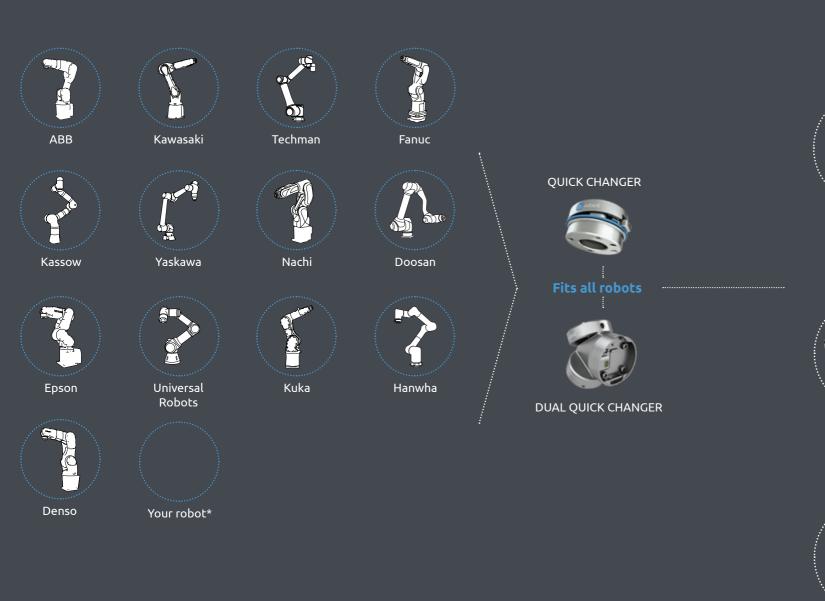


# <sup>Q</sup>n robot

# One System, Zero Complexity, **Unlimited Opportunities**

Save integration time and simplify deployment with our complete solution.



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

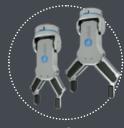




2FG14



3FG15



RG2/RG6



Soft Gripper



Gecko Gripper



VG10



OnRobot Sander







HEX



**OnRobot Eyes** 



VGC10







2FGP20





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 mediumsized companies. Deploying robotic applications on the manufacturing floor is still far too complex, timeconsuming, 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

- barriers so you can automate faster, easier, and without risk
- to 90% on deployment and redeployment, 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
- journey by making changes to the application yourself when production requirements change, and ensure minimum downtime



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



Palletizing

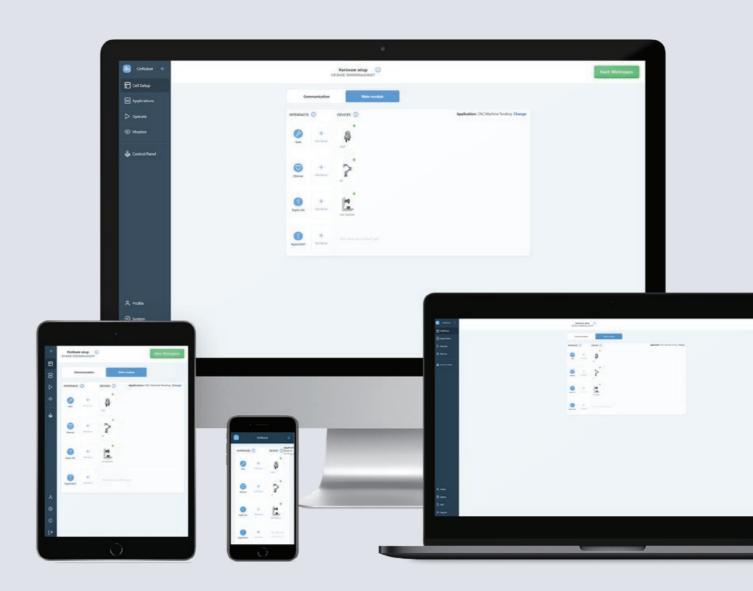




Packaging

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 redeployment 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 redeployments
- Access monitoring data on and offsite 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.



#### Cell setup

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



#### Workspace

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

3

5



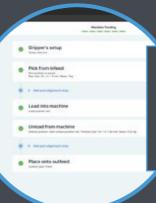
#### Application setup

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
Dayload	-	-	20	[kg]
Payload	-	-	44.1	[lb]
Total stroke	-	260	-	[mm]
TOLALSLIOKE	-	10.24	-	[inch]
Caio width and a	170	-	430	[mm]
Grip width range	6.69	-	16.93	[inch]
Cainain a constability	-	+/- 0.5	-	[mm]
Gripping repeatability	-	+/- 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	i	
Motor	Ir	ntegrated, ele	ectric BLDC	
IP Classification		54		
Dimensions	40	88	[mm]	
Difficusions	15	[inch]		
Maiabb		3.5		[kg]
Weight		[lb]		

Vacuum Grip Properties	Minimum	Typical	Maximum	Unit	
	5	-	60	[%Vacuum]	
Vacuum	- 0.05	-	- 0.607	[Bar]	
	1.5	-	17.95	[inHg]	
Air flow	0	-	12	[L/min]	
Payload	-	-	2.5	[kg]	
(with delivered attachments)	-	-	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	Integ	rated 50 µ	m, field repla	aceable	

# 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-ofthe-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

General Properties	Minimum	Typical	Maximum	Unit
	5%	-	60%	[Vacuum]
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 <sup>(1)</sup>	20 (2)	[kg]
rayload (with default attachments)	-	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	I	ntegrated, e	electric BLDC	
Dust filters	Integ	rated 50µm	, field replace	able
IP Classification		IP	54	
Dimensions	2	[mm]		
Differisions	10.	[inch]		
Weight		2.55		[kg]
vveignic		5.62		[lb]









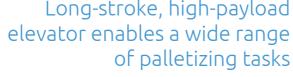








Long-stroke, high-payload







### **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





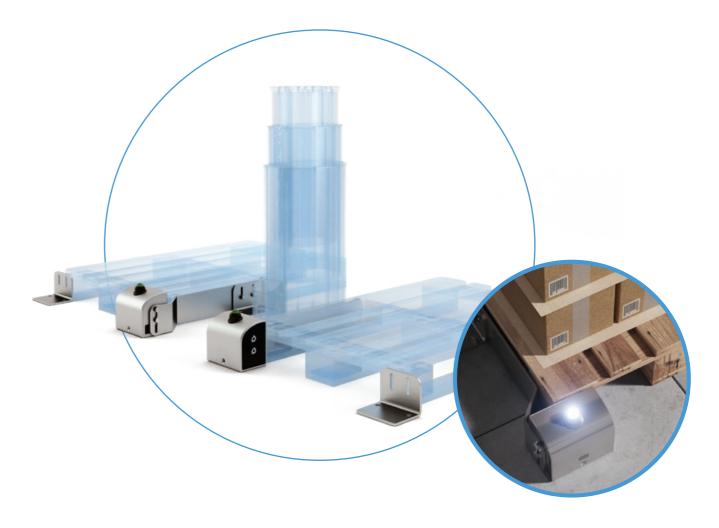


#### **TECHNICAL SPECIFICATIONS**

General Properties	Minimum	Typical	Maximum	Unit
Deutend	0	-	100	[kg]
Payload	0	-	220	[lb]
Haiahhahaya flaga	730	-	1630	[mm]
Height above floor	28.74	-	64.17	[inch]
Stroke of lift	0	-	900	[mm]
Stroke of lift	0	-	35.43	[inch]
1:66.000	0	-	100	[mm]
Lift speed	0	-	3.39	[inch]
Waiahh	86			
Weight	189.6			
Dimensions [L x W x D]	730 x 325 x 492	-	1630 x 325 x 492	[mm]
Dillielisions [L x w x D]	28.74 x 12.8 x 19.37	-	64.17 x 12.8 x 19.37	[inch]
Interfaces / Communication	Modbus			
C	0	-	60	[°C]
Storage temperature	32	-	140	[°F]
IP Classification		IP5	4	

### **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.

General Properties	Minimum	Typical	Maximum	Unit
Sensor activation zone	0	-	6	[mm]
Sensor activation zone	0	-	0.236	[inch]
Weight		17		[kg]
weight		34.5		[lb]
Dimensions [LVWVD]	828 x 428.5 x 207.5	-	828 x ∞ x 207.5	[mm]
Dimensions [L x W x D]	32.6 x 16.87 x 8.17 - 32.6 x ∞ x 8.17		32.6 x ∞ x 8.17	[inch]
Pallet sizes		All sizes	*	
Interfaces / communication	I/O			
Characa hama arabura	0	-	60	[°C]
Storage temperature	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	5	Minimum	Typical	Maximum	Unit	
Payload	Payload Force Fit		-	-	7 [15.5]	kg [lb]	
Payload	Form Fit		-	-	11 [24.3]	kg [lb]	
Total str	oke		-	38	-	mm	
	External	Fingers inwards	1 [0.039]	-	39 [1.53]	mm [inch]	
Grip Width	Externat	Fingers outwards	35 [1.37]	-	73 [2.87]	mm [inch]	
range	ange	Fingers inwards	11 [0.43]	-	49 [1.92]	mm [inch]	
Internal	Fingers outwards	45 [1.77]	-	83 [3.26]	mm [inch]		
Gripping	g force		20	-	140	N	
Gripping	g speed		16	-	450	mm/s	
Gripping	g repeatabil	ity	-	+/-0.1 [+/-0.004]	-	mm [inch]	
Hold wo	rkpiece if p	ower 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]	







- 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.

General	General Properties		Minimum	Typical	Maximum	Unit	
Payload	Force Fit		-	-	14	[kg]	
Payload Form Fit		-	-	20	[kg]		
Total stroke		-	50	-	[mm]		
	External	Fingers inwards	5	-	55	[mm]	
Grip Width	Externat	Fingers outwards	55	-	105	[mm]	
range	1-51	Fingers inwards	17.6	-	67.6	[mm]	
	Internal	Fingers outwards	67.6	-	117.6	[mm]	
Gripping	ı repeatabili	ty	-	+/- 0.1	-	[mm]	
Gripping	force		40	-	280	[N]	
Gripping	force tolera	ance	-	-	+/-10	[N]	
Gripping	speed		16	-	100	[mm/s]	
Gripping	time (includ	ling brake activation)	-	200	-	[ms]	
Hold wo	rkpiece if po	wer loss?	Yes				
IP Classification		IP67					
Dimensions [L, W, D]		155.2 x 115 x 70 [n					
Weight				1.45		[kg]	





























Plug & Produce grippers for multiple purposes

### 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	0	100	[mm]
(adjustable)	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]





















### **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 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			

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			



Grab & Go - flexible, adjustable

# electrical vacuum gripper



# **POWER UP**

- 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.

# **PRODUCTION**

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	Inte	grated, electric B	LDC	
Arms	4, adjustabl	e by hand, 2 vacuı	um c	:hannels
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		.62 .57		[kg] [lb]











# 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	ı	Replaceable	, customizable	
Dust filters	Integ	grated 50µm	n, field replacea	able
IP Classification		IF	P54	
Dimensions (folded)	101 x 100 x 100 [mm] 3.97 x 3.94 x 3.94 [inch]			
Weight		0.814 1.79		[kg] [lb]















# Electric Magnetic Gripper reliably handles range of parts

# **Gecko Gripper** SP1/SP3/SP5





# 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
Deutend	0.001	-	10	[kg]
Payload	0.002	-	22.046	[lb]
Madaine	Ø 65.4	-	-	[mm]
Workpiece size required for full force	Ø 2.574	-	-	[inch]
Magnetism resolution	-	100	-	[steps]
Gripping time (including brake activation)	-	300	-	[ms]
Hold workpiece if power is lost?	Yes			
Share a barra a sabara	0	-	55	[°C]
Storage temperature	32	-	131	[°F]
Motor	Integrated, electric BLDC			
IP Classification		IP	67	
D: : [67.1]	71 x 80.2			[mm]
Dimensions [Ø, L]		[inch]		
Marines		0.8		[kg]
Weight		1.763		[lb]







#### I ECHNICAL SPECIFIC

# 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 Pro	perties		Unit	
	SP1	1 / 2.2	[kg] / [lb]	
Maximum payload	SP3	3 / 6.6	[kg] / [lb]	
paytoss	SP5	5/11	[kg] / [lb]	
	Minimum	SP1: 2.8 SP3: 8.2 SP5: 11.6	[N]	
Preload required	Medium	SP1: 8.2 SP3: 23.4 SP5: 33	[N]	
requires	Maximum	SP1: 13.3 SP3: 38.6 SP5: 54.4	[N]	
Detachmen	ıt time	100-1000 (dependent on robot speed)	[msec]	
Holds workp power lo		Yes. How long? Potentially days if well centered and undisturbed		
IP Classific	ation	IP42		
Dimensions	(HxW)	69 x 71 / 2.7 x 2.8	[mm] / [inch]	
	SP1	0.267 / 0.587	[kg] / [lb]	
Weight	SP3	0.297 / 0.653	[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



# **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

TECHNICAL	SPECIF	FICATIONS
-----------	--------	-----------

General Properties	Minimum	Typical	Maximum	Unit	
Material	T	wo-compone	nt silicone rub	ber	
Food approval	FDA 21 CFR 177.2600 & EC/EU - 1935/2004				
Operation cycles		2.000.000		[cycles]	
Operation temperature	-20 / -4		80 / 176	[C] / [F]	
SG-tool attachment mechanism		Quick-lock a	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)	7	6x112 / 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)	77>	[mm] / [inch]			
Weight (smart lock included)		0.172 / 0.379		[kg] / [lb]	

# food-grade soft gripper

# **OnRobot Screwdriver**

### Smart screwdriving solution for multiple processes



- 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

General Properties		Minimum	Typical	Maximum	Unit	
Screw size range		M1.6	-	M6		
To	orque range	0.15 / 0.11	-	5 / 3.68	[Nm] / [lbft]	
Torque	If torque < 1.33Nm/0.98lbft	-	0.04 / 0.03	-	[Nm] / [lbft]	
ассигасу	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 pr	eload (adjustable)	0	10	25	[N]	
Safet	y feature force	35	40	45	[N]	
I	Motor (x2)	Integrated, electric BLDC				
IP Classification		IP54				
Dimensions		-		mm] inch]		
Weight		2.5 / 5.51		[kg] / [lb]		
Screw	presenter sizes	М	1.6 ; M2 ; M2.5	; M3 ; M4 ; M5	; M6	
	Screw leng Shank si Shank pr Safet I	Screw size range  Torque range  If torque < 1.33Nm/0.98lbft  If torque > 1.33Nm/0.98lbft  Output speed  Screw length within full safety  Shank stroke (screw axis)  Shank preload (adjustable)  Safety feature force  Motor (x2)  IP Classification  Dimensions	Screw size range	Screw size range	Screw size range	























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 Prop	General Properties		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 spee	ed	1,000	-	10,000	RPM	
Ped type (3M:	20353)		Clean San	ding Disc Pad		
Pad media typ	oe .		Но	okit™		
Pad weight			0.1 [0.22]		kg [lb]	
Weight			1.2 [2.645]	]	kg [lb]	
IP rating		IP54				
Dimensions (d	outer)	87 x 123 [3.42 x 4.8		mm [inch]		
Operating Co	onditions	Minimum	Typical	Maximum	Unit	
Sanding powe	Pr	-	150	-	W	
	External voltage	-	30	-	V	
Operation	External power	-	150	-	W	
voltage	Tool connector voltage	-	24	-	V	
	Tool connector power	-	2.4	-	W	
Operation ter	Operation temperature		-	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/T	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 [mm] 1.97 x 2.79 x 3.66 [inch]				

#### **HEX-H QC TECHNICAL SPECIFICATIONS**

General Properties	6-Axis Force/T		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]



























# Chrobot | OnRobot **Eyes**

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 erception 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]				
Operating Temperature	0 – 35 [32 – 95]				°C [°F]	
IP rating		IP 54				
Weight		0.260 [0.57]				
Eyes Features						
Type of vision system		2.5 D				
Minimum part size	10x10 o	10x10 or 15 diameter [0.39x0.39 or 0.59 diameter]				
Applications Supported		Detection, Sorting, Inspection, Landmark				
Mounting options supported		Rob	ot and External			
	12 configurations (4 x 3)					
Reconfigurability when Robot mounted	Around robot's flange		Т	Tilt orientations		
Williams	0 - 90 - 18	0 - 270	0 - 4:	5 - 90	[degrees]	
Detection Repeatability		< 2 [< 0	.078]		mm [inch]	
Detection Accuracy (typical)	External	Mount	Robot	Mount		
measured at 500 mm	2 [0.0]	78]	2 [0.078]		mm [inch]	
Minimum Inspection Defect Size	5 [0.197]			mm [inch]		
	Waypoint distance from Landmark	Minimum error	Typical error	Maximum error		
Landmark accuracy **	200 [7.874]	0.2635 [0.0104]	0.6596 [0.0260]	0.9500 [0.0374]	mm [inch]	
•	500 [19.68]	0.6586 [0.0259]	1.6490 [0.0649]	2.3750 [0.0935]	mm [inch]	
	1000 [39.37]	1.3173 [0.0519]	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

General Properties		Minimum	Typical	Maximum	Unit
Payload Force Fit		-	-	10/22	[kg] / [lb]
Payload For	m Fit	-	-	15/33	[kg] / [lb]
Caia Diamakas*	External	4/0.16	-	152 / 5.98	[mm] / [inch]
Grip Diameter*	Internal	35 / 1.38	-	181 / 7.12	[mm] / [inch]
Finger position r	esolution	-	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 Yes if power loss?					
IP Classification IP67					
Dimensions [L	_, W, Ø]	156 x 158 x 180 / 6.14 x 6.22 x 7.08 [mm] / [inch			
Weight			1.15 / 2.5		[kg] / [lb]













# 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**



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.