Minimum | Typical | Maximum | Unit |
|---|--------------------------------------|-------------|-------------|------------|---------------|
| Payload Force Fit | | - | - | 10 / 22 | [kg] / [lb] |
| Payload Form Fit | | - | - | 15 / 33 | [kg] / [lb] |
| Grip Diameter* | External | 4 / 0.16 | - | 152 / 5.98 | [mm] / [inch] |
| | Internal | 35 / 1.38 | - | 181 / 7.12 | [mm] / [inch] |
| Finger position resolution | - | 0.1 / 0.004 | - | | [mm] / [inch] |
| Repetition accuracy | - | 0.1 / 0.004 | 0.2 / 0.007 | | [mm] / [inch] |
| Gripping force | 10 | - | - | 240 | [N] |
| Gripping force (adjustable) | 3 | - | - | 100 | [%] |
| Gripping speed (diameter change) | - | - | - | 125 | [mm/s] |
| Gripping time (including brake activation) | - | 500 | - | | [ms] |
| Hold workpiece if power loss? | Yes | | | | |
| IP Classification | IP67 | | | | |
| Dimensions [L, W, Ø] | 156 x 158 x 180 / 6.14 x 6.22 x 7.08 | | | | |
| Weight | 1.15 / 2.5 | | | | |



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.

DUAL QUICK CHANGER



Dual Gripper:

- Dual gripper speeds cycle time and can improve productivity by 50% or more.
- Increased productivity offers faster payback, with ROI in as little as 3 months.

Quickly switch between tools to meet changing production needs.

QUICK CHANGER

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.





Contact details:

OnRobot A/S
Teglværksvej 47H
5220 Odense SØ
Denmark
+4553535737
sales@onrobot.com
www.onrobot.com



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>.